Advancing Both European Market Integration and Power Sector Decarbonisation: Key issues to Consider

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Delivering an integrated and decarbonised, European electricity market

• Three concurrent activities
  – market integration by 2014 within a framework of legally binding Codes
  – action by MS to deliver national decarbonisation (based on self-sufficiency)
  – decarbonisation initiatives on a European scale

• Need for increased & systematic co-ordination
Instances where decarbonisation & market integration initiatives may possibly conflict

- Market integration initiatives & low-carbon support measures adopted by MS need to be compatible, but one size may not fit all
- Nature of “locational messages” in the context of decarbonisation
- Issues arising from the development of the Generation Connection Code
- Energy balancing for a decarbonised electricity system
Decarbonisation support measures and market integration

• Market integration via the “Target Model”
  – focus now is on consistent energy prices across Europe
  – but longer view, i.e. what future market arrangements will sustain clean resource investments, is also needed

• Decarbonisation support measures (i.e. FiTs, quotas, capacity payments etc)
  – impact energy prices differently
  – potential to distort cross-border trade
Decarbonisation support measures and market integration (cont)

• “Target Model” will need to accommodate a range of support measures

• The process should encourage:
  – MS consideration of design options that minimize potential cross-border trade distortions, while still meeting MS goals (see capacity payment discussion in Annex 2)
  – EU review of support mechanisms that acknowledges “one size does not fit all”
Locational Signals & Decarbonisation

• Locational signals delivered via use of system charges may discriminate against intermittent renewable generation
  – need less network assets
  – inability to respond

• “Target Model” will deliver locational signals through energy price differentials
  – flat use of system charges?
  – preferential allocation of transmission rights?
Generation Connection Code

• Pilot has highlighted TSO’s pivotal role
  – need for formal involvement of system users and early involvement of MS
  – “system” level provision where economically justified
  – where appropriate, system requirements should be delivered through market arrangements
  – retrospective application should be justified by independent cost benefit analysis
Intermittent generation & balancing

• Debate focused on existing paradigm
• Balance between exposing intermittent generation to the full costs of integration v risks to deployment & possible need for increased market support?
• Dual cash out prices penalise intermittent generation & small players
• Consideration should be given to;
  – balancing intermittent generation on a zonal or net basis?
  – separate gate closure?
Full Paper Available at:

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- Promote economic efficiency
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Market coupling

- Two interconnected markets, ATC non congested

Exporting Market
- Two interconnected markets, ATC congested

Importing Market

Market A

Market B