



Operational and SO Cost Update

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Agenda

Operational Issues

SO Cost Update

BSUoS Update

Operational Performance Summary

- ◆ **There have been seven Significant Incident Reports requested in the last two months**
 - ◆ One for a unit failing to follow their submitted PN
 - ◆ One for switching without prior agreement from National Grid
 - ◆ One for unplanned circuit breaker operations
 - ◆ One for a main busbar protection mal-operation
 - ◆ One for a unit failing to desynchronise after accepting an instruction to do so
 - ◆ Two for loss of station supplies for switching time
- ◆ **There has been one significant frequency excursion since the last operational forum**
 - ◆ 12th June – Frequency rose to 50.308 Hz
 - A planned 100 MW increase in a generators output produced an abnormal 0.26 Hz increase in system frequency. Planned de-synchronisations two minutes later restored frequency.

IBC component comparison –June 2009



June Summary - Constraints

◆ Cheviot and Scottish Internal Constraint costs below forecast

- Contracting strategy for the month delivered average daily constraints cost well below scheme forecast.
- National Grid managed to forward contract greater volumes than forecast, at lower spreads than forecast.

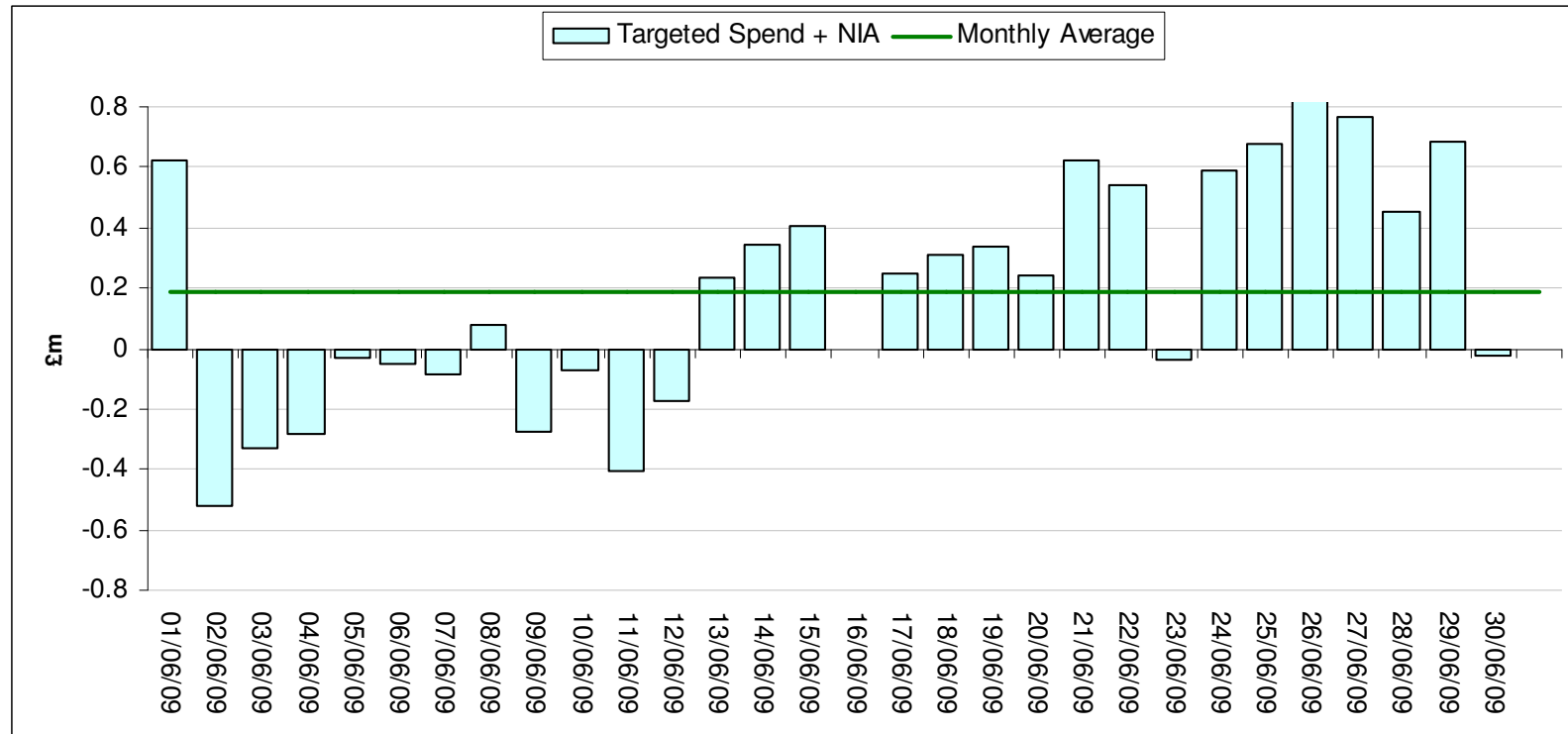
◆ England and Wales Constraint costs below forecast

