## VIRTUAL BIDDING ISSUES

- Separating the DAM solution from the day-ahead reliability commitment. In essence assumes a need to complete the financial settlement of the day-ahead market at the end of pass 1 (including any mitigation actions associated with energy payment). This need exists to allow for the case where the virtual bids for load and or energy make an electrically feasible secure solution impossible. The financial settlement would not necessarily result in an electrically feasible solution but would include a dispatch solution for purposes of setting prices. Subsequent commitment passes (currently 2 and 3) would add any needed real supply to achieve a secure solution for the forecasted load and would address any local reliability requirements. Resolution of this issue must include a process that will always produce a market and reliability solution in an acceptable time period.
- **Participation by virtual bidders in financing the cost of ancillary services.** This issue has been raised by market participants who note that the amount of load bid by entities that will not consume load in real-time will have an effect on the cost of ancillary services. Ancillary services are paid for under the current tariff by load actually consumed in real-time. There is therefore a need to equitably allocate the cost of ancillary services in a manner that ensures that virtual bidders and real load bidders are treated fairly.
- Participation by virtual bidders in financing the cost of day ahead uplift. This issue has been raised by market participants who note that the amount of load and generation (negative load) bid by entities that will not consume load in real-time will have an effect on uplift. Schedule 1 uplift is paid for under the current tariff by load actually consumed in real-time. There is therefore a need to equitably allocate the cost of day ahead uplift in a manner that ensures that virtual bidders and real load bidders are treated fairly. Some market participants have insisted that day-ahead and real-time uplift must be separated as part of the implementation of virtual bidding.
- **Trading hubs.** Is there a need for a trading hub in addition to the existing 11 zones in NY when virtual bidding is initiated? Is a trading hub needed by participants as a more convenient means of positioning and distributing purchased and/or sold energy? Does a trading hub alleviate some of the *lumpiness* that zonal bidding patterns might create if they were the only choices. Does a more distributed solution created by a larger hub have any inherent appeal to participants or is it only a concern for engineers worried about the feasibility of a solution. In other words, if we separate the market solution from the reliability solution as noted in the first issue, does the fact that the prices represent a technically infeasible solution matter? (note that TCC's are sold based on feasible solutions)