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MODIFICATION REPORT
MODIFICATION PROPOSAL P74 –
Single Cost – Reflective Cash-out Price

Prepared by ELEXON on behalf of the Balancing
and Settlement Code Panel

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Each BSC Agent	Various
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Each BSC Panel Member	Various
energywatch	Energywatch
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c Related Documents

Reference	Document
Reference 1	Modification Proposal P74 'Single Cost – Reflective Cash-out Price' Assessment Report (P074AR10, 18 July 2002)
Reference 2	Modification Proposal P78 'Revised Definition of System Buy Price and System Sell Price' Assessment Report (P078AR10, 18 July 2002)
Reference 3	'Proposed Revisions to Balancing Services Adjustment Data (BSAD) Methodology Statement – Consultation by National Grid July 2002' (23 July 2002)

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II CONTENTS TABLE

I	Document Control	2
a	Authorities	2
b	Distribution	2
c	Related Documents.....	2
d	Intellectual Property Rights and Copyright.....	2
II	Contents Table	3
1	Summary and Recommendations	4
1.1	Recommendation.....	4
1.2	Background.....	4
1.3	Rationale for Recommendations	6
1.4	Balancing Services Adjustment Data (BSAD) Amendments	7
2	Introduction	9
3	History of the Modification	9
4	Description of Alternative Modification	9
4.1	Detailed Overview of the Alternative Modification	10
4.2	Balancing Services Adjustment Data Amendments	14
5	Legal Text to Give Effect to the Alternative Modification	16
6	Summary of Representations	16
Annex 1	– Representations	17

1 SUMMARY AND RECOMMENDATIONS

1.1 Recommendation

On the basis of the analysis, consultation and assessment undertaken in respect of this Modification Proposal during the Assessment Procedure, and the resultant findings of this report, the BSC Panel recommends that:

Alternative Modification P74 should be made, with an Implementation Date of 25 February 2003 where an Authority decision is received by 6 September 2002. Where an Authority decision is received after this date, but before 19 February 2003, the Implementation Date should be 24 June 2003.

Proposed Modification P74 should not be made. However, if the Authority determine that the Proposed Modification should be made, the Implementation Date should be 25 February 2003, where an Authority decision is received by 6 September 2002. Where an Authority decision is received after this date, but before 12 March 2003, the Implementation Date should be 24 June 2003

1.2 Background

The Assessment Report for Modification Proposal P74 (Reference 1) contains the detailed background and history of Modification Proposal P74, and this report can be found on the BSC Website, as follows:

ftp://www.elexon.co.uk/ta/modifications/modsprops/P074/P74_AR_Final.pdf

Modification P74 'Single Cost-reflective Cash-out Price' was submitted on 4 April 2002 by Electricity Direct. Modification Proposal P74 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.

The Initial Written Assessment for Modification P74 was considered by the Panel at its meeting of 18 April 2002. The Panel agreed to submit Modification Proposal P74 to the Assessment Procedure at that meeting, with the Assessment to be undertaken by the Pricing Issues Modification Group (PIMG). The Panel also tasked the PIMG with defining the Terms of Reference for Modification Proposal P74.

The Panel also agreed, at its meeting of 18 April 2002, that Modification Proposal P74 should be considered in parallel with Modification Proposal P78 'Revised Definition of System Buy Price and System Sell Price' (Reference 3), as they both address similar perceived defects in the Balancing and Settlement Code.

During the Assessment Procedure, the PIMG met ten times (on 25 April 2002, 1, 8, 15, 22 and 29 May 2002, 12 and 19 June 2002, and 3 and 10 July 2002). Two consultations were issued, the first on 27 May 2002 (responses due 11 June 2002) and the second on 4 July 2002 (responses due 11 July 2002).

One detailed level impact assessment was performed by the BSC Central Service Agent, BSC Parties and ELEXON on 21 June 2002 (CPC0196, responses due 8 July 2002).

The PIMG submitted the Terms of Reference for the Assessment Procedure to the Panel, which endorsed them at its meeting of 18 May 2002. The PIMG submitted an interim report to the Panel meeting of 13 June 2002. In this report the PIMG requested an extension to the Assessment Procedure of one month in recognition of the complex issues raised by this Modification and the requirement for further analysis and assessment. The Panel agreed to an extension to the Assessment Procedure for Modification Proposal P74.

However, the Authority issued a notice pursuant to the BSC Section F 1.4.3, directing that the extension to the Assessment Procedure should not be made. The reasons for such direction were provided in the notice (dated 19 June 2002) as follows:

"It has been acknowledged by NGC and the industry that the issues that the Modification Proposals [P74 and P78] seek to address are of great importance, which is demonstrated by the considerable amount of time the industry has already devoted to assessing the Modification Proposals to date.

Having had regard to the relevance and importance of the outcome of these Modification Proposals in relation to a number of aspects of the regulatory regime, Ofgem considers that Modification Proposals P74 and P78 should be dealt with within the timeframes as set out within F2.2.9 of the BSC. Therefore Ofgem considers that it is essential for the 3-month Assessment Procedure to be adhered to."

The PIMG, (19 June 2002), in recognition of the time constraints, revised and agreed their work plan for the remainder of the Assessment Procedure, such that an Assessment Report for Modification Proposal P74 could be presented to the Panel on 18 July 2002, thus adhering to the three month Assessment Procedure.