- Favourable plant positions and interconnector flows led lower than forecast costs.
- High costs incurred on 23rd due to coincidence of unfavourable plant position exacerbated by a planned outage.
- 2250 MW of Northern plant constrained on 29th due to failure of a CT at Deeside.

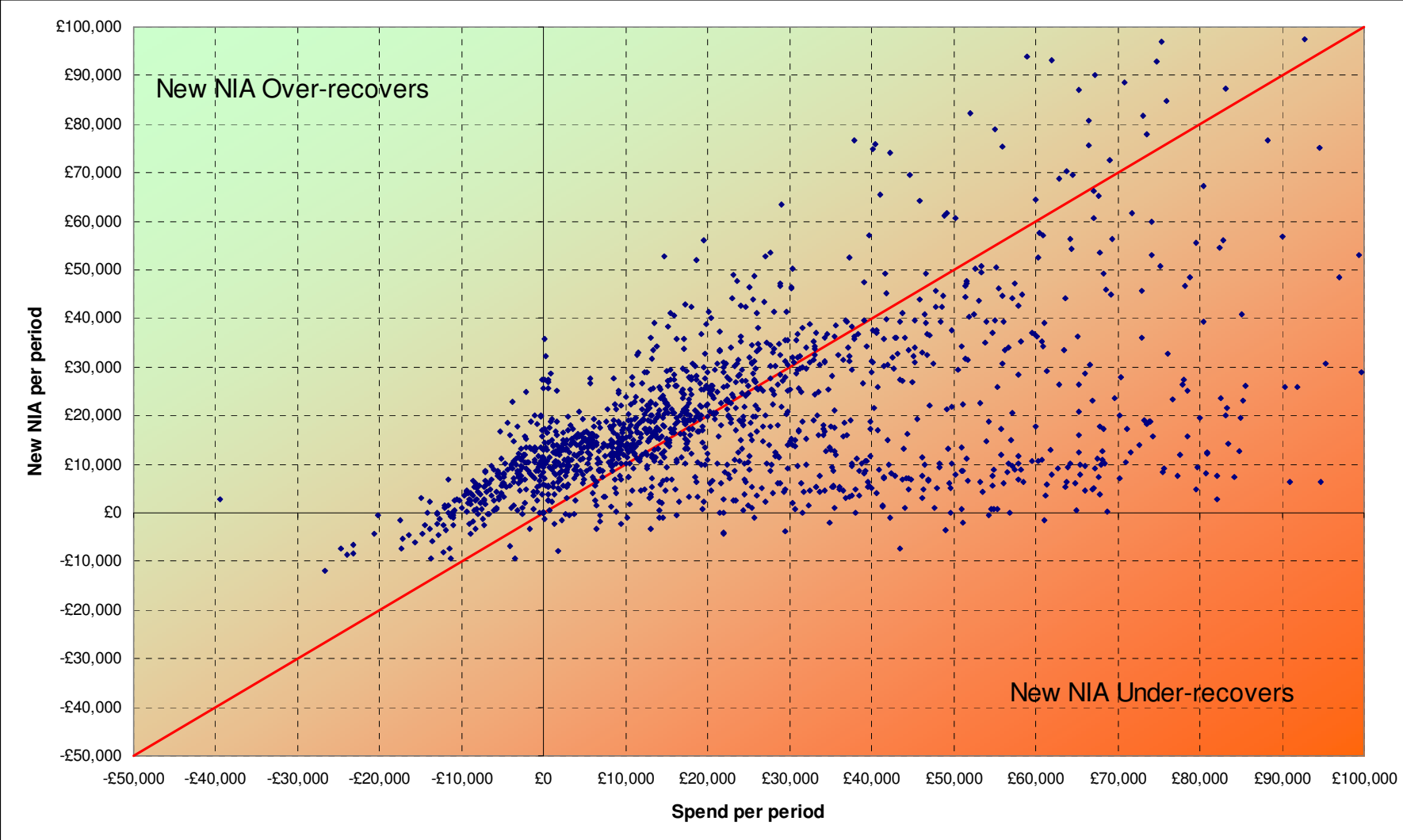
June Summary – NIA

◆ NIA does not fully recover targeted costs

- Over the course of the month, NIA recovered some £5.7m less than the targeted costs
- This effect occurred mainly in the later part of the month, where costs remained high but NIA values reduced as the market moved from an average short position towards an average of balanced to slightly long



