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BSC Signatories, National Grid Company  
and Other Interested Parties

Our Ref: MP No P172

Dear Colleague

**Modification to the Balancing and Settlement Code (“BSC”) – Decisions in relation to Modification Proposal P172: “Removal of Emergency Instructions taken for System reasons from Imbalance Price”**

The Gas and Electricity Markets Authority<sup>1</sup> (the “Authority”) has carefully considered the issues raised in the Final Modification Report<sup>2</sup> in respect of Modification Proposal P172 “Removal of Emergency Instructions taken for System reasons from Imbalance Price”.

The BSC Panel (the “Panel”) recommended to the Authority that Proposed Modification P172 should be made and that Alternative Modification Proposal P172 should not be made. In the event that the Authority determines that either Proposed Modification P172 or Alternative Modification Proposal P172 should be made, the Panel recommended an Implementation Date of five working days following an Authority Decision.

Having considered the Final Modification Report in respect of Modification Proposal P172, the Panel’s recommendation and having regard to the Applicable BSC Objectives<sup>3</sup> and the

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<sup>1</sup> Ofgem is the Office of the Authority. The terms “Ofgem” and “the Authority” are used interchangeably in this letter.

<sup>2</sup> Elexon document references P172DMR, Version No. Final/1.0, dated 18 January 2005.

<sup>3</sup> The Applicable BSC Objectives, as contained in Standard Condition C3 (3) of National Grid Company’s (“NGC’s”) Transmission Licence, are:

- a) the efficient discharge by the licensee of the obligations imposed upon it by this licence;
- b) the efficient, economic and co-ordinated operation by the licensee of the licensee’s transmission system;
- 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;

Authority's wider statutory duties<sup>4</sup>, the Authority has decided to direct a Modification to the BSC in line with Proposed Modification P172.

This letter explains the background and sets out the Authority's reasons for its decisions.

## **Background**

### *Cash out arrangements*

The Balancing Mechanism ("BM") was designed as a tool to assist National Grid Company plc ("NGC"), as the System Operator ("SO"), to keep the transmission system in balance in real time by providing a mechanism to adjust levels of generation and demand through the acceptance of Bids and Offers submitted to the BM ("Electricity Balancing"). The SO also uses the BM, amongst other things, to ensure that the system remains within safe operating limits, and that the pattern of generation and demand is consistent with any transmission system constraints ("System Balancing"). System Balancing actions include, but are not limited to, frequency control and the alleviation of locational constraints. The SO also has commercial freedom to trade in the other short term markets and to contract with generators, suppliers and customers to balance the system.

Under the rules of the BSC, a Party is in a position of imbalance if its notified contract volume does not match its metered volume, i.e. the Party is producing (or consuming) electricity which has not been sold (or bought) and is therefore not covered by contracts. Imbalance settlement, or 'cash out', is designed so that any electricity produced or consumed that is not covered by contracts is paid for, or charged at, a cost reflective price. The arrangements are designed to target the costs that NGC has incurred in buying and selling electricity to match generation and demand onto those Parties that are in imbalance, i.e. those Parties on behalf of which the SO has taken Electricity Balancing actions.

Parties that are 'long' when the market as a whole is 'short' (i.e. generators whose physical output exceeds their contracted volume or suppliers whose customers' demand is less than their contract volume when total demand on the system is greater than the total supply of generation), are not, in any meaningful sense, contributing to balancing the system (except inadvertently). The converse is true for parties who are short when the market is long. Parties with imbalances in the opposite direction to the system can also impose costs on the system (these are the costs associated with the need for a generator or supplier to change its output at short notice) as their contribution to balancing is not guaranteed, requiring the SO to manage the resulting risks.

A dual cash-out mechanism exists, in which there are two Energy Imbalance Prices, or 'cash out prices': the System Buy Price ("SBP") and the System Sell Price ("SSP"). Parties that are short are generally charged the SBP for their imbalance volumes and Parties that are long generally

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- d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements;
  - e) the undertaking of work by BSCCo (as defined in the BSC) which is:
    - (i) necessary for the timely and effective implementation of the proposed British Electricity Trading and Transmission Arrangements (BETTA); and
    - (ii) relevant to the proposed GB wide balancing and settlement code; and does not prevent BSCCo performing its other functions under the BSC in accordance with its objectives.

<sup>4</sup> Ofgem's statutory duties are wider than the matters that the Panel must take into consideration and include amongst other things a duty to have regard to social and environmental guidance provided to Ofgem by the government.

receive SSP for their imbalance volumes. These prices apply whether the system itself is long or short. In reflecting the costs that parties in imbalance impose on the system, a dual cash-out mechanism provides incentives for parties to contract ahead to meet their customers' demands, as those Parties that are long are likely to receive a lower price for electricity via imbalance settlement than if they had been fully contracted. Similarly, parties that are short are likely to pay a higher price for electricity via imbalance settlement than if they had been fully contracted.