The PIMG noted that, as a consequence of the time constraints, they were unable to fulfil one of the Terms of Reference for the Assessment Procedure, namely a quantitative comparison of Modification Proposal P74 (and any Alternative) with Modification Proposal P78 (and any Alternative). However, the PIMG felt able to provide a qualitative comparison between the Modifications and their Alternatives and this was provided in the relevant Assessment Reports.

The PIMG agreed the provisional recommendations with regards to Modification Proposal P74 (3 July 2002). These were provided, in a draft of the Assessment Report, for industry consultation on 8 July 2002 (responses due 15 July 2002).

With due consideration to the second assessment consultation responses, the PIMG confirmed the provisional recommendations.

The Panel considered the Assessment Report at its meeting of 18 July 2002, and agreed to submit Modification Proposal P74 to the Report Phase. The Panel also unanimously agreed to provisionally endorse the recommendations of the PIMG, namely that:

- The Alternative Modification should be made, with an Implementation Date of 25 February 2003, where an Authority decision is received by 6 September 2002; and
- The Proposed Modification should not be made, but if an Authority decision to the contrary is received, the Implementation Date should be 25 February 2003, where such an Authority decision is received by 6 September 2002.

At the Panel meeting of 18 July 2002, the Authority was requested to provide an indication as to whether legal drafting would be required for the Proposed Modification. Subsequent to that meeting, the Authority indicated that no such drafting would be required.

The draft Modification Report, containing the provisional recommendations of the Panel, was provided to Industry for consultation on 1 August 2002, allowing five working days for consultation (responses due 7 August 2002).

It should be noted that the legal drafting provided with the draft Modification Report for Alternative Modification P74 was dependent upon the results of the Transmission Company Balancing Services Adjustment Data (BSAD) consultation (Reference 3), (see section 1.4).

Fifteen consultation responses were received in respect of the draft Modification Report. The majority of respondents (eight of fifteen) did not support the provisional Panel recommendations, as the respondents did not support the Modification Proposal (Proposed or Alternative).

Five respondents supported the provisional Panel recommendations.

The Panel considered the draft Modification Report at its meeting of 15 August 2002. The Panel considered the consultation responses made in respect of this draft Modification Report at its meeting of 15 August 2002 and noted that a number of consultation responses expressed concern regarding:

- The perceived reduction in transparency resulting from a move from gross to net reporting of BSAD; and
- The perceived difficulty the Transmission Company may face in differentiating between energy and system BSAD trades (as required by the proposed methodology for Alternative Modification P74).

However, the Panel, recognised that BSAD amendments are beyond the vires of the BSC.

The Panel noted that the responses from the Transmission Company's BSAD consultation (Reference 3) favoured Option 2. Therefore, no consequential amendments are required to be made to the legal drafting for Alternative Modification P74 as it is based on Option 2 (see section 1.4 of this report).

The Panel, by majority, confirmed its provisional recommendations to the Authority, namely that the Alternative Modification P74 should be made, and Proposed Modification P74 should not be made.

1.3 Rationale for Recommendations

The Assessment Report for Modification Proposal P74 (Reference 1) contains the detailed rationale of the PIMG as to the recommendations made by the PIMG to the Panel.

However, with specific regards to the facilitation of the achievement of the Applicable BSC Objectives, the PIMG believe that both the Proposed and the Alternative Modification better facilitate achievement of the Applicable BSC Objectives for the following reasons:

- Reduction in the risk of exposure to imbalance, as a consequence of the removal of the buy – sell spread, and the associated costs from implementation of a single Energy Imbalance Price will help to promote competition in generation and supply;
- A proposed outcome of both the Proposed and the Alternative Modification is that the market will come closer to balance, and consequently parties will not hold so much self reserve. On this basis, the system operator should be able to balance the market more efficiently and effectively;
- The increased incentive for parties to balance their individual positions ahead of Gate Closure should result in increased accuracy of information provided to the system operator ahead of Gate

Closure, thus enabling it to make informed decisions about balancing the system, improving efficiency and economic operation;

- Improving the cost-reflectivity of the Energy Imbalance Prices should promote this Objective by providing more accurate signals to the system operator of the costs of balancing the system;
- The implementation of a more cost-reflective cash-out price regime could incentivise participants to balance their individual positions ahead of Gate Closure, therefore minimising the actions that the system operator has to take to correct the system energy imbalance. This helps to minimise the role of centrally administered mechanisms and facilitates the bilateral trading of energy; and
- Reduction in the risk of exposure to imbalance, whilst maintaining the incentives to balance, and therefore trade bilaterally, ahead of Gate Closure, may have the effect of encouraging participants to trade closer to real-time, with the associated effect of improving liquidity in the forwards and spot markets, thus increasing competition.

The Proposed and the Alternative Modification may or may not better facilitate achievement of the Applicable BSC Objectives for the following reason (depending upon perspective):

- The Proposed and the Alternative Modification value 'uninstructed assistance' to the system (i.e. imbalances in the opposite direction to the overall system imbalance) at the same price as imbalances in the same direction to the overall system imbalance, this may not be reflective of the costs they may be imposing on the system. However, there is no value of uninstructed assistance that can be definitively more cost-reflective and no evidence that the price for such assistance is not cost-reflective.

However, the Proposed and the Alternative Modification may not better facilitate achievement of the Applicable BSC Objectives for the following reasons:

- If the cost-reflectivity of the Energy Imbalance Price for imbalances in the opposite direction to the overall system imbalance is questionable, it means that the cost of energy balancing is less correctly targeted at those causing the imbalance, and therefore this reduces competition by promoting cross-subsidies; and
- A single cash-out regime may have the effect of encouraging the development of Contracts for Difference, thus removing trading from the forwards and spot markets (although it could be argued that liquidity is merely moving to a different market), and reducing the incentive to trade bilaterally, ahead of Gate Closure, which may in turn have the effect of discouraging participants to trade closer to real-time, with the associated effect of decreasing liquidity in the forwards and spot markets, thus reducing competition, in this particular market.