June NIA per settlement period versus spend



June Summary – Other BSIS Costs

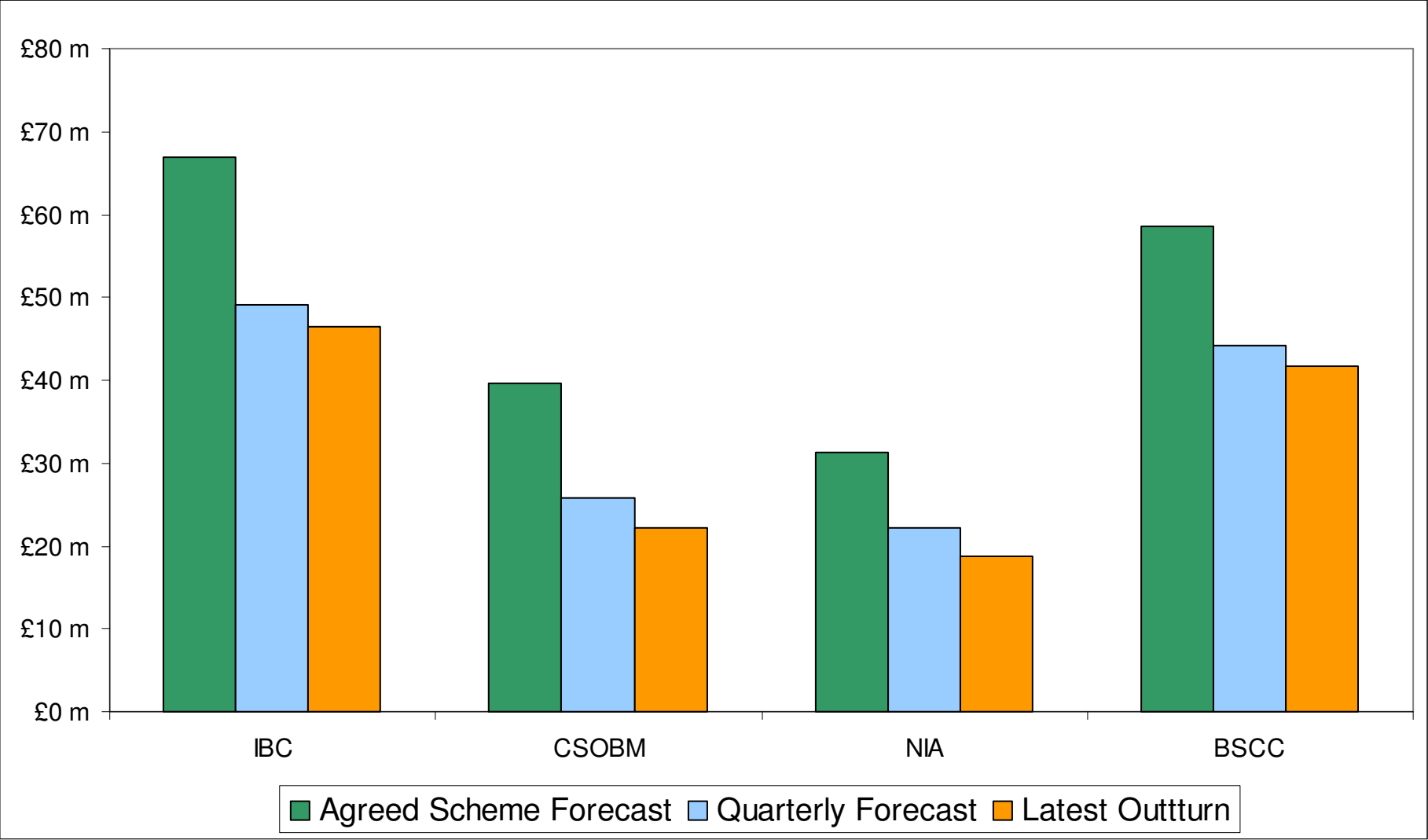
◆ Operating Reserve costs below forecast

- Operating reserve costs for the month were £3.8m below agreed scheme value due to low volumes of actions required due to the market being longer than forecast.

