Comments of Calpine Corporation on

Energy Imbalance Market

Revised Straw Proposal

Dated: May 30, 2013 Comments Submitted: June 14, 2013

Summary:

Calpine contributed to and fully supports the comments of WPTF submitted today.

We remain generally supportive of an EIM that sets market-wide 5-minute LMP prices that are based on non-discriminatory practices. In this document, we take the opportunity to highlight two issues of key concern: the growing number of disparities in pricing between similarly situated generators in the combined market and a request to review the benefits of the EIM in a world of 15-minute scheduling.

Disparities being recognized and must be addressed

The list of differences in treatment for similarly situated generators is growing. IF a single market is intended by the EIM, some of these structural differences must be resolved:

- Offer obligations are very different in that California RA units are required to offer into the RT markets and EIM Entity (EIME) generators have no obligations. This difference creates the possibility of "capacity leaning." Both sides of this "free call option" coin end up tails for California. RA sellers provide capacity with no compensation to EIME, and RA buyers get less value for the RA they have acquired. Calpine does appreciate the revised straw proposal that would have EIMEs participate in RT capacity costs (like FlexiRamp). It seems that the CAISO must consider either a capacity obligation in the EIME, or a must offer obligation (rather than a voluntary market.)
- GHG kickbacks will create price distortions. The proposal to refund certain generators their GHG costs will create price separations – possibly even for a single generator. That is, if the output of a single generator is split between allocations to the CAISO and to the EIME, they may have two different prices for identical MW. The benefits of the EIM will be

skewed as a result of these differences in price. Certainly, the E3 analysis of benefits did not incorporate the complicated kickbacks proposed by the CAISO.

- Metering differences. As we understand, (and we may misunderstand)
 PacifiCorp will not require either its own merchant generation or other
 EIME participants to install and maintain 5 minute metering. Rather they
 will disaggregate the 15 minute pulses into 5 minute average output. This
 averaging will significantly reduce imbalances and may create questions
 about the need for, and integrity of a 5 minute dispatch.
- The absence or presence of LMPM in EIME areas must be resolved. On one hand, the absence of LMPM would allow scarcity pricing that is entirely absent in the California market. On the other hand, as Powerex identified, a significant principle supporting LMPM in California is the presence of an RA market. The absence of such a capacity payment in other EIME areas severely limits the justification for LMPM.
- Transmission constraint relaxation. The CAISO proposes to relax any transmission constraint that cannot be resolved in an EIME area through the non-market "Minimum Shift Optimization". This relaxation is in stark contrast to the policies of the CAISO that require parameter pricing in these circumstances.

Benefits of the EIM

When E3 evaluated the benefits of the EIM, they did not consider the constraints to pricing or differences in treatment that are now apparent. In addition, they used, as a baseline hourly schedules. We now know more facts that could affect the balance of burdens and benefits of the EIM. Specifically, we anticipate that 15 minute scheduling will be in place before the EIM, and this could capture most of the benefits. Indeed, if PacifiCorp does not require 5 minute metering and dispatch, it could capture all of the reported benefits. The ISO should continue to review the balance of burdens and benefits of the evolving proposal.

Thanks