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**INITIAL ASSESSMENT OF  
MODIFICATION PROPOSAL P74 -  
Single Cost-reflective Cash-out  
Price**

**Prepared by ELEXON Limited**

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Version	Date	Reviewer	Signature	Responsibility
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1.0	12/04/02	Trading Strategy		

### b Distribution

Name	Organisation
Each BSC Party	Various
Each BSC Agent	Various
The Gas and Electricity Markets Authority	Ofgem
Each BSC Panel Member	Various
Energywatch	Energywatch
Core Industry Document Owners	Various

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## 1 SUMMARY

Modification Proposal P74 'Single Cost-reflective Cash-out Price' was submitted on 4 April 2002 by Electricity Direct. The Proposal seeks to amend the application of Energy Imbalance Prices, such that where the Total System Energy Imbalance Volume for a Settlement Period is:

- Negative, then the Imbalance volumes on all Energy Accounts are to be cashed out at the System Buy Price (SBP);
- Positive, then the imbalance volumes on all Energy Accounts are to be cashed out at the System Sell Price (SSP);
- Zero, then the imbalance volumes on all Energy Accounts are to be cashed out at a default Energy Imbalance Price, which will be the arithmetic mean of the System Buy Price and System Sell Price.

At a high level, the Modification Proposal asserts that the intent of such an amendment to the Energy Imbalance Price application is to mitigate distortion of the market caused by the current dual cash-out arrangements, which are not cost reflective, and are unduly penal to Parties with unpredictable output and / or small portfolios.

An initial assessment of Modification Proposal P74 has identified the following potential areas of impact and issues to be considered. These are expanded further in section 10:

- The impact of Modification Proposal P74 on the BSC Agent Systems, specifically the Settlement Administration Agent (SAA);
- The impact of Modification Proposal P74 on the Transmission Company systems, processes and documentation;
- The interaction of this Modification Proposal with other Modification Proposals, such as Modification Proposals P12 (one hour Gate Closure), P78 (Revised Definition of System Buy Price and System Sell Price) and P27 (Amendment to the Derivation of Imbalance Prices). The interaction of these Modifications with Modification Proposal P74 is explored in more detail in section 10;
- Assessment of whether the Modification Proposal addresses the issues detailed without being outweighed by detrimental impacts elsewhere;
- The impact of Modification Proposal P74 on the Settlement calculations and cashflows; and
- Consideration of the issues and arguments raised in the Modification Proposal and associated Annex by the Proposer.

It is recommended that the Modification Proposal is progressed as follows:

- Modification Proposal P74 should be submitted to the Assessment Procedure, in accordance with Section F 2.6 of the BSC, in order to enable the Modification Group to assess the Modification;
- Modification Proposal P74 should be assessed in conjunction with Modification Proposal P78, as Modification Proposal P78 seeks to address similar issues to those identified by Modification Proposal P74. However, it should be noted that Modification Proposal P78 is sufficiently different from Modification Proposal P74 to warrant a separate assessment of each Modification Proposal, rather than amalgamating them;

- The Assessment Procedure should be undertaken by the Pricing Issues Modification Group (PIMG); and
- The Assessment Report should be submitted to the Panel for consideration at their meeting of 18 July 2002 (with an interim report to Panel meeting 13 June 2002).

## 2 INTRODUCTION

This Report has been prepared by ELEXON Ltd. on behalf of the Balancing and Settlement Code Panel ('the Panel'), in accordance with the terms of the Balancing and Settlement Code ('BSC'). The BSC is the legal document containing the rules of the balancing mechanism and imbalance settlement process and related governance provisions. ELEXON is the company that performs the role and functions of the BSCCo, as defined in the BSC.

An electronic copy of this document can be found on the BSC website, at [www.elexon.co.uk](http://www.elexon.co.uk)

## 3 DESCRIPTION OF THE MODIFICATION PROPOSAL

A copy of the Modification Proposal and the associated Annex, as submitted by its Proposer, can be found at Annex 1 to this report. It should be noted that the description of the Modification Proposal provided here is only a high level summary and description. The Modification Proposal itself, and associated Annex provide more detail.

