SEM Market Integration Workshop 3 – Outstanding Issues

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Outline

- Central Commitment and Dispatch

- Bidding

- Renewables

- Capacity payments

Central Commitment & Dispatch

- Target model based on:

    - self commitment & nomination

    - simple bidding

- Self commitment for SEM:

    - Loss of largest infeed ~ 20% controllable generation

    - Transmission constraints

- Intermittent generation now ~ 50% system demand at times

Central Commitment & Dispatch (contd.)

- To maintain system security SOs need:

  - Central commitment

  - Central dispatch

  - Accurate technical constraints

  - Accurate cost-reflective offer data to:

    - commit and dispatch units

    - price dispatch in real time

Central Commitment & Dispatch (contd.)

- During consultation period RAs to work with SOs to look at:

  - Physical security of supply implications

  - Efficiency implications

  - Compatibility of central commitment & dispatch with target model

    - Day ahead stage

    - Intraday stage

Bid/Offer Types

- Day ahead market coupling algorithm currently being developed on basis of that used now in CWE region (COSMOS)

- COSMOS currently allows offers:

    - linear interpolated /stepwise price/quantity pairs

    - 'fill or kill' block orders

- Hourly products

- Order requirements for PCR algorithm requirements:

  - Profile block orders

  - Linked block orders

  - Minimum income condition orders

  - Load gradient constraints

  - Schedule stop constraint

  - Indivisibility constraint

- Price properties of PCR algorithm

  - Welfare maximisation

  - Uniform national purchase price (PUN) in Italy

- Complex three part offers inconsistent with PCR algorithm

- Compatibility of centralised day ahead market based on complex three part offers with market coupling

- Compatibility of three part offers made day ahead with intraday trading using updated simple offers

- Implications of basing real time/balancing market on complex offers made the day before

Renewables

- Promoting renewables a key objective of Government policy

- Increased interconnection & trading closer to real time beneficial for renewables

- The intra day market will allow market participants to trade cross border to respond to within day variations in wind up to gate closure

Renewables (contd.)

- Issues that remain to be addressed include:

  - Participation of wind in bilateral markets

  - Priority dispatch

  - Exposure of intermittent generation to imbalances

  - New entry in the longer run

Capacity payments

- Mainland European markets energy-only markets

- SEM and BETTA energy + capacity markets

  - IC flows in SEM pay and get paid capacity payments

  - DECC position open

- Market coupling implications

- Options

  - Include deadband in coupler

  - IC flows not eligible for capacity payments