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BSC Signatories, National Grid Company and
Other Interested Parties

Our Ref: MP No P136/P137

Dear Colleague

**Modification to the Balancing and Settlement Code ("BSC") - Decisions in relation to
Modification Proposal P136: "*Marginal Definition of the 'main' Energy Imbalance Price*" and
Modification Proposal P137: "*Revised Definition of the System Buy Price and System Sell
Price*"**

The Gas and Electricity Markets Authority¹ has carefully considered the issues raised in the Modification Reports² in respect of Modification Proposal P136: "*Marginal Definition of the 'main' Energy Imbalance Price*" and Modification Proposal P137: "*Revised Definition of the System Buy Price and System Sell Price*".

The BSC Panel recommended to the Authority separately that Proposed Modifications P136 and P137 should not be made, but in the event that the Authority determined that either or both Proposed Modification P136 or P137 should be made, then in each case the Implementation Date should be 3 November 2004 where the Authority's decision is received before or on 23 January 2004. Where the Authority's decision is received after this date but prior to or on 31 March 2004, the Panel recommended that the Implementation Date for each modification directed to be made should be 22 February 2005.

Having carefully considered the Modification Reports in respect of Proposed Modifications P136 and P137 and the Panel's recommendations the Authority has decided not to direct either modification to the BSC to be made as the Authority does not consider that either proposal would better facilitate achievement of the Applicable BSC Objectives³.

¹ Ofgem is the office of the Authority. The terms "Ofgem" and "the Authority" are used interchangeably in this letter.

² Elexon document references P136MR Version No. 1.0 and P137MR, Version No. 1.0, dated 12 December 2003.

³ 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;
- d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements

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

Proposed Modifications P136 and P137 each seek to address the same perceived defect in the rules and seek to introduce similar solutions (although Proposed Modification P137 seeks to make some additional amendments to the 'tagging' rules⁴).

Background

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 close to, and 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 system transmission 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 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 at, 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, therefore, 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

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- 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.

⁴ The 'tagging' rules are used to determine those bids/offers that are associated with system rather than energy balancing and are not included in the calculation of imbalance cash out prices.

short are charged SBP for their imbalance volumes and Parties that are long 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 than if they had been fully contracted and Parties that are short are likely to pay a higher price than if they had been fully contracted.

During the design of NETA, Ofgem/DTI, in consultation with interested Parties, considered whether cash-out prices should be calculated using a marginal or volume weighted average methodology. After extensive consultation and discussion, Ofgem/DTI concluded that marginal cash-out pricing had a number of drawbacks relative to a volume weighted average approach. For instance, since at the time of the introduction of NETA, Gate Closure⁵ was set 3.5 hours ahead of real time, following which participants could not revise their Bids or Offers, it was the view of Ofgem/DTI that there would be a significant risk that marginal prices would be set by unrepresentative actions (for example, a high priced Offer accepted by the SO early in the trading window). More generally, Ofgem/DTI had concerns that, based in part upon previous experience of Pool pricing, a marginal pricing approach could be vulnerable to manipulation and could lead to greater volatility in cash-out prices and prices that frequently reflected neither underlying market conditions nor the costs incurred by NGC in balancing the system.

Since NETA Go-Live⁶, in the light of experience gained under the new arrangements, a number of modifications⁷ 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 fundamentals on the grounds that the proposed changes would increase the likelihood of this happening⁸. These modifications include the introduction of the Continuous Acceptance Duration Limit ("CADL")⁹ 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 were considered to be driving the market long, as discussed above.

⁵ Gate Closure is the last point at which Parties can notify their contract position to NETA Central Systems and at which Parties can resubmit their Physical Notifications to NGC.

⁶ NETA Go-Live occurred on 27 March 2001.

⁷ 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 and introduced a 'main' and a 'reverse' price.

⁸ 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.

⁹ Approved Modification P18A: CID definition 1a

Approved Modification P78¹⁰ was submitted by NGC on 5 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 Balancing¹¹. It was also suggested that SBP was being distorted by System Balancing costs more frequently than SSP and hence that 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 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 eligible¹² Electricity Balancing actions taken by the SO to alleviate the Net Imbalance Volume¹³ ("NIV"). Under the proposal the main price would apply to imbalances in the same direction as the imbalance of the System 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.

During autumn 2003 the Authority also considered the issues raised in respect of Modification Proposal P135 raised by NGC¹⁴, which proposed that the Energy Imbalance Price calculation be amended such that SBP is calculated using a marginal methodology during periods of demand control and where the System is short (i.e. where there is insufficient generation to meet demand). Proposed Modification P135 was raised by NGC (and granted urgent status) as an 'interim measure', ahead of raising what they considered to be a more enduring long term solution with Proposed Modification P136.

The Authority rejected Proposed Modification P135 on grounds that it would not better facilitate achievement of the Applicable BSC Objectives. This decision was reached for a number of reasons which included concerns that by having two regimes in place for the calculation of Energy Imbalance Prices there would be scope for perverse incentives to exist and also that there could be increased risk that cash-out prices were set at levels that did not reflect NGC's costs on the basis of a very small volume Offer. In addition, Ofgem considered that the incentives that

¹⁰ 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.

¹¹ Since System Balancing costs cannot currently be attributed to particular users they are excluded from the calculation of imbalance cash-out prices.

¹² 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.

¹³ The NIV is calculated by netting off all purchase actions against all sell actions to give the imbalance of the overall System.