Modification Proposal P74 requires amendment to the existing application of Energy Imbalance Prices to Energy Imbalance Volumes. The Modification Proposal states that where the Total System Energy Imbalance Volume for a Settlement Period is:

- Negative, then the Imbalance volumes on all Energy Accounts are to be cashed out at the System Buy Price (SBP);
- Positive, then the imbalance volumes on all Energy Accounts are to be cashed out at the System Sell Price (SSP);
- Zero, then the imbalance volumes on all Energy Accounts are to be cashed out at a default Energy Imbalance Price, which will be the arithmetic mean of the System Buy Price and System Sell Price.

The Modification Proposal states that the existing application of two Energy Imbalance Prices (the SSP and SBP) is creating economic inefficiency, and that it is discriminating against embedded generators, non-portfolio generators and smaller suppliers. Modification Proposal P74 lists, as follows, the issues that it is attempting to address:

1. The current cash-out regime delivers asymmetric risk into the market, via the significant risk of exposure to very high System Buy Price for 'short' Energy Accounts;
2. The potential for a large spread between the SSP and SBP is leading to inefficient traded markets;
3. Efficient peaking capacity is not being utilised as the predominant balancing action is the de-loading of flexible coal plant. This de-loading has contributed to an increase in the emissions of carbon, SO<sub>x</sub> and NO<sub>x</sub>;
4. Portfolio generators are incentivised to create their own reserve by running several plant on part load, thus mitigating their imbalance risk should any plant fail. This additional plant loading of plant has contributed to the increase in emissions of carbon, SO<sub>x</sub> and NO<sub>x</sub>;

5. Imbalance costs borne by Parties are not reflective of the costs incurred by the Transmission Company (System Operator) in managing those imbalances.

The Modification Proposal states that the existing arrangements (i.e. the dual cash-out) are distorting the market by placing undue risks on parties that cannot control their imbalance position. The Modification Proposal asserts that a single cash-out price would lead to a more efficient market as the spot market prices will better reflect the potential costs of imbalance in both directions.

The Modification Proposal states that the Proposed Modification better facilitates achievement of all four of the Applicable BSC Objectives ((a), (b), (c) and (d)), as set out in the Transmission Licence, Condition C3, clause 3.

## 4 IMPACT ON BSC SYSTEMS AND PROCESSES

BSC System / Process	Potential Impact of Proposed Modification
<p><b>Balancing Mechanism Activities</b></p>	<p>It should be noted that there may be an impact on the BMRA Indicative Price reporting. At the end of each Settlement Period, BMRA calculates the Indicative System Buy Price and Indicative System Sell Price. Although this calculation is not affected, BMRA does not (and cannot) calculate the TQEI of the system, and therefore BMRA will not be able to indicate which of the Energy Imbalance prices will be applied in the Settlement Period. Therefore a notice to this effect may be required to be added to the relevant BMRA screen.</p> <p>However, for the purposes of this IWA, it is assumed that there is no impact on the BMRA, as its processes and calculations are not affected by Modification Proposal P74.</p>
<p><b>Settlement</b></p>	<p>The Modification Proposal affects the application of the Energy Imbalance Prices, once these have been calculated. It should be noted that the Modification Proposal does not require any amendment to the manner in which the Energy Imbalance Prices are calculated prior to their application. An additional step at the end of the existing calculation of SSP and SBP will be required in order to reflect the calculation of the arithmetic mean of the SSP and SBP for application where the Total System Energy Imbalance Volume is zero.</p> <p>The Settlement Administration Agent (SAA) will be required to amend the functionality associated with the calculation of Energy Imbalance Cashflows (defined in the BSC, Section T 4.7) to reflect:</p> <ul style="list-style-type: none"> <li>– The application of SSP to all Account Energy Imbalance Volumes (QAE<sub>i</sub>) where the Total System Energy Imbalance Volume (TQEI<sub>j</sub>) is positive;</li> <li>– The application of SBP to all Account Energy Imbalance Volumes (QAE<sub>i</sub>) where the TQEI<sub>j</sub> is negative; and</li> <li>– The application of a calculated arithmetic mean of SSP and SBP to all Account Energy Imbalance Volumes (QAE<sub>i</sub>) where the TQEI<sub>j</sub> is zero.</li> </ul> <p>This should not require any amendment to the reporting from SAA, namely the SAA-I014 (Settlement Report – Subflows 1, 2 or 3), as the proposed Modification amends only the way in which the cashflows are calculated, and therefore the current structure of the reports will support the requisite reporting</p>

