

Operational and SO Cost Update



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Electricity Operational Forum – October 2012

Changes to Scheme Methodology for 2011-13



NGET Suggested Changes

- Changes to optimiser Settings
- Running of CHP plant
- Inclusion of rules to run plant needed for voltage control
- Correction of an error in the boundary transfer
- Use of Ex-Post MEL for generator availability
- Use of ex-post interconnector flows
- Changes to the modeling of a particular generator
- Removal of “erroneous data” e.g. Severn Power +99999 bid prices in April 2012
- Treatment of commissioning generation

Link:

http://www.nationalgrid.com/NR/rdonlyres/37E1065A-227B-4613-B673-76ED6AF41D0F/54943/2011_13BSISmethodologyconsultation_July2012Final_Industry.pdf

Ofgem Approved Changes

- Changes to optimiser Settings ✓
- Running of CHP plant ✓
- Inclusion of rules to run plant needed for voltage control ✓
- Correction of an error in the boundary transfer ✓
- Use of Ex-Post MEL for generator availability ✓
- Use of ex-post interconnector flows From Sept 2012 —
- ~~■ Changes to the modeling of a particular generator~~ ✗
- Removal of “erroneous data” e.g. Severn Power +99999 bid prices in April 2012 ✓
- Treatment of commissioning generation ✓

Link:

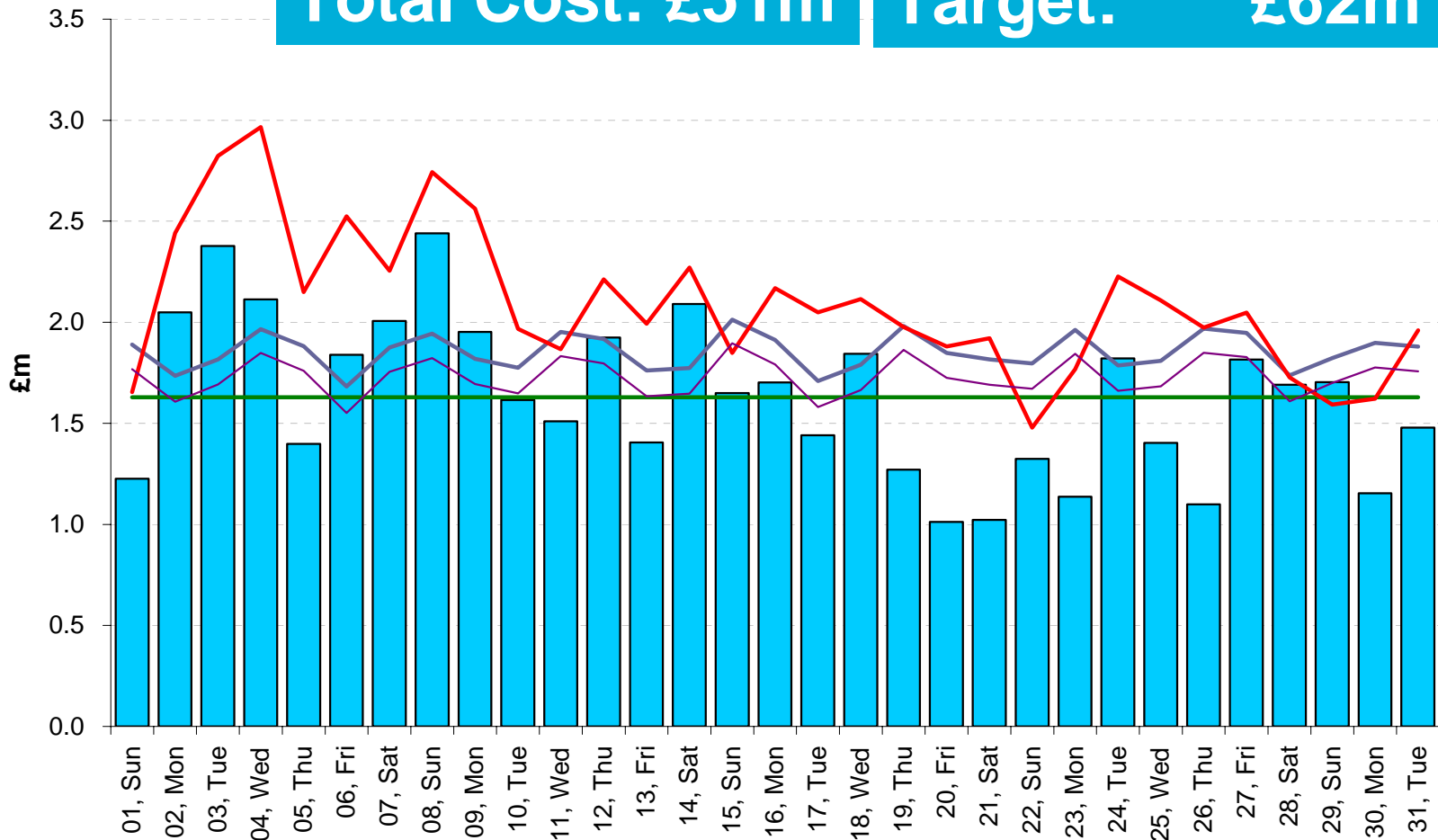
<http://www.ofgem.gov.uk/Markets/WhIMkts/EffSystemOps/SystOpIncent/Documents1/NGET%20BSIS%202011-13%20Methodology%20Amendment%20Direction%20Letter.pdf>