Since NETA Go-Live<sup>5</sup>, in the light of experience gained under the new arrangements, a number of modifications<sup>6</sup> have been made to the way in which Energy Imbalance Prices are calculated as a result of concerns that the rules did not give rise to prices that reflected costs and market conditions on the grounds that the proposed changes would increase the likelihood of this happening<sup>7</sup>. These modifications include the introduction of the Continuous Acceptance Duration Limit ("CADL")<sup>8</sup> and changes to the treatment of contracts in the calculation of the Energy Imbalance Price. Most recently, Approved Modification P78 was introduced to address a potential defect in the methodology for calculating Energy Imbalance Prices used at that time which resulted in high levels of SBP that did not reflect the costs that NGC was incurring to balance the system and were considered to be driving the market long, as discussed above.

Approved Modification P78<sup>9</sup> was submitted by NGC on April 2002 in response to concerns expressed by both NGC and market participants that cash out prices were reflective of costs associated with both System Balancing and Electricity Balancing<sup>10</sup>. It was also suggested that SBP was being distorted by System Balancing costs more frequently than SSP and hence the spread between SBP and SSP was larger than would be the case if System Balancing costs were correctly excluded. This, in turn, was creating asymmetric risks for Parties, in response to which they were tending to go long to avoid exposure to a high SBP, with the result that the market itself was long overall.

Approved Modification P78 introduced a mechanism into the BSC to remove a category of acceptances taken for System Balancing reasons from the calculation of cash out prices. Under Approved Modification P78 these acceptances were considered to be characterised by equal and opposite compensatory actions which, in general, were being taken by the SO for System

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<sup>5</sup> NETA Go-Live occurred on 27 March 2001.

<sup>6</sup> Approved Modification P10 "Eliminating Imbalance Price Spikes caused by Truncating Effects" was implemented in May 2001 to remove spurious Bid-Offer Acceptances ("BOAs") for small volumes that resulted in price spikes that did not reflect the costs incurred by NGC in achieving energy balance.

Approved Modification P18A "Removing/Mitigating the Effect of System Balancing Actions in the Imbalance Price" was made in September 2001 to remove actions taken for System Balancing rather than Electricity Balancing reasons from the calculation of Energy Imbalance Prices and to remove Bids and Offers with a duration of less than 15 minutes.

Approved Modification P8 "Introduction of a Price Adjuster to reflect Option Fees for Balancing Services Contracts in setting System Buy Price and System Sell Price" introduced an adjustment mechanism to reflect option fees for balancing services contracts in the calculation of Energy Imbalance Prices.

Approved Modification P78 "Revised Definitions of System Buy Price and System Sell Price" removed further System Balancing actions from the calculation of Energy Imbalance Prices.

<sup>7</sup> In addition, on 2 May 2002, the Authority accepted BSC Modification Proposal P12 "Reduction of Gate Closure from 3.5 hours to 1 hour", which was implemented on 2 July 2002.

<sup>8</sup> Approved Modification P18A: CID definition 1a.

<sup>9</sup> The Authority's decision in respect of Approved Modification P78 "Revised Definitions of System Buy Price and System Sell Price" was published on 9 September 2002 and can be found on the Elexon website: [www.elexon.co.uk](http://www.elexon.co.uk).

<sup>10</sup> Since System Balancing costs cannot currently be attributed to particular users they are excluded from the calculation of imbalance cash out prices.

Balancing reasons, for instance the alleviation of locational constraints. Approved Modification P78 also sought to change the derivation of cash out prices such that there would be a 'main' price and a 'reverse' price. It proposed that the reverse price would be derived from a market price based on short-term energy trades made in the forward and spot markets. The main price would be derived using a volume weighted average of all the eligible<sup>11</sup> Electricity Balancing actions taken by the SO to alleviate the Net Imbalance Volume ("NIV")<sup>12</sup>. Under the proposal the main price would apply to imbalances in the same direction as the overall system imbalance and the reverse price would apply to imbalances in the opposite direction. On 9 September 2002, the Authority decided to direct that Approved Modification P78 should be made. Approved Modification P78 was implemented on 11 March 2003.

In summary, the rules used to set cash out prices are designed to produce prices for each half hour settlement period that reflect the costs that NGC incurs in balancing generation and demand on the system. Cash out prices are crucial in sending appropriate price signals and creating the right commercial incentives on companies necessary to maintain security of supply. For suppliers, the potential to be exposed to high cash out prices during periods of peak demand provides the incentive to contract with generators in advance to meet their customers' peak demand. For generators, the potential to be exposed to high cash out prices following, for example, a mechanical failure, during periods when margins are tight provides an incentive to maintain plant and to contract with other peaking plant to provide physical cover.

#### *Current treatment of Emergency Instructions*

Under the Grid Code, NGC can issue Emergency Instructions, which may require BM Units to operate outside their submitted parameters, in order to preserve the integrity of the transmission system<sup>13</sup>. NGC can issue an Emergency Instruction to increase or decrease generation or demand in certain circumstances<sup>14</sup>. An Emergency Instruction can only be rejected by the relevant transmission system user on safety grounds<sup>15</sup>. The Grid Code states that an Emergency Instruction issued to a BM Unit is treated as a Bid-Offer Acceptance ("BOA"), unless it is rejected by the transmission system user or the Grid Code explicitly states to the contrary<sup>16</sup>.