¹⁴ Proposed Modification P135: 'Marginal System Buy Price During Periods of Demand Reduction'

would be created by the RCRC¹⁵ mechanism could also undermine the intended effect of the Proposed Modification and that there was a significant risk that the Proposed Modification could increase the risk of generators inefficiently part-loading or withholding capacity in the event that demand control was likely. As part of the Authority's decision letter on Proposed Modification P135, Ofgem highlighted several areas where it considered potential improvements could be made in respect of the Energy Imbalance Price calculations. These areas included:

- Continuous Acceptance Duration Limit ("CADL") tagging
- NIV tagging
- NIV volume
- +/-£99,999/MWh Bid and Offer price constraint
- Ensuring that correct incentives are in place on suppliers if demand control is instructed

Following this, Proposed Modification P144 'Removal of CADL from the BSC' was raised and granted Urgent status. The Authority issued its decision letter to reject Proposed Modification P144 on 18 December 2003 on grounds that it would not better facilitate achievement of the Applicable BSC Objectives. This decision was reached on the basis that CADL tagging is an appropriate mechanism for identifying balancing actions taken to address within-half-hour effects (such as frequency control) and that this mechanism complements the NIV tagging mechanism in achieving the best differentiation between System Balancing and Electricity Balancing actions.

As in the Authority's decision letter on Proposed Modification P135, in the decision letter for Proposed Modification P144 Ofgem made clear that it considered that, where there are potential improvements to be made in respect of the Energy Imbalance Price calculations, it is important for the industry to address these issues in the appropriate forum and, if any perceived defects are identified, for resolution of these defects to be progressed as quickly as possible.

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 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 very 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.

The Modification Proposals

Modification Proposal P136 was submitted on 1 August 2003 by NGC. In its Proposal, NGC considered that the use of a volume weighted average methodology for the calculation of the main cash-out price significantly understates the cost of the marginal balancing action. Further, they considered that this understatement is particularly significant at times of energy shortage

¹⁵ Residual Cashflow Reallocation Cashflow – a payment either to or from Parties derived from the aggregate of all Account Energy Imbalance Cashflows (payments by Parties at SBP for short imbalance volumes, i.e. top-up, and payments to Parties at SSP for long imbalance volumes, i.e. spill) pro-rated over a Trading Party's Credited Energy Volumes.

(i.e. high levels of demand relative to generation availability) when the marginal cost of balancing energy is likely to be high.

NGC was of the view that the use of a volume weighted average methodology to calculate the main cash-out price has meant that these prices have failed to reflect the true underlying marginal cost of balancing and thus have not provided market participants with sufficient incentives to contract ahead in the forward energy markets to mitigate the risk of not being able to achieve a balanced position at Gate Closure.

Modification Proposal P137 was submitted on 1 August 2003 by Barclays Bank Plc. In its proposal, Barclays considered that the current method of calculation of the main cash-out price fails to reflect the underlying costs of market shortage, and in particular that a volume weighted average definition of the main cash-out price underestimates the marginal cost of balancing at times of shortage.

Barclays was also of the view that the current NIV tagging methodology inappropriately tags out accepted Offers at times of system shortage, as the need to maintain operating reserves would result in NGC also accepting Bids in the BM at this time, which will result in the most expensive Offers being tagged out. In addition, they considered that the current methodology used to include the costs that NGC incurs in procuring and using reserve into cash out prices was flawed. Barclays argued that the existing methodology does not reflect the opportunity cost of using this reserve when it is called because the option fees paid for reserve are averaged over the Settlement Periods for which the reserve is made available, rather than those Settlement Periods in which the reserve is actually used. Further, they were of the view that the current derivation of SBP does not account for the use of non BM Unit specific standing reserve¹⁶.

Each of Modification Proposals P136 and P137 seeks to modify the BSC to introduce a marginal methodology for the calculation of the main cash-out price. Under each Modification Proposal the marginal price would be derived from the last eligible¹⁷ Electricity Balancing action remaining in the NIV¹⁸, i.e. the most expensive Offer Acceptance or electricity BSAD¹⁹ purchase when the system is short, and the least expensive Bid Acceptance or electricity BSAD sale when the system is long.

Currently under the BSC, all forward energy trades taken by the SO are reflected as a net, aggregated volume in the NIV. NGC and Barclays Bank Plc considered that, in order to facilitate the introduction of a marginal methodology for the calculation of the main cash-out price, consequential changes to the derivation of the NIV, which would include changes to both the BSC and the BSAD Methodology Statement, would be required in order better to reflect all the balancing actions taken by the SO in each Settlement Period. The consequential changes to the

¹⁶ Contracts for reserve struck with plant or apparatus not established and registered as a BM Unit under section K of the BSC.

¹⁷ Defined as actions that are not: Bids or Offers which have a Continuous Acceptance Duration of less than 15 minutes; de minimis accepted Bids or Offers; Arbitrage accepted Bids or Offers; NIV Tagged Bids or Offers; or System actions identified in the BSAD methodology.

¹⁸ The NIV is calculated by netting off all purchase actions against all sell actions to give the imbalance of the overall system.

¹⁹ NGC has produced and maintains the Balancing Services Adjustment Data ("BSAD") Methodology Statement in accordance with special condition AA4 of its Transmission Licence. The purpose of the BSAD Methodology Statement is to set out the information on relevant balancing services that will be taken into account under the BSC for the purpose of determining Energy Imbalance Prices.

BSAD Methodology Statement and the BSC proposed by NGC include ensuring that each individual trade be represented in the NIV in a disaggregated format; incorporation of non BM Unit specific delivered standing reserve (which is not currently included in the NIV) into the BSAD Methodology Statement; and modification of the treatment of option fees for standing reserve contracts to target the BM Units that have standing reserve called²⁰.

