

P217: Assessment Procedure

P217: Revised Tagging Process and Calculation of Cash Out Prices

(RWE Npower, raised 19 October 2007)

141/05

Recommendation: Report Phase (10 July 2008)

Andrew Wright

P217: Why was P217 raised?

- Imbalance Prices are polluted by actions taken to manage transmission constraints
- P217 proposes to reduce that influence by getting the System Operator to identify actions which may be impacted by transmission constraints
- The Proposer believes this would make the main Energy Imbalance Price more reflective of the short term energy balancing costs the SO incurs

P217: Proposed Modification

- Key points to the Proposed Modification:
 - Flagging (identification of actions)
 - System Operator flagging of transmission constraints
 - Continuous Acceptance Duration Limit (CADL)
 - Emergency Instructions
 - Classification
 - Replacement Price
 - Price Average Reference (PAR) volume of 100MWh
 - Disaggregated Balancing Service Adjustment Data (BSAD)

Current arrangements vs P217

Current arrangements	P217
Emergency Instructions CADL tagging De Minimis tagging Arbitrage tagging Aggregated BSAD	System Operator flagging Emergency Instructions flagging CADL flagging De Minimis tagging (includes BSAD) Arbitrage tagging (includes BSAD) Disaggregated BSAD Classification
NIV tagging	NIV tagging
PAR tagging	Replacement Price PAR tagging (change to PAR volume)

What is the purpose of the Imbalance Pricing processes?

- The purpose of all the tagging, flagging and classification processes is to separate out what is 'in merit' from what is not 'in merit'
- Once this is done the 'in merit' actions are used to calculate the main Energy Imbalance Price
- 'In merit' – actions taken to resolve the short term energy imbalance of the Transmission System
- Not 'in merit' – actions taken for reasons other than resolving the short term energy imbalance
- But not black and white – some actions taken for non-energy reasons also resolve the energy imbalance

What is an 'action'?

- 'Action' is the term used to describe a discrete operation which the System Operator uses or 'takes' in order to balance the Transmission System
- Actions are made up of:
 - Balancing Mechanism Acceptances (Bids and Offers)
 - Forward trades – which are entered through BSAD
- Each action has two characteristics:
 - Price (£)
 - Volume (MWh)

P217 Proposed Modification solution: Disaggregated BSAD

- BSAD will be disaggregated
- Instead of netted BSAD variables each individual forward trade will be submitted by the SO
- Disaggregated BSAD would undergo all the classification and tagging processes
- Treatment of Option fees (Buy Price Adjuster and Sell Price Adjuster) will not change

P217 Proposed Modification solution: Flagging

- Flagging is the identification of actions that may have a non-energy balancing component
- System Operator flagging:
 - The SO would flag actions that resolve transmission constraints
- CADL flagging:
 - The BSC Systems will flag actions shorter than the Continuous Acceptance Duration Limit: 15 minutes
- Emergency Instructions:
 - Actions currently classified as Excluded Emergency Acceptances will be flagged by the SO

P217 Proposed Modification solution: De Minimis tagging and Arbitrage Tagging

- De Minimis tagging: completely removes actions with a volume less than 1MWh
 - Only change under P217 would be that disaggregated BSAD would undergo De Minimis tagging
- Arbitrage tagging: completely removes actions which would not exist in an efficient market:

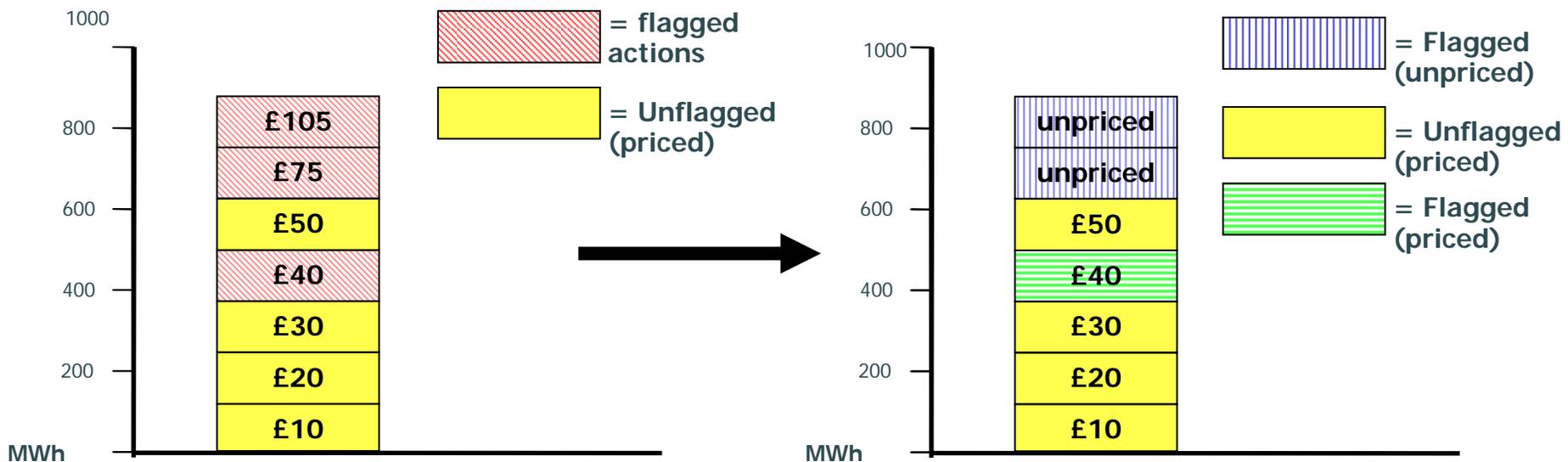
Offer - 10MWh at £10

Bid - 10MWh at £15

- Only change under P217 would be that disaggregated BSAD would undergo Arbitrage tagging

P217 Proposed Modification solution: Classification

- What happens to flagged actions?
- Each flagged action is compared against the most expensive Unflagged (priced) action in the respective stacks (Buy and Sell)
- Below is an example of classification in a Buy stack:

