Operational and Cost Update







Sam Matthews, Balancing Services Manager Electricity Operational Forum – February 2012

Agenda

Weather

Minimum Zero Times (MZT) of Generation in GB

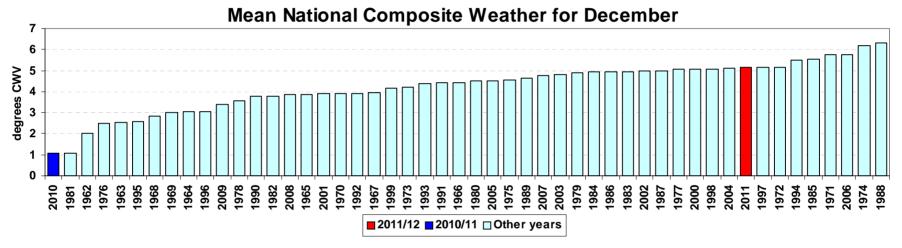
Interconnector flows to Europe across Winter 2012

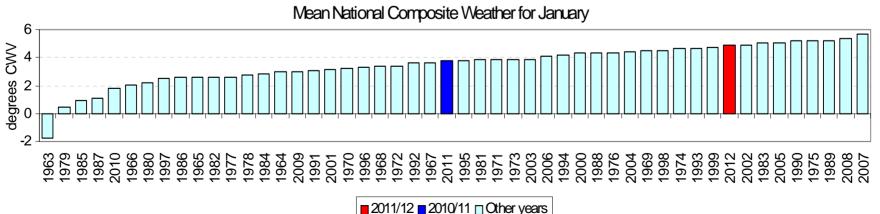
Wind Update

Cost Update

Weather for Dec 2011 and Jan 2012

Continuing mild weather across Dec / Jan

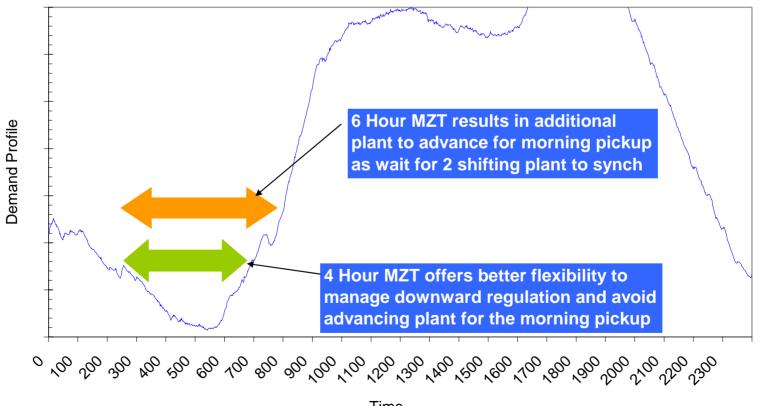






Generation Minimum Zero Times

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



Time



Interconnectors

Have observed high exports at GB peak demands and also "wheeling"
Imports via BritNed

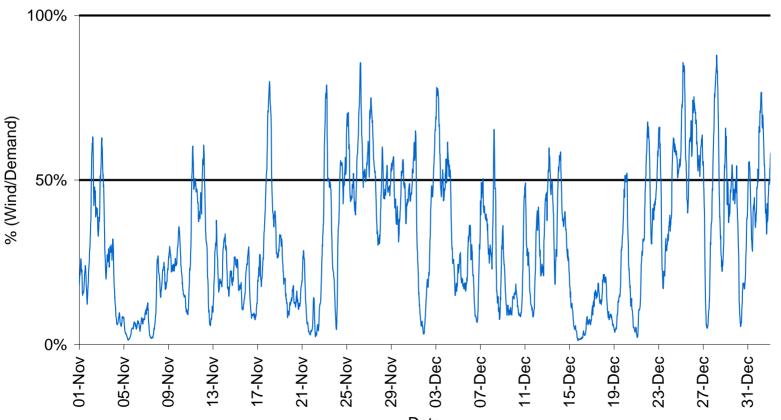
Imports via BritNed **And Exports via French** Average Half Hourly Interconnector Flows Interconnector i.e. Data referring to dates: 2012-02-07, 2012-02-08 "wheeling" (Positive Implies Flow to GB) 2000 1000 Interconnector Flow MW **High Exports on all** Interconnectors -1000 -2000 -3000 **Settlement Period**