◆ Footroom costs still rising

- Footroom costs were high (£7.7m) due to a number of interacting factors beyond National Grid's control
- The current level of nuclear availability is above that experienced in recent summers. This increases the amount of inflexible generation on the system.
- Low gas prices resulted in higher levels of generation overnight due to gas fired generators running through, in spite of low margins/spark spreads.
- A substation switch fault near a large demand resulted in higher than usual HF requirements
- Overnight imports from France have been low, combined with the inability on several occasions to arm the HF intertrip on a bipole due to voltage issues in the south arising from low southern generation levels.

IBC component comparison - July 2009



July Summary - Constraints

◆ **Cheviot and Scottish Internal Constraint costs below forecast**

- Contracting strategy for the month continues to deliver average daily constraints costs below scheme forecast.
- Low wind over month resulting in less constraint requirement
- Plant running arrangements have been more favourable than forecast

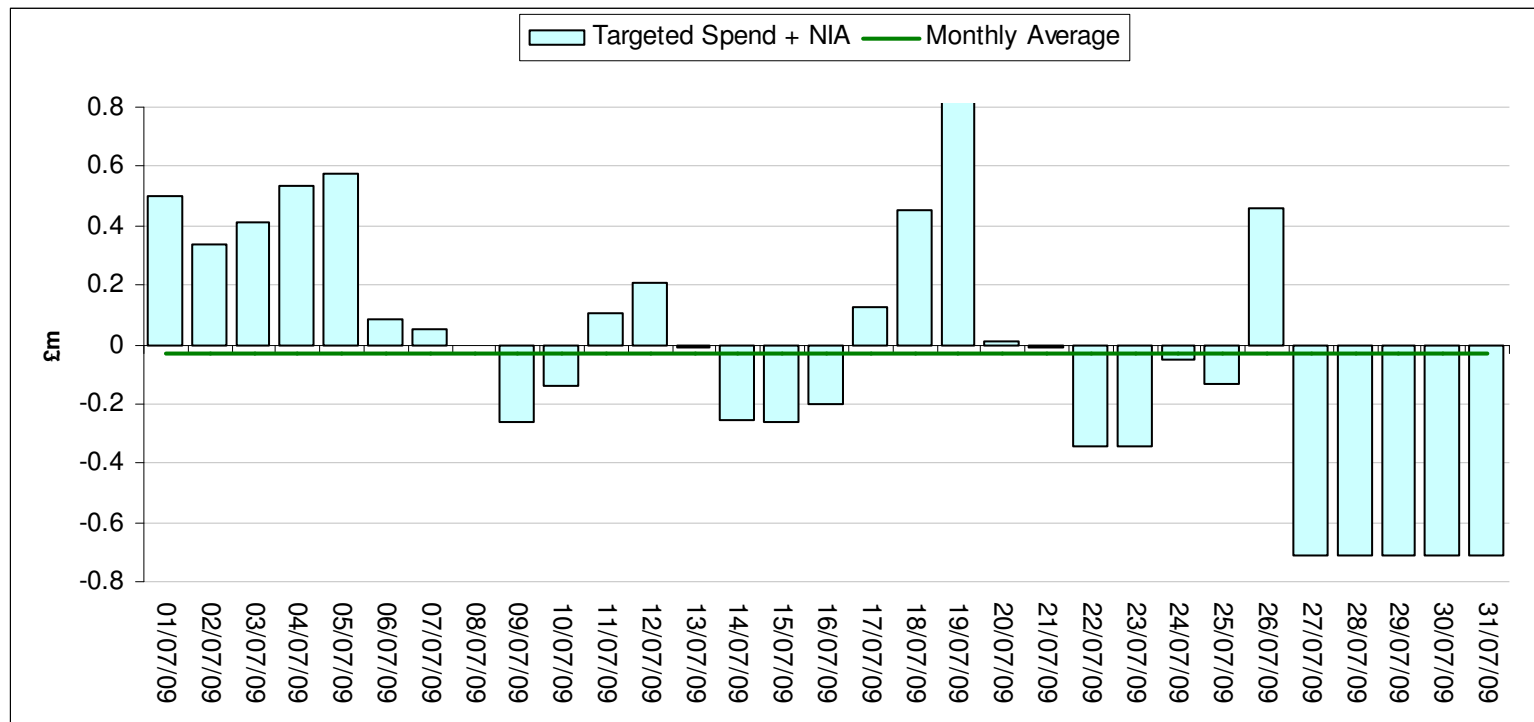
◆ **England and Wales Constraint costs below forecast**

- Some outages have been deferred, resulting in lower than forecast costs.