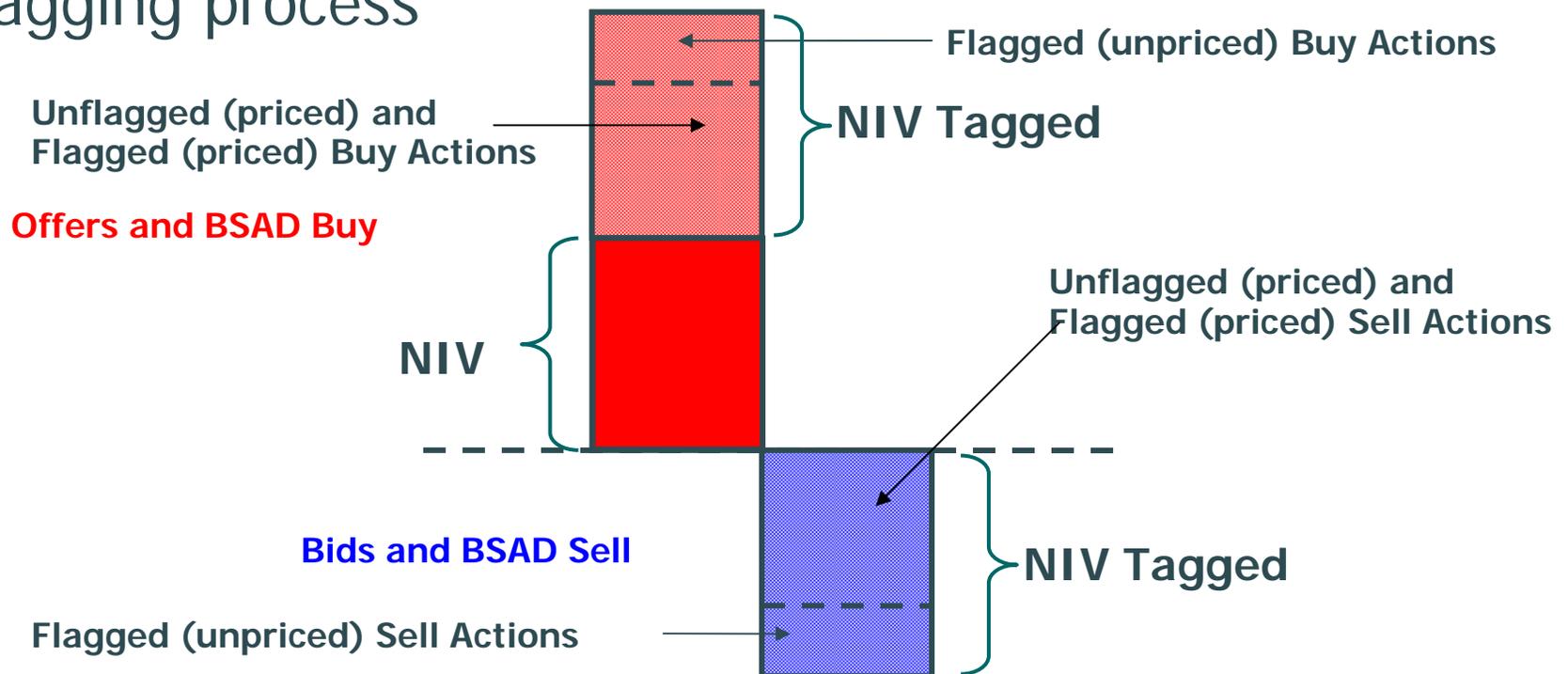


P217 Proposed Modification solution: Classification

- Classification is the way P217 determines whether an action is 'in-merit'
- Actions can be classified as:
 - Unflagged (priced)
 - Actions taken for purely energy balancing reasons
 - Flagged (priced)
 - Less expensive than the most expensive Unflagged (priced) action
 - Flagged (unpriced)
 - More expensive than the most expensive Unflagged (priced) action

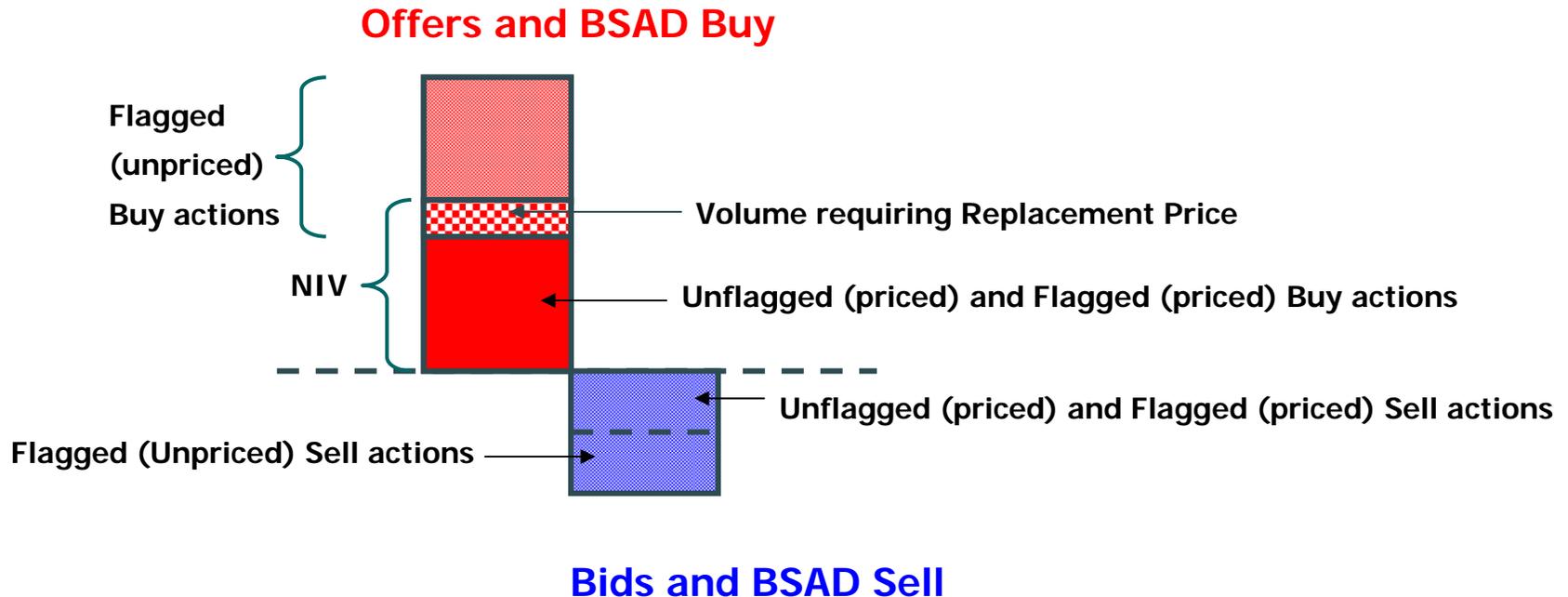
P217 Proposed Modification solution: Net Imbalance Volume (NIV) tagging

- NIV tagging determines the volume of energy needed to resolve the Transmission System imbalance
- Under P217 there would be no changes to the NIV tagging process