Proposed Modification P137 also seeks to amend the BSC to introduce two additional tagging steps: BM Unit undo tagging and BSAD offsetting tagging. Under BM Unit undo tagging, all the balancing actions accepted on each BM Unit (Bid and Offer Acceptances, disaggregated electricity BSAD buys and sells, and net aggregated system BSAD) would be stacked in price order, least expensive first – i.e. for each BM Unit, two stacks (buy and sell) would be derived. Where the buy volume exceeds the sell volume, then the least expensive priced buy balancing actions would be removed up to the sell volume; or where the sell volume exceeds the buy volume, then the least expensive priced sell balancing actions would be removed up to the buy volume. Under BSAD offsetting tagging, the total volume of electricity BSAD buys and BSAD sells that could not be attributed to any particular BM Units would be derived. An equivalent of the smaller of these two volumes would then be removed from the least expensive balancing actions (i.e. the bottom) of the relevant NIV stack prior to NIV Tagging. The remaining balancing actions would then go forward for NIV tagging as undertaken currently. It was considered that this would help to ensure that there would be consistent treatment of actions taken prior to Gate Closure with those taken subsequently within the BM when calculating Energy Imbalance Prices.

NGC, the Proposer of Modification Proposal P136, was of the view that using a marginal methodology for the calculation of the main cash-out price would provide a more appropriate price signal to the market as to the underlying cost of supplying the last increment of energy required to balance generation and demand. The Proposer considered that a more appropriate price signal would place incentives on market participants to contract ahead in the forward energy markets to mitigate the risk of not being able to achieve a balanced position at Gate Closure, which in turn would benefit the operation of the Transmission System when security of supply is an issue and would increase the level of competition in the market. The Proposer considered, therefore, that Modification Proposal P136 would better facilitate achievement of Applicable BSC Objective C3(b) for the efficient, economic and co-ordinated operation by NGC of the Transmission System and Applicable BSC Objective C3(c) for the promotion of 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.

Barclays Bank Plc, the Proposer of Modification Proposal P137, was of the view that using a marginal methodology for the calculation of the main cash-out price would ensure that the underlying opportunity costs of balancing the system are better reflected in the main cash-out price and would thereby promote efficient market responses to emerging shortages (or surpluses) and encourage efficient investment in generation capacity.

²⁰ In order to accommodate these requirements NGC has proposed revisions to the BSAD Methodology Statement. On 25 November 2003 NGC submitted its consultation report in respect these proposed revisions to the Authority for decision, recommending that it consent to the proposed revisions should it consider that either Proposed Modification P136 or P137 should be made and implemented. Ofgem has today also published its decision in relation to these proposed revisions to the BSAD Methodology Statement.

Assessment Procedure

At its meeting of 14 August 2003, the BSC Panel determined separately that Proposed Modifications P136 and P137 should be submitted to the Assessment Procedure. In its Initial Written Assessments of Proposed Modifications P136 and P137, Elexon recommended that the two proposals be progressed through the Assessment Procedure in parallel as they addressed similar issues and proposed similar solutions (noting, however, that Proposed Modification P137 seeks to make additional amendments to the tagging mechanisms). The Panel agreed with this recommendation and determined that the Assessment Procedure for both Proposed Modifications should be undertaken by the Pricing Issues Standing Modification Group ("PSMG").

The PSMG considered Proposed Modifications P136 and P137 over the course of seven meetings between August 2003 and December 2003. During its assessment of the Proposed Modifications, the PSMG considered two consultations would be appropriate. These consultations were issued on 16 September 2003 and 21 October 2003 respectively. Following these meetings and consultations, the PSMG issued a joint Assessment Report and recommended to the Panel that neither of the Proposed Modifications should be made.

A number of views were expressed in relation to the Proposed Modifications by the PSMG during its assessment of the Proposed Modifications and BSC Parties and other interested parties in response to the assessment consultations. The views of the PSMG and all consultation responses can be found in full on Elexon's website²¹. A summary of the substantive points raised follows here.

Timing of the Proposed Modifications

A view expressed against the Proposed Modifications was that insufficient time had elapsed since the methodology for calculating cash-out prices was last modified (by Approved Modification P78²², which was implemented on 11 March 2003) to conclude that the current imbalance cash-out methodology was not providing the appropriate price signals. Proponents of this view considered that the current methodology should be allowed to continue over the winter 2003/2004 period before an assessment is made as to whether the methodology should be changed.

Cost reflectivity

Some considered that a marginal main cash-out price would send more appropriate signals to the forward and spot markets as to the true underlying cost of balancing the system and therefore the cost that Parties should face if they are in imbalance. In particular, some considered that the risk of exposure to a marginal main cash-out price would increase the commercial incentives on generators to maintain efficient and reliable plant, would provide the appropriate investment

²¹ Responses can be found on the Elexon website: www.elexon.co.uk.

²² 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.

signals to the market to return mothballed plant, encourage the building of new generation, and would properly value the presence of peaking plant in terms of ensuring security of supply.

In contrast, the view was expressed that, under the Proposed Modifications, small volumes of 'extreme' priced Bids or Offers could set the marginal main cash-out price and that this was especially likely at times of system stress. Proponents of this view considered that this would not be reflective of the underlying market conditions and would not be reflective of the total costs incurred by the SO in Electricity Balancing the system.

Incentives to balance

A further view expressed against the Proposed Modifications was that a 'higher'²³ main cash-out price, which proponents of this view considered would be an outcome of the Proposed Modifications, would drive the market excessively and inefficiently long through collective over contracting by Parties. In contrast, the view was expressed that the potential for a lower or negative SSP when the system is long would enhance the incentive on Parties to balance rather than go long, as is currently the case. A counter view was expressed, however, that the magnitude of the effect of the Proposed Modifications on SSP when the system is long would be likely to be far less than the effect on SBP when the system is short, and therefore the asymmetric incentive on Parties to go long provided by the existing cash-out mechanism would be enhanced by the Proposed Modifications.

