

Macquarie Energy LLC

**Comments on the Impact of Convergence Bidding on Real-Time Imbalance Energy Offset Issue Paper and Straw Proposal.**

May 11, 2011

---

Macquarie Energy LLC (Macquarie) appreciates the opportunity to comment on the Real-time Imbalance Energy Offset Issue Paper and Straw Proposal (April 27, 2011).

Macquarie proposes that CAISO should consider market based solutions to address the Imbalance Energy Offset (IEO) issues. CAISO's suggested MW based settlement solution (aimed at certain types of bids based upon whether the HASP clears above or below the RTD price) will adversely impact the convergence bidding market and physical inertia usage.

**Comments on the Draft Issue Paper**

It appears CAISO is presuming convergence bidding as the key reason behind a recent increase in IEO amounts. However, the issue existed before the commencement of convergence bidding. The CAISO claims the relative infrequency and lower bid floor of -\$30 could not balance the effect of the RT offset when RTD prices are higher than HASP prices. However, CAISO did not present in the issue paper a complete analysis of the increased energy price caps on the IEO. Referring to examples presented by the Citigroup filing, Macquarie agrees that CAISO's proposed solution will tend to stifle both convergence bidding market and ability of participants to efficiently manage their portfolio risk. CAISO should provide a market based solution as suggested in the sections below.

CAISO's issue paper also does not include how CAISO will handle situations related to isolated nodes, unscheduled flows, parameter tuning curtailments, and positions impacted by force majeure events related to reliability. In addition, CAISO did not mention in the issue paper the potential impacts of 15 minute scheduling (FERC NOPR - Docket No. RM10-11-000), and ongoing intra-hour scheduling efforts at the neighboring balancing authorities (BA).

In summary, the issue paper does not contain a comprehensive analysis and discussion of various alternative options before finalizing the proposed MW based settlement solution.

### **HASP-RT deviations**

The HASP RT deviations, in principle, occur due to imbalances of energy that are not already allocated to instructed and uninstructed deviations from resources' DA schedules. As a result, the real time management of energy requirements at interties tends to increase the RT prices over the HASP. The RT energy buy/sell is necessary to balance the system and maintain reliability of the BA system.

HA-RT price deviations are caused by a variety of factors, including forecasting errors and scheduling deviations, RUC based on load forecasts, variable generators in need of balancing energy, hourly schedules versus intra-hour flows, ramping constraints, and forced outages. CAISO's suggested proposal lacks a full analysis and discussion of the key underlying reasons behind HASP-RT deviations in determining a suggested solution. In fact, the issue paper does not consider market based solutions at all. On the contrary, it proposes a post-market MW based remedy. Macquarie Energy recommends CAISO to revisit the issues and address the problem of HASP-RT in a more comprehensive manner.

### **Ramping Issues**

In addition to the market design issues listed above, the intra-temporal scheduling rules adds to HASP-RT deviations. As load ramps up or down, the inability of interties schedules to meet ramping load creates RT need for energy balancing. Combination of forecast errors, and inability to manage intra-hour HA schedules, excluding dynamically scheduled energy, will continue to disparate prices in RT and HASP markets. Macquarie, therefore, recommends CAISO to resolve underlying intra-temporal inflexibility at interties before executing any post-market based solutions. Such measures may include flexible ramping, coordinating with neighboring BA on implementing sub-hourly scheduling, and accurate load and resource forecasting.

### **Role of Convergence Bidding**

Convergence bids are financial hedging instruments used primarily for managing price risk between DA and HA/RT prices. Entities use convergence bids to manage these risks. These convergence bids reduce price divergence and induce operational market efficiencies.

Targeting convergence bids to eliminate IEO per CAISO's proposed solution appears to be biased against the convergence bidding market participants. The clawback proposal will tend to decrease liquidity at interties potentially increasing volatility and negatively impacting the DA and HASP markets.

**Suggested Solution**

Macquarie Energy opposes CAISO's proposed settlement based claw-back solution. As described above, CAISO should address the underlying causes responsible for IEO in its entirety. CAISO should devise a market based solution to address the IEO amount resulting from HA-RT price and volume differences.

In the interim, Macquarie proposes the following:

Eliminate IEO by allowing all convergence bids, physical import and exports to settle at RTD. Imports and exports must receive BCR payments for any uneconomical settlements.

In the longer term, Macquarie proposes CAISO to address key reasons resulting in HASP-RT price delta. In addition, the potential solutions should be based on market based principles and not the MW based approach as adopted by CAISO in its current issue paper.

Macquarie agrees with Citigroup's analysis to support the suggested solution.

For further questions please contact Ishwar Saini at 713-275-6818, or [Ishwar.saini@macquarie.com](mailto:Ishwar.saini@macquarie.com)