Operational & System Operator Cost Update

Iain McIntosh - Electricity Incentives Development Manager
Actual Cost for June 2013

Daily Outturn By Category for Jun 2013

- £m

- Energy Imbalance
- Positive Reserve
- Negative Reserve
- Frequency Control
- E&W Total
- Scotland Total
- Cheviot Total
- Remainder
- IBC

01/06/2013 to 30/06/2013
June – Scotland Constraints

- Big reduction in constraint cost from May, led by lower Scottish constraints
- Active constraints in FAUGEX and Cheviot
- Lower wind output led to almost 50% reduction in Cheviot
• England & Wales accounted for a majority of constraint costs in June – but overall costs lower

• SWALEX main thermal constraint, voltage issues across south of England. DRIVE contracts in place
Actual Cost for July 2013
July – Scotland Constraints

- NLOANSSE and Cheviot were the active constraints
- High costs associated with high wind output – 1000MW of wind bids on 4th July
- Contracts in place to manage NLOANSSE
July – England & Wales Constraints

• Voltage management main issue – managed through DRIVE contracts to end Sept

• High costs on 22nd driven by import constraint requiring generation support

• SWALEX/USKEX main thermal constraint
Actual Cost for August 2013

Daily Outturn By Category for Aug 2013

- Actual Cost for August 2013
- Energy Imbalance
- Negative Reserve
- Positive Reserve
- Frequency Control
- Scotland Total
- E&W Total
- Cheviot Total
- Remainder
- IBC

£m

01/08/2013 to 31/08/2013
• Most costs accrued over two days associated with high wind output
• Number of circuits out of service
• Emergency instructions issued across 3 wind farms
August – England & Wales Constraints

• A majority of active thermal constraints are in Wales
• Voltage constraints active across southern England and South Wales
BSUoS Forecast Update
BSUoS Forecast 2013-14

- External BSUoS costs estimated to be: ~£856m
- Total BSUoS costs estimated to be: ~£988.55m
- Total Charging Volume: 626.4TWh
- Est. BSUoS Charge: £1.58/MWh (Range of £1.27/MWh to £1.72/MWh)
IAE Update
# IAE Submissions and Cost Impact

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<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Cost Impact</th>
<th>Revenue Impact</th>
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<tbody>
<tr>
<td>Transmission Losses</td>
<td>Increased north-south energy transfers due to swing from gas to coal, increased wind generation and delays to commissioning plant</td>
<td>£107.9m</td>
<td>£21m</td>
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<tr>
<td>FMJL Replacement</td>
<td>Unforeseen and subsequently extended outages to replace assets with safety exclusion zones</td>
<td>£28.9m</td>
<td>£7.2m</td>
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<tr>
<td>Closure of Alcan</td>
<td>Large reserve/response provider closed during scheme which was unforeseen and resulted in more expensive actions being taken</td>
<td>£38.3m</td>
<td>£9.6m</td>
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<tr>
<td>Moyle Outage</td>
<td>Fault of Moyle I/C in 2011/12 resulted in higher Scottish constraint costs by effectively lowering demand in Scotland</td>
<td>£29.2m</td>
<td>£7.3m</td>
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## Details of IAE decision

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Impact on BSUoS 2012/13

- Income adjustment of £7.3M after sharing factors
- Impact on BSUoS is 1.17p/MWh (£0.017/MWh)
- Impact of charges will be reflected through the final reconciliation runs
PV Forecasting
Forecasting Embedded Solar Generation

Estimated GB Output / MW

PV Installed Capacity

PV Output @ 1200
## Embedded Generation Forecast

### Embedded Generation Estimates

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### Contact

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Q&A

iain.mcintosh@nationalgrid.com