However, the majority of the PIMG believe that the benefits from the achievement of the Applicable BSC Objectives (set out above) outweigh the detrimental impacts. The majority of the PIMG believe that the Alternative Modification better facilitates achievement of the Applicable BSC Objectives than the Proposed Modification. Therefore, the majority of the PIMG recommend that the Alternative Modification should be made.

The Panel supported the rationale of the PIMG regarding the recommendations made in respect of the Proposed and Alternative Modification P74.

1.4 Balancing Services Adjustment Data (BSAD) Amendments

The Alternative Modification (section 4) requires amendment to the Balancing Services Adjustment Data, as follows.

Currently BSAD is formulated and reported on a gross basis, and includes only energy balancing actions taken ahead of Gate Closure by the Transmission Company. However, the mechanism for calculating the Net Imbalance Volume (as set out in Section 4 of this Modification Report) requires that all balancing actions, system and energy, be utilised in order to derive a true net imbalance (i.e. the energy imbalance of the system). Therefore, the Transmission Company propose to provide a system component for the BSAD, and to report the BSAD on a net basis.

During the Assessment Procedure for Modification Proposal P74, the Transmission Company indicated that they would provide either (as a consequence of the net reporting, explored in section 4 of this Modification Report, and in the Assessment Report for Modification Proposal P74 (Reference 1)):

- The (net) Buy Price Volume Adjustment and a Buy Price Cost Adjustment; or
- The (net) Sell Price Volume Adjustment and a Sell Price Cost Adjustment.

The volume adjustment was proposed to contain a MWh figure derived from both energy and system actions, whereas the cost adjustment would contain only the cost of energy balancing (in £), as it is deemed to be inappropriate to include the cost of the system balancing (as this could then pollute the Energy Imbalance Price). Therefore the net volume adjustment would include both system and energy volumes, whereas the cost adjustment would include only energy.

During the legal drafting to support the Alternative Modification, it was realised that this methodology would not be robust in terms of derivation of a £/MWh price (required for placing BSAD into the Bid – Offer stack for Net Imbalance Volume derivation, and for Net Imbalance Volume Tagging), the following (simple) example indicates why this is the case:

- Energy balancing ahead of Gate Closure was 100 MWh at a total cost of £1000; and
- System balancing ahead of Gate Closure was 150 MWh, no cost notified.

Therefore the price for inclusion in the Bid – Offer stack is price / volume to give a £/MWh price, which results in a price of:

- $£1000 / (100 + 150) \text{ MWh} = £4 / \text{MWh}$.

However, the actual price should have been:

- $£1000 / 100 \text{ MWh}$, i.e. the energy component, = $£10 / \text{MWh}$.

This has a material effect on the placing of the BSAD in the Bid – Offer stack, and therefore to the amount to be tagged out, or not. This could lead to system volumes being included in the Energy Imbalance Price.

The Transmission Company provided this approach as an option (Option 1) in their BSAD consultation document, but indicated that they did not believe this option to be robust. However, the Transmission Company indicate that this option had been provided for consultation as a consequence of it being the approach explored in the Assessment Report for Modification Proposal P74.

The Transmission Company proposed another approach (Option 2) in their BSAD consultation in order to address the above deficiency in the BSAD reporting and usage. This was their preferred option as it is more robust than Option 1.

Option 2 splits the energy and system portion such that they are reported separately, as follows:

- (Net) Volume Adjustment (Energy) (MWh);
- (Net) Cost Adjustment (Energy) (£); and

- (Net) Volume Adjustment (System) (MWh).

This approach is consistent with the approach documented for Modification Proposal P74, i.e. the formulation and reporting of system BSAD volume with no associated price, and energy volumes with an associated price, but with a different implementation approach to the original solution (defined in the Assessment Report (Reference 1) and set out in Option 1 of the BSAD consultation). Therefore, Option 2 is the same in intent as Option 1.

It should be noted that the legal drafting provided in this Modification Report for the Alternative Modification is based on, and is consistent with, Option 2 set out in the BSAD consultation (Reference 3).

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.

This Modification Report is addressed and furnished to the Gas and Electricity Markets Authority ('the Authority') and none of the facts, opinions or statements contained herein may be relied upon by any other person.

An electronic copy of this document can be found on the BSC website, at www.elexon.co.uk

3 HISTORY OF THE MODIFICATION

Modification Proposal P74 has been extensively assessed by the PIMG, and the detail of the assessment is provided in the Assessment Report for Modification Proposal P74 (Reference 1), and is therefore not repeated here.

4 DESCRIPTION OF ALTERNATIVE MODIFICATION

At a high level, Alternative Modification P74 will be effected as follows:

The Balancing Mechanism Reporting Agent (BMRA) receives Balancing Services Adjustment Data (BSAD) and Bid – Offer Acceptances for a Settlement Period. These are published on the BMRA (as for now, noting the requirement to report amended BSAD for Alternative P74). BMRA, at the end of the relevant Settlement Period, will calculate the Energy Imbalance Price by deriving the Net Imbalance Volume and the associated Energy Imbalance Price. These will be displayed on the BMRA (to the same service levels as currently), although it should be noted that there will be additional data (derived from the Net Imbalance Volume calculation) displayed.