The BSC specifies that an Emergency Instruction issued to a BM Unit under the Grid Code is classed as an Acceptance for the purpose of settlement<sup>17</sup>. At present, Acceptances resulting from Emergency Instructions issued to BM Units under the Grid Code are handled within settlement consistent with other Acceptances. Therefore, as for other Acceptance Volumes, an Emergency Instruction Acceptance has the following effect:

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<sup>11</sup> Defined as actions that are not: Bids or Offers which have a Continuous Acceptance Duration of less than 15 minutes; De Minimus accepted Bids or Offers; Arbitrage accepted Bids or Offers; NIV Tagged Bids or Offers; or System actions identified in the BSAD methodology.

<sup>12</sup> The NIV is calculated by netting off all purchase actions against all sell actions to give the imbalance of the overall System.

<sup>13</sup> See Grid Code BC2.9.1 and BC2.9.2.

<sup>14</sup> See Grid Code BC2.9.1.2.

<sup>15</sup> See Grid Code BC2.9.2.1.

<sup>16</sup> Grid Code BC2.9.2.3 states that a BOA will not be issued for provision of the Maximum Generation Service, during the Black Start process or the re-synchronisation of a de-synchronised island.

<sup>17</sup> See BSC Q5.1.3 (b) and Q5.1.5.

- ◆ the Lead Party of the affected BM Unit will be paid (or pay) for the Acceptance at the prevailing Bid or Offer price;
- ◆ a payment will be made from (or to) the Transmission Company to (or from) the Lead Party of the affected BM Unit as a result of the Acceptance, with an associated impact on Balancing Services Use of System (“BSUoS”) charges for all Parties; and
- ◆ the Acceptance Volume feeds into the cash out price calculation at the prevailing Bid or Offer price, which may, subject to the tagging rules, impact imbalance payments and the Residual Cashflow Reallocation Cashflow (“RCRC”) for all Parties.

#### *Damhead Creek incident*

On 19 May 2004, NGC determined that a piece of high voltage equipment was showing signs of distress and needed to be taken out of service as soon as possible in order to prevent an unsafe situation. The location of the distressed equipment meant that it was necessary to stop Damhead Creek Power Station exporting to the transmission system. At 12:51 BST on 19 May 2004, NGC issued an Emergency Instruction to Damhead Creek to perform a controlled shutdown and desynchronise the BM Unit as quickly as possible. The power station complied with the instruction and the equipment was isolated safely.

As outlined earlier, Acceptances resulting from Emergency Instructions are not distinguished within Settlement from other Acceptances. In this case, Damhead Creek’s prevailing Bid price for a large proportion of the Acceptance Volume was -£9,999/MWh. Elxon has estimated that the inclusion of the Acceptance data<sup>18</sup> associated with the Emergency Instruction would result in SSP being:

- ◆ -£96.68/MWh<sup>19</sup> for Settlement Period 27; and
- ◆ -£5,870.82/MWh for Settlement Period 28.

Following the implementation of Approved Modification P181<sup>20</sup>, the inclusion of this Bid Acceptance within settlement has been delayed until the Final Reconciliation Run for the affected Settlement Periods. The Final Reconciliation Run is due to take place on 8 July 2005 at which point, under the existing baseline, the imbalance exposure of those Parties with long positions in the relevant Settlement Periods will be altered on the basis of the revised SSPs.

In response to its concerns about the potential for cash out prices to be affected by Emergency Instructions in the future, on 25 August 2004 British Gas Trading (BGT) submitted Modification Proposal P172: “Removal of Emergency Instructions taken for System reasons from Imbalance Price”.

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<sup>18</sup> The acceptance data was not initially included in settlement. The Trading Disputes Committee subsequently heard a Trading Dispute and directed that a Bid Acceptance should be entered into Settlement in the R3 Reconciliation Run on 15 December 2004.

<sup>19</sup> NB: A negative SSP will mean that a Party who was ‘long’ during the Settlement Period will pay the absolute value of SSP for its imbalance volume (rather than receive it).

<sup>20</sup> Approved Modification P181 “NGC Emergency Instruction re Damhead Creek 19.5.04: Deferral of Settlement Process”.

## **The Modification Proposal**

Modification Proposal P172 seeks to revise the way in which Acceptances linked to Emergency Instructions are included in the calculation of cash out prices. Under the proposal, NGC, as SO, would have the discretion to identify whether an Emergency Instruction was issued for Electricity Balancing reasons or for System Balancing reasons. In the event that an Emergency Instruction is flagged by NGC as being an Electricity Balancing action, it would be treated no differently from any other Acceptance within settlement, as is currently the case. However, in the event that an Emergency Instruction is flagged by NGC as being a System Balancing action, it would be distinguished within settlement. Under the proposal a System Balancing Emergency Instruction Acceptance would be treated as follows within settlement:

- ◆ the Lead Party<sup>21</sup> of the affected BM Unit would be paid (or pay) for the Acceptance at the prevailing Bid or Offer price (as is currently the case);
- ◆ a payment would be made from (or to) the Transmission Company to (or from) the Lead Party of the affected BM Unit as a result of the Acceptance with an associated impact on BSUoS charges for all Parties (as is currently the case); and
- ◆ the Acceptance Volume would feed into the cash out price calculation as an unpriced volume.