July & August Outturns



Total Incentivised Balancing Cost (IBC) for July 2012

Total Cost: £51m **Target: £62m**

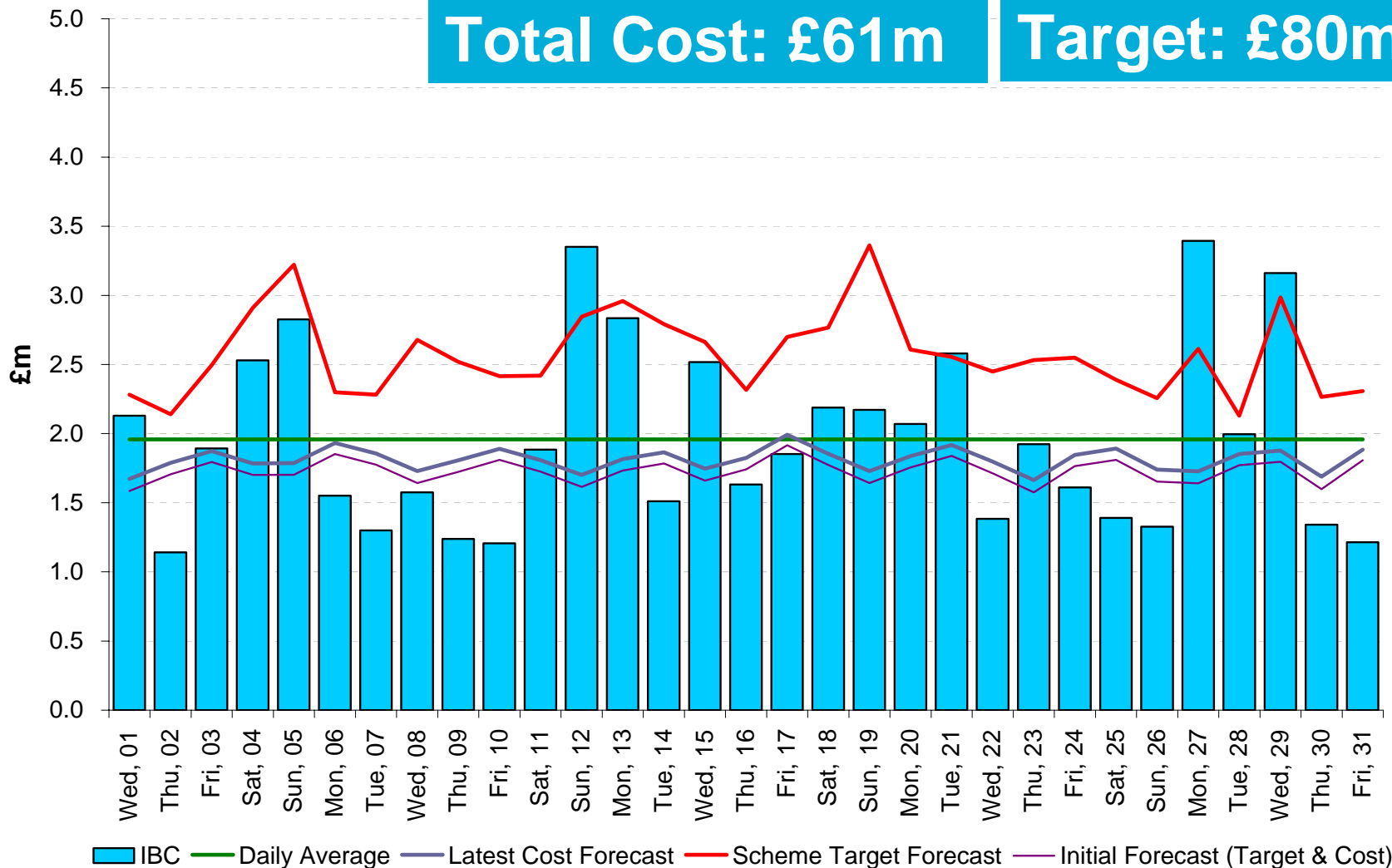


IBC Daily Average Latest Cost Forecast Scheme Target Forecast Initial Forecast (Target & Cost)