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



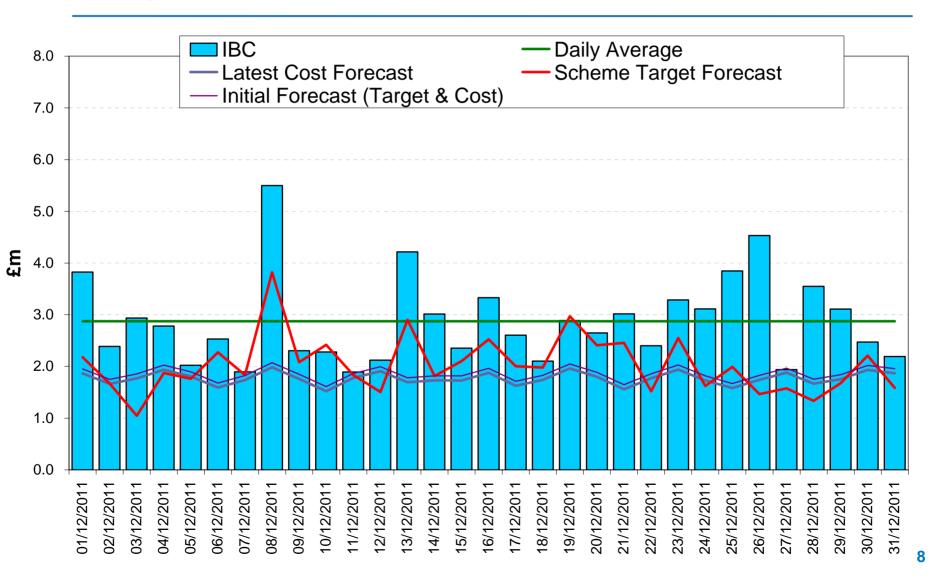
— Total Scottish Wind (estimate made of non metered wind) as a % of Scottish Demand (not including Pumped storage or Interconnetor flows)