Self balancing

One view against the Proposed Modifications was that a higher main cash-out price would place incentives on Parties to breach the Grid Code by self balancing (where, in the event of plant trip, a Party chooses to deviate from the submitted Final Physical Notification on other generation units in order to meet its overall contracted levels and thereby mitigate the risk of exposure to imbalance cash-out). A further view was expressed that the Proposed Modifications would place incentives on generation Parties to withhold generation from the market as insurance, i.e. generation Parties would hold their own reserve to mitigate potential imbalance risk. In addition, the view was expressed that, if such Parties did not remove their generation plant from the system in times of system stress, the potential would exist for these Parties to be put out of business. The view was expressed that these factors would adversely affect the SO's ability to balance the system.

Demand forecasting

The view was also expressed that the quality of supply Parties' demand forecasts is already such that, irrespective of the methodology used to calculate cash-out prices, supply Parties cannot provide any better physical position information to the SO. Proponents of this view considered that, since demand forecasts will always contain errors, there is a point where it will become

²³ If the system is short then SBP is the main cash-out price. It is likely that under a marginal methodology for the calculation of the main price SBP will be higher than is currently the case. However, if the system is long, SSP is the main price and under a marginal methodology this likely to be lower (or negative) than is currently the case. Therefore, references to a 'higher' main cash-out price presuppose that the system is short and that Parties in imbalance in the same direction as the system imbalance are exposed to a marginal SBP.

questionable whether the improved demand forecast will actually provide any additional benefit when the costs of making those improvements are considered.

Bid and Offer pricing

In addition the view was expressed that the Proposed Modifications would result in an increase in the costs of risk management, which would ultimately be fed through to customers, since Parties would need to have more sophisticated methods for contract and Bid/Offer pricing and demand forecasting. The view was also expressed that, although Parties should be able to factor the risk of exposure to imbalance into their Bid and Offer and contract prices, a large exposure to a marginal main cash-out price at a time of system stress could lead to 'catastrophic' imbalance exposure, the risk of which could not be adequately factored into Bid and Offer and contract prices.

Smaller generators and new build

Another view expressed against the Proposed Modifications was that the Proposed Modifications would result in increased risk to small, single site generation Parties and small supply Parties. Proponents of this view considered that, as these Parties cannot self balance and do not have the natural hedge between generation and demand that vertically integrated market participants have, they would be more exposed to the risks of being out of balance when cash-out prices were high. In addition the view was expressed that, for these reasons, potential new entrants, in particular Parties with renewable generation technologies will be discouraged from entering the market. Further, the view was expressed that the risks associated with entering the market through the commissioning of new generating stations would significantly increase as such stations are more likely to trip during their commissioning phase. The view was therefore expressed that the Proposed Modifications would encourage greater market concentration and would reinforce the current trend towards a market dominated by vertically integrated portfolio players, which in turn would lead to an overall decrease in competition.

Risk management

One view expressed in support of the Proposed Modifications was that the change in the level of risk exposure provided by the Proposed Modifications could encourage the development of within Gate Closure insurance products. The view was also expressed that, by allocating imbalance cash-out risk more efficiently, the Proposed Modifications should lead to the development of more efficient risk management tools. Proponents of this view considered that a stronger link between the BM and the forward and spot markets should lead to a better ability to price risk products. In contrast, the view was expressed that imbalance risk would be unmanageable since events such as plant trip or demand forecast error occur after Gate Closure and therefore cannot be insured against. A further view was expressed that any shortfall due to post Gate Closure plant loss should be removed from the calculation of cash-out prices as currently participants are prohibited from adjusting their position after Gate Closure to maintain the balance that they had achieved at Gate Closure.

A further view in support of the Proposed Modifications was that, should either of the Proposed Modifications be approved, some Parties would consider themselves to be more constrained by

the additional risk, while others may be able to offer greater flexibility and hence gain the rewards for doing so.

Transparency

The view was also expressed that the increased transparency associated with a single marginal balancing action setting the main cash-out price would mean that the actions taken by the SO in balancing the system would be able to be subjected to greater scrutiny from the market, which would improve competitive bidding into the BM and lead to a reduction in the spread between Bid and Offer prices and an overall reduction in the cost of imbalance cash-out.

A counter view was expressed however, that there could only be increased incentives to balance, and hence an increase in security of supply, if there was increased transparency in the actions that the SO takes in order to balance the system. In contrast, the view was expressed that the Proposed Modifications addressed some of these transparency issues and therefore would better facilitate achievement of the Applicable BSC Objectives by improving the quality of market signals.

Gaming

One view expressed against the Proposed Modifications was that calculating the main cash-out price using a marginal methodology could lead to increased manipulation of the arrangements and that it was for this reason that the marginal pricing approach, which prevailed under the Pool, was abandoned during the design of NETA. A supporting view was expressed that, under the Proposed Modifications, Parties may try to manipulate market prices through small volume and high priced Offers and that, at times of system stress, generation Parties would be likely to increase their Offer prices towards maximum permitted levels²⁴.

RCRC

In respect of the effect of the Proposed Modifications on RCRC, the view was expressed that there would be an increase in size of RCRC compared to BSUoS²⁵. However, the view was also expressed that it would be unlikely that Parties would change their behaviour in response to changes in the size of RCRC since the Proposed Modifications would not change the principle by which the RCRC allocation is made.

Credit Cover

Another view expressed against the Proposed Modifications was that Credit Cover would become more of an issue and would become more complex should either of the Proposed

²⁴ The numerical specification of Bid and Offer prices is outlined in the 'Data Validation, Consistency & Defaulting Rules' and requires all Bid and Offer prices to be greater than or equal to -£99,999/MWh and less than or equal to £99,999/MWh in order to be classified as Valid Bid-Offer Data.

²⁵ In order to keep the system in balance in real time, the SO procures a range of Balancing Services from service providers. Parties (both suppliers and generators) pay for the cost of these Balancing Services through Balancing Services Use of System (BSUoS) charges. BSUoS charges are comprised of the following costs: the costs of the BM, i.e. Bid and Offers accepted by the SO; Balancing Services contract costs e.g. frequency response, black start, etc; NGC incentive payment (or receipt); and internal costs of the SO function e.g. salaries, facilities, etc.