BSC System / Process	Potential Impact of Proposed Modification
	<p>without change.</p> <p>The SAA will also be impacted by the implementation of this Modification Proposal. It is expected that any Modification will be implemented on a Settlement Day basis and this will mean that Settlement Runs for days prior to the implementation date will utilise the existing calculations, and Settlement Runs for Settlement Days post implementation will use the Settlement calculations implemented under the Modification. This leads to a period of overlap in usage of two differing Settlement calculations which will have to be carefully managed.</p>

## 5 IMPACT ON OTHER SYSTEMS AND PROCESSES USED BY PARTIES

System / Process	Potential Impact of Proposed Modification
<b>BSC Parties</b>	BSC Parties will be impacted by the amendment to the manner in which Energy Imbalance Cashflows are calculated, and therefore their systems and processes may require amendment to reflect this change, thus enabling the verification of their Settlement liabilities correctly.
<b>Transmission Company</b>	<p>The Transmission Company will be impacted by the amendment to the manner in which Energy Imbalance Cashflows are calculated, and therefore their systems and processes may require amendment to reflect this change, thus enabling the verification of Settlement liabilities correctly.</p> <p>It should be noted that this Modification may impact the Transmission Company's processes with regards to imbalance compensation of balancing services providers. The existing compensation calculations reference the imbalance liability of the relevant party under the BSC and therefore this may require amendment if the manner in which these liabilities are calculated changes.</p>

## 6 IMPACT ON DOCUMENTATION

### 6.1 Impact on Balancing and Settlement Code

BSC Section	Potential Impact of Proposed Modification



<b>BSC Section</b>	<b>Potential Impact of Proposed Modification</b>
T: Settlement and Trading Charges	<p>The Modification Proposal affects the application of the Energy Imbalance Prices, once these have been calculated. It should be noted that the Modification Proposal does not require any amendment to the manner in which the Energy Imbalance Prices are calculated prior to their application. An additional step at the end of the existing calculation of SSP and SBP (Section T 4.4) will be required in order to reflect the calculation of the arithmetic mean of the SSP and SBP for application where the Total System Energy Imbalance Volume is zero.</p> <p>Amendment to the functionality associated with the calculation of Energy Imbalance Cashflows (defined in the BSC, Section T 4.7) is required, to reflect:</p> <ul style="list-style-type: none"> <li>– The application of SSP to all Energy Accounts where the Total System Energy Imbalance Volume (TQEI<sub>j</sub>) is positive;</li> <li>– The application of SBP to all Energy Accounts where the TQEI<sub>j</sub> is negative; and</li> <li>– The application of a calculated arithmetic mean of SSP and SBP to all Energy Accounts where the TQEI<sub>j</sub> is zero.</li> </ul>
X: Definitions and Interpretation	<p>A new price is required to be calculated in Section T (4.4), which is to be the arithmetic mean of SSP and SBP. This will require the creation of a new data item, and the construction of the associated definition of that data item.</p>
X: ANNEX X-2 Technical Glossary	<p>A new price is required to be calculated in Section T (4.4), which is to be the arithmetic mean of SSP and SBP. This will require the creation of a new data item, and the construction of the associated definition of that data item.</p>

