Two-Tier Real-Time Bid Cost Recovery

Margaret Miller
Senior Market and Product Economist
Convergence Bidding Stakeholder Meeting
October 16, 2008
The CAISO has posted an Issue Paper exploring the redesign of the Real-Time BCR Uplift charge

- Some stakeholders have expressed their desire for a two-tier Real-Time uplift charge in various stakeholder forums over the past several years
- Ordered by FERC to be implemented no later than three years after MRTU start-up
- IFM and RUC BCR uplift charges will be redesigned as a part of convergence bidding design
- Makes sense to address all three uplift charges as part of package that is integral to the policy design and development of convergence bidding
- Redesign affects both virtual and physical transactions
## Proposed plan for resolution of all BCR uplift charges

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<th>Tentative Date</th>
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<tr>
<td>October 31, 2008</td>
<td>Written comments on issue paper due to <a href="mailto:mmiller@caiso.com">mmiller@caiso.com</a></td>
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<td>December 5, 2008</td>
<td>Straw Proposal posted for all BCR uplift charges</td>
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<td>December 16, 2008</td>
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<td>January 4, 2008</td>
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<td>Mid January</td>
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<td>February 2008</td>
<td>Draft Final Proposal posted</td>
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<td>Late February 2008</td>
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<td>March, 2008</td>
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In contrast to IFM and RUC BCR uplift charges, RTM is a single tier charge.

- IFM and RUC uplift is allocated in two tiers. Tier 1 charges those responsible and Tier 2 is allocated to metered demand.
- RTM is a single tier charge and is allocated to metered demand so there is no aspect of cost causation.
Costs for BCR Uplift at other ISOs in 2007

- **PJM** = $459,124,502 or 1.5% of total PJM Billing
  - Average rate for Day-Ahead = $.057 per MWh
  - Average rate for Real-Time = $2.33 per MWh
- **ISO New England** = $29.6 M
  - Average rate for Day-Ahead = $.03 per MWh of demand
  - Average rate for Real-Time = $.54 per MWh of deviation
- **Midwest ISO** = $328.8M
  - Day-Ahead = $26.4M
  - Real-Time = $302.4M
  - All in price of electricity = $51MWh, uplift accounted for about 1% of all in price
## Comparison of RTM Uplift Charges

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What actions could create Real-Time Uplift?

- A number of factors may contribute to the CAISO’s need to commit, de-commit, increment and decrement Generating Units in Real-Time:
  - Uninstructed deviations
  - Transmission de-rates
  - Congestion management
  - Accounting for forecast errors
  - Virtual transactions
Two options suggested in Issue Paper to create RTM Tier 1 uplift charge:

- Option 1 – based on premise that both inc and dec instructed energy give rise to Real-Time Uplift.
- Allocation based on each SCs net deviations across their portfolio that resulted in the need for inc or dec balancing energy
- Virtual supply and virtual demand would be included in netting
- Only those SC’s with their required real-time imbalance energy aligned with the net overall system required imbalance energy in the sense of inc or dec are allocated Tier-1 Real-Time uplift allocation
Two options suggested in Issue Paper to create RTM Tier 1 Uplift charge:

- Option 2 – considers the need for incremental energy as the primary cause for uplift in Real-Time
- Allocation to SCs with net negative uninstructed deviations and net virtual supply
- A net negative result indicates that SC had excess underscheduled load and exports and/or overscheduled generation and imports after netting deviations across the entire portfolio
What should the denominator be for the calculation of the rate for Tier 1 Real Time uplift?

- IFM Tier 1 Rate is calculated as the lower of:
  
  a) Hourly net IFM Bid Cost Uplift ($) divided by the IFM Load Uplift Obligation (MW) or,
  
  b) Hourly Net IFM Bid Cost Uplift($) divided by the sum of all hourly Generation in the Day-Ahead Schedule (MW) and IFM Upward AS Awards (MW).

- RTM Tier 1 Rate could be calculated as the lower of:
  
  a) Hourly net RTM Bid Cost Uplift ($) divided by the RTM Load Uplift Obligation (MW) or,
  
  b) Hourly Net RTM Bid Cost Uplift ($), divided by the sum of the absolute value of incs and decs in the real-time market.
The CAISO seeks input from stakeholders via written comments on the following topics:

- SCE’s proposal on cost allocation for convergence bids
- Options for RTM Tier 1 Uplift described in issue paper
- Other ideas for options for Tier 1 Real-Time Uplift
- Denominator for calculation of rate for Tier 1 Uplift
- Stakeholder comments template posted to CAISO website by October 21
- Stakeholder comments due by October 31 (Halloween) to mmiller@caiso.com