The Settlement Administration Agent (SAA) will, when performing a Settlement Run, derive the Net Imbalance Volume and calculate the associated Energy Imbalance Price, using the same mechanism as the BMRA, but with the latest data. The SAA will report the results of the Settlement Run as currently, via the Settlement Report (SAA – I014, sub flows 1, 2 and 3).

The Settlement Report will contain the (relevant) new variables used for the calculation of the Net Imbalance Price.

The Assessment Report for Modification Proposal P74 (Reference 1) contains a description of the detailed amendments (system functionality and documentation) required to support Modification Proposal P74, including the Alternative.

The legal drafting to support Alternative Modification P74 is provided in Section 5 of this Modification Report.

4.1 Detailed Overview of the Alternative Modification

Alternative Modification P74 derives a (single) Energy Imbalance Price from balancing actions (including BSAD) taken to alleviate the energy imbalance of the system. The Alternative Modification proposes a new mechanism for determining the energy imbalance of the system, by ‘stacking’ all system and energy balancing actions (BSAD purchases and Offer Acceptances on one stack, and BSAD sales and Bid Acceptances on the other stack), the volumes are then netted to leave the Net Imbalance Volume, which is deemed to be the energy imbalance of the system (with the netted off balancing actions deemed to have been taken for system balancing purposes).

It should be noted that Alternative Modification P74 requires amendment to the formulation and utilisation of Balancing Services Adjustment Data (BSAD). The Transmission Company are currently consulting on the proposed amendments, and the following description (and the associated legal drafting) is based upon Option 2 of the Transmission Company’s consultation (Reference 3), as this is the preferred option of the Transmission Company, as a consequence of Option 1 (based upon the amendments defined in the P74 Assessment Report, (Reference 1)) being insufficiently robust (section 1.4 of this Modification Report).

Figures 4.1 and 4.2, below, are high level schematics reflecting the stacking of all balancing actions, and the derivation of the Net Imbalance Volume.

System Short:

Note that BSAD (Energy and System) is net, so only appears in one stack.

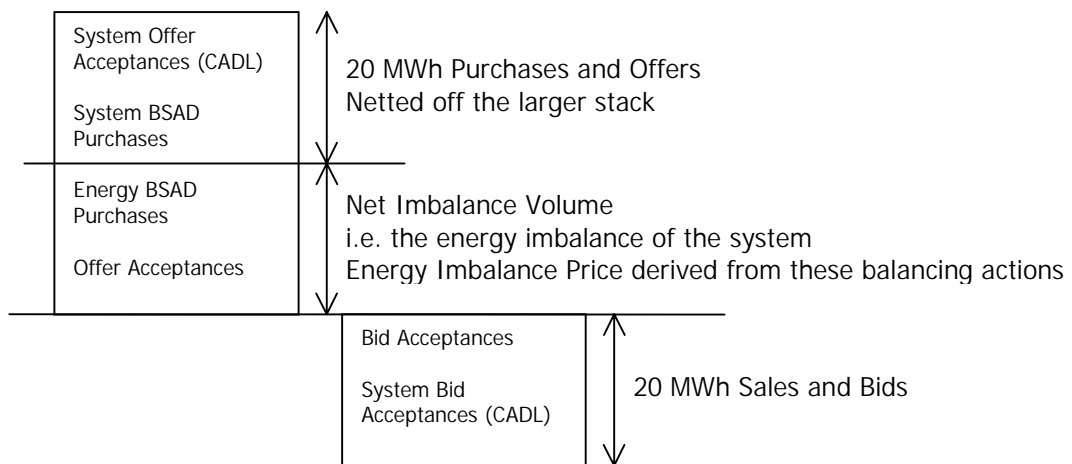


Figure 4.1: Net Imbalance Volume Derivation where the System is Short

System Long:

Note that BSAD (Energy and System) is net, so only appears in one stack.

