CAISO-proposed ramping capability constraint

March 18, 2011 MSC

Ellen Wolfe

Ramping constraint issue – Problem/Situation Definition

- The CAISO has identified a preference to have at times additional fast-ramping capacity on line to serve real-time load variability
  - See technical bulletin (http://www.caiso.com/2381/2381f87327f70.html)
- The CAISO proposes to add a commitment constraint that would allow the CAISO to commit resources in the real-time predispatch (RTPD) in excess of the load forecast
  - Commitment levels would be configurable by the CAISO operators, with some general guidelines captured in BPM
- The CAISO does not plan to offer any value-based compensation for this service
  - Only BCR for the additional commitments
- It's unclear what level of transparency will be available as to system cost impacts/system value impacts of the new constraint
- We understand the CAISO does not intend a tariff filing for this change

Ramping constraint issue – Further Clarification of Issues/Concerns

- Minimum on-line constraints were similarly added to procure capacity in certain regions (also not value priced)

- No near-term policy discussion otherwise planned

- New renewable product discussions will only begin in April
  - Yet, imagine how long it might to design products in that large process

- The services that are needed by the CAISO should be value priced
  - Provides the right incentives
  - Is the appropriate approach to avoiding compensation gaps
  - Avoids, or compensates somewhat for, price distortions (e.g. energy market price suppression with even more units committed)

Ramping constraint issue – Questions to Ponder

- There are a number of questions we as a community should ponder:
  - What language should be used to describe these new services, "constraints", "shadow"- like prices?
  - What is the value to the system? How is it measured? What language should we use to describe it?
- Should the CAISO capture these services in their tariff or should such constraints fall "under the radar screen"?
- Should we have a policy process where people fast-ramp (pun intended) to address the policy and pricing implications when the CAISO feels it needs to implement such a change that affects operations and the markets?
- If we were to create a product for this how would such a product be designed?

Ramping constraint issue – Questions to Ponder (continued)

- What information if any should be captured and published for this new constraint?

- We suggest at least the following:
    - Full definition of the constraint
    - When the constraint(s) is(are) enforced
    - When they "bind"
    - Changes in the commitment solution that results
    - Other measure of system savings/value(?)
    - Measure of "shadow price(?)"

- In the interim we should collect and publish as much information as possible about this ramping constraint in order inform the market

Discussion

We look forward to your thoughts and a lively discussion