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:

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, WPTF is interested in participating. Many of our members have substantive experience on convergence bidding (and its benefits to the market) in other ISO/RTOs. We believe our members can provide significant and positive input in aiding CAISO developing appropriate protocols.

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

Moderately available subject to you avoiding other CAISO meetings and to your providing reasonable notice in scheduling meetings.

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

WPTF recommends the CAISO undertake at least the following high-level tests of Convergence Bidding functionality:

a) Test impact of large imbalances in virtual supply and virtual demand (all virtual demand or all virtual supply) to determine impact on unit commitment and market software solution feasibility

b) Test for impact of large numbers of relatively small virtual transactions at many locations to ensure CAISO systems can handle volume (note: this includes both timely acceptance of participant submissions as well as DA market solution)

c) Test functionality that screens for attempts to play “CRR Game”

d) Ensure that virtual supply offers only clear when the LMP at that location is above the offer price and virtual demand bids only clear when the LMP is below the bid price

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?

Having every virtual transaction registered with a resource ID would be unworkable.

2. Do you have a preference among the options presented?
Option 5 (no registration of detailed information) is the most workable. Option 4 (inclusion of detailed information in the bids) would likely be implementable but would burden the day-to-day operations.

3. Other comments?

The Eastern ISOs that have utilized approaches similar to Options 4 and 5 (PJM, MISO, ISO-NE) have found them to work very well. The one ISO that utilized something similar to Option 1 (NYISO) has found that it presents (in hindsight avoidable) challenges for their movement to nodal bidding (which is being implemented in the coming year).

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.)*

WPTF supports the concept of allocating costs based on cost-causation and believes that the impact of virtual bids and offers is generally to shift costs between IFM and RUC, rather than to cause additional costs. Given this, WPTF does not believe that RT costs should be allocated to virtual transactions at all. WPTF generally support the direction the CAISO was headed with using IFM imbalances as a proxy measure for IFM/RUC costs (vs. for example, SCE’s proposal) until such time as further analysis is available about the relationship of uplift costs and virtual transactions. WPTF does believe that certain additional improvements should be made to the CAISO IFM/RUC proposal, as further detailed below.

With respect to convergence bidding and uplifts from the forward (IFM) market:

It is critical that CAISO stick with its proposal to determine cost allocation to virtual bids based on a comparison with forecast load. Note that if CAISO did not do this, then it would provide an incentive for load to underbid. By underbidding (and then leaving the rest of demand to be filled by virtual demand) load would avoid uplift cost that they would naturally bear but for the existence of virtual transactions. Further, as virtual demand would now see an uplift cost in moving the market towards convergence, there would be a barrier to achieving a DAM load level (and DA dispatch level) commensurate with what is needed in RT. While the load may perhaps believe it is better to have only a partial solution in the DAM (i.e., lower prices), this is not better for the market as a whole nor for system reliability.
The main change WPTF proposes for the IFM allocation is that, just as it does with physical transactions, the CAISO should net virtual supply and virtual demand on both a system-wide and a participant basis thereby placing virtual and physical transactions on the same footing when allocating IFM uplifts. The key principle is that additional commitment costs may result when the amount of net virtual demand (i.e., virtual demand less virtual supply) is positive and causes the combination of net virtual demand and physical demand to exceed the CAISO’s load forecast. In this instance, it is appropriate for virtual demand bids to be assessed a portion of the IFM uplift charges – specifically, whatever portion of this excess demand was caused by virtual transactions. The allocation of these costs should then be made to those participants with net virtual demand (i.e., positive virtual demand less virtual supply).

With respect to convergence bidding and uplifts from RUC:

As WPTF shared in its presentation at the last stakeholder meeting, virtual supply generally has no net impact on commitment costs since any increase in RUC procurement that results from the presence of virtual supply is capacity that would have been committed anyway in the IFM if net virtual supply had been zero. In certain rare instances when RUC procurement cost for a unit is substantially higher than what it would have been for IFM procurement, it is conceivable that net virtual supply could generate additional costs. As such (as mentioned in WPTF’s overall comments), until such costs can be reliably ascertained, WPTF can understand CAISO’s proposal to allocate a share of RUC costs to the net amount of virtual supply when that amount is positive. Nonetheless, WPTF believes that if anything this cost allocation will result in greater costs than is fair for virtual supply to bear. As a result WPTF opposes proposals such as SCE’s, which would (in a seemingly baseless manner) allocate costs to gross virtual supply and shift a greater share of costs to those transactions. Finally, WPTF believes that any virtual-assigned costs should be allocated to those participants with a net (vs. gross) virtual supply position.