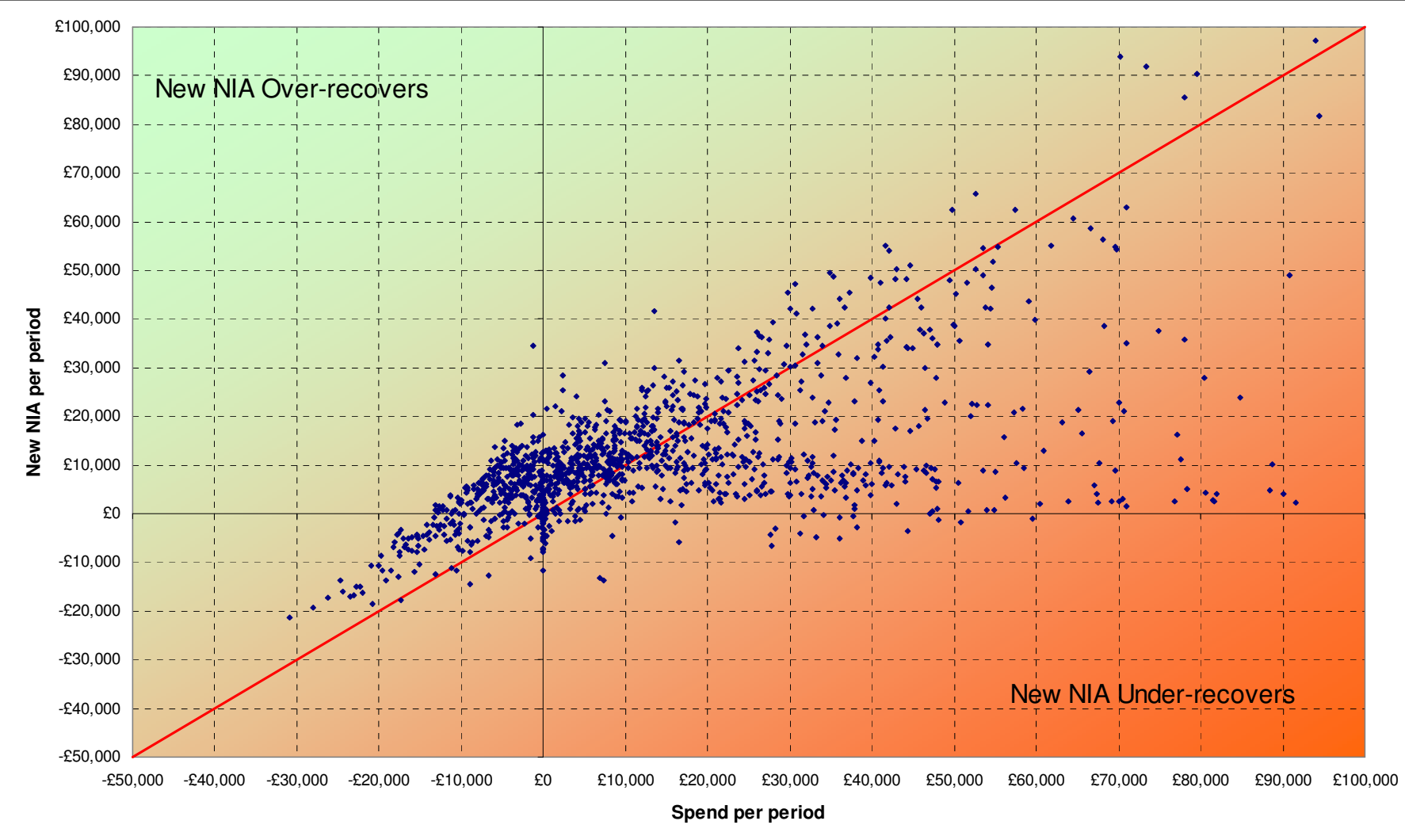
July Summary – NIA

◆ NIA recovery close to targeted costs

- Over the month NIA closely matched targeted spend. The largest imbalance occurred on 19th July, predominantly driven by footroom issues, with seven plant two shifted overnight for downward regulation.