Modifications be approved. Further, a view was expressed that the increased risks associated with a marginal main cash-out price would require additional Credit Cover to be posted, which in turn would increase Parties' costs. In addition, the view was expressed that a large exposure to an 'extreme' marginal main cash-out price could lead to a Party incurring imbalance charges far in excess of its Credit Cover, creating consequential risk for all other BSC Parties. In contrast, the view was expressed that the current Credit Cover mechanism was sufficiently robust to accommodate any changes to the level of current imbalance cash-out prices.

Additional amendments to the tagging rules

In respect of the two additional tagging steps proposed by Proposed Modification P137 (BM Unit undo tagging and BSAD offsetting tagging), the view was expressed that any benefits that may be realised by including the additional tagging steps could be outweighed by the increased complexity that they would add to the calculation of the main cash-out price. In addition, the view was expressed that the additional tagging steps could tag out genuine trades that were taken due to a change in circumstances and which therefore should not be tagged out. Further, the view was expressed that BM Unit Undo Tagging would only give the net effect of offsetting trades on the same BM Unit in terms of volume but not price. In contrast, the view was expressed that the additional tagging steps would provide a better reflection of a marginal main cash-out price for electricity balancing.

Report Phase

At its meeting of 13 November 2003, the BSC Panel noted the Assessment Report in respect of Proposed Modifications P136 and P137 and the recommendations of the PSMG. The Panel agreed that the Proposed Modifications should not be made and determined that each of the Proposed Modifications should be submitted to the Report Phase.

Respondents' views in respect of Proposed Modification P136

Exelon published the draft Modification Report in respect of Proposed Modifications P136 for consultation on 20 November 2003 which invited responses by 3 December 2003. Exelon received twenty-two responses (representing sixty Parties and five non Parties) to the consultation on the draft Modification Report. Three respondents (representing three Parties) supported Proposed Modification P136; eighteen respondents (representing fifty-six Parties and five non Parties) did not support the Proposed Modification; and the remaining respondent (representing 1 Party) provided a "no comment" response.

As noted in the final Modification Report in respect of Proposed Modification P136, no new substantive points were raised in response to the consultation. Responses to the consultation can be found in full in the final Modification Report in respect of Proposed Modifications P136. A summary of these responses follows here.

A number of respondents not in favour of Proposed Modification P136 reiterated their view that sufficient time had not elapsed since the cash-out arrangements were modified by Approved Modification P78 to determine whether there was a need for a change to the definition of the main cash-out price. In particular, respondents again considered that the current cash-out

arrangements had not been tested over a winter period and the need for a change to the imbalance cash-out mechanism had therefore not yet been proved. Respondents also raised concerns that, in their view, constant change to the BSC creates uncertainty and risk which is ultimately paid for by customers.

Many respondents not in favour of Proposed Modification P136 again expressed the view that the proposal had the potential to create unmanageable risk for some Parties through creating high and volatile cash-out prices which, in their view, would be detrimental to competition. In addition, one respondent considered that the incentives to manage risk provided by the current cash-out arrangements are already very strong.

One respondent in favour of Proposed Modification P136 expressed the view that the main source of opposition to the Proposed Modifications was that they would lead to inappropriately high and volatile cash-out prices. This respondent considered that to assume that marginal cash-out pricing would automatically equate to frequent instances of cash-out prices in the tens of thousands is highly misleading and is unlikely to reflect the competitive and practical constraints of the trading arrangements. However, this respondent conceded that, on those occasions when generation is very scarce, prices may rise above marginal cost but that this would be appropriate in that it would capture the scarcity rents associated with inflexible demand.

In relation to the potential for gaming under the Proposed Modification, one respondent considered that the exercise of excessive market power at times of system stress is subject to several practical, regulatory and legal constraints on the abuse of market power. Further, this respondent considered that any market participant that became responsible for setting the price at unjustifiably high levels would do so at the risk of potentially serious consequences to their own business including the indirect credit, financial and reputational consequences associated with the high prices and the potential exit of other market participants.

One respondent not in favour of Proposed Modification P136 considered that, on the assumption that the marginal main cash-out price should explicitly reflect those actions taken for Electricity Balancing purposes and not those taken for System Balancing purposes, the main cash-out price should be derived from the latest information and that this should be refined over time as volumes and associated information becomes more accurate. One respondent in favour of the Proposed Modification was of the view that there is no theoretical dividing line between System Balancing and Electricity Balancing actions given that some action taken for System Balancing reasons can have consequences for Electricity Balancing and vice versa. This respondent also considered that the current tagging rules are robust and that, were any unforeseen anomalies to emerge in future (under the Proposed Modification), the Modification Procedures could be used to correct the relevant defect.

A number of respondents not in favour of Proposed Modification P136 repeated the view that it would create incentives for portfolio generation Parties to breach the Grid Code and would be likely to remove single site generation plant from the system. These respondents restated the view that, under the Proposed Modification, generation Parties may choose to avoid risk by withholding generation plant which, in the view of these respondents, would not encourage capacity to be made available at times of system stress. One respondent was concerned that NGC had presented conflicting views regarding this winter's security of supply status throughout

the Assessment Procedure which may have distracted from the fact that the existing cash-out arrangements appear to be working as expected.

One respondent in favour of Proposed Modification P136 reiterated their view that a marginal definition of the main price would ensure that forward prices value generation capacity more appropriately and would thereby place the appropriate incentives on generation Parties to make plant available. This respondent also considered that it was inappropriate to assume that market participants will breach the obligations placed on them by the Grid Code when assessing the Proposed Modification. One respondent noted that, in their view, although the current cash-out arrangements do not properly reflect the cost of System shortages, the Proposed Modification is a disproportionate method for addressing this issue and would be likely to harm many market participants without providing the appropriate incentives to make generation plant available.

