



## Work Package 1 – Temporal Issues: MIO Pricing Test Plan for Sandbox Environment

The Market Pricing working Group is currently discussing a potential resolution of a number of temporal pricing issues (Issues #04, #25 & #31) that involves concurrently extending MIO to the unconstrained algorithm and eliminating the 12X ramp rate. The Market Pricing Working Group is seeking use of the Sandbox environment in order to determine the effect on market clearing price of this proposal. This would require exclusive use of the Sandbox for several periods lasting up to one week each, where the Sandbox would be synchronised with the Production system (similar to the set-up that was used for MIO testing).

### The test set-up required for Sandbox is as follows:

- Ø Synchronisation with Production – similar to the process used for MIO testing – bids, offers, limits, manual values, etc. are automatically copied over to Sandbox to maintain synchronisation. Identical software versions for software that would have any effect on dispatch and pricing algorithms in constrained and unconstrained sequences.
- Ø Exclusive use – use of Sandbox by anyone else must not alter software or data that would impact pricing.
- Ø Changes are required to allow the constrained sequence to emulate the unconstrained sequence as closely as possible:
  - § Set all transmission limits to highest possible value.
  - § Set area minimum reserve requirements to zero and maximum reserve requirements to a very high value
  - § Set the penalty factors for all nodes to 1.0

### Timing of Tests:

An initial test period for a weekend (Friday, November 12, 2004 to Sunday, November 14, 2004) has been scheduled. This would be a trial to verify the test set up and data produced. After confirming that the test method and set up is satisfactory, several future test periods of a few days (up to a week) each are to be arranged over November 2004, December 2004, and possibly early January 2005.