

Modification proposals:	Balancing and Settlement Code (BSC) P211: Main Imbalance Price based on Ex-post Unconstrained Schedule Balancing and Settlement Code (BSC) P217: Revised Tagging Process and Calculation of Cash-out Prices		
Decision:	The Authority <sup>1</sup> has decided to approve Alternative Modification Proposal P217A and to reject Modification Proposals P217 and P211. <sup>2</sup>		
Target audience:	National Grid Electricity Transmission Plc (NGET), Parties to the BSC and other interested parties		
Date of publication:	16 October 2008	Implementation Date:	5 November 2009

## Background to the modification proposal

In February 2007 Ofgem launched a review of the electricity cash-out arrangements, the Cash-out Review, after concerns were identified with the existing arrangements. The objective of the review was to identify whether there were changes to the existing cash-out arrangements that would make them simpler and more transparent, whilst providing appropriate economic signals and commercial incentives on parties to balance their physical and contractual positions and avoid any undue discrimination between different parties.

## Modification Proposals P211 and P212

One of the concerns discussed during the Cash-out Review was 'system pollution', where cash-out prices reflect some of the costs of 'system' balancing actions rather than purely 'energy' balancing actions. In April 2007 two modifications were raised simultaneously proposing alternative, and mutually incompatible, approaches for addressing this defect.

Modification Proposal P211 (P211) was raised by EdF Energy. It seeks to amend the calculation of the Main Imbalance Price so that when the market is short, the System Buy Price (SBP) will be based on the least expensive offers that the System Operator (SO) could have utilised on an unconstrained transmission system. Conversely, when the market is long the System Sell Price (SSP) will be based on the least expensive bids that the SO could have used on an unconstrained transmission system. PAR<sup>3</sup> tagging would then be applied as currently to base the main cash-out price on the most expensive 500 MWh of actions within the Ex-Post Unconstrained Schedule (EPUS) stack<sup>4</sup>. The reverse cash-out price would be calculated in the same way as it is now.

Modification Proposal P212 (P212) was raised by Bizz Energy, which proposed an alternative method for setting cash-out prices based on a premium or discount to the prevailing market price at the time.

Ofgem published its Impact Assessment on both modifications in December 2007<sup>5</sup>. In it we said that we were then minded to accept P211 but to reject P212.

<sup>1</sup> The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

<sup>2</sup> This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

<sup>3</sup> Price Average Reference – the volume of NGET actions from which the cash-out price is calculated.

<sup>4</sup> The EPUS stack is created for each settlement period by calculating the available energy for each bid and offer in the Balancing Mechanism and placing them in price order. It ignores most dynamic constraints, for example whether the plant would be positioned at the start of the settlement period to be able to deliver the theoretical volume of energy associated with the bid or offer.

<sup>5</sup> Available at the following link

<http://www.ofgem.gov.uk/Markets/WhlMkts/CompanEff/CashoutRev/Pages/CashoutRev.aspx>

In February 2008, we subsequently rejected P212 but decided to defer the decision on P211 until October 2008, to align with the timetable for decision on Modification P217 (P217) which had been raised during the P211/P212 Impact Assessment and also sought to address the same system pollution defect.

### **Modification Proposal P217**

Modification Proposal P217 was raised by RWE npower in November 2007. The proposed modification seeks to improve the Main Energy Imbalance Price calculation by introducing a methodology for 'flagging'<sup>6</sup> Bid Offer acceptances (BOAs) and disaggregated Balancing Services Adjustment Data (BSAD) volumes that are taken to balance the system to resolve transmission constraints, and replacing the price of these where they would otherwise 'pollute' cash-out prices. The other main feature of the proposal is a change in the PAR value from 500 MWh to 100 MWh. Alternative Modification Proposal 217 (P217A) would retain the current 500 MWh PAR value, but is otherwise identical to P217.

### **BSC Panel<sup>7</sup> recommendations**

In its Final Modification Report (FMR)<sup>8</sup> on P211, the Panel recommended that P211 should not be made. The majority view of the Panel supported the majority view of the Modification Group that the Proposed Modification would not better facilitate the achievement of the Applicable BSC Objectives (b), (c), and (d) when compared to the current Code baseline.