## 6.2 Impact on Code Subsidiary Documents

Code Subsidiary Document	Potential Impact of Proposed Modification
BSC Service Descriptions	<p>An additional step at the end of the existing calculation of SSP and SBP (to reflect the changes to the BSC Section T 4.4) will be required in order to reflect the calculation of the arithmetic mean of the SSP and SBP for application where the Total System Energy Imbalance Volume is zero.</p> <p>Amendment to the functionality associated with the calculation of Energy Imbalance Cashflows (defined in the BSC, Section T 4.7) is required, to reflect:</p> <ul style="list-style-type: none"> <li>- The application of SSP to all Energy Accounts where the Total System Energy Imbalance Volume (TQEI<sub>j</sub>) is positive;</li> <li>- The application of SBP to all Energy Accounts where the TQEI<sub>j</sub> is negative; and</li> <li>- The application of a calculated arithmetic mean of SSP and SBP to all Energy Accounts where the TQEI<sub>j</sub> is zero.</li> </ul>

## 6.3 Impact on Core Industry Documents

Core Industry Document	Potential Impact of Proposed Modification
Grid Code CUSC Ancillary Services Agreements	<p>This Modification may impact the Transmission Company's processes with regards to imbalance compensation of balancing services providers. The existing compensation calculations reference the imbalance liability of the relevant party under the BSC and therefore this may require amendment in the manner in which these liabilities are calculated changes. This may require changes to the CUSC and / or Ancillary Services Agreements.</p>

## 7 IMPACT ON OTHER CONFIGURABLE ITEMS

Item	Potential Impact of Proposed Modification
BSC Central Service Agent Documentation	<p>The amendments to the SAA Service Description, and the SAA functionality are required to be reflected in the SAA User Requirements Specification, the SAA System Specification and the SAA Design Specification.</p>

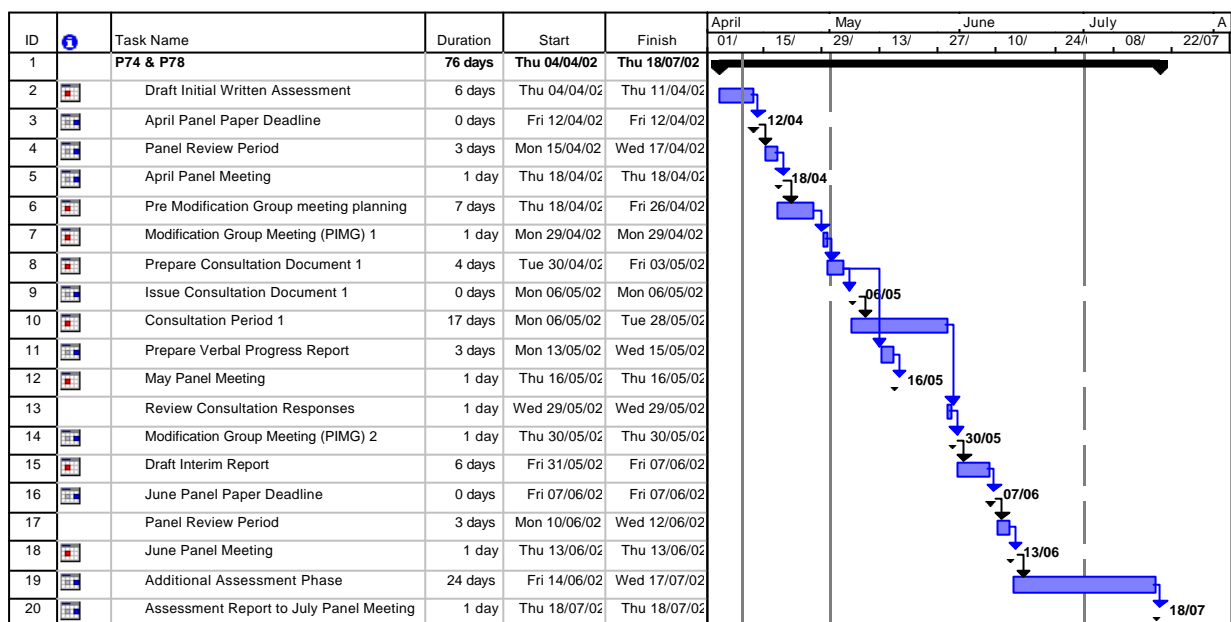
## 8 IMPACT ON ELEXON

Area of Business	Potential Impact of Proposed Modification
ELEXON Systems	ELEXON will be impacted by the amendment to the manner in which Energy Imbalance Cashflows are calculated, and therefore the TOMAS system and associated processes may require amendment to reflect this change, thus enabling the verification of Settlement liabilities / the Settlement Report correctly.

