

Marginal Loss User Group Final Recommendation

Presentation to PJM MC

March 25, 2010

Proposal to be Voted Today

The MLUG presents to the Members Committee the following motion for a vote:

The Members Committee directs PJM staff to implement the marginal loss modeling change as detailed in the PJM Manual changes posted by PJM, with an effective date of June 1, 2011.

MLUG Participants

- AEP
- Dayton
- Duke
- Exelon
- PPL
- Shell Energy

Brief Chronology

- Marginal Loss User Group chartered by MC in 2008
 - Original goal was to develop a hedging mechanism for the ML component of LMP. Effort was tabled after comprehensive review of how ML works
- While studying the details of the implementation of ML in PJM, the UG identified two issues
 - Inconsistent system models among zones
 - Potential generator pricing error (GSU/pNode)
- MLUG held a number of open meetings in 2008-09
- MLUG brought findings to the MC in June 2009
 - MC directed MIC to review and report by Nov 2009

Recent Events

- MIC reported an improved PJM proposal for ML modeling to the MC in November 2009
 - MC directed MIC to perform a targeted three month evaluation of how the results of implementing the PJM proposal differed from those of the original (>100 kv cutoff) proposal
 - PJM reviewed with the MIC a side by side simulation of implementation of the two proposals – results were consistent
- MC will take a final vote today.

The Zonal Modeling Issue

- Level of detail in PJM's transmission system model varies by TO zone
 - Reliability/congestion issues
 - TO historical practices in data transfer
- PJM currently calculates marginal loss sensitivities for all elements in its dispatch system model
 - Share of losses paid for through ML settlements versus assigned physically to load varies zone to zone
 - Impacts LMPs for gens and loads across PJM
 - Inconsistent with system model used by PJM to calculate congestion component of LMP

Proposed Solution

- ML sensitivity calculations should be performed on facilities monitored for reliability
 - Less arbitrary
 - Consistent with facilities for which PJM calculates congestion component of LMP
 - Less chance of cost shifts among zones
 - Equal treatment for supply resources in dispatch
 - Helps to keep loads from over-paying for losses

Proposed Solution

- Impacts
 - Decreases unhedgeable component of LMP among various points in the PJM market
 - Decreases over-collection of \$\$ needed for loss payments
- Recommendation
 - Correct PJM model to reflect lines monitored for markets and reliability
 - Correct PJM model to reflect actual metering point for generators at high or low side of GSU
 - Make change effective 6/1/11 in conjunction with ATSI integration and aligned with EMS upgrade

Final Steps in User Group Process

- MC vote today – final stakeholder action
- Based on the result of the MC vote, the MLUG may decide to present this issue directly to the PJM Board of Managers

Questions ?

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