Template for Submission of Comments on Convergence Bidding and Bid Cost Recovery

The CAISO is requesting written comments to presentations and documents discussed at the October 16th Convergence Bidding stakeholder meeting. This template is offered as an optional guide for entities to submit comments; however participants are encouraged to submit comments in any form.

Comments requested in this template are requested by close of business Friday, October 31, 2008 to MMiller@caiso.com. Please feel free to contact Margaret Miller at mmiller@caiso.com or 916 608-7028 with any questions. Comments received on the Bid Cost Recovery section of the template will be considered in the further development of a Straw Proposal for cost allocation of virtual bids and the overall policy for Bid Cost Recovery.

Additional comments on the MAP Program may be submitted at anytime to MAPImplementation@caiso.com. Additional comments on the policy development for Convergence Bidding may be submitted at anytime to ConvergenceBidding@caiso.com.

All documents and presentations discussed at the meeting are posted on the CAISO Website at the following link:

http://www.caiso.com/1807/1807996f7020.html

Please provide responses to the following questions:

Submitted by Brian Theaker, Dynegy.

Section 1 – MAP Program Update
Presented by Janet Morris

1. Are you interested in Joint Application Development (JAD) sessions for test scenario development for element of MAP, like Convergence Bidding?
Yes.

2. If you are interested, what is your availability to participate?

*Availability will depend on the schedule.*

3. What high level test scenarios would you propose for Convergence Bidding?

*Testing should:*
  - verify that both the nodal and LAP-level granularity is functional.
  - determine if virtual bidding – both virtual supply and demand - changes the total unit commitment cost that would result without virtual bidding, and if so, why.
  - examine the interaction between the amount of demand that clears the DA market, the amount of cleared virtual bids, and the DA-RT price convergence.
  - verify the performance of the virtual bidding system under “extreme” conditions – e.g., high volumes of virtual bids, significant amounts of demand shifted from DA to RT, significant over-commitment or under-commitment in RUC due to missed CAISO demand forecast

4. Additional comments?

Section 2 – Resource IDs for Convergence Bidding
Presented by Byron Woertz

1. Of the options presented in the white paper, are there any that are completely unworkable for you?

*No. The relevant question is – are they unworkable for the CAISO?*

2. Do you have a preference among the options presented?

*Yes, for option 5 – Additional Field for Certified SC.*

3. Other comments?
Section 3 – Cost Allocation for IFM, RUC and RTM Bid Cost Recovery Uplift Charges

1. Do you have any comments generally about cost allocation for virtual bids, or specifically about the discussion on IFM and RUC uplift charges for virtual bids? *(The presentations that were discussed by SCE and WPTF are posted at: [http://www.caiso.com/1807/1807996f7020.html](http://www.caiso.com/1807/1807996f7020.html).)*

The CAISO should allocate costs to virtual bids based on cost causation principles.

Assuming that the CAISO commits units in increasing cost order, and that the pool of generating units the CAISO would commit in IFM (if the amount of demand that cleared the DA market was equal to the CAISO’s forecast) is the same pool of units that the CAISO would commit in RUC and IFM combined (if the amount of demand that cleared the IFM was less than the CAISO’s forecast), then the primary effect of virtual supply is merely to postpone commitment from the IFM to RUC – but not to increase the total commitment cost. With this assumption, it would be illogical to assign IFM or RUC uplift costs to virtual supply merely because virtual supply shifted commitment from the IFM to RUC. In keeping with cost causation principles, the only RUC uplift costs that should be allocated to virtual supply are incremental costs that are incurred from shifting commitment from the IFM to RUC. Similarly, the only IFM uplift costs that should be allocated to virtual demand are those incremental costs incurred in which virtual demand increases unit commitment in IFM to a level above what would occur in IFM and RUC combined.