Total Incentivised Balancing Cost (IBC) for August 2012

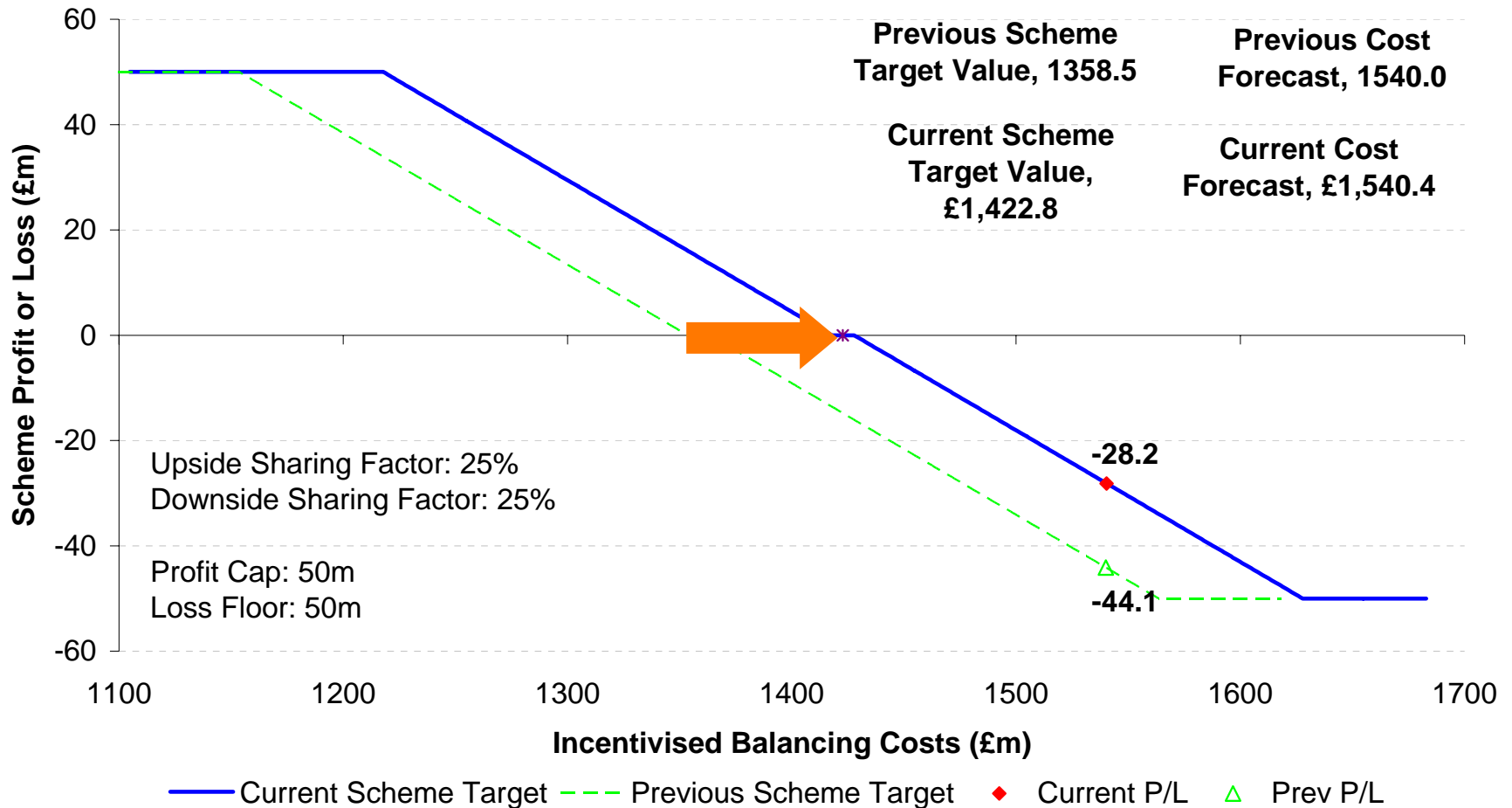
Total Cost: £61m

Target: £80m



Resulting Change in Target

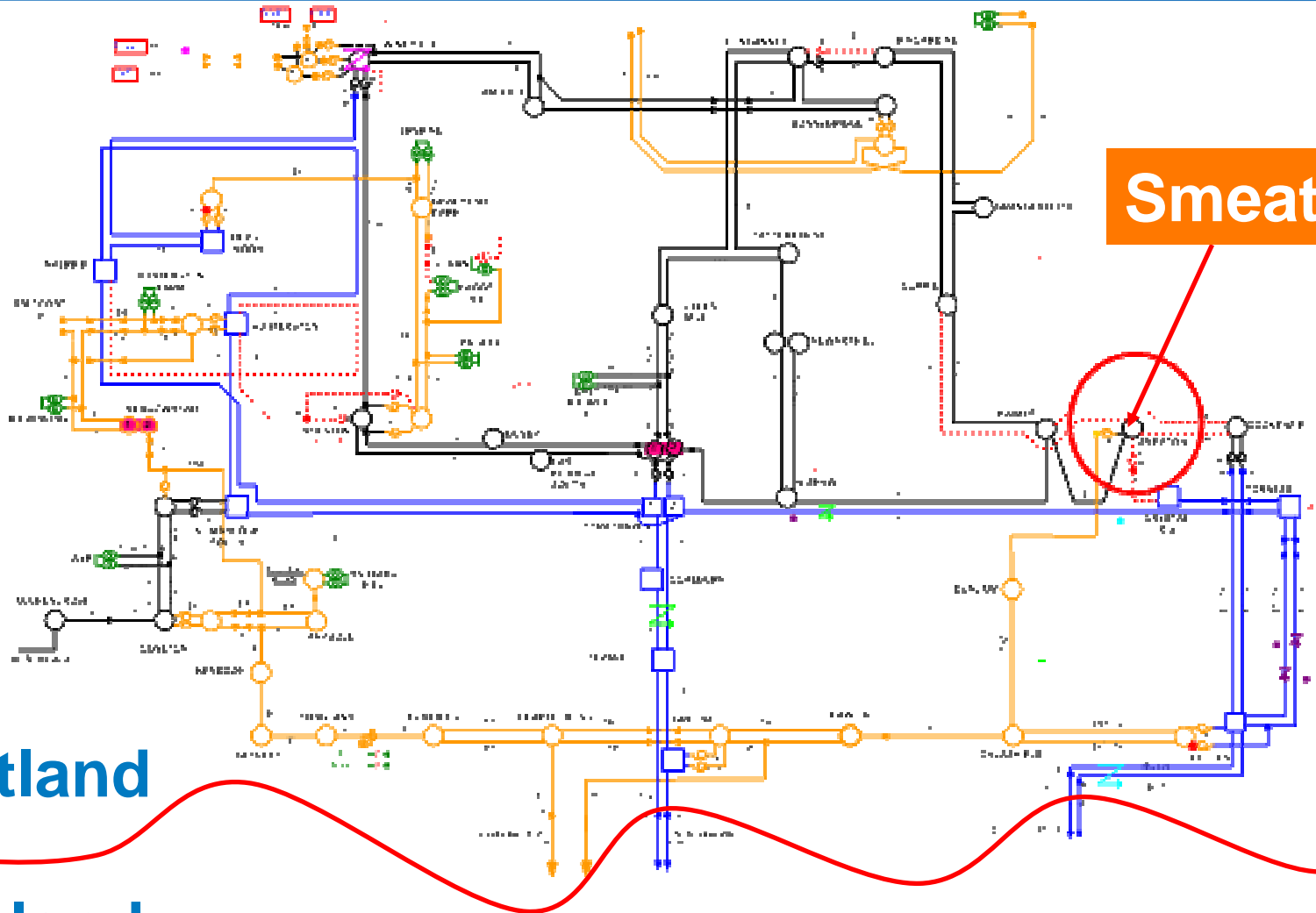