Therefore, Modification Proposal P172 seeks to revise the treatment of System Balancing related Emergency Instructions Acceptances by making them unpriced Acceptance Volumes for the purposes of calculating cash out prices. Modification Proposal P172 seeks to apply the proposed solution, if approved, on a prospective basis and so is not seeking to unwind the effect of the Damhead Creek incident on cash out prices in the affected Settlement Periods.

The Proposer considers that this Modification Proposal better facilitates the achievement of Applicable BSC Objective (c) ("Promoting effective competition in the generation and supply of electricity and promoting such competition in the sale and purchase of electricity"). The Proposer considers that the Emergency Instruction issued on 19 May 2004 undermined the intent of imbalance prices which are meant to be based upon Electricity Balancing actions taken by the SO and led to a number of Parties being exposed to an erroneously large imbalance price that is unrepresentative of the SO's Electricity Balancing actions. The Proposer considers that removal of this defect prospectively would promote competition by ensuring that the Energy Imbalance Price is reflective of Electricity Balancing actions taken by the SO.

## **Alternative Modification Proposal**

Alternative Modification Proposal P172 seeks to reflect within cash out prices any consequential Electricity Balancing which may be delivered by an Emergency Instruction issued for System Balancing reasons.

Like Proposed Modification P172, Alternative Modification Proposal P172 seeks to apply the proposed solution on a prospective basis and to provide NGC with the discretion to identify whether an Emergency Instruction was issued for Electricity Balancing reasons or for System Balancing reasons. Alternative Modification P172 also proposes no revisions to the treatment within settlement of any Emergency Instruction Acceptances which are flagged as being

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<sup>21</sup> The Lead Party is the Party registered to the BM Unit pursuant to Section K3 of the BSC.

Electricity Balancing actions. However, a different approach is proposed for the treatment of Emergency Instructions taken for System Balancing reasons. Under Alternative Modification Proposal P172, a System Balancing Emergency Instruction Acceptance would be treated as follows within settlement:

- ◆ the Lead Party of the affected BM Unit would be paid (or pay) for the Acceptance at the prevailing Bid or Offer price (as is currently the case);
- ◆ a payment would be made from (or to) the Transmission Company to (or from) the Lead Party of the affected BM Unit as a result of the Acceptance with an associated impact on BSUoS charges for all Parties (as is currently the case); and
- ◆ replacement Bid/Offer Acceptances, derived on the basis of the Bids and Offers that would have been taken had the Emergency Instruction not been issued, would be included within settlement for the purposes of calculating cash out prices. This is effectively akin to applying a replacement price to the System Balancing Emergency Instruction volume based on an equivalent overall volume of Bids/Offerings which would have been taken in the absence of the Emergency Instruction. The Panel or a delegated sub-committee would have responsibility for approving the replacement price.

Therefore, as with Proposed Modification P172, Alternative Modification Proposal P172 has no impact on the payments between the Lead Party of affected BM Units and the Transmission Company relating to the Emergency Instruction Acceptance. The impact is confined to the way in which System Balancing Emergency Instruction Acceptances feed into and affect the calculation of cash out prices. As outlined above, such Acceptances will effectively be priced at a replacement price for the purpose of calculating cash out prices under Alternative Modification Proposal P172.

### **Related Modification Proposals**

Several related Modification Proposals were considered by the Pricing Standing Modification Group (“PSMG”) alongside Modification Proposal P172. However, the decision in relation to Modification Proposal P172 has been made independently of these related Modification Proposals.

*Modification Proposal P171 “Retrospective removal of Emergency Instructions taken for System reasons from Imbalance Price”*

Modification Proposal P171 was also submitted on 25 August 2004 by BGT. The solutions proposed under Original Modification Proposal P171 and Alternative Modification Proposal P171 are identical to those proposed under Original Modification Proposal P172 and Alternative Modification Proposal P172 respectively in all but one respect. Consequently, the details of the proposed solutions under Modification Proposal P171 are not repeated here.

Modification Proposals P171 and P172 differ in terms of the proposed implementation approach. While Modification Proposal P172 entails prospective implementation, the solutions proposed under Modification Proposal P171 would, if approved, be implemented on a retrospective basis with effect from 19 May 2004. This would, therefore, unwind the effect of the Damhead Creek incident on cash out prices in the affected Settlement Periods.