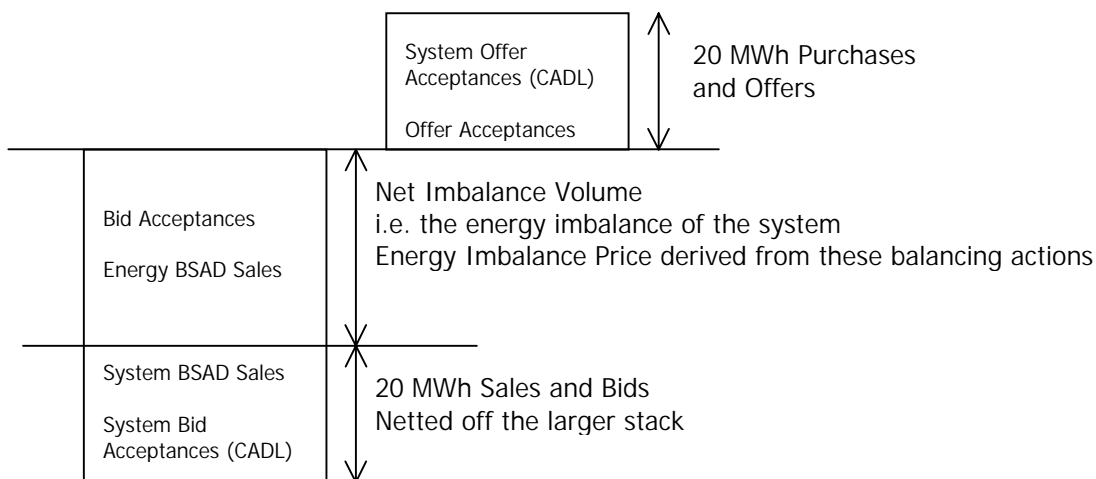


Figure 4.2: Net Imbalance Volume Derivation where the System is Long

Currently, Bid –Offer Acceptances for a Settlement Period have the Continuous Acceptance Duration Limit (CADL) applied to remove Acceptances deemed to have been taken for system balancing purposes. Then De-minimis Acceptances are identified and removed. The remaining Bid – Offer Acceptances are then stacked in price order (as defined in Annex T-1 of the BSC), and subjected to Arbitrage Tagging and Trade Tagging (to the level of the Balancing Reserve Limit). The Acceptances remaining after this tagging is applied go forward to set the Energy Imbalance Prices. BSAD sales (SCA and SVA), purchases (BCA and BVA) and options fees (BPA and SPA) are also included in the Energy Imbalance Price calculation.

It is generally acknowledged that the current mechanism has the potential to include system balancing actions in the Acceptances going forward to set Energy Imbalance Price, especially on the shorter stack, where they may have an undue influence on the resulting Energy Imbalance Price. However, given the difficulty in distinguishing between a system and an energy balancing action, this could be considered to be inevitable.

Alternative Modification P74 creates a mechanism for better differentiating between energy and system balancing actions by netting off all system and balancing actions (as reflected in Figures 4.1 and 4.2), to derive the Net Imbalance Volume, i.e. the energy imbalance of the system, and deeming all balancing actions ‘outside’ of the Net Imbalance Volume to have been taken for system purposes (and therefore disregarded for the purposes of setting the Energy Imbalance Price). Those balancing actions taken to alleviate the energy imbalance of the system (the Net Imbalance Volume) are therefore deemed to be attributable to energy balancing only.

The resulting Energy Imbalance Price is then derived from the (energy) balancing actions taken to alleviate the Net Imbalance Volume (Figures 4.1 and 4.2).

This requires amendment to the way in which Bid – Offer Acceptances and BSAD are treated when deriving the Energy Imbalance Price, as follows:

The Bid – Offer Acceptances have the Continuous Acceptance Duration Limit (CADL) applied to determine those Acceptances deemed to have been taken for system balancing purposes.

The De-minimis Acceptances are removed, and Arbitrage Tagging is undertaken.

Then the Bid – Offer Acceptances and BSAD are stacked as follows, in order to derive the Net Imbalance Volume:

The Offer (and purchase) stack is 'built' by:

- The Total System Un-priced Accepted Offer Volume (i.e. CADL'ed Offers) is placed in the Offer stack as if it were the most expensive Offer (i.e. at the top);
- The (net) Buy Price Volume Adjustment (System) (SBVA) is placed in the Offer stack as if it were the second most expensive Offer (i.e. below the CADL'ed Acceptances, but above the Priced Accepted Offers);
- The Priced Offer Acceptances are stacked in price order (below the CADL'ed Offers and the SBVA), placing the most expensive Offers first; and
- The (net) Buy Price Volume Adjustment (Energy) (EBVA) is placed into the Offer stack in order of price (derived from EBCA / EBVA, i.e. a £/MWh price).

This is represented schematically in Figure 4.3 below.

The Bid (and sale) stack is 'built' by:

- The Total System Un-priced Accepted Bid Volume (i.e. CADL'ed Bids) is placed in the Bid stack as if it were the cheapest Bid (i.e. at the bottom);
- The (net) Sell Price Volume Adjustment (System) (SSVA) is placed in the Bid stack as if it were the second cheapest Bid (i.e. above the CADL'ed Acceptances, but below the Priced Accepted Bids);
- The Priced Bid Acceptances are stacked in price order (above the CADL'ed Offers and the SBVA), placing the most expensive Bids first; and
- The (net) Sell Price Volume Adjustment (Energy) (ESVA) is placed into the Bid stack in order of price (derived from ESCA / ESVA, i.e. a £/MWh price).

This is represented schematically in Figure 4.4 below.