In its Final Modification Report<sup>9</sup> on P217, the Panel recommended that P217 should not be made, and that P217A should be made. The majority view of the Modification Group was that P217 would not better facilitate the achievement of the Applicable BSC Objectives (b), (c), and (d), whereas P217A would. There was a minority view of the Group that neither P217 nor P217A would better facilitate the achievement of the Applicable BSC Objectives.

### **The Authority's decision**

The Authority has considered carefully the issues raised by the modification proposals and the FMRs and responses to Elexon's consultations, attached to the FMRs. We considered all responses to our Impact Assessments, of which the non-confidential ones can be found on Ofgem's website.

The Authority has concluded that the implementation of P211 would not further the Applicable BSC Objectives and therefore does not direct that it be implemented.

The Authority has concluded that P217A would overall further the Applicable BSC Objectives and directs that it be implemented. It has concluded that P217 does not further the Applicable BSC Objectives and hence directs that it should not be implemented.

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<sup>6</sup> Flagging is the NG's process of manually identifying actions that are taken to resolve transmission constraints.

<sup>7</sup> The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC.

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[http://www.elexon.co.uk/documents/Change\\_and\\_Implementation/modifications/211/P211\\_Final\\_Modification\\_Report.zip](http://www.elexon.co.uk/documents/Change_and_Implementation/modifications/211/P211_Final_Modification_Report.zip)

[http://www.elexon.co.uk/documents/Change\\_and\\_Implementation/modifications/217/P217\\_Modification\\_Report\\_Documents.zip](http://www.elexon.co.uk/documents/Change_and_Implementation/modifications/217/P217_Modification_Report_Documents.zip)

The reasons for these decisions are outlined below.

## **Reasons for the Authority's decision**

### ***Objective (b) – the efficient, economic and co-ordinated operation of the GB transmission system***

#### *Removal of system pollution*

The Balancing and Settlement Code (BSC) imbalance cash-out rules were designed to provide commercial incentives on parties to balance their aggregated input and offtakes from the system on a half-hourly basis, where it is cheaper for the parties than NGET to do so. Where NGET balances on behalf of parties, those parties should face the costs of NGET's balancing actions. Hence cash-out prices should reflect the costs NG faces in resolving market wide energy imbalances at half-hourly granularity and expose out-of-balance parties to these costs. Other 'system' balancing costs such as those incurred to resolve geographic constraints<sup>10</sup>, or sub-half hourly imbalances, which are below the granularity of the settlement rules, and hence cannot be managed directly by BSC parties, are currently recovered proportionately from all parties based on their throughput<sup>11</sup>.

We have consistently stated our concern that cash-out prices are being polluted by system balancing actions,<sup>12</sup> and in our P217 IA we estimated the impact on consumers to be around £37m annually. The root of this issue is that the System Operator (SO) uses the Balancing Mechanism to resolve both energy imbalances and system imbalances and the BSC requires complex rules to extract the cost of energy balancing from the overall costs.

A further issue is that there is no industry consensus on what constitutes energy balancing versus system balancing. There is general consensus that the costs of managing transmission constraints and sub-15 minute actions should not be included in cash-out prices, however there are differing views on the treatment of reserve as we discuss below.

The analysis undertaken by the Modification Group and contained within our IA demonstrates that P217 and P217A would reduce the effect of system pollution by explicitly removing constraint actions from the cash-out price calculation. This would lead to more accurate energy imbalance price signals. The IA also demonstrated that the dis-aggregation of Balancing Services Adjustment Data (BSAD) would impact cash-out prices. In general, the greater granularity of BSAD price information should improve the accuracy of the cash-out price calculation, although we noted in the IA that there is an increased chance of the cash-out price in certain periods being derived entirely from BSAD trades whose prices may not reflect supply/demand conditions for the relevant balancing period.

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<sup>10</sup> Note that under proposals being considered as part of the Transmission Access Review alternative methods for targeting costs associated with resolving constraints are being considered.

<sup>11</sup> The total SO balancing costs, energy and system, are charged to parties via Balancing Services Use of System (BSUoS) charges based on throughput and applied separately to production (generation) and consumption (demand) accounts. Parties also receive Residual Cashflow Reconciliation Cashflow (RCRC) based on throughput. RCRC is the aggregate imbalance charges representing the costs of energy balancing targeted at out-of-balance parties. Hence, BSUoS net of RCRC should represent the costs of system balancing only, assuming there was no pollution in cash-out prices.