BSIS 2011-13



Smeaton Outage



Smeaton Substation



Smeaton

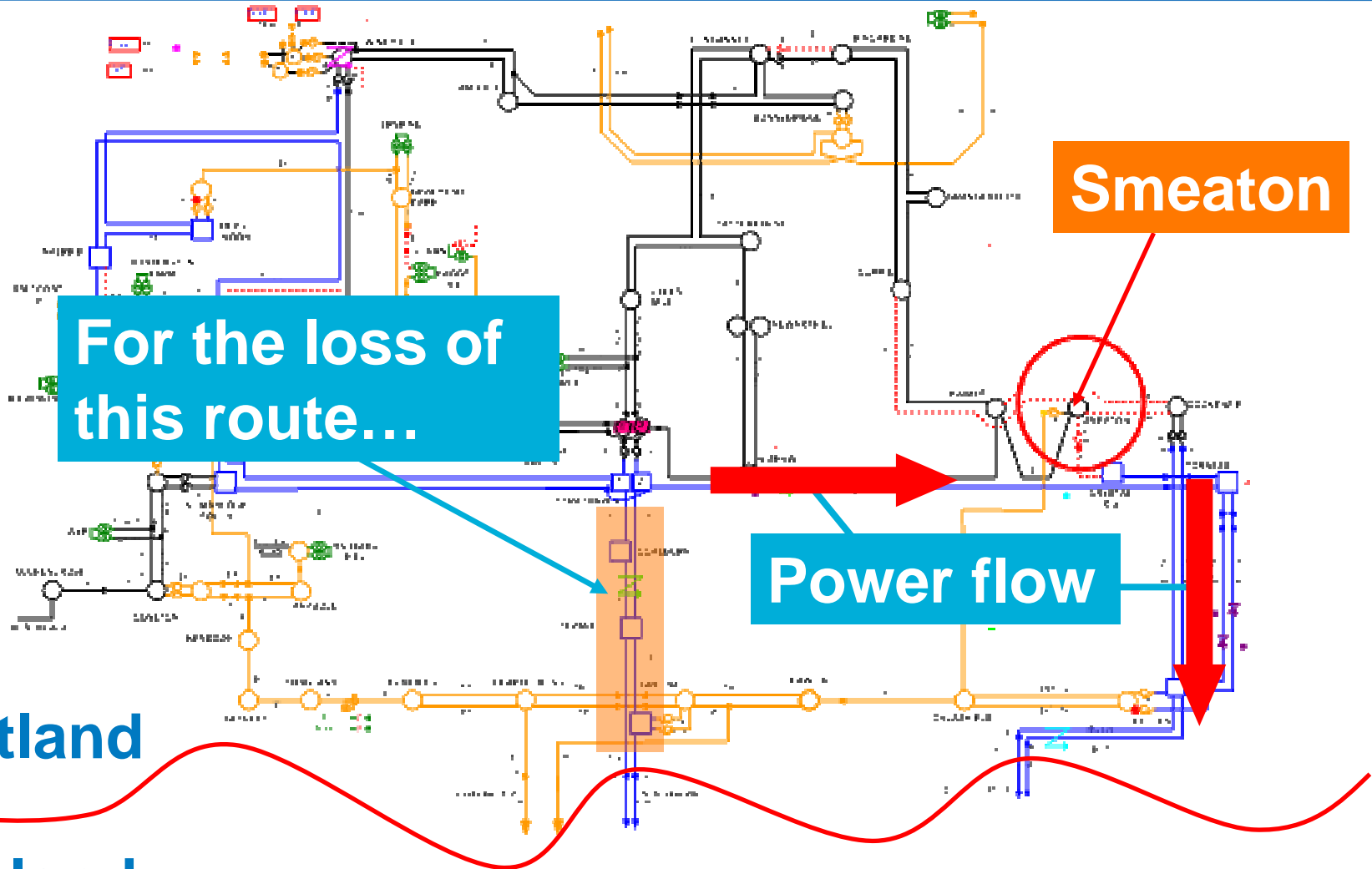
Scotland

England

FMJL replacement

- “FMJL” type current transformers need to be removed from system
 - History of disruptive failure
 - Due to hazard, exclusion zones are in place
 - At Smeaton these exclusion zones would prevent any entry to site unless substation shutdown

