Comments of Pacific Gas and Electric Company
Real-Time Imbalance Energy Offset Whitepaper

PG&E submits these comments in response to CAISO staff's Revised Issue Paper on Analysis of Real-Time Imbalance Energy Offset Release issued August 26, 2009. PG&E is concerned with the very large size of the Imbalance Energy Offset ($14 million in April), however it appears premature at this time for the CAISO to propose significant tariff revisions based on limited results to-date and without allowing sufficient opportunity for the benefits of on-going market and operational improvements to be realized. Further, sufficient consideration has not been devoted to the possible impacts and interactions with future MRTU market enhancements such as Scarcity Pricing and Convergence Bidding. PG&E recommends that the CAISO continue to aggressively pursue and mitigate the causes of the large energy price differential between RTD and HASP, and to reassess the issue when 6 months of operational experience and settlement data have been established.

Background

In response to the large size of the real-time imbalance energy offset costs for April, the CAISO investigated this issue and identified two key drivers: the significant difference between HASP and RTD energy prices combined with substantial amount of incremental and/or decremental HASP imbalance energy; and the effect of using an average hourly price for RT demand imbalance energy settlement. In addition, the CAISO identified other contributing factors including: over-scheduling in the IFM; under-scheduling in the IFM with under-forecasting in RUC; and intra-hour load variations relative to hourly granularity of the load schedules.

To reduce the size of the imbalance energy offsets, the CAISO has proposed five long-term options[1]:

1) Implement a two-tier allocation scheme to allocate a portion of the offset charge to positive uninstructed imbalance energy
2) identify and mitigate to the greatest extent possible the causes of the large energy price differentials between RTD and HASP
3) develop and implement a new process to determine and settle load deviations on a ten minute basis, consistent with the settlement of generation resources
4) use the RTD prices to settle the hourly intertie imports and exports in HASP
5) do nothing

[1] In addition, the CAISO has proposed a near-term settlement adjustment to exempt load following MSS from charges or credits associated with the real-time imbalance energy offset. PG&E does not oppose this modification since load following MSS are not a contributing factor in the offset costs and credits.

PG&E Comments and Recommendations

The CAISO adoption of Option 2 (identify and mitigate causes of RTD and HASP price differences) is the prudent and supported course of action recommended for the CAISO at this time. Either alone or in conjunction with others, PG&E does not support the implementation of any of the other long-term Options.

It is premature based on one or two months of market data[2] that reflect the fledging state of MRTU for the CAISO to suggest major tariff changes effecting HASP import/export pricing, load settlements or the creation of new penalties. PG&E recommends that the CAISO continue to identify and address the market and operational causes of the large energy price differential between RTD and HASP, and to reassess the issue when 6 months of operational experience and settlement data are available. The future assessment should also include consideration of the possible mitigating or aggravating impacts of planned and possible market enhancements including Scarcity Pricing, Convergence Bidding and the potential for a full hour-ahead / three-settlement process.

Notwithstanding the above recommendations, PG&E offers the following specific comments on each of the CAISO proposed long-term Options:

1) Two-Tier Allocation Process for Positive Imbalance Energy. This option should not be considered further, while the CAISO indicates that this follows cost-causation principles, it does not. In addition to over-scheduling, the CAISO Issue Paper identified numerous other causes of Imbalance Offset besides over-scheduling, in addition there are issues[3] that that create RTM price volatility that exacerbates HASP and RTM price differences and have nothing to do with over-scheduling. Allocation of Tier 1 Offsets costs/credits to positive uninstructed imbalances should not be adopted since it does not reflect appropriate cost-causation. Secondarily, PG&E is very opposed to the CAISO establishing effectively new penalties on load scheduling – and certainly not without a dedicated stakeholder process equivalent in depth and scope to what was used to determine the process, thresholds, and applicability rules for the interim load under-scheduling penalties.

2) Continue to Indentify/Mitigate Factors Causing HASP and RTM Price Differences. PG&E supports the CAISO suggestion to continue to identify and address the causes of the large energy price differential between RTD and HASP and to reassess the extent of this problem with 6 months of operational experience and settlement data. This will allow sufficient time for the HASP and RTM markets to

[2] The DMM has indicated that HASP and RTM convergence has improved in June relative to May and April. DMM Quarterly Report on Market Issues and Performance, 7/30/09, page 5.

[3] For example, load biasing used for generator ramping range management ; abrupt transmission biasing used to match real time flows.

better stabilize and the benefits of the on-going market and operational improvements to demonstrate the extent of their effectiveness.

3) Align Load Imbalance Settlement Intervals with Generation. PG&E does not support the implementation of this Option at this time, however recommends that the CASIO look into this much more deeply. The possibility of settling load imbalances on effectively a ten minute basis may be worthwhile, but the implementation implications are very complex and would require significant development and implementation efforts. The methodology to transform 'hourly' loads into six distinct components would be required; while the CAISO has indicated state estimator results may facilitate this process, there are potentially worthwhile alternatives including the already-available intra-hour granularity of 'load profiles' used for all non-interval metered loads. It is premature for the CAISO to propose potential changes to the tariff, but further investigation is appropriate.

4) Use RTD Prices to Settle Hourly Ties. The CAISO proposal outlines an Option to settle HASP transactions at RTD prices and further suggests that Bid Cost Recovery (BCR) would be provided to importers of energy in HASP (sellers), but would not be available to exporters of energy in HASP (buyers). PG&E does not support changing such fundamental market pricing provisions at this time, based as they are on such limited data and operational history. PG&E however does support further stakeholder discussions here, including alternatives to the CAISO's proposed BCR rules, pay-as-bid HASP, and the possibilities of a full hour-ahead market with a three-settlement system as favored by FERC.

5) Do Nothing. PG&E does not support; improvements are likely possible through the CASIO pursuit of Option 2 and should be adopted.

For the reasons outlined above, PG&E recommends that the CAISO continue to aggressively pursue and mitigate the causes of the large energy price differential between RTD and HASP, and to reassess the issue when 6 months of operational experience and settlement data have been established.

For follow-up or questions, please contact Ann Segesman (415-973-5263) or Glenn Goldbeck (415-973-3235).