With respect to convergence bidding and uplift costs from the RTM:

WPTF finds it important that the CAISO clarify its record on the practices in other markets. There is general agreement among ISOs that, while virtual bids and offers may cause costs in the IFM/DAM or day-before RUC runs, they do not affect commitment decisions in RT because any effect they may have is already accounted for in the RUC run. MISO acknowledged this in the ongoing RSG docket (EL07-92-000) and Ron Coutu agreed with this principle when asked directly during the May CAISO presentation he gave on ISO-NE’s experience with virtual bidding. The challenge some ISOs have in actually implementing such a method is that they currently have cost allocation algorithms that cannot distinguish RUC costs from RT uplift costs – and so they ultimately allocate both to virtuals. It is only those ISOs that include RUC costs in their RT uplift costs that allocate these RT uplift costs to virtual transactions. NY, which bundles the cost of their RUC commitments in with the DA market solution, does not allocate its RT uplift to virtual transactions.
Virtual transactions have no impact on the CAISO’s RTM commitment because they are already accounted for in the RUC commitment. They never appear in the CAISO’s short-term forecasts of real-time physical load and the CAISO does not make any adjustments to its RTM commitment and dispatch decisions based on the presence or absence of virtual supply and virtual demand. Some of the causes of RTM costs include unexpected transmission outages, unexpected generation outages, load trips, weather changes, interface derates, additional voltage support requirements, and local reliability issues – but not virtual transactions. Since virtual transactions have no impact on RTM costs, they should not be required to bear any of the RTM uplift costs.

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

As stated above, WPTF finds it important that the CAISO clarify its record on the practices in other markets. Only markets that include RUC costs in their RT uplift costs allocate RT cost uplifts to virtual transactions. NYISO, which includes RUC costs in its DAM charge, does not allocate its RT uplift to virtual transactions. Since CAISO, like NYISO, is able to separate RUC costs from RT costs, the appropriate course of action is for CAISO to not allocate any RT uplift costs to virtual transactions. As noted above, virtual transactions have no impact on the CAISO’s RTM commitment because they never appear in the CAISO’s short-term forecasts of real-time physical load and the CAISO does not make any adjustments to its RTM commitment and dispatch decisions based on the presence or absence of virtual supply and virtual demand. Since virtual transactions have no impact on RTM costs, they should not be required to bear any of the RTM uplift costs.
B) Do you have other thoughts on how costs should be allocated in Tier 1 for Real-Time uplift?

Note that WPTF is opposed generally to accelerating the cost allocation proposal from a process perspective. There is other functionality that has been connected with FERC mandated MAP functionality to which WPTF believes the CAISO should first focus its attention, such as the 30-minute product. Empirical evidence on the nature and causes of RT uplift cost in CAISO does not exist yet and approaches certainly should not be taken from markets that include RUC uplifts costs as part of their RT uplift cost reporting. In fact, WPTF questions the prioritization process that resulted in this item being considered on an accelerated basis when only one market participant ranked it as high in the Road Map process. WPTF would like feedback from the CAISO on what implications that has for the integrity of the Road Map prioritization process.

Separately, when CAISO is able to collect data on the nature and causes of RT uplift, WPTF believes the likely causes will be (as stated above): unexpected transmission outages, unexpected generation outages, load trips, weather changes, interface derates, additional voltage support requirements, and local reliability issues – but not virtual transactions. In keeping with principles of cost causation, it will make sense to allocate costs to those things that cause it.

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

Consistent with our response under (B) WPTF further believes it prudent to review empirical evidence from MRTU to understand the nature of the actual RT costs that are being accrued, including the correlation of the commitment needs with the incs and the decs. If the CAISO believes it critical to build the functionality into the system prior to start-up, WPTF encourages the exploration of flexibility of the configuration to allow for modification of the denominator value. Most generally though, WPTF does not find compelling evidence at this time that the CAISO should spend any resources on this functionality. Making a choice on the design of this element at this time would likely result in an outcome that is not consistent with the cause of the RT commitments given that we do not yet know the drivers behind the RT commitment.

To the extent the CAISO can provide more data on the commitments necessary from market sim and the extent to which the CAISO believes that those results are representative of what should be expected after MRTU start-up that may be insightful.

4. Additional comments?
WPTF would like to see a web meeting or in person meeting scheduled to address the balance of the policy issues that were not presented during the October meeting due to time constraints.