## 9 PROCESS AND TIMETABLE FOR PROGRESSING THE PROPOSAL

The initial assessment of this Modification Proposal indicates that no further work is required to define the amendments required to support this Modification Proposal. Therefore ELEXON recommends that Modification Proposal P74 'Single Cost-reflective Cash-out Price' be submitted to the Pricing Issues Modification Group (PIMG) for a three month Assessment Procedure (with an interim report after 2 months to provide the opportunity for provisional thinking to be requested from the Authority). The Pricing Issues Modification Group should be actioned to provide the Assessment Report for consideration at the Panel meeting of 18 July 2002.

It is expected that the Assessment Procedure will require at least four meetings of the Pricing Issues Modification Group, one consultation and one impact assessment. The potential timetable is as follows:



## 10 ISSUES

The following issues will need to be considered and addressed in progressing Modification Proposal P74:

- The impact of Modification Proposal P74 on the Transmission Company systems, processes and documentation. Modification Proposal P74 may impact on the CUSC / Ancillary Service Agreements in the area of balancing services provision and compensation, as a consequence of the amendment to the application of Energy Imbalance Prices. The Transmission Company may also be impacted by any change to operational behaviour caused by the implementation of Modification Proposal P74.

The impact on the Transmission Company will not be assessed by the Modification Group. However, the impacts should be understood such that any further ramifications on Parties as a consequence of Transmission Company amendments can be assessed by Parties. Any dependencies between the implementation of Modification Proposal P74 and consequential changes for the Transmission Company should be identified in order to ensure a consistent approach to implementation.

– Interaction with existing Modification Proposals. There are a number of Modification Proposals which have a degree of interaction with Modification Proposal P74. Namely:

- Modification Proposal P12 'One Hour Gate Closure'. Modification Proposal P12 may have a twofold interaction with Modification Proposal P74. One of the key impacts of Modification Proposal P12 is the potential to reduce imbalances by trading closer to real-time;

A related potential impact on Modification Proposal P74 from the implementation of Modification Proposal P12 is the reduced risk to Parties from plant failure. A shorter Gate Closure allows a Party to adjust sooner a physical position, portfolio or trade to counter the failure, and hence results in a smaller period of exposure to imbalance.

- Modification Proposal P78 'Revised Definitions of System Buy Price and System Sell Price', raised by the Transmission Company (NGC) on 5 April 2002. This Modification Proposal seeks to amend the definitions of SSP and SBP, and therefore the manner in which they are calculated, in order to improve the stability and cost reflectivity of the Energy Imbalance Prices.

Therefore there is a material interaction between Modification Proposal P74 and Modification Proposal P78, and although they are addressing similar issues, they are not the same, and should be assessed separately. However, the Assessment procedure for Modification Proposal P74 should take into consideration that of Modification Proposal P78, and run in parallel with it.

- Modification Proposal P27 'Amendment to the Derivation of Imbalance Prices' was raised by Electricity Direct on 26 June 2001. Modification Proposal P27 addressed a similar area and issues as Modification Proposal P74. However, Modification Proposal P27 was rejected by the Authority and therefore the concerns raised by the Authority in the Modification Proposal P27 Authority Decision letter should be considered whilst assessing Modification Proposal P74 (and Modification Proposal P78).

