



# Balancing Energy Market Straw Man Issue 30 Group

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# Problems with Balancing Mechanism



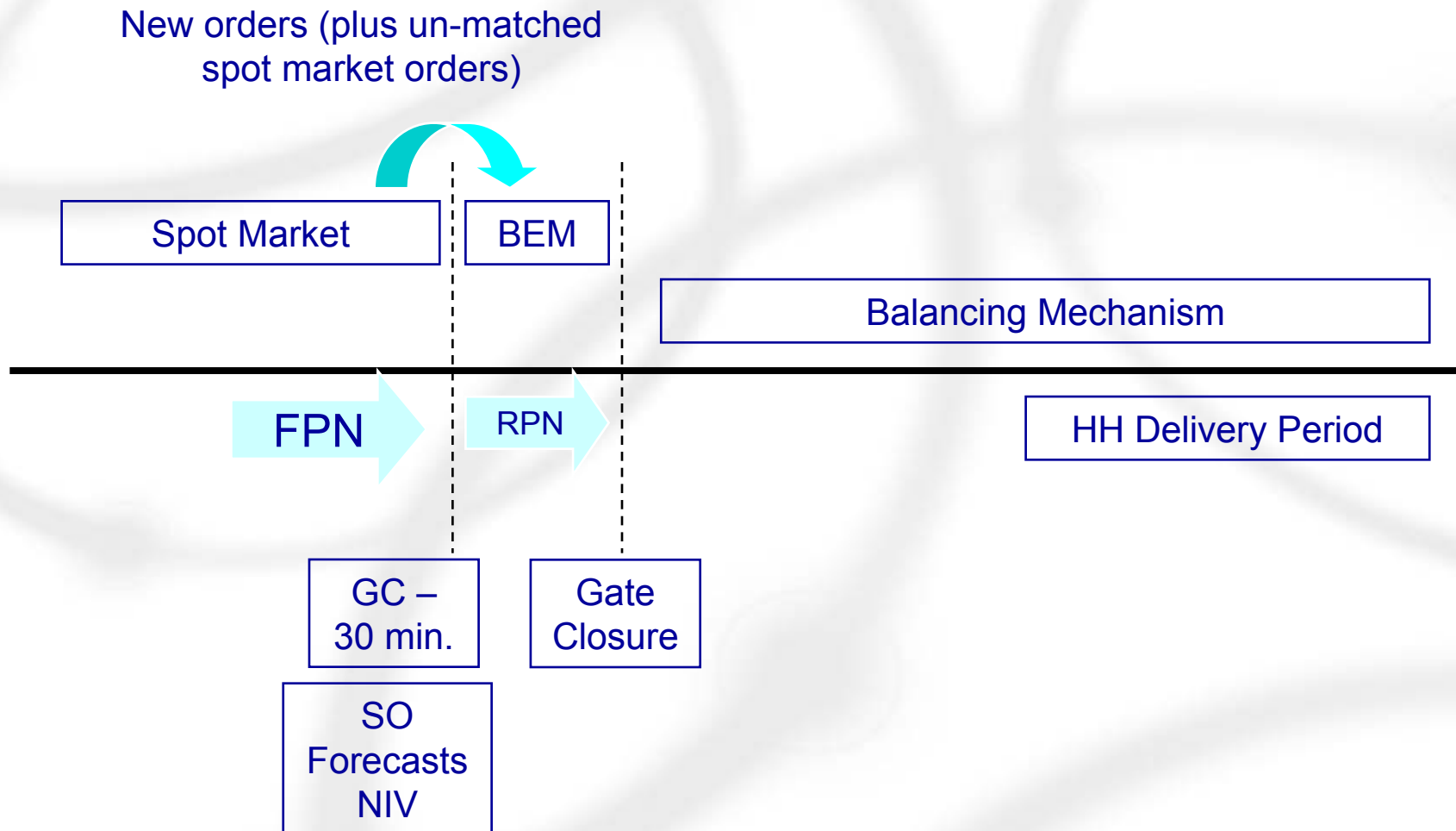
- NGET and EdF analysis shows only a small percentage of Imbalance Mechanism actions are for resolving pure energy imbalance.
- NGET estimate 75% of Offers are 'energy plus'
- Prices submitted into BM are not for HH blocks of energy
- Therefore, even with perfect tagging, or an ex-post schedule, any prices derived from BM can not reflect cost of HH energy, as BM Offers are priced for NGET's differing requirements.