One respondent not in favour of Proposed Modification P136 reiterated the view that the implementation of a marginal definition for the main cash-out price would have a detrimental impact on the trading arrangements in that the cost of balancing the System would be over-recovered and therefore that the Proposed Modification would distort the signals being sent to the market.

One respondent not in favour of Proposed Modification P136 repeated the view that the treatment of post Gate Closure plant loss needed to be addressed, as currently participants are prohibited from adjusting their position after Gate Closure to maintain the balance that they had achieved at Gate Closure.

One respondent noted that there is still a need to increase the level of transparency in respect of the methods by which the SO balances the system. However, the respondent considered that Proposed Modification P136 addressed some of these transparency issues and therefore would better facilitate achievement of the Applicable BSC Objectives by improving the quality of market signals.

A number of respondents not in favour of Proposed Modification P136 reiterated the view that the increased risks associated with a marginal main cash-out price would require additional Credit Cover to be posted, which in turn would increase Parties' costs. One respondent considered that, were the Proposed Modification to be approved and implemented, a full review of the current Credit Cover arrangements would be required.

In its response to this consultation, the Proposer of Proposed Modification P136 expressed the view that the recommendations of the BSC Panel were not consistent with the balance of valid arguments contained within the Modification Reports in support of Proposed Modifications P136 and P137. In support of this view, Barclays plc, the Proposer of Proposed Modification P137, considered that the recommendations of the PSMG, which were subsequently endorsed by the Panel, emerged from a process that systematically understated the benefits of the Proposed Modifications while placing undue weight on a list of arguments against the proposals which, in the view of this respondent, were highly questionable.

Respondents' views in respect of Proposed Modification P137

Elexon published the draft Modification Report in respect of Proposed Modifications P137 for consultation on 20 November 2003 which invited responses by 3 December 2003. Elexon received twenty-two responses (representing fifty-six Parties and four non Parties) to the consultation on the draft Modification Report. Three respondents (representing three Parties) supported Proposed Modification P137; nineteen respondents (representing fifty-three Parties and four non Parties) did not support the Proposed Modification.

As noted in the final Modification Report in respect of Proposed Modification P137, no new substantive points were raised in response to the consultation. Responses to the consultation can be found in full in the final Modification Report in respect of Proposed Modifications P137. A summary of these responses follows here.

A number of respondents not in favour of Proposed Modification P137 reiterated their view that sufficient time had not elapsed since the cash-out arrangements were modified by Approved Modification P78 to determine whether there was a need for a change to the definition of the main cash-out price. In particular, respondents again considered that the current cash-out arrangements had not been tested over a winter period and the need for a change to the imbalance cash-out mechanism had therefore not yet been proved. Respondents also raised concerns that, in their view, constant change to the BSC creates uncertainty and risk which is ultimately paid for by the end customer.

Many respondents not in favour of Proposed Modification P137 again expressed the view that the proposal had the potential to create unmanageable risk for some Parties through creating high and volatile cash-out prices which, in their view, would be detrimental to competition. In addition, one respondent considered that the incentives to manage risk provided by the current cash-out arrangements are already very strong.

One respondent in favour of Proposed Modification P137 expressed the view that the main source of opposition to the Proposed Modifications was that they would lead to inappropriately high and volatile cash-out prices. This respondent considered that to assume that marginal cash-out pricing would automatically equate to frequent instances of cash-out prices in the tens of thousands is highly misleading and is unlikely to reflect the competitive and practical constraints of the trading arrangements. However, this respondent conceded that, on those occasions when generation is very scarce, prices may rise above marginal cost but that this would be appropriate in that it would capture the scarcity rents associated with inflexible demand.

In relation to the potential for gaming under the Proposed Modification, one respondent considered that the exercise of excessive market power at times of system stress is subject to several practical, regulatory and legal constraints on the abuse of market power. Further, this respondent considered that any market participant that became responsible for setting the price at unjustifiably high levels would do so at the risk of potentially serious consequences to their own business including the indirect credit, financial and reputational consequences associated with the high prices and the potential exit of other market participants.

One respondent not in favour of Proposed Modification P137 considered that, on the assumption that the marginal main cash-out price should explicitly reflect those actions taken for Electricity Balancing purposes and not those taken for System Balancing purposes, the main cash-out price should be derived from the latest information and that this should be refined over time as volumes and associated information becomes more accurate. One respondent in favour of the Proposed Modification was of the view that there is no theoretical dividing line between System Balancing and Electricity Balancing actions given that some action taken for System Balancing reasons can have consequences for Electricity Balancing and vice versa. This respondent also considered that the current tagging rules are robust and that, were any unforeseen anomalies to emerge in future (under the Proposed Modification), the Modification Procedures could be used to correct the relevant defect.

A number of respondents not in favour of Proposed Modification P137 repeated the view that it would create incentives for portfolio generation Parties to breach the Grid Code and would be likely to remove single site generation plant from the system. These respondents restated the view that, under the Proposed Modification, generation Parties may choose to avoid risk by withholding generation plant which, in the view of these respondents, would not encourage capacity to be made available at times of system stress. One respondent was concerned that NGC had presented conflicting views regarding this winter's security of supply status throughout the Assessment Procedure which may have distracted from the fact that the existing cash-out arrangements appear to be working as expected.

One respondent in favour of Proposed Modification P137 reiterated their view that a marginal definition of the main price would ensure that forward prices value generation capacity more appropriately and would thereby place the appropriate incentives on generation Parties to make plant available. This respondent also considered that it was inappropriate to assume that market participants will breach the obligations placed on them by the Grid Code when assessing the Proposed Modification. One respondent noted that, in their view, although the current cash-out arrangements do not properly reflect the cost of System shortages, the Proposed Modification is a disproportionate method for addressing this issue and would be likely to harm many market participants without providing the appropriate incentives to make generation plant available.

