



MMU Analysis of Combined Regulation Market

MIC

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- PJM temporarily modified the regulation market on August 1, 2005
- PJM combined the PJM Regulation Market and the Western Region Regulation Market
- Final decision on combining markets is contingent on a report from the MMU and a decision by PJM members

- Combined market is better operationally than separate markets
- Combined market is more competitive than separate markets
- Combined market still exhibits structural market power in a substantial number of hours
- MMU concludes that it is preferable to retain the combined market, if appropriate mitigation can be implemented

- Prior mitigation included:
 - All cost based offers (prior to Dominion integration)
 - Cost-based offers for dominant owners (following Dominion integration)
- Proposed mitigation – flexible real time approach:
 - Real time application of three pivotal supplier test
 - Apply test using exactly the same logic applied in the energy market
 - Offer capping only in hours that fail test
 - Offer capping only for owners that fail test in hour; and that are needed to provide regulation in hour

- HHI results for 2006
 - Calendar year
- Three pivotal suppliers for 2006
 - Calendar year
 - Three market definitions.
 - Correct market definition is 1.50 times clearing price.
 - Provided result for 2.00 times clearing price at the request of members.
- Mark up results for 2006
 - About 24 percent of marginal units had offers greater than cost



Combined Regulation Market HHIs

Market Type	Minimum	Average	Maximum
All Units	816	1256	3763



Combined Regulation Market Pivotal Supplier Results

Market Definition	Hours with Three Pivotal Suppliers (Percent)
Price \leq RMCP x 1.05	79%
Price \leq RMCP x 1.5	26%
Price \leq RMCP x 2.0	5%