# Balancing Energy Market



- A separate market is required which NGET uses to explicitly balance the HH energy imbalance.
- Market operates in the window between spot market close and gate closure
- Bids / Offers submitted are for HH energy (equivalent to orders in spot market, and are at energy account level.)
- NGET purchases/sells to resolve forecast NIV
  - Requires FPN submission earlier to enable NIV to be forecast
- Effectively a 'mini-auction' running each HH
- Matched orders settled at bid or marginal ?
- PNs need to be revised post trade ( $\sum \Delta \text{PN} = \text{trade volume}$ )

# Balancing Energy Market (BEM)



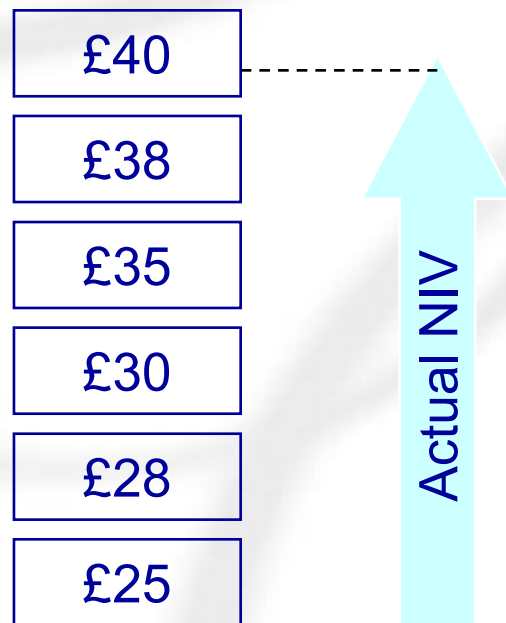
# Balancing Energy Market



- P212 analysis showed an ex-ante price may fundamentally change incentives on parties to balance.
- Imbalance price based on *actual* NIV priced against Offer stack to ensure imbalance prices reflect real level of energy imbalance
- Plant trips / demand changes will therefore affect the imbalance price
- A Surplus/Deficit arises due to inaccuracies of NIV forecast.
  - could feed into NGET incentivised pot
  - or rebated via an RCRC mechanism
- Dual pricing can be maintained.

# BEM – Main Imbalance Price

- Short market, Offers stacked in price order



- Price setting uses *actual* NIV
- All parties out of balance pay marginal price (£40)
- Reverse price calculated as now
- Any surplus BEM revenue (as a result of NIV forecast errors):
  - Recovered via RCRC, or,
  - Passes through to SO BM costs.

Actual NIV is calculated as it is now plus the SO actions in the BEM. It is therefore available in same timescale as it is currently.

# Balancing Mechanism

- BM continues in its present form and used for resolving 'system' issues:
  - Transmission constraints
  - Intra-HH load matching
  - Frequency response
  - Reactive despatch
  - Creating reserve

# Advantages of a BEM



- A pure price for Energy
- Not polluted by system issues
- Main Imbalance price based on cost of SO energy actions
- Ex-post price reflecting actual HH energy imbalance
- Standard product traded in BEM, which should result in more providers able to participate on an equal footing.
- Balancing mechanism retained in its current form but at gate closure system should be in 'energy balance'.
- Operates as an extension to spot market, thereby minimising development required.
- SO is purchasing exactly what the parties would have purchased had they known their exact requirements
- Simple and transparent



# Issues

- Will there be sufficient plant available to participate in BEM?
- Requires earlier submission of FPN to enable NIV to be forecast – is this practical?
- BEM Orders paid bid or marginal ?
- Decreases economies of scope – is this an issue?
- Are the timings correct?
- Is there a requirement for SO to trade energy forward?
- Rules for non-delivery

# SO Incentives



- Incentivised to accurately forecast NIV volume, or minimise 'cost' of NIV forecast error.
- Maintain Incentives to minimise balance mechanism costs
- Need to ensure no perverse incentives exist between two areas.

# A VITAL LINK IN ENERGY TRADING

