Operational and Cost Update

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Electricity Operational Forum – February 2012
Agenda

- Weather
- Minimum Zero Times (MZT) of Generation in GB
- Interconnector flows to Europe across Winter 2012
- Wind Update
- Cost Update
Weather for Dec 2011 and Jan 2012

Continuing mild weather across Dec / Jan

Mean National Composite Weather for December

Mean National Composite Weather for January
Generation Minimum Zero Times

- Reduction in 4 hour machines to 2-shift overnight being experienced at times (particularly in Dec)

6 Hour MZT results in additional plant to advance for morning pickup as wait for 2 shifting plant to synch

4 Hour MZT offers better flexibility to manage downward regulation and avoid advancing plant for the morning pickup
Interconnectors

- Have observed high exports at GB peak demands and also “wheeling”

Imports via BritNed And Exports via French Interconnector i.e. “wheeling”

High Exports on all Interconnectors
Wind

- Have operated “SCOTEX” above 3GW transfers this winter to maximise renewable generation.

Wind Generation in Scotland as % of Scottish Demand Nov 2011 to Dec 2011

- Total Scottish Wind (estimate made of non metered wind) as a % of Scottish Demand (not including Pumped storage or Interconnector flows)
System Operator Cost Update
Total Incentivised Balancing Cost (IBC) for December 2011
Cost Update – Scottish Constraints

- Correlation with of constraints to wind output

Total Metered Wind Output (MW) vs Scottish Constraint Costs
(Scotland)
Cost Update – Transmission Losses

- Higher North – South flows increases losses

![Cumulative Transmission Losses Graph]

- Cumulative Transmission Loss (TWh)
- Cumulative To Date

- cumu 2011
- cumu 2010
- cumu Target (2011-13)
Scheme Target vs. Costs Overview

- Scheme target not increasing to cover for events outside of NGET control

Costs increasing but Scheme target stays static
BSIS Update – End December

Scheme losses continue to increase

- Current Scheme Target Value, 1346.6
- Previous Scheme Target Value, 1339.4
- Current Cost Forecast, 1453.8
- Previous Cost Forecast, 1379.7

Upside Sharing Factor: 25%
Downside Sharing Factor: 25%

Incentivised Balancing Costs (£m)
Scheme Profit or Loss (£m)
Analysis of main drivers for divergence in costs vs. scheme target

Main Drivers identified

- Long term Moyle Interconnector fault outage not modelled in Plexos
- Plexos modelling of generator running patterns in Scotland not what is experienced in real-time
- Transmission Outages overrunning
- Southern voltage control
- Response costs – driven by unplanned Transmission outage
- Transmission Losses due to changing generation patterns
BSUoS Forecast

- 2011/12: £1.31/MWh (previous update = £1.26)
- 2012/13: £1.09/MWh (Updated with latest information)
Contribution to BSUoS

+Constraint Costs

-Energy & Reserve Costs

+Lower Volume