Smeaton Substation Shutdown



Scotland

England

Securing the outage

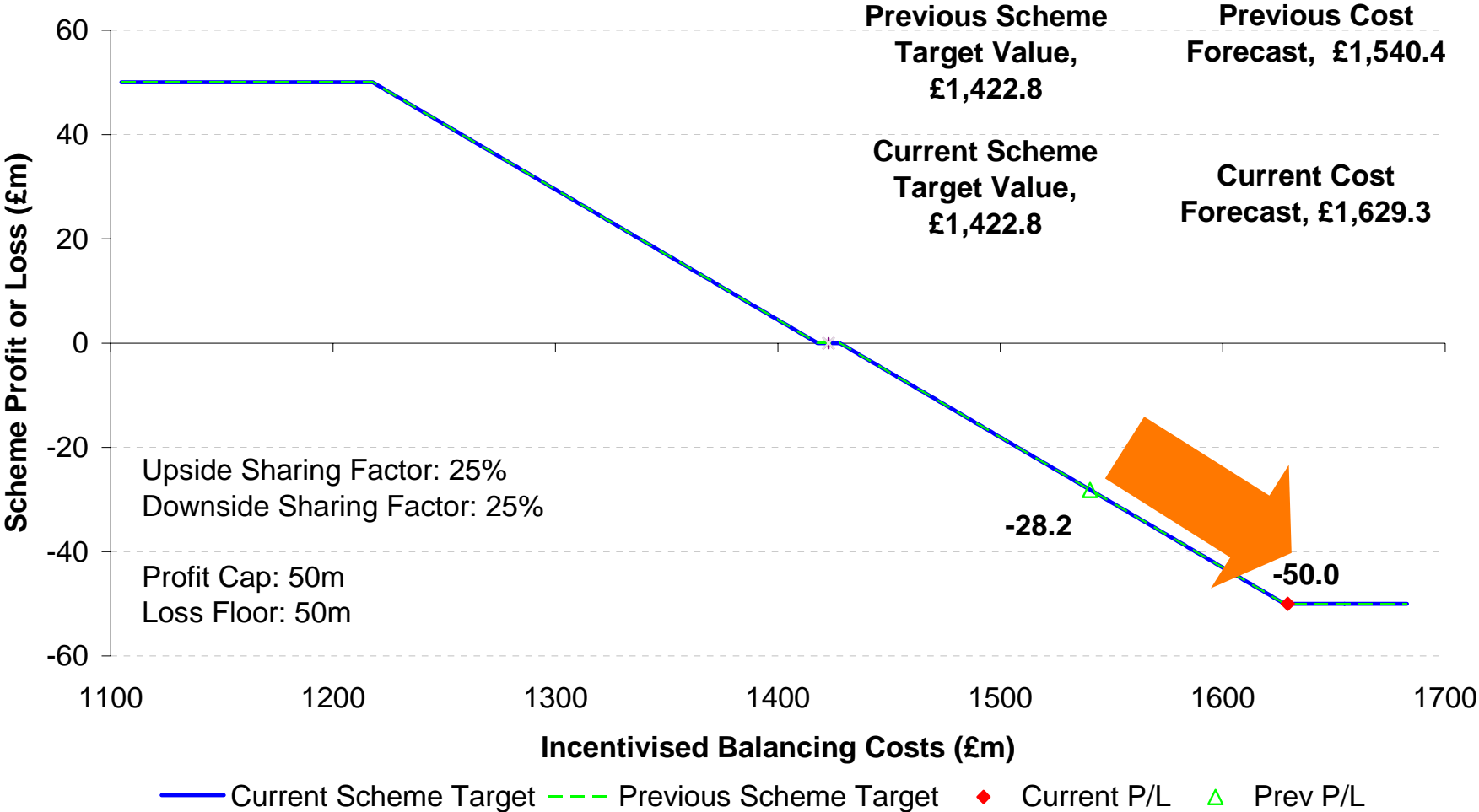
- Loss of the route through Smeaton, combined with a down rating of the Strathaven – Torness route, is difficult to secure
 - Need to secure for both export and import conditions
 - Small margin between too much and too little generation

Mitigations

- NGET and SP have worked closely to mitigate the impact of the Smeaton outage
 - Temporary circuit to supply Edinburgh
 - Changes to work plan to allow return of through route in shortest possible time