One respondent not in favour of Proposed Modification P137 reiterated the view that the implementation of a marginal definition for the main cash-out price would have a detrimental impact on the trading arrangements in that the cost of balancing the System would be over-recovered and therefore that the Proposed Modification would send distortionary signals to the market.

One respondent not in favour of Proposed Modification P137 repeated the view that the treatment of post Gate Closure plant loss needed to be addressed, as currently participants are prohibited from adjusting their position after Gate Closure to maintain the balance that they had achieved at Gate Closure.

One respondent noted that there is still a need to increase the level of transparency in respect of the methods by which the SO balances the system. However, the respondent considered that Proposed Modification P137 addressed some of these transparency issues and therefore would

better facilitate achievement of the Applicable BSC Objectives by improving the quality of market signals.

A number of respondents not in favour of Proposed Modification P137 reiterated the view that the increased risks associated with a marginal main cash-out price would require additional Credit Cover to be posted, which in turn would increase Parties' costs. One respondent considered that, were the Proposed Modification to be approved and implemented, a full review of the current Credit Cover arrangements would be required.

In its response to this consultation, the Proposer of Proposed Modification P136 expressed the view that the recommendations of the BSC Panel were not consistent with the balance of valid arguments contained within the Modification Reports in support of Proposed Modifications P137 and P137. In support of this view, Barclays plc, the Proposer of Proposed Modification P137, considered that the recommendations of the PSMG, which were subsequently endorsed by the Panel, emerged from a process that systematically understated the benefits of the Proposed Modifications while placing undue weight on a list of arguments against the proposals which, in the view of this respondent, were highly questionable.

Panel's recommendation

At its meeting of 11 December 2003, the BSC Panel noted the responses to the consultation on the draft Modification Reports in respect of Proposed Modifications P136 and P137; confirmed the recommendation of the PSMG that the Proposed Modifications would not better facilitate achievement of the Applicable BSC Objectives; and recommended to the Authority that the Proposed Modifications should not be made.

Ofgem's GB Consultation

On 18 December 2003, Ofgem issued a GB consultation in respect of Proposed Modifications P136 and P137 inviting further responses, in particular those that identify additional implications for Great Britain, by 15 January 2004²⁶. Ofgem received eight responses to this consultation. It is Ofgem's view that none of the respondents raised any additional implications that would result from the implementation of Proposed Modifications P136 or P137 on a GB basis compared to an England and Wales basis.

Ofgem's view

Having carefully considered each of the two Modification Reports separately in respect of the Proposed Modifications, the respondents' views and the Panel's recommendations, and having had regard to the Applicable BSC Objectives and its statutory duties, it is Ofgem's view that neither proposal would, if made, better facilitate achievement of the Applicable BSC Objectives²⁷. A wide range of issues were raised during the Modification Procedures in respect

²⁶ Responses to Ofgem's GB consultation in respect of Proposed Modifications P136 and P137 can be found on its website: www.ofgem.gov.uk.

²⁷ 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.

of Proposed Modifications P136 and P137. Ofgem has considered all of these issues in detail and has addressed the most pertinent points as part of this section.

Link between the BM and forward and spot markets

Ofgem acknowledges the view held by supporters of Proposed Modifications P136 and P137 that there is a link between the BM and the bilateral traded markets and that this link is important to the proper functioning of the trading arrangements and to maintaining security of supply. If, for example, a Party considers that SBP is likely to be high compared with the prevailing market price for that Settlement Period, there is an incentive on the Party to purchase the necessary energy (or options to acquire energy in the event of failure, for example, of their own generation) prior to Gate Closure to reduce the risk of being cashed-out. Conversely, if the Party considers that SBP is likely to be low, Parties may decide that the risks associated with being cashed out are low and it may be cheaper (and more efficient) for them to have the SO resolve their imbalances in the BM rather than purchase energy bilaterally. It can be seen, therefore, that cash-out prices provide incentives to balance and signals to the forward and spot markets as to the cost of supplying balancing energy.

In instances where the supply/demand gap is tight, prices in the BM would be expected to rise to reflect scarcity, as in any other market. During periods when the system is under stress, when it is important that cash out prices send signals about the scarcity of electricity to the market, the difference in the effect of using a weighted average rather than a marginal approach to determining cash-out prices should be small, since Offer prices are likely to converge and this should lead to the two approaches to pricing giving similar results. Ofgem notes the views of supporters of Proposed Modifications P136 and P137, however, that experience of cash-out prices to date has shown they have not always reflected the underlying system conditions.

The most commonly cited instance of this is from 10 December 2002. On that day, peak demand reached 54.8 GW (the highest ever recorded demand), whilst there were a number of exceptional generator failures at very short notice, which led to all available plant being brought onto the system. As a result, NGC issued a 'Demand Control Imminent' notice (indicating a potential five per cent demand reduction) for the peak of the day and a 'High Risk of Demand Reduction' notice over the later part of the evening. Meanwhile, the SO accepted a number of high priced Offers in order to balance the system, with Offers up to 9,999 £/MWh being taken in periods 35 and 36. However, relatively small volumes of energy were accepted at these prices and SBP only reached 270 £/MWh and 261 £/MWh in periods 35 and 36 respectively. A further concern cited in relation to the events of 10 December 2002, is that prices in the short term markets did not respond to the reducing margin of supply over demand. In particular, that short term prices on this day were lower than on the days either side, when the supply/demand balance was significantly less tight.