*Modification Proposal P173 "Revised Settlement Arrangements for Emergency Instructions"*

Modification Proposal P173 was submitted by National Grid Transco on 25 August 2004. It proposes to amend the way in which Emergency Instructions are distinguished within settlement as follows:

- ◆ the Lead Party of the affected BM Unit would be paid (or pay) for the associated Acceptance at a replacement price rather than the prevailing Bid or Offer price. The replacement price would be calculated for the affected BM Unit and agreed by the Panel post event. The proposal is that the replacement price should represent Avoidable Costs, as currently defined in Section G.2 of the BSC, with the intention that the Lead Party of the affected BM Unit would be 'cost neutral' as a result of responding to an Emergency Instruction;
- ◆ a payment would be made from (or to) the Transmission Company to (or from) the Lead Party of the affected BM Unit as a result of the Acceptance on the basis of the replacement price based on Avoidable Costs rather than the prevailing Bid or Offer price. BSUoS payments for all Parties would reflect the replacement price rather than the prevailing Bid or Offer price; and
- ◆ the Acceptance Volume would feed into the cash out price calculation at the replacement price based on Avoidable Costs rather than the prevailing Bid or Offer price.

Alternative Modification Proposal P173 proposes the same solution in terms of the treatment of Emergency Instructions within settlement but proposes a wider definition of Avoidable Costs upon which to base the replacement price. The wider definition proposed under Alternative Modification Proposal P173 includes additional cost categories which are specifically excluded under the existing Avoidable Costs definition included in Section G.2 of the BSC. Under the wider definition the following cost categories can be included where demonstrably incurred:

- ◆ costs or losses in respect of damage to property (including plant or apparatus) or death or injury to persons;
- ◆ increases in insurance premia; and
- ◆ increases in financing costs and overhead costs.

*Modification Proposal P175 "Development of Provisions related to certain Bid-Offer Acceptances issued pursuant to the Grid Code (e.g. BC2.9 and BC2.10)"*

Modification Proposal P175 was submitted by RWE Npower plc on 1 October 2004. It proposes to amend the way in which Emergency Instructions and intertrips are distinguished within settlement as follows:

- ◆ the Lead Party of the affected BM Unit would not be paid (or pay) for the associated Acceptance at either the prevailing Bid or Offer price or any replacement price. The Lead Party would be able to apply under the BSC for compensation for any costs incurred in responding to the instruction, including costs associated with plant damage but excluding any amounts received or paid under the Connection Use of System Code ("CUSC") or any other bilateral agreement with NGC. The Panel would make a determination on each cost claim received. The Lead Party would be paid (or pay) any upheld compensation claim;



- ◆ a payment would not be made from (or to) the Transmission Company to (or from) the Lead Party of the affected BM Unit as a result of the Acceptance on the basis of the prevailing Bid or Offer price or any replacement price. However a payment would be made from (or to) the Transmission Company on the basis of any upheld compensation claim; and
- ◆ replacement Bid/Offer Acceptances, derived on basis of the Bids and Offers that would have been taken had the Acceptance not been issued, would be included within settlement for the purposes of calculating cash out prices. This is effectively akin to applying a replacement price to the Acceptance volume based on an equivalent overall volume of Bids/Offer which would have been taken in the absence of the Acceptance. The Panel or a delegated sub-committee would have responsibility for approving the replacement price.

## **Respondents' views**

### *Assessment Consultation*

Elexon published an Assessment Consultation in relation to Modification Proposal P172 on 28 October 2004, which invited respondents' views by 9 November 2004. Elexon received 11 responses to the Assessment Consultation. The views received can be summarised as follows:

- ◆ eight respondents considered that Proposed Modification P172 better facilitated the achievement of the Applicable BSC Objectives, while one respondent did not;
- ◆ seven respondents considered that Alternative Modification P172 better facilitated the achievement of the Applicable BSC Objectives, while two respondents did not. Of the respondents in support of Alternative Modification Proposal P172, two explicitly favoured it over Proposed Modification P172;
- ◆ two respondents did not provide a view.

### *Respondents' views in respect of Proposed Modification P172*

Those in support of Proposed Modification P172 considered that it was appropriate to remove System Balancing actions from the derivation of cash out prices on the basis that Energy Imbalance Prices are intended to reflect the costs of Electricity Balancing actions taken by the SO. The majority of respondents considered that Proposed Modification P172 would, by reducing the risk of System Balancing actions feeding into and potentially significantly distorting Energy Imbalance Prices, benefit competition and thus better facilitate the achievement of Applicable BSC Objective (c). The majority of respondents considered that by reducing the potential for exposure to unrepresentative Energy Imbalance Prices, Proposed Modification P172 would give confidence and certainty to the market, thereby promoting effective competition. One respondent also considered that excluding System Balancing actions from the Energy Imbalance Price would lead to better incentives to balance, which would lead to more efficient operation of the Transmission System, therefore, better facilitating Applicable BSC Objective (b).

The respondent who did not support Proposed Modification P172 considered that whilst it would remove an Emergency Instruction taken for System Balancing purposes from the Energy Imbalance Price calculation, the cost of the acceptance would continue to be smeared across all the parties via BSUoS. This respondent considered that when an Emergency Instruction is issued

for System Balancing reasons, it would be inappropriate for the affected BM Unit to receive a windfall gain at the expense of others.

*Respondents' views in respect of Alternative Modification Proposal P172*

As with Proposed Modification P172, the majority of respondents considered that it would be appropriate for the costs of System Balancing related Emergency Instructions to be removed from the calculation of Energy Imbalance Prices and so were supportive of Alternative Modification Proposal P172 relative to the existing baseline. These respondents considered that by reducing the potential for System Balancing actions to feed into and distort Energy Imbalance Prices, Alternative Modification Proposal P172 would benefit competition and thus better facilitate the achievement of Applicable BSC Objective (c).