Offer (Purchase) Stack

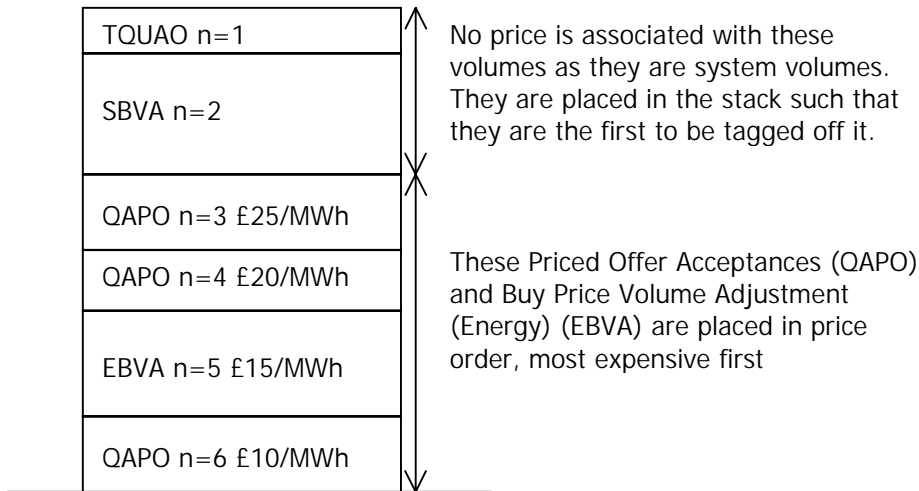


Figure 4.3: Composition of the Offer (Purchase) Stack

Bid (Sale) Stack

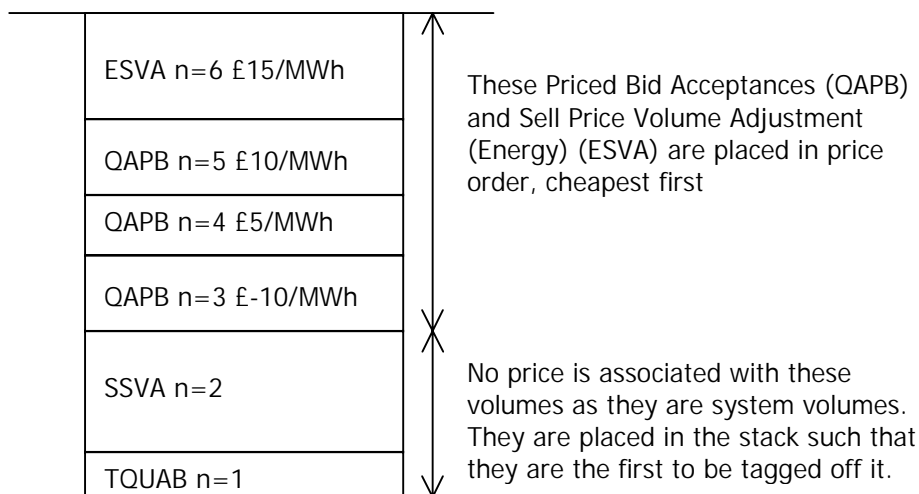


Figure 4.4: Composition of the Bid (Sale) Stack

Once the stacks have been built, the Net Imbalance Volume can be derived by netting, via tagging, the volume of the smaller stack (Offer stack where the system is long, and Bid stack where the system is short) off the larger stack. This is represented schematically in Figure 4.5, where a long system (i.e. more Bid Acceptances (and BSAD sales) than Offer Acceptances (and BSAD purchases)) is used as an example. It should be noted that this schematic assumes net BSAD energy and system volumes in the same direction as the system (i.e. net sales).

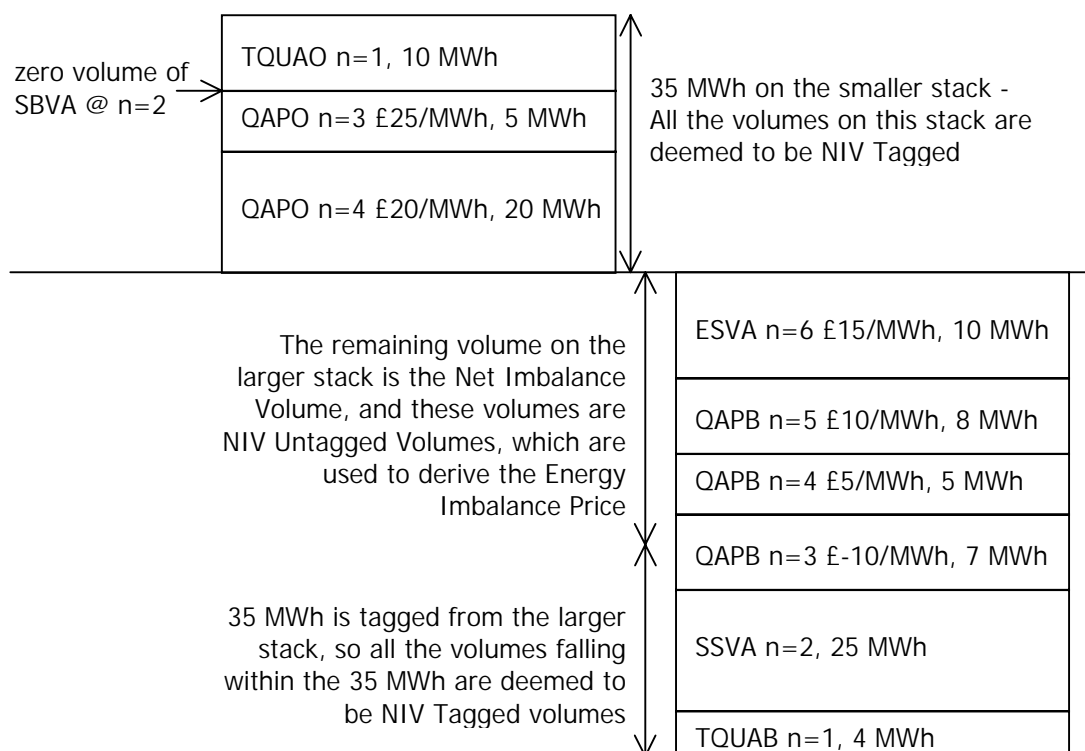


Figure 4.5: Net Imbalance Volume Tagging Example

Once the Net Imbalance Volume has been derived, the balancing actions that comprise it go forward to the Energy Imbalance Price calculation. A weighted average Energy Imbalance Price is derived from the balancing actions taken to alleviate the Net Imbalance Volume.

If the Net Imbalance Volume is zero, then the default Energy Imbalance Price rules are invoked, and this requires setting the Energy Imbalance Price from the maximum of the cheapest non Arbitrage Offer Acceptance, or the most expensive non Arbitrage Bid Acceptance, or where there are no such Bid – Offer Acceptances, zero.

For the avoidance of doubt, the single price calculated as the Energy Imbalance Price will continue to be reported and applied as System Buy Price and System Sell Price, in order that participant systems have minimal impact in terms of verification and calculation of Trading Charges. Therefore it should be noted that the System Buy Price will always be equal to the System Sell Price under this Modification.

