Convergence Bidding –

Granularity of Virtual Bids

Stakeholder Conference Call
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Purpose of Today’s Call

- Review and further discuss issues related to the granularity of virtual bidding.
  - “Granularity” = whether bids are associated with one node or an aggregation of nodes bounded to specific areas (such as LAPs, but may also include sub-LAPs.)
    - NYISO = zonal
    - PJM & ISO-NE = nodal

- Previous stakeholder discussion 10/30/2006:
  (http://www.caiso.com/1807/1807996f7020.html)
  - CAISO preference for LAP-level granularity upon initial implementation of convergence bidding, but then moving toward more granular approach as soon as possible.
Reasons for LAP-level Virtual Bidding (initially)

- Minimizes potential for under-scheduling by load – as long as physical load is settled at the LAP.
- Allows time to observe performance of LMP operating in California – for any potential market monitoring concerns.
- Avoids possible unintended consequences for mismatch if virtual demand were bid more granularly than how physical load is settled.
- More granular virtual bidding will likely require more significant changes to scheduling and settlement processes.
  - (initial list on next slide)
Moving Toward More Granular Convergence Bidding

- Possible need for additional pass in IFM as a market monitoring tool.
- Possible need to use bid-in Demand (rather than forecasted Demand) to base mitigation.
- Possible need to develop Uninstructed Deviation Penalty (UDP) to limit generators’ ability to raise / lower RT prices in order to profit from virtual bids.
- Possible new settlement rule – similar to other ISOs -- to monitor virtual bidding and CRRs.
LAP Disaggregation / More Granular Convergence Bidding

- FERC’s Sept. 21, 2006 MRTU Order:
  - Settlement of energy charges for load based upon three LAP zones is a reasonable approach for introducing LMP pricing.
  - Paragraph #611: “… we direct the CAISO to increase the number of LAP zones for Release 2.”

- Possible concept: As settlement of load is disaggregated from LAPs, so virtual bids would move to the same granular level.
  - Would likely achieve primary goal to minimize potential for load under-scheduling.
Process for Prioritizing MRTU Release 2 Features

- CAISO plans ranking of market enhancements based on established set of criteria:
  http://www.caiso.com/1b95/1b95ac1f4b452.pdf

- Stakeholder review of proposed future market enhancements expected mid-August.
  - There are a number of key inter-related market features.
MSC Chairman Frank Wolak has suggested imposing position limits on total virtual bids at each node
- to limit local market power and
- as an approach for collateral requirements.

- Fixed MW limit on bids versus Dynamic amount
- Advocated as a way to move toward more granular virtual bidding quicker.
Next Steps

- Continued stakeholder discussions on key conceptual features of convergence bidding
  - July 26 Stakeholder meeting
  - Written comments requested by COB
    August 3 to: convergencebidding@caiso.com

- August 7 conference call (tentative)
- August 13 conference call (tentative)