<sup>12</sup> See for example "Decision Letter on Modification P205: Increase in PAR level from 100 MWh to 500 MWh": <http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/CashoutRev/Documents1/15830-P205%20D.pdf>; Decision on Modification P172: "Removal of emergency instructions taken for system balance reasons from imbalance price": <http://www.ofgem.gov.uk/Licensing/ElecCodes/BSC/BSC/Documents1/11129-P172%20D.pdf>

Most respondents agreed that cash-out prices were being polluted by constraint actions and that P217 and P217A would be effective in removing these effects. However three respondents questioned the assumed cost of system pollution of £37m noting that it is very difficult to quantify. Three respondents believed that the costs of system pollution had been understated and that flagging should extend to include reserve creation (i.e. to treat these actions as system balancing), and one believed it should also include all intra-half hour actions. One respondent did not agree that P217 or P217A would lead to prices more reflective of the costs of energy balancing since it was unconvinced of the benefits of trying to separate energy and system balancing costs. It argued for a return to pre-Modification P194 arrangements. The same respondent argued that the cost would not necessarily be passed on to consumers but may simply result in a transfer between different BSC parties.

Two respondents believed that the replacement price methodology could lead to an underestimation of the costs of energy balancing since it was derived from actions lower down the price stack than the action whose price was being replaced.

Most respondents noted that the disaggregation of BSAD could lead to unexpected prices in some periods, but agreed that overall it should lead to more accurate cash-out prices.

Whilst we recognise our analysis of the costs of system pollution relies on assumptions which are difficult to quantify accurately, we consider that the IA demonstrated that a degree of pollution does exist, and that P217 and P217A would to a large extent remove that pollution. As we recognised in the IA, some facets of the proposals, notably BSAD disaggregation and the replacement price methodology,<sup>13</sup> create a risk of less cost-reflective prices in some periods. But on the basis of our analysis we think that the benefits of more accurate price signals in the majority of periods (significantly) outweigh that risk, but it will be important to monitor such effects once the new rules are implemented.

#### *Value of PAR*

P217 also includes a reduction in the Price Average Reference (PAR) value to 100 MWh from 500 MWh. The lower PAR value would lead to more marginal cash-out prices, which would in theory lead to a more economic outcome since consumers would be exposed to the incremental cost of providing the last unit of energy. However, in practice the marginal action will often not be priced to reflect the cost of that action. For example, under marginal (or even PAR100) pricing, the price could be set by a “sleeper bid”<sup>14</sup>, a BSAD action, a poorly targeted reserve creation action, or a constraint action that has not been caught by the flagging or tagging mechanisms. There is therefore an important balance to be struck to ensure that small, non-cost-reflective bids do not set prices.

The reason for the large impact of the PAR value on cash-out prices is the large spread in BOA prices. This reflects the fact that there is no homogeneous half-hourly energy balancing product (even once the system actions are stripped out), with the SO buying or selling energy on a minute-by-minute basis from different plant with different dynamics, each attracting different premia and discounts. A more marginal price would put more weight within the cash-out price calculation on Bid/Offer Acceptances (BOAs) from more responsive plant and, as the IA demonstrated, lead to imbalance charges which would on average significantly exceed the total costs incurred by the SO in energy balancing.

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<sup>13</sup> The proposal includes a replacement price which would apply to any flagged actions that are lower priced than an energy action. Further details can be found in the P217 IA.

<sup>14</sup> A bid or offer which, once posted, is not repriced and remains available at a high price, usually as a signal that the party does not want the bid or offer to be accepted (but which can occasionally enter the price stack).

Hence, the theoretical arguments for a more marginal cash-out price need to be weighed up against the practicalities of deriving a half-hourly energy price from a non-uniform set of actions taken in the Balancing Mechanism and the imperfections in the derivation of the stack of energy balancing actions.