4.2 Balancing Services Adjustment Data Amendments

Alternative Modification P74 requires amendment to the formulation and reporting of Balancing Services Adjustment Data (BSAD), as described in sections 1.4 and 4.1 of this Modification Report.

Currently BSAD reflects energy balancing only, and is reported as follows:

- Buy Price Cost Adjustment, BCA (£);
- Buy Price Volume Adjustment, BVA (MWh);
- Buy Price Price Adjustment, BPA (£);
- Sell Price Cost Adjustment, SCA (£);

- Sell Price Volume Adjustment, SVA (MWh); and
- Sell Price Price Adjustment, SPA (£).

However, for the derivation of a 'true' Net Imbalance Volume under the mechanism proposed by Alternative Modification P74, the volumes attributable to system balancing should also be formulated and reported by the Transmission Company for use in the Settlement calculations.

However, it should be noted that only a volume attributable to system balancing will be provided, as it is not considered to be appropriate to 'pollute' the Energy Imbalance Price with 'known' system balancing actions. Therefore the system volumes are (only) used to derive the Net Imbalance Volume.

The following figure, (figure 4.6) taken from the Transmission Company document 'Modification Proposal P78: Revised SBP & SSP' (an expanded annex to Modification Proposal P78, provided in Annex 6 of the P78 Assessment Report (Reference 2)), reflects how the Transmission Company perceive any effect from gross reporting to be ameliorated by the incorporation of net BSAD.

In support of Figure 4.6 the Transmission Company asserts that in the gross reporting of BSAD the Energy Imbalance Price would reflect only BSAD trades, despite them resolving only a proportion of the Net Imbalance Volume, therefore this would not be robust against the Transmission Company (System Operator) having to unwind its pre-Gate Closure trades in the Balancing Mechanism.

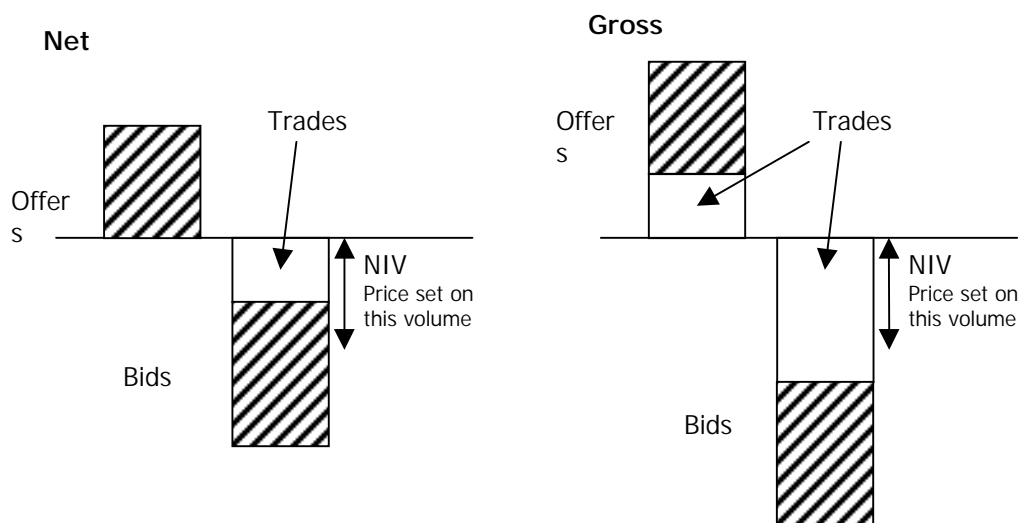


Figure 4.6: Net vs Gross Reporting / Usage of BSAD in the Energy Imbalance Price calculation.

Therefore the Transmission Company is proposing to report only net BSAD, as follows:

- (net) Buy Price Cost Adjustment (Energy) (EBCA) (£);
- (net) Buy Price Volume Adjustment (Energy) (EBVA) (MWh);
- (net) Buy Price Volume Adjustment (System) (SBVA) (MWh);
- Buy Price Price Adjustment (BPA) (£);
- (net) Sell Price Cost Adjustment (Energy) (ESCA) (£);

- (net) Sell Price Volume Adjustment (Energy) (ESVA) (MWh);
- (net) Sell Price Volume Adjustment (System) (SSVA) (MWh);
- Sell Price Price Adjustment (SPA) (£).

This will be validated on receipt to ensure, for the net reported variables, that where a net buy is reported (i.e. values for either or both EBVA and SBVA), that the net sell variables, i.e. ESVA and SSVA, are zero, and vice versa.

5 LEGAL TEXT TO GIVE EFFECT TO THE ALTERNATIVE MODIFICATION

It should be noted that the Authority have indicated that legal drafting for the Proposed Modification P74 is not required, therefore no text is provided here.

Both redlined text and clean text for Alternative Modification P74 were provided for consultation (with v0.2 of this draft Modification Report) in order to provide an indication to Parties of the changes to the Code required to support the implementation of Alternative Modification P74.

However, due to the complexity of the Modification, and following advice from the ELEXON Legal Department, the legal drafting being provided (with this Modification Report) to the Authority is an amalgam of both, which gives more clarity when implementing the changes. This draft is in all material respects the same as the two drafts which were consulted on (noting the clarification to the list of BSAD variables resulting from the representations made in respect of the draft Modification Report (section 6)).

For the legal drafting to support Alternative Modification P74 see attached document '**P074RR_Legal Text**'.