System Operator Cost Update



Total Incentivised Balancing Cost (IBC) for December 2011

nationalgrid

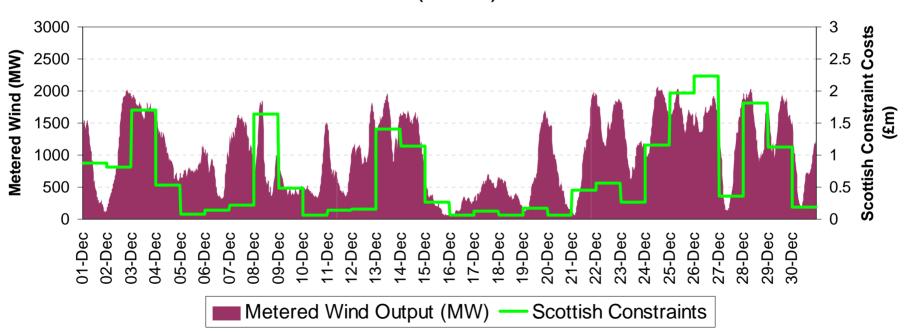




Cost Update – Scottish Constraints

Correlation with of constraints to wind output

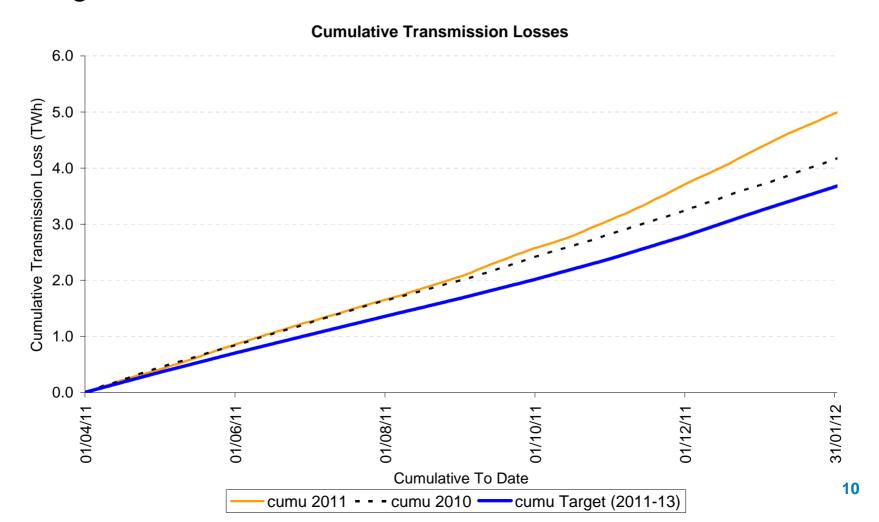






Cost Update – Transmission Losses

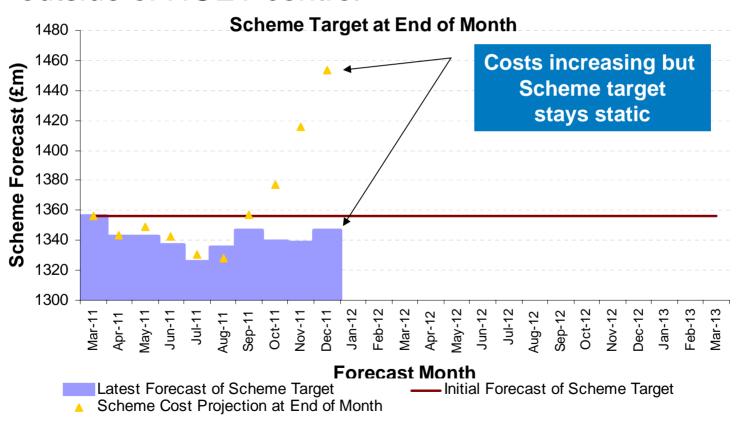
Higher North – South flows increases losses





Scheme Target vs. Costs Overview

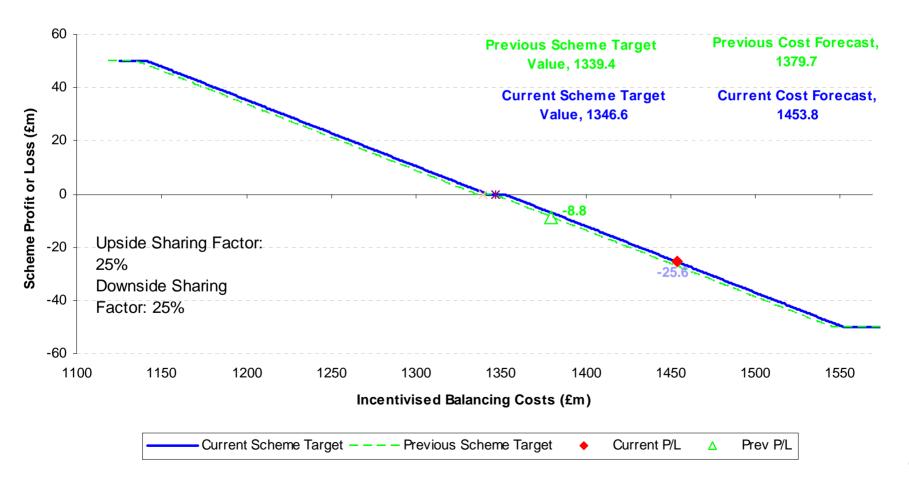
 Scheme target not increasing to cover for events outside of NGET control





BSIS Update – End December

■ Scheme losses continue to increase



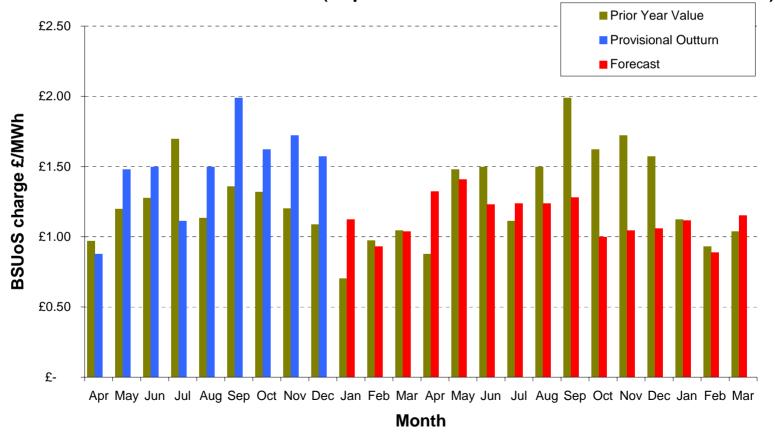
Analysis of main drivers for nationalgrid divergence in costs vs. scheme target

- 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