Of the nine respondents who were in favour of the P217 methodology, six agreed that PAR should remain at 500 MWh. Three of these believed that this should be on a permanent basis, whereas three believed that leaving PAR at 500 MWh would be a prudent measure until a track record of operating under the P217 methodology is established prior to moving to more marginal pricing. Three respondents believed that PAR should be reduced to 100 MWh straightaway stating that this would lead to more efficient balancing. One respondent was of the view that the new flagging methodology and the PAR500 pricing were both intended to address the system pollution problem, and hence there is a possibility of adjusting for the effect twice in calculating cash-out prices. Two respondents suggested that more marginal pricing would overstate the SO's energy balancing costs since it believed that applying marginal pricing to a pay-as-bid mechanism overstates the energy balancing costs faced by the SO. One of these advocated returning to a weighted average price. It noted that P217A with PAR500 would result in prices similar to pre-Modification P194 (with a volume weighted price).

#### *Overall assessment of Modification Proposal P217/Alternative Modification Proposal P217A against Objective (b)*

We believe that the P217/P217A methodology for removing the impact on constraints on cash-out prices and the disaggregation of BSAD volumes should promote the efficient and economic operation of the GB transmission system by more accurately targeting the costs of energy balancing at out-of-balance parties. We believe that P217A would better facilitate Applicable Objective (b) but, due to the concerns noted above that more marginal pricing would not be cost-reflective, we believe it is not proven that P217 would better facilitate objective (b).

#### *Modification proposal P211*

P211 leads to significantly less cost reflective cash-out prices than P217 or P217A if reserve creation is defined as an energy balancing action. By ignoring plant dynamics in the EPUS calculation, it not only removes the effect of constraints, but effectively excludes the costs of reserve creation.

Hence, in order to determine whether P211 would further Applicable Objective (b) it is necessary to define whether reserve creation BOAs should be classified as energy or system related.

Reserve is required to manage uncertainty in the supply/demand balance, and there are different types of reserve to address uncertainty over different time intervals. Broadly speaking reserve can be categorised as (a) that required to resolve imbalances of ½ hour or more, and (b) that required for sub-half hourly balancing. The former category covers reserve that is 'exercised' via the Balancing Mechanism, namely BM Start-up, Short Term Operating Reserve (STOR) and reserve creation BOAs, where plant are positioned in earlier periods so that they can provide reserve for later periods. The cost of utilising this reserve is included in the cash-out price calculation for the relevant settlement period. However, the costs of making it available are incurred earlier. In the case of BM Start-up and STOR, the availability fees of these contracts are targeted back approximately into cash-out prices through the Buy Price Adjusters according to the BSAD Methodology Statement. In the case of reserve creation BOAs, there is no attempt to channel the

costs into the settlement period where the reserve was required, and hence the costs of creating the reserve may influence the cash-out prices in the preceding periods.

We expressed concerns in the Impact Assessment for P211/P212 about the accuracy of the targeting of these reserve costs. However, we are of the view that BM Start-up, STOR and reserve creation BOAs are predominantly required to manage half-hourly energy imbalances and should be included in cash-out prices<sup>15</sup>. If the SO did not contract for these services, cash-out prices would be more extreme and volatile requiring parties to make their own provisions which would almost certainly lead to higher overall costs. It may be more economic for the SO to provide these services centrally but the costs it incurs should be reflected in cash-out prices or else balancing performance could weaken and lead to higher overall costs<sup>16</sup>. In the IAs for P211/P212 and P217/P217A we noted that the availability fees for BM Start-up and STOR are only partially captured in cash-out prices. We are also concerned that the current ex-ante method of allocating the costs of STOR availability fees may not be providing sharp enough signals in periods when the system is most under stress, for example on 27 May 2008.

Most parties agreed reserve should be targeted in cash-out prices. One respondent's view was that it is impractical to target costs precisely to those using utilising the reserve at any given time, but a reasonable compromise is to target reserve costs on those in imbalance. It said any correlation over time between a party's imbalance and reserve costs in that period should bias costs towards that party and give a more accurate allocation of costs than simple sharing.

Three respondents disagreed. One believed that reserve creation costs should be treated as system, but should be targeted more on generators as they create most of the requirement. One respondent was not convinced by the arguments in the P217 IA and believes reserve should be treated as system.