Therefore the assessment of Modification Proposal P74 should take into consideration issues arising from other Modification Proposals, where appropriate;

- Assessment of whether the Modification Proposal addresses the issues and would better facilitate achievement of the applicable BSC Objectives;
- Assessment of the impact of Modification Proposal P74 on the Settlement calculations and cashflows. If the Energy Imbalance Price application changes, then there will be ramifications on other Settlement cashflows, such as the Residual Cashflow Reallocation Cashflow (RCRC). Therefore an assessment of Modification Proposal P74 should include the impact on the other aspects of Settlement; and
- The assessment of Modification Proposal P74 should also consider the arguments presented by the Proposer in the Modification Proposal and its associated Annex.

## ANNEX 1 – MODIFICATION PROPOSAL

<b>Modification Proposal</b>	<b>MP No: 74</b> <i>(mandatory by BSCCo)</i>
<b>Title of Modification Proposal (mandatory by proposer):</b> Single Cost-reflective Cash-out Price	
<b>Submission Date (mandatory by proposer):</b> 04 April 2002	
<b>Description of Proposed Modification (mandatory by proposer):</b> Where Total System Energy Imbalance Volume (TQEI) is positive then all Account Energy Imbalances will be settled at the prevailing System Sell Price. Where Total System Energy Imbalance is negative then all Account Energy Imbalances will be settled at the prevailing System Buy Price. In the unlikely event that Total System Energy Imbalance Volume is zero, then the default Settlement Price will be the arithmetic mean System Buy Price and System Sell Price.	
<b>Description of Issue or Defect that Modification Proposal Seeks to Address (mandatory by proposer):</b> On several measures, the 2-price cash-out regime is leading to economic inefficiency. This is unduly discriminating against embedded generators, non-portfolio generators and smaller suppliers.  1. The 2-price cash-out regime is delivering asymmetric risks into the market, with a significant risk of exposure to very high buy prices for accounts that go short. This risk is not cost-reflective in relation to the costs of balancing the system, which leads to discrimination against smaller and embedded participants. The rational position of consumption accounts is to over-contract by at least 1 standard deviation to avoid these system buy prices as is demonstrated in the supporting analysis (see Annex). In reality, the best estimate is that this figure has been exceeded.  Nevertheless, there is a clear bias built into the system towards supplier over-contracting rather than towards balance. In the supporting analysis, the cost of this to the Transmission Company over the winter period (a period which is not affected by pre-Mod 18A effects) is estimated. The calculation is consistent with the methodology used for calculating the System Operator Incentive, which incorporates a Net Imbalance Volume Adjustment (NIVA). While the long market has ensured low BSUoS charges, the estimated BSUoS net of NIVA has been considerably higher. If the Transmission Company is not entitled to “profit” from the long market, then it must be considered that generators have earned the profit. The consumer cost of this long market has therefore been underestimated.  2. The potential size of the buy-sell spread is leading to inefficient traded markets. The only ways for participants to trade out of imbalance risk is via consolidation services. Although the rule restrictions that applied to such services have been reduced, the risks in provision of consolidation services remain dependent on the size of the consolidator portfolio, which means that only the incumbent large suppliers can offer efficient consolidation services (which they were always able to offer anyway), which fails to protect the parties wishing to be consolidated from the market power of such incumbents.  There is no financial instrument that can be efficiently offered on the system because any counter-party to such an instrument will always be on the wrong side of prices. A primary aim of NETA was to create appropriate incentives for participants to contract bilaterally and, to this end, liquid spot and forward markets were expected to develop. For this to occur there must be a connection between spot prices and the imbalance prices that participants seek to avoid by contracting. However, in a persistently long market, spot prices have collapsed to close to system sell	