July NIA per settlement period versus spend



July Summary – Other BSIS Costs

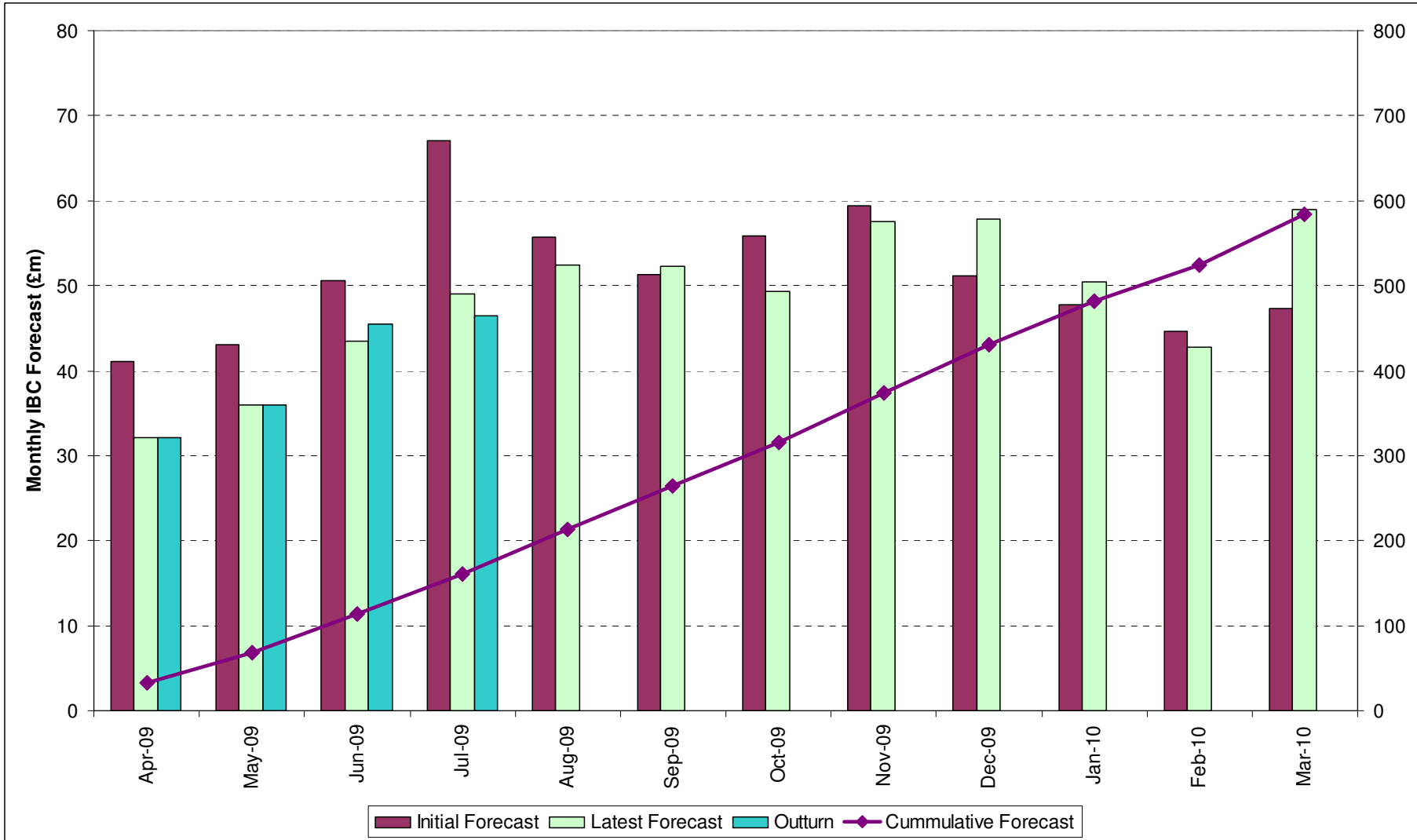
◆ Operating Reserve costs below forecast

- Operating reserve costs for the month were £8.5m below agreed scheme value due to low volumes of actions required due to the market being longer than forecast.