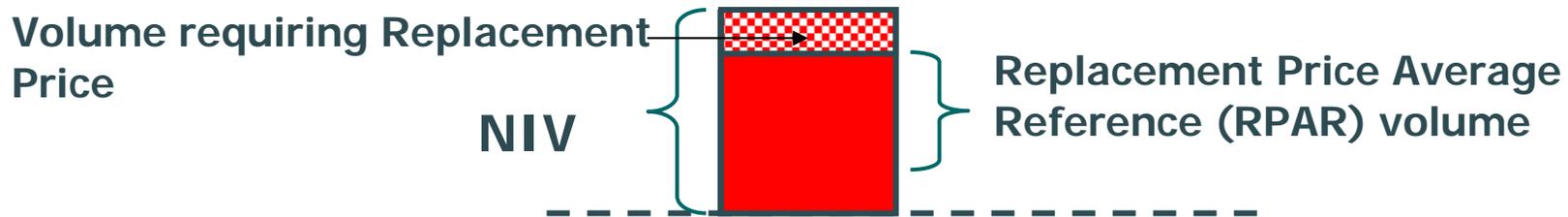
P217 Proposed Modification solution: Replacement Price

- Sometimes Flagged (unpriced) actions remain after Net Imbalance Volume (NIV) tagging
- In such cases a Replacement Price is assigned



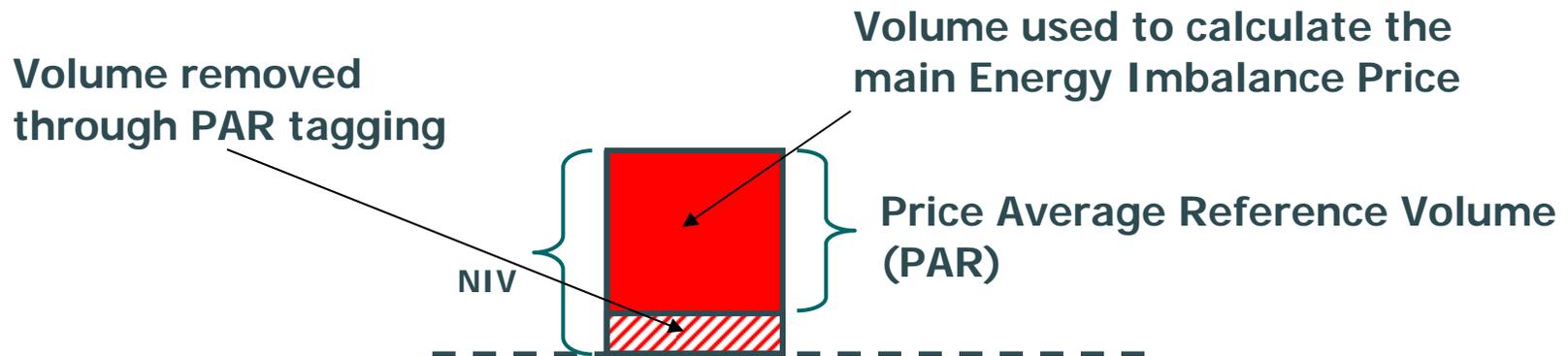
P217 Proposed Modification solution: Replacement Price

- Replacement Price calculated from up to 100MWh of most expensive priced actions
 - Replacement Price Average Reference (RPAR) volume
- If less than 100MWh of priced action then Replacement Price is calculated from whatever is available



P217 Proposed Modification solution: PAR volume

- Once a Replacement Price has been assigned (if required) Price Average Reference (PAR) tagging occurs
- For Proposed Modification the PAR is calculated from up to 100MWh of most expensive actions
- For Alternative Modification the PAR is calculated from up to 500MWh of most expensive actions



P217: Alternative Modification

- Alternative Modification is identical to the Proposed Modification apart from using the current PAR volume of 500MWh

P217: Process Followed

- IWA: 9 November 2007
- Definition Report: 1 February 2008
- Mod Group met 6 times
- 1 consultation
- 1 impact assessment: BSC Agent, BSC Party, Transmission Company, BSCCo
- Transmission Company analysis of the ex-ante constraint flagging solution
- BSCCo price recalculation analysis

P217: Consultation responses

Question		Yes	No	Neutral/Other
1	Do you believe Proposed Modification P217 would better facilitate the achievement of the Applicable BSC Objectives when compared to the current baseline?	6	9	0
2	Do you believe Alternative Modification P217 would better facilitate the achievement of the Applicable BSC Objectives when compared to the current baseline?	12	3	0
3	Do you believe Alternative Modification P217 would better facilitate the achievement of the Applicable BSC Objectives when compared to the Proposed Modification?	12	3	0

P217: Applicable BSC Objectives

Full views on pages 16 to 25 of Assessment Report

Proposed Modification

Mod Group's majority view of Applicable BSC Objectives:

(a) n/a (b) No (c) No (d) No

Alternative Modification

Mod Group's majority view of Applicable BSC Objectives:

(a) n/a (b) Yes (c) Yes (d) Yes

P217: Applicable BSC Objectives – Common views for Proposed and Alternative solutions

(b) For:

- Reduces impact of transmission constraints on main Energy Imbalance Price – more cost reflective

(b) Against:

- Greater transparency of constraint information could lead to market abuse
- Constraint actions could be incorrectly flagged
- Imperfections in the P217 solution

P217: Applicable BSC Objectives – Common views for Proposed and Alternative solutions

(c) For:

- More cost reflective Imbalance Prices – more accurately targeted at out of balance Parties, enhancing market competition
- Greater transparency of information for participants
- Imbalance Pricing Guidance document increases industry understanding of Imbalance Pricing, reducing one barrier to entry

(c) Against:

- Solution does not make changes to the treatment of reserve

P217: Applicable BSC Objectives – Common views for Proposed and Alternative solutions

(d) For:

- Imbalance Pricing Guidance document would increase industry understanding of Imbalance Pricing, reducing questions to BSCCo

(d) Against:

- P217 is more complex than the current baseline
- P217 would have considerable implementation costs

Proposed vs Alternative – (b)

(b)	Proposed	Alternative
For	<ul style="list-style-type: none">• Reduces SO balancing costs by approx. £4 million per year• More marginal pricing provides clearer balancing signals	<ul style="list-style-type: none">• Keeping the current PAR volume reduces the impact of some of the features of the P217 solution• Analysis undertaken during progression of P205 shows that PAR of 500MWh still provides appropriate signals to balance
Against	<ul style="list-style-type: none">• More marginal pricing may lead to some generators withholding capacity• Increases volatility of prices	<ul style="list-style-type: none">• Increases SO balancing costs by approx. £150k per year• Overly dampens prices

Proposed vs Alternative – (c)

(c)	Proposed	Alternative
For	<ul style="list-style-type: none">•The more marginal prices of the Proposed would be more cost reflective than the Alternative and would more accurately target imbalance costs at Parties out of balance	<ul style="list-style-type: none">•Keeping the PAR of 500MWh reduces the impact of Imbalance Prices on smaller Parties – reducing 'fear of cashout'
Against	<ul style="list-style-type: none">•More marginal PAR reduces competition as it subjects smaller Parties (who are traditionally less able to balance) to higher Imbalance Prices•More marginal PAR amplifies any imperfections in the P217 solution	<ul style="list-style-type: none">•Alternative Modification would overly dampen Imbalance Prices making them less cost reflective

Proposed vs Alternative – (d)

- In general the views for Applicable BSC Objective (d) did not differ
- Some Group members and respondents noted views such as 'complexity' and 'implementation cost' for one Modification and not the other
 - Balance of benefits against disadvantages

Reasons for Mod Group's preference of the Alternative Modification

- Retaining the PAR volume at 500MWh reduces some of the uncertainty that surrounds the introduction of the new arrangements
- It mitigates against the potential for some transmission constraints not to be correctly identified by the new methodology
- The degree of transmission constraints entering the main Energy Imbalance Price would be better understood after a period of implementation

P217: Modification Costs

BSC implementation costs:

	Implementation Cost	Tolerance
BSC Agent	£292,030	0%
BSCCo	£129,780	10%
Total	£421,810	N/A

Transmission Company implementation costs:

	Implementation Cost	Contingency
Transmission Company	£658,000	£167,000

Parties implementation costs:

- Between £10,000 and £50,000

P217: Implementation Date

- Impact Assessment suggested maximum required implementation period would be 12 months (Transmission Company, one Party)
- Recommended Implementation Date:
 - 05 November 2009 (if a decision is received on or before 30 October 2008); or
 - 16 March 2010 (if a decision is received after 30 October 2008, but on or before 25 February 2009)
- 16 March 2010 is aligned to the Transmission Company scheduled release

P217: Modification Group Views

- Mod Group recommends P217 to Report Phase
- P217 Proposed Modification should not be made
- P217 Alternative Modification should be made
- Recommended Implementation Date:
 - 05 November 2009 (if a decision is received on or before 30 October 2008); or
 - 16 March 2010 (if a decision is received after 30 October 2008, but on or before 25 February 2009)
- Draft legal text provided for Proposed and Alternative Modification

P217: Recommendations

- NOTE Mod Group's recommendations
- AGREE P217 to Report Phase
- AGREE Proposed Modification should not be made
- AGREE Alternative Modification should be made
- AGREE provisional Implementation Date for Proposed and Alternative Modification:
 - 05 November 2009 or 16 March 2010
- AGREE draft legal text
- AGREE draft Modification Report to Panel: 10 July 2008