<b>Modification Proposal</b>	<b>MP No: 74</b> <i>(mandatory by BSCCo)</i>
<p>price, which has compressed the premium that shaped energy would command in an efficient balanced market. Suppliers have responded by going exceptionally long during periods of lower demand, relying on lower-priced flat energy contracts and not seeking to more closely balance because the net cost of over-contracting is outweighed by the risk of exposure to SBP. The extent of this is estimated in the supporting analysis.</p> <ol style="list-style-type: none"> <li>3. In a predominantly over-supplied market, efficient peaking capacity is not being utilised because the predominant balancing action is to de-load part flexible coal plant. This has contributed to an increase in emissions of carbon, SOX and NOX, estimates of which are given in the supporting analysis.</li> <li>4. Because of the continuing risk of SBP price spikes, portfolio generators have an incentive to carry their own reserve by operating several plant at part load rather than relying on just the least cost plant and relying on the market to provide reserve. This is done so that replacement plant can respond rapidly to any plant failure. The extent of the additional part loading of plant has contributed to an increase in emissions of carbon, SOX and NOX as is further estimated in the supporting analysis.</li> <li>5. The cost of imbalance borne by participants is not reflective of the costs incurred by the System Operator in managing those imbalances. This is reflected by the estimated transfer of funds under TRC compared to actual BSUoS costs. The supporting analysis uses estimated data because half-hourly TRC and account imbalance totals are not publicly available figures. Nevertheless, they are realistic interim figures that show that the cost of NGC purchases of imbalance energy was considerably lower than participant imbalance payments and that NGC revenues from sales of imbalance energy were also considerably less than was paid out to parties for their spill energy, thus distorting the competitive position of market participants.</li> </ol>	
<b>Impact on Code</b> <i>(optional by proposer):</i>	
<b>Impact on Core Industry Documents</b> <i>(optional by proposer):</i>	
<b>Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties</b> <i>(optional by proposer):</i>	
<b>Impact on other Configurable Items</b> <i>(optional by proposer):</i>	
<p><b>Justification for Proposed Modification with Reference to Applicable BSC Objectives</b> <i>(mandatory by proposer):</i></p> <p>The dual cash-out price regime has significantly distorted the market by failing to be cost-reflective of the costs of balancing leading to undue risks on parties that cannot fully control their balance position. The parties most disadvantaged are embedded generators – who are unduly penalised for the potential intermittency of their output and smaller suppliers who lack the portfolio effects that larger incumbents enjoy. Because no suppliers can precisely control their balance they have responded by going long rather than balance. Because the price risk of going short is not cost-reflective, portfolio generators have responded by carrying significantly more reserve than would be the case in an efficient market (and considerably more reserve than was carried previous to NETA) on part-loaded plant, which has led</p>	

<b>Modification Proposal</b>	<b>MP No: 74</b> <i>(mandatory by BSCCo)</i>
<p>to a significant deterioration in environmental standards.</p> <p>A single cash-out price would lead to a more efficient market. This will occur because spot market prices will better reflect the potential costs of imbalance in both directions. The economic rationale for this is more fully explained in the Annex but can be summarised as follows:</p> <ul style="list-style-type: none"><li>– If the value of spill is potentially the system buy price, then generators will not offer it to suppliers in the spot market at a price that does not reflect this possibility;</li><li>– Because the spot price is a better reflection of the risk of exposure to SBP as well as SSP, suppliers who over-contract will do so at a higher cost and will therefore have an incentive to seek to balance rather than spill;</li><li>– A spot market more reflective of shortfall costs will incentivise generators to sell into such a market, promoting liquidity;</li><li>– Because, the cost of generator trip is no longer always exposure to SBP, there is reduced incentive on parties to carry reserve, which will reduce the extent of part loading and will make the extra capacity available in forward markets instead;</li><li>– An increased possibility of NGC buying in the balancing market will lead to more competition from generators to offer their reserve to NGC rather than holding onto it purely against the risk of trip.</li></ul> <p>The extent to which the proposal better facilitates the Applicable BSC Objectives is explained more fully in the supporting analysis in the Annex to this proposal. Therefore, in the following paragraphs, a summary of the justification is presented.</p> <ol style="list-style-type: none"><li>1. <i>The efficient discharge by the Transmission Company of the obligations imposed under the Transmission Licence</i><ol style="list-style-type: none"><li>1.1 As the Annex more fully proves, the proposal improves the incentive on participants to balance rather than spill. This reduces the extent of balancing required by the Transmission Company, which enhances safe and secure operation in accordance with the Transmission Company's Licence.</li><li>1.2 By improved cost-targeting rather than over-recovery the imbalance charging regime is more cost reflective in accordance with the Transmission Company's Licence.</li><li>1.3 An imbalance regime that does not excessively penalise small-scale participants and intermittent generation reduces undue discrimination against new entrants and embedded generators, which is in accordance with the Transmission Company's Licence Obligation against undue discrimination.</li></ol></li><li>2. <i>The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System</i><ol style="list-style-type: none"><li>2.1 A single price regime will improve incentives to balance rather than to spill such that the volume of SO balancing actions will be reduced, improving efficient and economic operation of the Transmission System.</li><li>2.2 Participants have improved incentives to follow their FPNs more closely because there is reduced risk of tripped generators facing SBP and so reduced incentive for portfolio generators to replace the energy after gate closure. Although this effect is reduced by a shorter gate closure (Modification P12), it is not removed. In addition, even if there is a reduced incentive to place ex ante notified contracts (as has been suggested because CfDs based on ex post volumes can be effectively offered to suppliers in a single cash-out price regime), generators will notify physical volumes consistent with their expected generation including any ex</li></ol></li></ol>	