Although the targeting of reserve costs is far from accurate in the current (and P217) arrangements, we remain of the view that they should in principle be targeted on parties who are creating the requirement for reserve by not balancing. On this basis, we believe that P211 would underestimate the costs of energy balancing and hence would not further Applicable Objective (b).

We remain concerned about the accuracy of reserve cost targeting and believe that the economy and efficiency of the arrangements could be improved by changes in this area. For example, we believe that alternative methods for targeting the costs of reserve creation BOAs into periods when the reserve is required could be considered. We also believe that the BSAD Methodology should be reviewed with respect to the allocation of reserve availability fees, and whether a greater proportion of these costs can be channelled into periods of system stress.

***Objective (c) - promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity***

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<sup>15</sup> Other forms of reserve such as Fast Reserve are required for sub-half hourly balancing and hence are excluded from the cash-out price calculation.

<sup>16</sup> The requirement for reserve is a function of uncertainty in energy balance rather than absolute imbalance – a party that is consistently long or consistently short should impose little or no reserve cost on the system since if the SO can predict this imbalance with certainty it can buy or sell forward trades rather than purchase options. Hence, theoretically reserve costs should be targeted based on forecasting accuracy. In the absence of an information charge, reserve costs can only be targeted based on absolute imbalances in each half-hour settlement period.

### *Removal of system pollution*

Reducing the effect of system pollution in cash-out prices should be beneficial to competition as it reduces any distortions in prices, which are likely to disproportionately impact on smaller players and intermittent generators since they will always tend to be proportionally more exposed to cash-out due to the size of their portfolios and their lower forecasting capability relative to larger players.

Some parties expressed the view that prices should be cost-reflective and not designed to favour any particular type of participant. One party suggested that improving cost-reflectivity by definition improves the distribution of charges.

One party suggested that both P217 and P217A may increase the potential for new entry by reducing the risk of spurious and anomalous prices. A number of respondents considered that the increased transparency brought about by the proposal would be beneficial to competition. One party disagreed, believing that the increased scope for parties to understand and manipulate constraints would lead to increases in the costs of resolving constraints.

Some respondents expressed concerns about the increased complexity of the imbalance price calculations under P217/P217A whilst others countered that new entrants would benefit from the Guidance Note to cash-out arrangements which Elexon is expected to produce if P217 or P217A is approved.

We consider that reducing the effect of system pollution in cash-out prices should help to ensure that the cash out price is accurately targeting the true costs of energy imbalances and is less likely to be artificially distorted by non-energy balancing actions. By accurately targeting the costs of energy imbalances whilst leaving the PAR value at 500MWh the P217A proposal should be beneficial to competition. We also agree that more cost-reflective cash-out arrangements should be beneficial to new entry. Under the current arrangements, smaller players and intermittent generators are potentially disadvantaged because system pollution artificially inflates cash-out prices, to which they are proportionally more exposed.

### *Value of PAR*

One respondent thought that P217A avoids the penal effects of a more marginal price calculation. Under P217A, it stated it would expect to see a transfer of funds from larger to smaller players as a result of what it considers is a cross-subsidy (from poorer balancers to stronger balancers) under the current arrangements being reduced. It believed that P217 probably aggravates what it sees as the inequitable redistribution of Residual Cashflow Reallocation Cashflow (RCRC)<sup>17</sup> which would reinforce the cross-subsidy.

Some respondents noted that distributional effects will depend on behavioural changes which are difficult to predict. One respondent agreed that the size of the spread determines the distribution of cash-out charges, and pointed out that the reverse price could be impacted by changes in behaviour under revised cash-out arrangements. Its view was that, if the main and reverse price calculations are both "correct", then the distribution will be appropriate.

We believe that P217 could be detrimental to competition since the effect of reducing PAR to 100 MWh more than offsets the removal of constraint pollution leading to less cost

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<sup>17</sup> RCRC is the aggregate sum of imbalance receipts less imbalance payments. It is redistributed to parties on an equal basis based on throughput.

reflective cash-out prices and wider spreads. Analysis in the IA suggests that the monies recovered from out-of-balance parties would (other things being equal) significantly exceed the costs of energy balancing, effectively leading to transfers from weaker balancers to stronger balancers. There appears to be little justification for such a transfer and this could be a barrier to entry.