Ofgem accepts that there have been occasions, including 10 December 2002, when the prevailing level of imbalance prices suggest that there are grounds for reviewing the rules currently used to determine imbalance cash out prices. These events suggest that there may be evidence that a combination of the effects of electricity BSAD actions and the BSC rules for calculating cash-out prices may not be sending appropriate signals to the market during periods of system stress and creating appropriate commercial incentives for market participants. Ofgem

is of the view that there may be issues with the current arrangements for cash out prices that warrant closer investigation and consideration and intends to undertake a review of the gas and electricity cash-out arrangements shortly. Ofgem considers that this review should focus on both the rules used to calculate imbalance prices contained within the BSC (i.e. the use of weighted averages) and on the rules contained within the BSAD Methodology Statement used to feed components of NGC's actions outside of the BM into the calculations of these prices (e.g. standing reserve option fees).

Transparency of NGC's actions

A number of respondents to the consultations in respect of the Proposed Modifications, and also in separate representations to Ofgem, have expressed the view that the current arrangements for the procurement and utilisation of standing reserve by NGC are not sufficiently transparent. As such, it is difficult for Parties to determine what the underlying system fundamentals are (i.e. is the system genuinely tight or is the SO holding significant amounts of standing reserve). Parties may therefore find it difficult to price energy against this uncertainty over underlying conditions. Ofgem accepts that these concerns are legitimate and therefore welcomes the recent announcement from NGT that they are undertaking a Transparency Review²⁸, to review aspects of the transparency of their balancing actions and the nature and quality of information that is available to the market. Ofgem expects that this review, and any changes made to the arrangements as a result of the review, will address the concerns expressed by respondents in this area.

Incentives on market participants

Prior to the introduction of NETA, Ofgem outlined its rationale for the adoption of volume weighted average prices for the imbalance cash-out rules. At that time, Ofgem shared the view of many market participants that cash-out prices should be calculated from a volume weighted average of accepted Offer and Bid prices in the BM as this would best reflect the costs incurred by the SO in balancing the system and ensure that appropriate signals and incentives were created, for example, by allowing short-term price signals to emerge at times of system stress. Ofgem was concerned that marginal cash-out prices could create distortions because they could be set based on a very small volume of energy accepted by the SO or alternatively based on a System Balancing action. Ofgem considers that experience of the early days of Transco's network code in the gas market supported this view²⁹.

Ofgem was also concerned that a marginal cash-out regime could increase the risk of manipulation to drive up cash-out prices and market prices to levels that would not reflect underlying market fundamentals particularly when the system is not under stress, and that experience under the Pool³⁰ supported these concerns. Ofgem had additional concerns surrounding the potential that marginal cash-out prices could distort the market through the

²⁸ Announced at the NGT Operational Forum on 4 February 2004. Further information is available on NGC's website: www.nationalgrid.com/uk.

²⁹ See, for example, 'An investigation into extreme price fluctuations on the flexibility market on 16 -17 December 1997: A Consultation Document', Ofgas, October 1998.

³⁰ See Offer Report "Review of Electricity Trading Arrangements: Background paper 1 - Electricity Trading Arrangements in England and Wales", February 1998, and references therein.

RCRC mechanism. During the assessment of Proposed Modifications P136 and P137, Ofgem has not been persuaded otherwise. Therefore, in Ofgem's view these concerns remain valid, and further may be increased during times of system stress.

With respect to the risk of manipulation in the BM, Ofgem recognises that the arrangements under NETA differ from those under the Pool. Ofgem is also aware of the regulatory and legislative constraints on Parties that may undertake this type of behaviour. However, Ofgem remains concerned about the scope and incentives to game the system under NETA. In Ofgem's view, a full marginal main cash-out pricing methodology would increase the incentives on participants to undertake this type of behaviour. Although there are regulatory safeguards in place, in practice there are limits to the speed with which Ofgem can intervene and address such behaviour in the market. Although Ofgem provides protection for customers, these measures may not stop harm to competition, customers and the market in the short term. Ofgem is therefore concerned that a change to full marginal cash out pricing could give rise to less cost-reflective pricing, particularly during periods when the system is not under stress.

In summary, Ofgem does not consider that either of the Proposed Modifications would better facilitate achievement of the Applicable BSC Objectives for the following reasons. In Ofgem's view, neither of the Proposed Modifications would be economic or efficient on the basis that they would be likely to lead to non cost reflective pricing (with respect to the costs incurred by NGC as SO in balancing the system), particularly at times when the system is not under stress. Therefore, Ofgem does not consider that either Proposed Modification P136 or P137 would better facilitate achievement of Applicable BSC Objective (b) for the efficient, economic and co-ordinated operation by the licensee of the licensee's transmission system. On the basis that the Proposed Modifications would not be effective in targeting NGC's costs back on to BSC Parties, the Proposed Modification would not better facilitate competition in that they would increase costs to, and risks on, market participants. Therefore, Ofgem does not consider that either Proposed Modification P136 or P137 would better facilitate achievement of Applicable BSC Objective (c) for 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.

Having considered all the BSC Objectives and its statutory duties Ofgem has decided not to direct NGC to make either of Proposed Modification P136 or P137.

Ofgem's cash-out review

As stated in our letter of 1 March 2004, Ofgem has decided not to undertake impact assessments in relation to Proposed Modifications P136 and P137. Also in this letter we explained that Ofgem intends to undertake a review of the gas and electricity cash-out mechanisms and their impact on incentives to balance and security of supply and that this review will contain a detailed impact assessment and consultation on the possible options for reform.

Please contact me on the above number if you have any queries in relation to the issues raised in this letter. Alternatively, contact Matthew Buffey on 020 7901 7088.

Yours sincerely

A handwritten signature in black ink that reads "Kyran Hanks". The signature is written in a cursive style and is underlined with a long, horizontal stroke.

Kyran Hanks
Director, Wholesale Markets