<b>Modification Proposal</b>	<b>MP No: 74</b> <i>(mandatory by BSCCo)</i>
<p>post contracts made off the system because they have no reason not to notify.</p> <p>Generators have a reduced incentive to slightly over-deliver in order to avoid SBP exposure on inaccurate FPNs (an effect that will be increased due to gearing if zonal loss factors are applied).</p> <p>Therefore, because notification accuracy will be improved, balancing actions taken by the Transmission Company will be reduced, which will improve efficient and economic operation of the Transmission System.</p> <p>2.3 The Annex demonstrates that the price signals offered in a single-price market, will be more rational because spot markets will better reflect the value of energy needed to avoid imbalance risk (a by-product of improved incentive to balance). This will therefore better target the costs of imbalance positions, giving the Transmission Company correct signals for contracting in the forward markets, and thereby providing residual balance at an economically efficient cost. This is further supported by the rationale used in applying the Net Imbalance Volume Adjustment (NIVA) to the SO transmission services incentive scheme.</p> <p><b>3</b> <i>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</i></p> <p>3.1 As the cost of supplier error in a single-price regime is no longer dependent on the size of the supplier portfolio, this reduces the cost of new entry for supply businesses, thus promoting effective competition in the supply of electricity.</p> <p>3.2 The risk-adjusted cost of trip for a single-site generator is reduced where the penalty is not automatically SBP, which reduces the penalty of operation outside a portfolio. This facilitates competition in generation.</p> <p>3.3 Under a single cash-out price, the value of embedded generation to a supplier increases to above the existing spill price, incentivising contracts at higher prices, which thereby facilitates competition in generation.</p> <p>3.4 As demonstrated in the Annex, improved cost targeting of imbalances under a single-price cash-out regime will provide better market signals to participants, which facilitates effective competition in both generation and supply.</p> <p>3.5 By allowing traders (who will no longer always face adverse prices when they assume imbalance risk) to offer effective risk management products on the system, the management of participant imbalance will be more efficient, which will lower the risk of generation and supply, thus facilitating effective competition in generation and supply.</p> <p><b>4</b> <i>Promoting efficiency in the implementation and administration of the balancing and settlement arrangements</i></p> <p>4.1 By utilising existing information and calculation systems, the cost of implementation will be low.</p> <p>4.2 The requirement for parties to register consolidation and sharing arrangements to avoid imbalance risk will be reduced, improving the efficiency of administration of the balancing and settlement arrangements.</p>	

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<b>Attachments: YES</b> <b>If Yes, Title and No. of Pages of Each Attachment:</b> Supporting Analysis to the Single Cost-reflective Cash-out Price Modification Proposal – [xx] pages. <u>N.B.</u> This paper will be issued week commencing 8 April 2002.	