#### *Overall assessment of Modification Proposal P217/Alternative Modification Proposal P217A against Objective (c)*

Since the P217/P217A flagging methodology reduces the impact of constraint actions on cash-out, it should result in more cost-reflective prices which would promote competition and make new entry more attractive. The approach improves transparency associated with the management of constraints and balancing services contracts but the benefit of this is probably offset by the additional complexity of the arrangements.

By reducing the value of PAR to 100 MWh, P217 is likely to increase significantly the main-reverse price spread, which under the proposed arrangements would increase net charges (cash-out less RCRC) to small parties relative to large parties<sup>18</sup>. We believe that this would be detrimental to effective competition and discourage new entry.

For these reasons we believe that overall P217A would further Applicable Objective (c) but that P217 would not. However, we remain concerned about the levels of complexity involved with the cash-out arrangements and the impact that this may have on the participation of potential new entrants in the market.

#### *Modification proposal P211*

P211 leads to less cost reflective cash-out prices which could favour smaller players and encourage new entry. However, by not fully reflecting the costs of energy balancing it may lead to inefficient new entry or deter investment in plant reliability, better forecasting and/or demand side response which in the longer term could be detrimental to competition. Furthermore, by breaking the link between actual SO actions and cash-out prices there is a greater risk of price manipulation under P211.

Of the respondents who commented on P211, most were of the view that breaking the link between SO actions and cash-out prices would be detrimental to competition. One respondent stated that the fundamental principle of using the actual actions taken to set cash-out prices is important as otherwise the arrangements will be unable to send messages to the market that they can respond to.

For these reasons we conclude that P211 would not further Applicable Objective (c).

#### ***Objective (d) - promoting efficiency in the implementation and administration of the balancing and settlement arrangements***

All three modification proposals would incur implementation costs – ~£725k in the case of P211, ~£1.4m in the case of P217/P217A. P217 and P217A would increase the complexity of the cash-out price calculation and would require a set of new processes for the SO in flagging potential constraint actions. With the additional complexity and discretion involved there would be greater requirement for monitoring and audit which would increase Ofgem's administrative costs. P211 may simplify the cash-out price

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<sup>18</sup> We note that BSC Issue Group 35 is considering the duration of gate closure and the contract notification period. Any changes in this area are likely to impact the reverse price and therefore the spread.

calculation in the longer term but would require a new algorithm to be implemented which could make the prices less transparent in the near term.

All parties who are in favour of either P217 or P217A were of the view that the increased complexity and implementation costs are outweighed by the benefits of the proposals. Three respondents considered that complexity per se is not a disadvantage and may even be necessary given the complexities of the electricity market in general. Two respondents pointed to the Guidance Notes to cash-out which will be produced by Elexon as a mitigation of the increased complexity associated with these proposals. Although we welcome this development, we do not consider it as part of our assessment of P217 and P217A.

In conclusion, we do not believe that the three modification proposals would reduce complexity or reduce the costs of administering the arrangements. Hence, we do not believe that P211, P217 or P217A would further Applicable Objective (d). We remain concerned about the complexity of the cash-out arrangements generally, and believe that improvements in this area would be desirable to reduce the overall administrative burden on participants.

### ***Wider statutory duties***

In making its decision on these modifications the Authority needs to consider its wider statutory duties for security of supply and sustainable development.

We believe that P217A would have a neutral or slightly positive impact on security of supply. The strength of the price signal would not change significantly, but any increase in new entry from the more cost-reflective price would improve diversity of supply. A more marginal price as proposed under P217 could in theory improve security of supply by providing sharper cash-out price signals through the lower PAR value. However, a number of issues and uncertainties remain which mean that a more marginal price is likely to be less cost-reflective, and could therefore lead to inefficient investment decisions. For example, the new mechanism for removing constraint actions is unproven, individual BSAD volumes may set the price, reserve creation costs are currently poorly targeted, there are potential gaming concerns and there is a risk of sleeper bids setting the price.

Once P217A is implemented, it will be important to monitor whether 500 MWh remains an appropriate PAR level, and whether appropriate and cost-reflective signals are delivered by the rules during periods of system stress.