IFM and RUC uplift costs would be allocated solely to demand in the absence of virtual bids, regardless of whether such demand cleared in the IFM. The primary effect of virtual demand and supply should be to shift commitment from the IFM to RUC, or vice versa, depending on how much demand would have cleared absent virtual bidding. Unless the CAISO can clearly identify incremental costs incurred from shifting commitment from the IFM to RUC or the RUC to IFM, allocating IFM or RUC uplift costs to virtual bids does not follow cost causation principles. Furthermore, if the CAISO can identify such incremental costs that result from shifting commitment from IFM to RUC or vice versa, the CAISO must also identify any incremental savings that result from shifting commitment and credit virtual bids for those savings.

Dynegy encourages the CAISO to review Bill Hogan’s white paper on the effect of virtual bids on unit commitment costs (available at [http://ksghome.harvard.edu/~WHogan/Hogan_RSG_100908.pdf](http://ksghome.harvard.edu/~WHogan/Hogan_RSG_100908.pdf)) when crafting its proposal for allocating uplift costs to virtual bids.

SCE’s presentation, which used unrealistically disparate costs for real-time costs for real-time and IFM unit commitment and failed to account for savings in IFM commitment costs created by virtual supply, does not support allocating uplift costs to virtual transactions.
2. Issue Paper on Two-Tier Real-Time Bid Cost Recovery Uplift

(This paper considers separating the allocation of costs associated with the Real Time Market into two tiers, which could involve both virtual and “physical” bids. This paper is located at: http://www.caiso.com/205b/205bf1653cf60.pdf.)

A) Do you have a preference among the options reviewed in the issue paper?

- Option 1 – Each SCs need for inc or dec energy across their portfolio if aligned with the total system need for inc or dec energy would determine allocation for Tier 1 Real-Time uplift. This includes both virtual supply and virtual demand.

- Option 2 – Allocation for Tier 1 Uplift for each SC would be based on Net Negative Uninstructed Deviation and net Virtual Supply

*Dynegy does not understand why the allocation of real-time uplift charges – which, per FERC order, is to be addressed on a three-year schedule – is part of the current discussion on the design of convergence bidding and the allocation of costs to virtual bids, which, per FERC order, is to be implemented no later than 12 months after MRTU implementation.*

*Dynegy notes that two-tiered real-time bid cost recovery uplift allocation was ranked “medium” in the CAISO’s July 7, 2008 Final Report on Ranking of High Priority Market Initiatives. Apparently, it was ranked “high” by only two market participants. Dynegy does not believe the CAISO has yet made the case that the need to determine how costs should be allocated to virtual bids creates the unavoidable requirement to determine the allocation of real-time uplift costs.*

*Dynegy questions the premise that virtual bidding creates real-time imbalances. Virtual bids are purely financial transactions which will be liquidated in real-time and should neither affect assigning feasible operating levels to generating units prior to the relevant operating hour nor the amount of demand that ultimately shows up in real-time. Feasible operating levels based on the CAISO’s forecast of CAISO demand can be assigned to generating units after the RUC process.*

*If the CAISO’s demand forecast was perfect, there should be no incremental real-time commitment, and therefore no commitment-related real-time uplift costs. However, even if there was no real-time unit commitment, predictive dispatch could create real-time uplift costs by having to pay a unit its bid price in an interval in which that unit was not on the margin but was being ramped to a future operating level at which it was expected to be on the margin. But there is no cost-causation related reason to allocate such predictive uplift costs to virtual bids.*

B) Do you have other thoughts on how costs should be allocated in Tier 1 for Real-Time uplift?
Tier 1 should be based on cost-causation. Real-time unit commitment costs should be allocated to demand in excess of CAISO forecast demand, assuming the RUC process committed sufficient units to meet the CAISO forecast of CAISO demand. Real-time uplift costs created by predictive dispatch should be allocated to all real-time metered demand.

There will inevitably be some costs – such as the costs of using predictive dispatch, or for commitment due to CAISO forecast error – for which cost causation cannot be determined. It is reasonable that these costs should be spread over the broad market, including to virtual bidders, but should not be allocated to virtual bidders in a way that would discourage participation in the virtual market.

C) Do you have a preference on what the denominator should be for the calculation of the Real-Time Tier 1 purchase rate?

- Absolute Value of Real-Time instructed incs and decs
- Instructed incs only
- Net of instructed incs and decs

See above.

4. Additional comments?