Several respondents considered that by deriving a replacement price for a System Balancing Emergency Instructions for the purposes of Energy Imbalance Price calculation, Alternative Modification Proposal P172 would lead to a more accurate Energy Imbalance Price than under Proposed Modification P172. This is based on the opinion that applying a replacement price (based on Bids/Offers that would have been taken in the absence of the Emergency Instruction) enables the cost of consequential Electricity Balancing delivered by an Emergency Instruction to be reflected in Energy Imbalance Prices. These respondents considered, therefore, that Alternative Modification Proposal P172 would lead to Energy Imbalance Prices which are more reflective of the costs of Electricity Balancing.

However, several respondents highlighted concerns in relation to the additional complexity associated with the replacement price process and considered that Alternative Modification Proposal P172 could be detrimental to the achievement of Applicable BSC Objective (d) as a result. Several of the respondents considered that this additional complexity could offset the benefits that it may deliver in terms of deriving more accurate Energy Imbalance Prices.

Of those that did not support Alternative Modification Proposal P172, one respondent considered that the use of the replacement price may be inconsistent with the treatment of other balancing actions which are 'tagged' by the imbalance pricing mechanism and included in the calculation as un-priced volumes. This respondent was also of the view that Alternative Modification Proposal P172 would signal a departure from the principles that underpin the current treatment of System Balancing actions.

Regardless of the opinions on the principle of applying a replacement price, respondents provided views on the appropriateness of the proposed methodology for deriving a replacement price in the event that this principle were to be approved. The majority of respondents supported the use of a methodology based on the existing Manifest Error process to determine the replacement price. It was noted that in the event that there are insufficient unused Bids/Offers to offset all or part of the Emergency Instruction volume, any outstanding volume would be filled by the Emergency Instruction itself. One respondent highlighted the need for clear guidance in a Balancing Settlement Code Procedure (BSCP) as to the approach to be taken to derive the replacement price in differing circumstances.

## *Draft Modification Report*

Subsequently, Elexon published a Draft Modification Report in relation to Modification Proposal P172 on 16 December 2004, which invited respondents' views by 23 December 2004. Elexon received 11 responses to the consultation on the Draft Modification Report for Modification Proposal P172. The majority of respondents considered that Proposed Modification P172 and/or Alternative Modification Proposal P172 would better facilitate the achievement of the Applicable BSC Objectives relative to the current baseline. Five respondents expressed a preference for Proposed Modification P172 while another four respondents favoured Alternative Modification Proposal P172. The remaining two respondents either did not express a clear preference or offered no comment.

Those in favour of Proposed Modification P172 considered that it would better facilitate competition as it would ensure that Energy Imbalance Prices would more accurately reflect the Electricity Balancing actions taken by the SO. These respondents considered that the additional complexity of Alternative Modification Proposal P172 and its implications for the efficiency of the arrangements would outweigh any potential benefit that it may have in terms of deriving more accurate Energy Imbalance Prices.

Those in favour of Alternative Modification Proposal P172 considered that the replacement price methodology would ensure that Energy Imbalance Prices appropriately reflect the Electricity Balancing costs associated with the SO's actions. One of these respondents did not consider that Alternative Modification Proposal P172 was significantly more complex than Proposed Modification P172.

### **Panel's recommendation**

The Panel met on 13 January 2005 and considered Original and Alternative Modification Proposals P172, the Draft Modification Report, the views of the PSMG and the consultation responses received.

The Panel considered that, on balance, both Proposed Modification P172 and Alternative Modification Proposal P172 would better facilitate the achievement of the Applicable BSC Objectives compared to the existing BSC baseline. The Panel was of the view that both Proposed Modification P172 and Alternative Modification Proposal P172 would reduce the potential for Parties to be exposed to Energy Imbalance Prices that were unrepresentative of the Electricity Balancing actions taken by the Transmission Company. However, the majority view of the Panel was that Alternative Modification Proposal P172 would not better facilitate the achievement of the Applicable BSC Objectives when compared to Proposed Modification P172. This was on the basis that any competitive benefits offered by the potential for more representative Energy Imbalance Prices under Alternative Modification Proposal P172 would not justify any detrimental impact associated with the reduced efficiency of the solution compared to Proposed Modification P172.

Therefore, in the Final Modification Report the Panel recommended to the Authority that Proposed Modification P172 should be made and that Alternative Modification Proposal P172 should not be made. In the event that the Authority determines that either Proposed Modification P172 or Alternative Modification Proposal P172 should be made, the Panel recommended an Implementation Date of five working days following an Authority Decision.

## **Ofgem's view**

Having carefully considered the Final Modification Report, the respondents' views and the Panel's recommendation, Ofgem, having regard to the Applicable BSC Objectives, is of the view that Proposed Modification P172 would better facilitate achievement of the Applicable BSC Objectives. Ofgem also considers that this decision is consistent with its wider statutory duties<sup>22</sup>.