Such signals are important to promote greater participation from the demand side and encourage investment in flexible generation which will be required in light of plant closures associated with the Large Combustion Plant Directive and possibly the Industrial Emissions Directive, and the growth of intermittent renewables.

Five respondents said that, by strengthening the signal to balance, P217 will improve security of supply. One respondent believed that P217 will more appropriately reflect the opportunity costs of imbalance in to the forward market and as such will have a positive impact on long term security of supply. However, another respondent suggested that more marginal cash-out prices would lead to parties holding back generation capacity to manage their own risks and potentially exacerbating periods of tight capacity margin.

Some parties thought that there would be no significant impact on security of supply under P217, and one respondent thought that the security of supply benefits had been overstated in the IA. Another thought that more accurate targeting of reserve costs would have a greater benefit to security of supply than a reduction in the PAR value. We believe that this issue warrants further consideration, and in particular whether more

targeted allocation of reserve costs into periods of system stress could be a more efficient and effective means of promoting security of supply rather than a reduction in PAR value which tends to affect prices over a much wider number of periods.

By underestimating the costs of energy balancing, we believe that P211 would be detrimental to security of supply since parties would have less incentive to manage their imbalances, or invest or contract to cover their positions.

We believe that the modifications may have some impact on sustainable development. Intermittent renewable plant may have higher exposure to cash-out than conventional plant due to the unpredictability of their output. P217A may provide a small benefit by removing the impact of constraint pollution on imbalance prices and risk.

The sharper balancing incentives under P217 may reduce the SO's reserve requirement for part-loaded plant (which operates at lower efficiency) but this is likely to be replaced by more self-provision of reserve, and vice versa under the more benign cash-out price signals under P211. We believe that P217A would have only a modest impact on the SO's reserve requirement since the average effect on price is relatively small.

The majority of parties thought that P217 and P217A would have little impact on sustainable development or fuel poverty.

### **Overall decision**

We believe that P211 and P217 would not further the Applicable Objectives, and hence our decision to reject them.

We believe that P217A would further Applicable Objectives (b) and (c).

Our analysis suggests that the P217/P217A flagging methodology would be an improvement on the current baseline since it explicitly addresses the issue of constraint pollution. In deciding to approve P217A we have concluded that there is currently not a case for reducing PAR, since it could be detrimental to competition, and in the absence of experience of operating under the new pricing methodology, it is not proven that it would lead to more efficient balancing of the system. However, we believe that the value of PAR should be kept under review and the treatment of reserve costs in cash-out should also be reviewed. The trigger for reducing PAR may be a track record of non-polluted cash-out prices under P217A, improved access to shape and balancing energy for smaller players through increased within-day liquidity (or other mechanisms), reduced cash-out price spreads which may result from the former or an amendment to the reverse price methodology, or a combination of all of these.

### **Timing**

The modification should be implemented by 5 November 2009, as outlined in the Final Modification Report.

### **Post-implementation review**

All respondents agreed that there should be a post-implementation review if P217/P217A were to be implemented. Ten respondents believed that this should take place twelve months after implementation, whereas two believed that it should take place after 6 months.

We propose that a full review of P217A takes place 12 months after its implementation, namely in November 2010. In addition, we will be actively monitoring the impact of

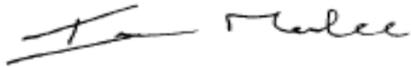
P217A on the market from its implementation date and will be requesting that National Grid Electricity Transmission (NGET) provides interim reports on the effectiveness of the flagging process during the first year.

We will consult with NGET and the industry on the terms of reference for the post-implementation review and interim monitoring prior to the implementation of the modification.

### **Wider considerations**

We are accepting P217A since we believe that it represents an improvement on the current baseline. However, we do not consider that it addresses all of the issues with the current cash-out arrangements. We recognise the views of some respondents that a period of stability in the arrangements is now required, but consider that there remains scope for improving the arrangements further. For example, we believe that the issues surrounding targeting of reserve costs, cash-out price spread and timing of gate closure and contract notifications may warrant further consideration in any future modification proposals.

**Signed on behalf of the Authority and authorised for that purpose.**

A handwritten signature in black ink, appearing to read 'Ian Marlee', written over a horizontal line.

**Ian Marlee**  
**Director, Trading Arrangements**