◆ Footroom costs remain high

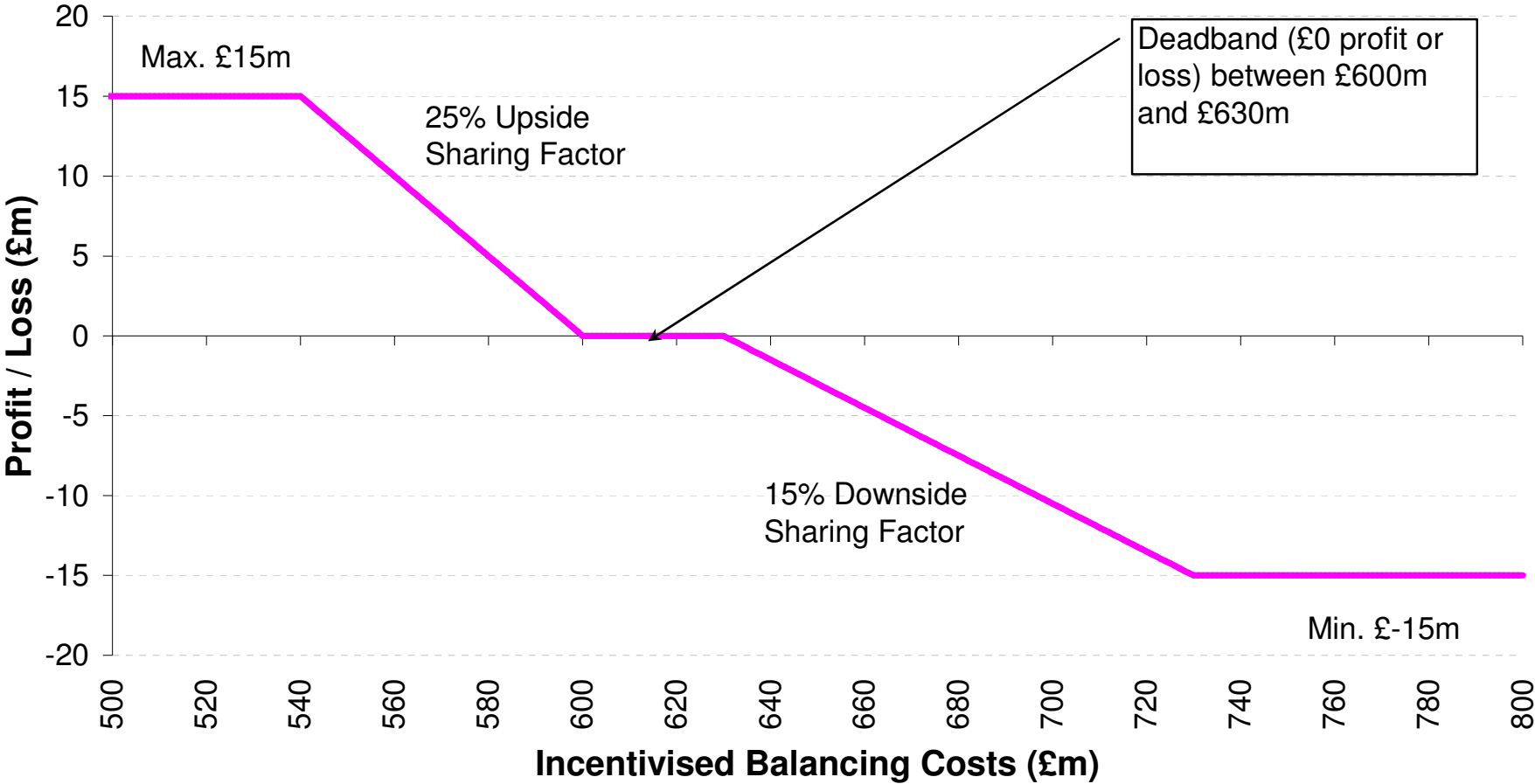
- Footroom costs were high (£5.8m) due to a number of interacting factors beyond National Grid's control
- The current level of nuclear availability is above that experienced in recent summers. This increases the amount of inflexible generation on the system.
- Low gas prices resulted in higher levels of generation overnight due to gas fired generators running through, in spite of low margins/spark spreads.
- A substation switch fault near a large demand resulted in higher than usual HF requirements
- Overnight imports from France have been low over much of the month.