*Applicable BSC 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*

### *System/Electricity Balancing split*

As outlined above, Energy Imbalance Prices are intended to reflect the costs of Electricity Balancing actions incurred by the SO but not the costs of System Balancing actions. The Damhead Creek incident highlights a problem with the existing rules as the Emergency Instruction was clearly a System Balancing action but the costs of the action have influenced Energy Imbalance Prices.

To reduce the risk that an Emergency Instruction taken for System Balancing reasons could distort Energy Imbalance Prices, both Original and Alternative Modification Proposals P172 give the SO discretion to flag whether or not the action was taken for System or Electricity Balancing reasons. Both proposals would also change the way that Emergency Instructions are treated in settlement for the purpose of calculating cash out prices. Ofgem notes that providing the SO with this discretion in relation to Emergency Instructions is consistent with treatment of pre-Gate Closure balancing actions, where the SO currently differentiates between System and Electricity Balancing actions.

Ofgem considers that it is appropriate to give the SO the discretion to flag whether an Emergency Instruction has been taken for System or Electricity Balancing reasons, as has been proposed. The rationale for this is that the SO, as the Party responsible for taking balancing actions and for the efficient, economic and co-ordinated operation of the transmission system, is best placed to identify whether or not the Emergency Instruction was taken for System Balancing reasons. Ofgem considers that providing the SO discretion to differentiate between Emergency Instructions taken for System and Electricity Balancing reasons, combined with transparency in terms of the methodology employed, is preferable to relying upon mechanistic rules, as it is more likely to lead to appropriate separation of System and Electricity Balancing actions on the basis of the SO's judgement. Experience to date since NETA Go Live suggests that it is difficult to codify clear, simple rules to separate out Electricity and System Balancing actions. The existing rules that are designed to separate out System and Electricity Balancing actions are highly complex and have, in certain circumstances (such as the Damhead Creek incident), failed to prevent System Balancing actions influencing Energy Imbalance Prices.

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<sup>22</sup> Set out in Sections 3A to 3C of the Electricity Act 1989, as amended by the Energy Act 2004. Ofgem's statutory duties are wider than the matters the Panel must take into consideration and include amongst other things, a duty to have regard to social and environmental guidance provided to Ofgem by the government, a duty to contribute to the achievement of sustainable development and a duty to have regard to the principles of best regulatory practice.

Furthermore, Ofgem considers that NGC's ability to exercise this discretion ex-post for Emergency Instructions should not have any detrimental effect on the timing of Energy Imbalance Price calculation or reporting relative to the current position. This is because there is already a delay associated with the incorporation of Emergency Instructions into settlement caused by the need to construct ex-post the Emergency Instruction Acceptance.

Therefore, Ofgem considers that, when accompanied by transparency in terms of the approach used, it is appropriate to provide the SO with discretion to determine whether an Emergency Instruction has been taken for System Balancing or Electricity Balancing reasons. This should reduce the potential for System Balancing Emergency Instructions to distort cash out prices and, therefore, for market participants to be exposed to cash out prices which were unrepresentative of the SO's Electricity Balancing actions. This would better facilitate the achievement of Applicable BSC Objective (c).

Ofgem considers that the Damhead Creek incident has highlighted a wider issue of the extent to which detailed, mechanistic rules are the most effective way of distinguishing between System Balancing and Energy Balancing actions. The alternative is to rely on the discretion of the SO to make the distinction, reducing the need for complex rules and the risk that the rules are found not to work as intended in certain circumstances. Ofgem considers that this issue may merit further consideration.

#### *Pricing Emergency Instructions taken for System Balancing purposes*

In order to avoid the potential for the cost of System Balancing related Emergency Instructions to distort Energy Imbalance Prices, under Proposed Modification P172 such actions would be unpriced for the purpose of calculating cash out prices. As highlighted above, this reduces the potential for market participants to be exposed to cash out prices which are unrepresentative of the SO's Electricity Balancing actions. Ofgem considers that this would better facilitate the achievement of Applicable BSC Objective (c).

Ofgem notes that Alternative Modification Proposal P172 seeks to reflect within Energy Imbalance Prices any consequential Electricity Balancing energy delivered by an Emergency Instruction taken for System Balancing purposes by pricing the acceptance at the proposed replacement price. This aims to ensure that Energy Imbalance Prices are more representative of the SO's Electricity Balancing costs than would be the case if the action was unpriced. Ofgem acknowledges that pricing these acceptances at a replacement price based on those actions that the SO would have taken for Electricity Balancing purposes (had its choices not been restricted) offers a way to incorporate into Energy Imbalance Prices the costs of consequential Electricity Balancing delivered by an Emergency Instruction. This arguably results in cash out prices that are more representative of the costs of Electricity Balancing, which would better facilitate the achievement of Applicable BSC Objective (c) to a greater extent than the unpriced approach.

