

Objective Function of the Balancing Market

Background

- HLD stated that TSOs will minimise the cost of deviating from physical nominations
 - Respecting priority dispatch
- TSOs will have:
 - PNs at points during BM
 - Wind Forecast
 - Demand Forecast
 - Local constraint group information
 - FPN at Gate Closure
 - Incremental and decremental prices associated with PNs and FPNs
 - Form of bids and offers to be discussed later in workshop

What should the TSO seek to do

- Minimise cost of dispatch based on information available through the BM
- Timing is a key consideration
 - At gate closure the TSO will consider FPNs and any supply/demand imbalance
 - Balance the system at least cost based on incs and decs
 - Execute any arbitrage trades that exist
 - IDM should ensure no arbitrage trades left at gate closure

What should the TSO seek to do (2)

- Minimise cost of dispatch based on information available through the BM
 - However, TSO won't always be able to wait until Gate Closure
 - Choice of available plants will diminish closer to real time given notice times
 - Certain plants with long start times may be needed for certain non energy actions
 - TSO will aim to minimise pre 1h ahead actions but must consider obligations to maintain secure system
 - Excessive pre 1h ahead actions could artificially suppress BM price
 - Energy and non energy action identification and BM pricing will be considered later in the workshop

Objective Function of the Balancing Market

- Minimise cost of dispatch based on information available
 - PNs
 - FPNs
 - Demand Forecast
 - Wind Forecast
 - Incs and Decs
- The TSO in operating the system will have to take actions on an ongoing basis
 - Transparency is important for the market