Monthly IBC 2009/10 forecasts and outturn



2009/10 Scheme Parameters

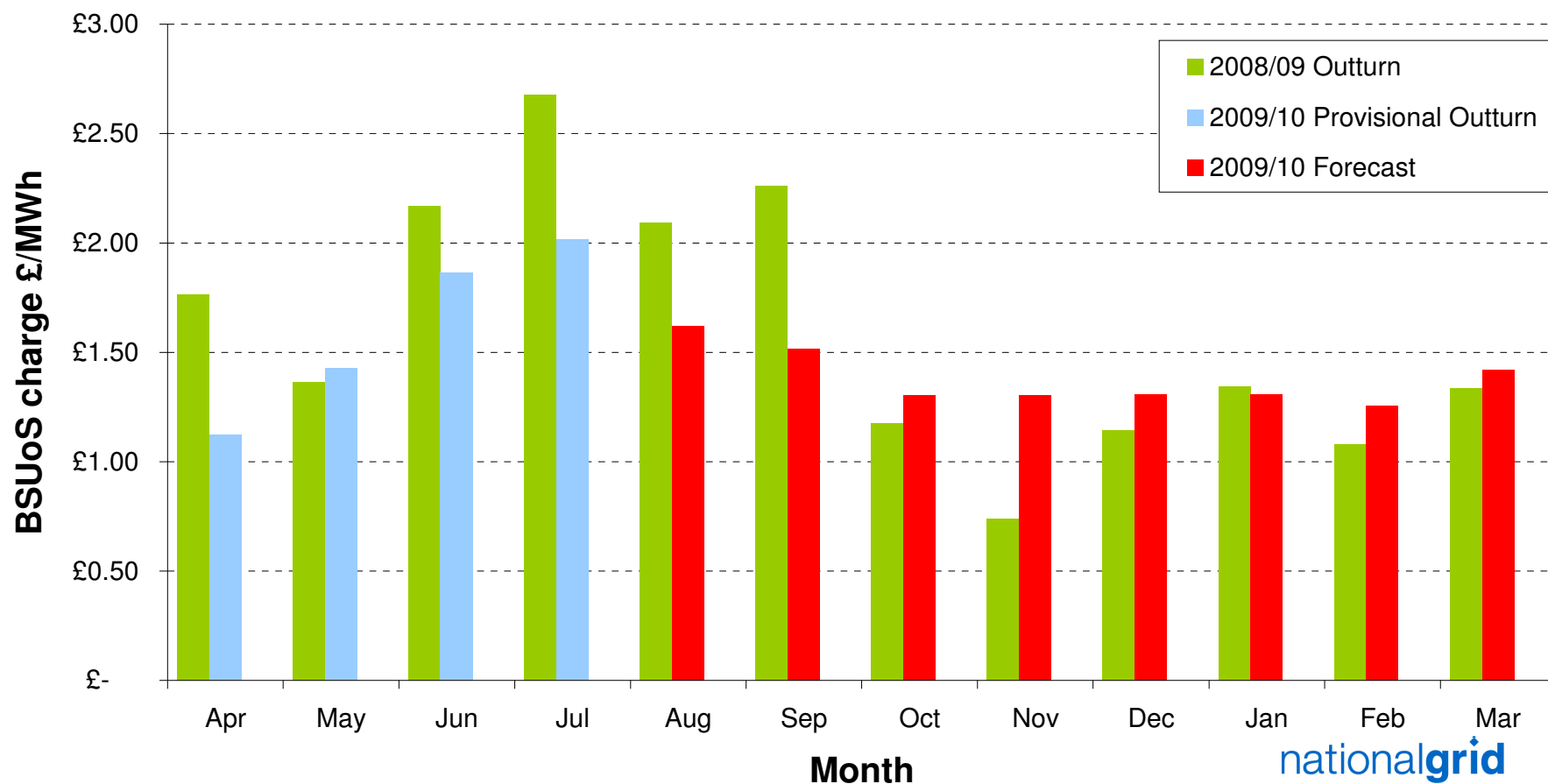
2009/10 Balancing Services Incentive Scheme



Provisional BSUoS outturn / forecasts 2009/10

- ◆ **Current BSUoS central forecast £1.44/MWh**
- ◆ **Overall forecast range £1.35/MWh to £1.55/MWh**

Provisional Monthly BSUoS outturn / forecasts 2009/10



Any questions?