However, Ofgem notes that the methodology for calculating the replacement price could, in certain circumstances, mean that the price of an Emergency Instruction Acceptance which has been flagged as having been taken for System Balancing reasons, could form all or part of the replacement Bid-Offer Pairs and, hence, the replacement price. Ofgem considers that it would be inappropriate for an action which has specifically been flagged as a System Balancing action to form all or part of the replacement price, as this would mean that System Balancing actions are distorting Energy Imbalance Prices, which would be to the detriment of the achievement of

Applicable BSC Objective (c). On balance, Ofgem considers that this possibility negates the potential benefits of seeking to reflect within Electricity Imbalance Prices any consequential Electricity Balancing energy delivered by a System Balancing Emergency Instruction.

Ofgem notes that both Original and Alternative Modification Proposals P172 seek to revise the way in which System Balancing Emergency Instruction Acceptances feed into the calculation of main Energy Imbalance Price. That is, it is only when the System Balancing Emergency Instruction Acceptance is in the same direction as the overall system imbalance, and so can feature in the calculation of the main price, that the proposed solutions will be able to impact upon Energy Imbalance Prices. Where the System Balancing Emergency Instruction Acceptance is located in the reverse stack, it has no direct influence on the reverse price, as this is calculated on the basis of market prices, and so the proposed solutions have no effect. However, depending upon the overall system imbalance prior to and the volume associated with a System Balancing Emergency Instruction, countervailing System Balancing actions are likely to have been taken by the SO to offset its effect on the overall system imbalance. Consequently, even if the System Balancing Emergency Instruction is in the reverse stack, it may have an indirect effect on the main price depending upon whether or not the countervailing System Balancing actions are tagged out of the calculation of the main price. While Modification Proposal P172 does not seek to address this issue, it is important to consider whether or not the existing tagging mechanisms are appropriately tagging out these countervailing System Balancing actions. Ofgem considers that this issue may merit further consideration.

*Applicable BSC Objective (d) – promoting efficiency in the implementation and administration of the balancing and settlement arrangements*

Ofgem notes that concerns have been raised during the progression of Modification Proposal P172 in relation to the additional complexity associated with Alternative Modification Proposal P172. Ofgem agrees that Alternative Modification Proposal P172 does involve an additional level of complexity due to the requirement to calculate a replacement price, which could be to the detriment of the achievement of Applicable BSC Objective (d). However, Ofgem notes that the proposed process is similar to the existing Manifest Error process and that Emergency Instructions are infrequent events. Therefore, in this case, Ofgem does not consider the additional complexity associated with Alternative Modification Proposal P172 to be a significant issue in the assessment of this Modification Proposal.

### *Summary*

Overall, Ofgem considers that both Proposed Modification P172 and Alternative Modification Proposal P172 would better facilitate the achievement of the Applicable BSC Objectives, notably Applicable BSC Objective (c). Ofgem considers this to be the case as providing the SO with the discretion to flag an Emergency Instruction as being a System Balancing action, rather than relying on mechanistic rules, should reduce the potential for System Balancing Emergency Instructions to distort Energy Imbalance Prices.

However, Ofgem considers that Proposed Modification P172 would better facilitate the achievement of the Applicable BSC Objectives relative to Alternative Modification Proposal P172. Ofgem recognises that the proposed replacement price methodology is intended to reflect any consequential Electricity Balancing delivered by a System Balancing Emergency Instruction within cash out price calculations and so lead to Energy Imbalance Prices which are

more representative of the costs of Electricity Balancing. However, Ofgem considers that the potential under the proposed methodology for the System Balancing Emergency Instruction Acceptance to influence Energy Imbalance Prices retains the ability for a System Balancing action to distort Energy Imbalance Prices. Given this possibility, Ofgem considers that Alternative Modification Proposal P172 is more likely to result in unrepresentative Energy Imbalance Prices than Proposed Modification P172.

Therefore, Ofgem considers that Proposed Modification P172 would better facilitate the Applicable BSC Objectives. In addition, Ofgem considers that this decision is consistent with its wider statutory duties.

### *Sleeper Bids*

The Damhead Creek incident has highlighted the issue of the potential effects of high priced “sleeper” Bids on the operation of the market and market participants. NGC has provided analysis which suggests that in the settlement periods affected by the Damhead Creek incident around 30 per cent of Bids submitted may be “sleeper” Bids and has stated that high, negative Bid prices are not uncommon. Ofgem has previously expressed in the consultation document relating to the guidelines for applying the Market Abuse Licence Condition under NETA<sup>23</sup> concerns about the potential for sleeper Bids, if accepted, to distort competition, which could be to the detriment of customers. Ofgem has also published guidance in relation to the application of competition law in the energy sector<sup>24</sup>, which is intended to help market participants assess their conduct to avoid potential breaches of competition law. This guidance applies to the bidding strategies of market participants in the Balancing Mechanism. Ofgem considers that the issue of sleeper bids may merit further consideration.

If you would like to discuss any aspects of this letter, please contact Sonia Brown on 020 7901 7412 or Simon Bradbury on 020 7901 7249.

Yours sincerely



**Steve Smith**  
**Managing Director, Markets**

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<sup>23</sup> ‘The Market Abuse Licence Condition under NETA: Guidelines, A consultation document’, Ofgem, September 2000.

<sup>24</sup> ‘Competition Act 1998 – Application in the Energy Sector, OFT and Ofgem, January 2005.