



Market Monitoring Update

Joseph E. Bowring
PJM Market Monitoring Unit
Energy Market Committee
February 7, 2001



MMU Issues

- TORWG proposal
- Day ahead withholding
- Cost capping method
- ICAP issue



TORWG

- The TORWG proposal was unanimously recommended by OC
- The proposal does not require new scheduling
- The proposal does define the reporting requirements for existing scheduling practices
- Submit planned outage schedules one year ahead
 - Outages > 5 working days
 - Outages with significant system impacts
 - Regular updates required
- Notice of all transmission outages by first day of preceding month
 - No notice, significant congestion: PJM can require rescheduling to reduce congestion
- All TOs required to regularly update facility ratings databases



Withholding in the day ahead energy market

- The OA, Schedule 1, Section 1.10.1a(d) states that Market Sellers which own Capacity Resources must submit offers for the available capacity of their units including any portion that is self scheduled, unless the unit has a declared outage.



Maximum Emergency Designation

- Max Emergency: Highest short term MW level a unit can produce and may require extraordinary procedures.
- Designation of capacity as Max Emergency constitutes withholding in the day ahead energy market.
 - If the capacity is not designated as ME in bid for real time energy market. (RT-DA)
 - If there is no physical reason to designate as ME.
- Proposed solution:
 - Take an outage ticket which reflects derating = difference in capacity.
 - Require submission of accurate ME MW.



Economic Maximum Designation

- Economic Max: Highest unrestricted level of MW that the operating company operates the unit.
- Reduction of economic max MW constitutes withholding in the day ahead energy market.
 - If the full capacity is made available in bid for real time energy market.
 - If there is no physical reason to designate a lower economic max.
- Proposed solution:
 - Take an outage ticket which reflects derating = difference in Economic Max. (RT-DA)
 - Require submission of accurate economic max MW.

Mirant Objections

- Indication of potential impact
 - Base load unit(s) withhold in day ahead market
 - Increase day ahead price above competitive level
 - Scheduling impact
- Participant counter strategies
- Cost and market based offers treated differently
 - Only withholding method available for cost based units
- Significant monitoring effort
- Legitimate risk management requires these methods
- Legitimate economic and contractual reasons for methods
 - QFs



Cost capping method

- Current method: cost cap units by 2400 of day ahead
 - Rationale: advance knowledge required to take advantage of local market power
 - Problem: Units bid in consistently at \$999/MWH
 - Ability to limit local market power restricted to next day
- Proposed method: cost cap units in real time:
 - Units bid in consistently at \$999/MWH
 - Constraint arises in real time
 - Cost capping effective immediately
 - Ability to limit cost capping to hours where constraint exists
- Alternative: cost cap units day ahead more conservatively

- Capacity market prices = CDR for January
- Competitive market price < CDR
- Contrast with June 2000: competitive market price > CDR
- Hypothetical problem
- Capacity owner with 5,000 MW available ICAP
- Market has 1,000 MW excess ICAP
- Capacity owner sets price floor = CDR
- Bid above CDR: capacity does not clear, receive CDR revenues
- Bid CDR: capacity does clear, receive CDR revenues from bids



Proposed ICAP solution

- Modify allocation of capacity deficiency revenues
- Long capacity owners receive higher of:
 - Forward energy market price differential up to CDR
 - $\$10/\text{MWH} * 16 \text{ hours} = \$160/\text{MW-day}$
 - Allocation of CDR revenues to all LSEs with covered loads and all long capacity owners
- Incentive to stay in ICAP market
- Incentive to compete