Forecast Impact on Scheme – Smeaton Outage

BSIS 2011-13

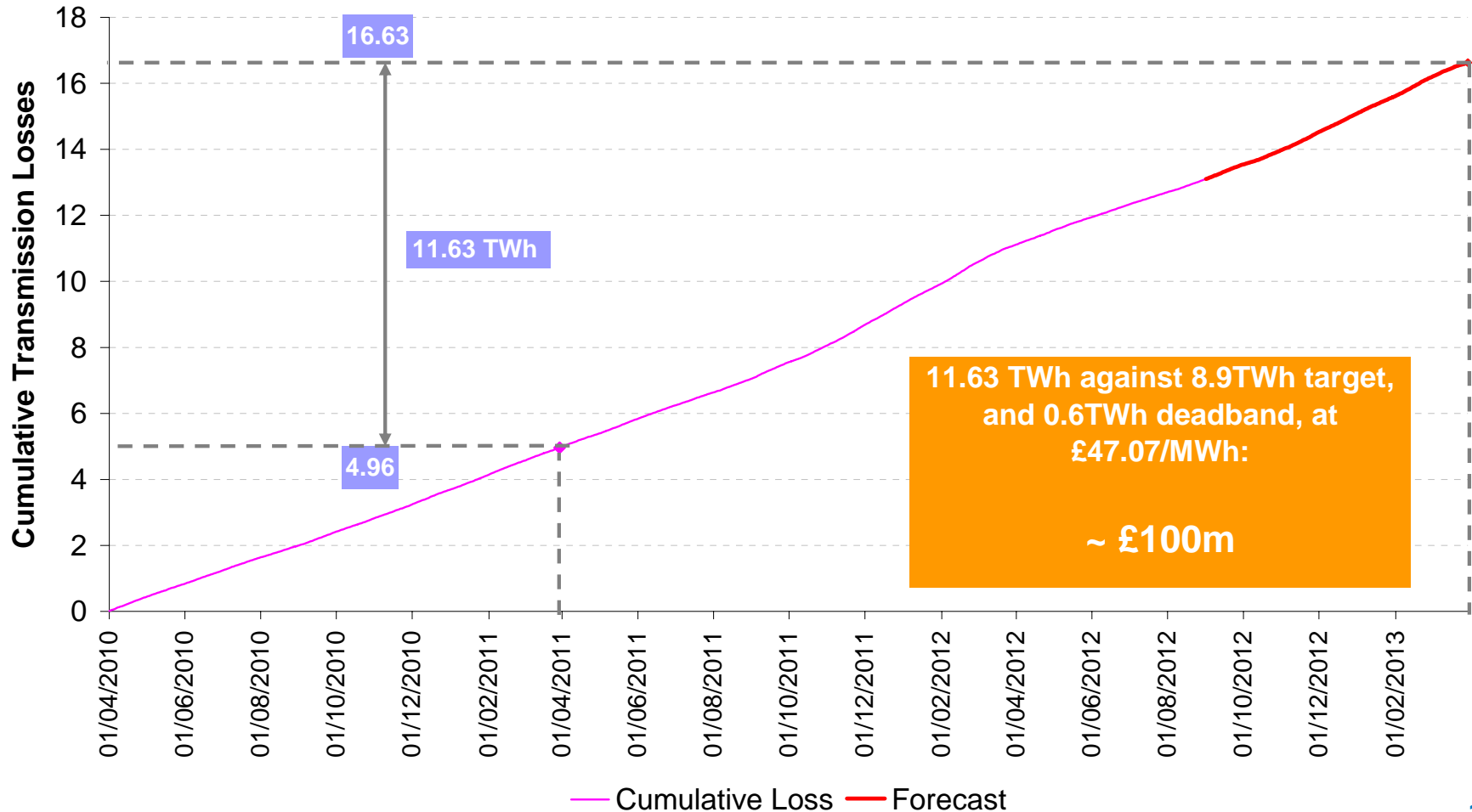


Transmission Losses



Forecast Transmission Losses

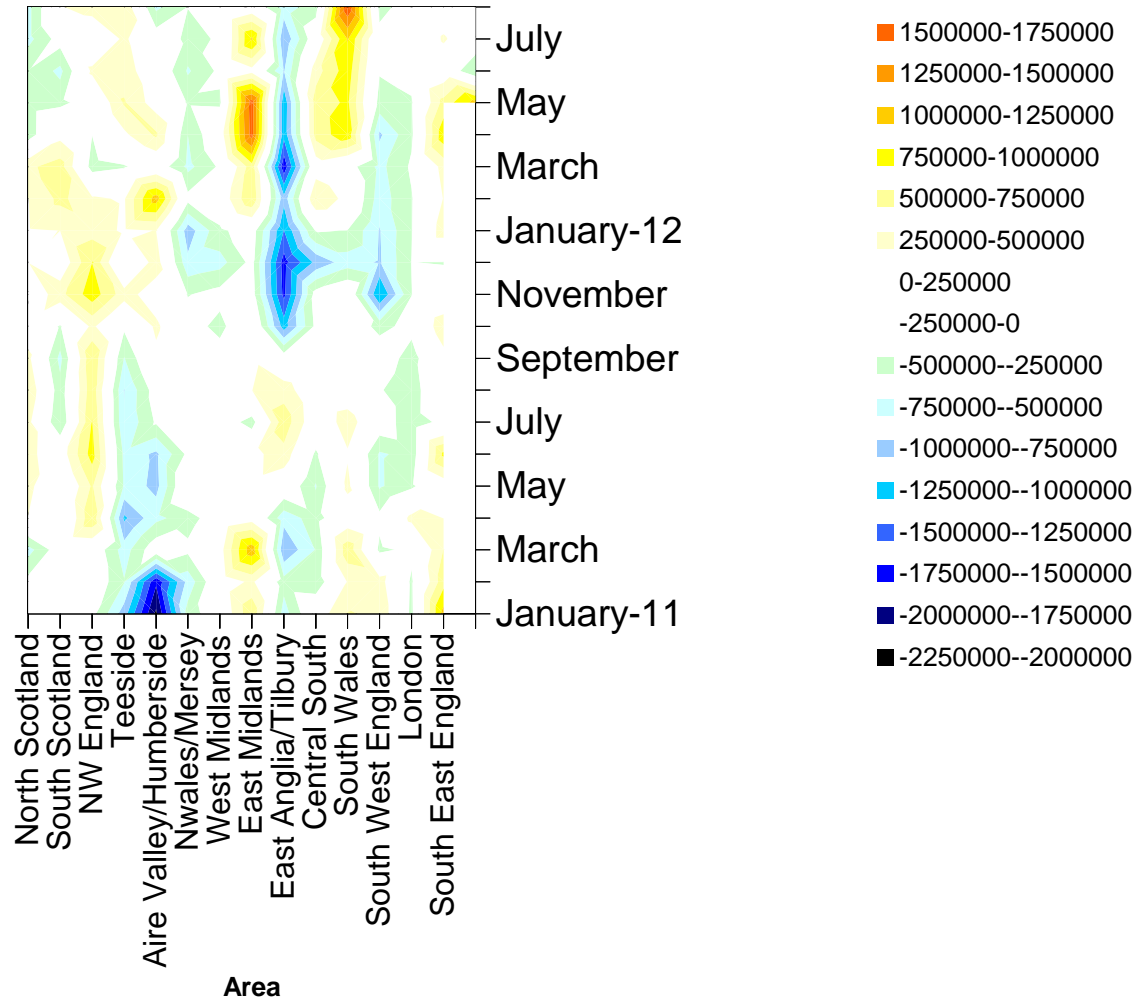
Projected Transmission Losses



Year on Year Generation Changes

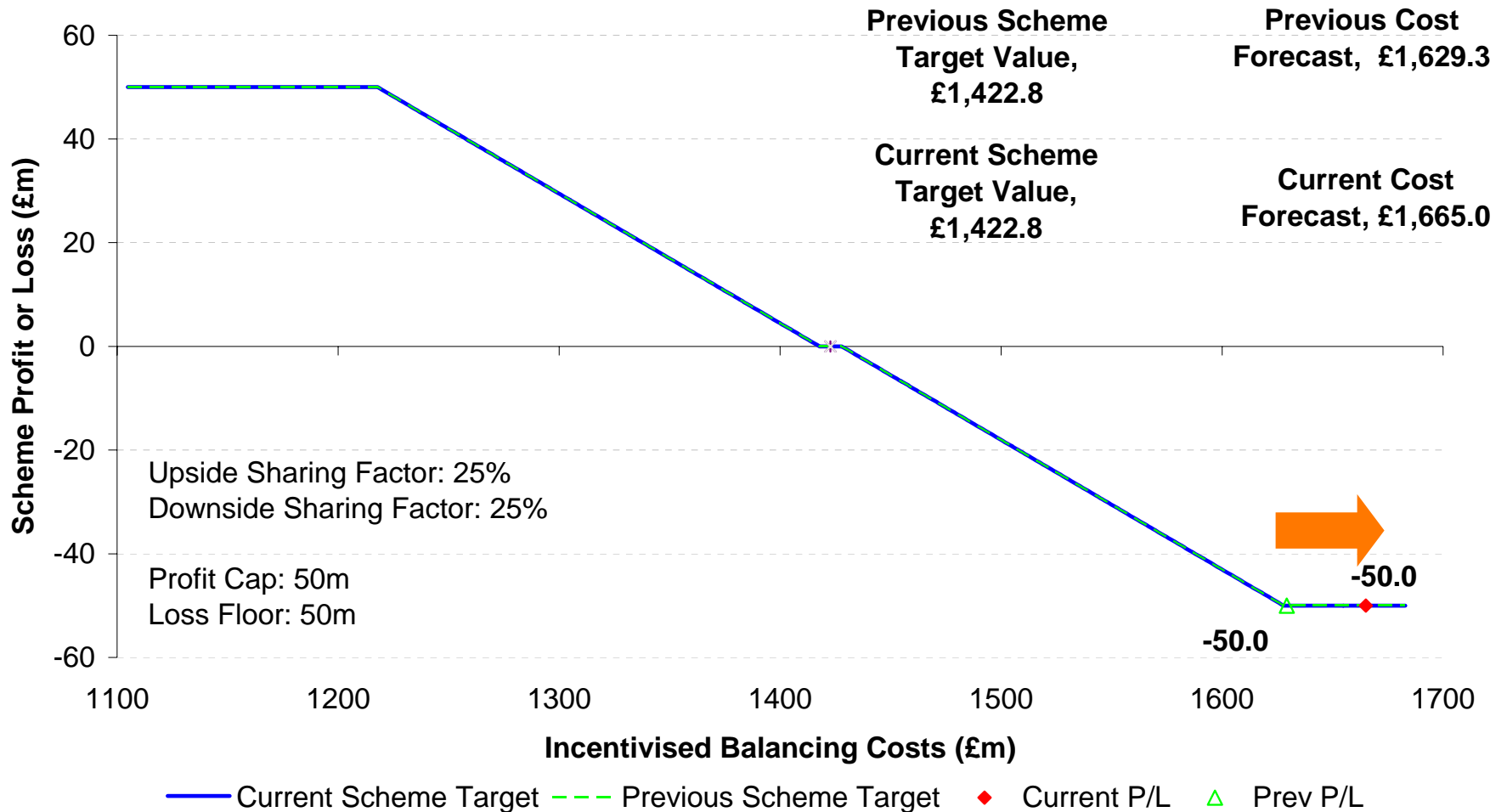
Changes in Generation Since Previous Year
(Including Interconnectors)

+ve = Increased generation
Values in MWh



Forecast Impact on Scheme – Transmission Losses

BSIS 2011-13



BSUoS

- 2011/12: £1.47/MWh (previous forecast £1.48/MWh)
- 2012/13: £1.34/MWh (previous forecast £1.20/MWh)