6 SUMMARY OF REPRESENTATIONS

Fifteen responses (on behalf of 50 Parties) were received in respect of the draft Modification Report for Modification Proposal P74. In summary:

- Eight responses (34 Parties) did not support the provisional recommendations contained within the draft Modification Report, as all eight respondents did not support the Modification Proposal (Proposed or Alternative);
- Five responses (14 Parties) supported the provisional recommendations contained within the draft Modification Report. It should be noted that two of these responses (5 Parties) supported the recommendations made in respect of P74, but expressed a preference for Alternative Modification P78; and
- Two responses (1 Party, 1 non party) made no comment in respect of the draft Modification Report.

The consultation responses contained no new, substantive arguments.

One response highlighted a discrepancy between the list of variables listed in Option 2 of the BSAD consultation and those listed in the proposed amendments to Section Q 6.3.2 of the Code. The response indicated that, although the list of BSAD variables provided in Section Q 6.3.2 was correct, additional clarity could be added by synchronising this list with that in the BSAD Methodology Statement. It is not believed that this is a material amendment and therefore, for increased clarity, this amendment has been made to the legal drafting (following the consultation).

ANNEX 1 – REPRESENTATIONS

Responses from P74 Draft Report Consultation

Consultation issued 1 August 2002

Representations were received from the following parties:

No	Company	File Number	No. Parties Represented
1.	Siemens Metering (Nottingham)	P74_MR_001	0
2.	TXU Europe	P74_MR_002	21
3.	Powergen	P74_MR_003	3
4.	Edison Mission	P74_MR_004	1
5.	SEEBOARD Energy	P74_MR_005	1
6.	Aquila Networks	P74_MR_006	1
7.	LE Group	P74_MR_007	1
8.	British Gas Trading	P74_MR_008	1
9.	Innogy	P74_MR_009	6
10.	AEP	P74_MR_010	1
11.	Scottish Power	P74_MR_011	5
12.	Immingham CHP LLP	P74_MR_012	1
13.	Scottish and Southern	P74_MR_013	4
14.	Campbell Carr for Electricity Direct and British Sugar	P74_MR_014	2
15.	BP Gas Marketing Limited	P74_MR_015	1

P74_MR_001 – Siemens Metering (Nottingham)

No impact for Siemens Metering (Nottingham).

Roger Grew

P74_MR_002 – TXU Europe

Thank you for the opportunity to comment on Modification Proposals P74 and P78. The following comments are made on behalf of all TXU Europe companies (21 BSC Parties).

TXU does not believe that either of the modification proposals, or their alternatives, should be implemented at this stage. It is not entirely clear that either proposal will improve the separation of system and energy balancing actions. Further, we believe that both these proposals will severely reduce the incentives on participants to balance their positions ahead of gate closure by eliminating or greatly reducing the system buy/system sell spread. For these reasons we do not feel that P74/P74A/P78/P78A better achieve any of the applicable BSC Objectives.

Ofgem recently approved the reduction of the Balancing Reserve Level to 5 MWh and we believe that the market should allow sufficient time for the impact of this reduction to be fully realised and assessed before making any changes to the calculation of Energy Imbalance Prices.

Yours faithfully

Nicola Roberts

Market Development Analyst, TXU Europe Energy Trading Ltd.

P74_MR_003 – Powergen

I am writing in response to consultation on the modification reports for P74 and P78. This response is made on behalf of Powergen UK plc, Powergen Retail Ltd and Cottam Development Centre Ltd. We do not support the recommendation of the Panel that P74 Alternative and P78 Alternative should be implemented.

During the assessment consultation we stated that we did not believe that either P74 Alternative or P78 Alternative better met the relevant BSC objectives. For P74 Alternative we had concerns about whether a single price would provide enough of an incentive for parties to contract sufficiently ahead of gate closure. For P78 Alternative we felt the reverse price was somewhat arbitrary and not cost reflective. We also pointed out that Gate Closure had only recently been set to 1 hour, that BRL was just about to be reduced to 5MWh and that we felt it was too early to make amendments to cash-out prices until the industry had sufficient experience of operating in these circumstances. These views remain.

We believe that it is not possible to perfectly separate energy and system actions and that there are inevitably going to be some actions which have been taken for both purposes. Therefore, to aim to remove all potential system actions from the energy price is not realistic, as it simply means that more energy related actions would end up in BSUoS.

One benefit of the use of the Net Imbalance Volume (NIV) is that in theory it should provide a simpler way of deciding which actions go into energy prices, as it is not necessary to identify which individual trades were made for energy purposes. However, we do not believe that this potential for simplicity is being exploited sufficiently in alternative proposals P74 and P78 to warrant their implementation. They still require a separate identification of a volume of BSAD which is deemed to be for energy purposes and a volume which is deemed to be for system purposes, prior to the use of NIV.

In short, we do not believe that alternative proposals P74 and P78 are more cost reflective, or provide a simpler and more efficient method of setting price. We therefore do not agree with the recommendation that they better meet the relevant BSC objectives.

Yours sincerely,

Paul Jones

Strategy and Regulation

P74_MR_004 – Edison Mission

Edison Mission Energy does not support the rationale for recommending Modification P74. Taking each of the reasons given in section 1.3 of the Modification Report as to how P74 better facilitates the Applicable BSC Objectives in turn:

- In an oversupplied market with risk averse suppliers who over forecast their demand to avoid exposure to SBP and an asymmetric bid offer price curve, the cashout price will most often be set from accepted bids. A generally low cashout price will be detrimental to independent generators and owners of reliable flexible generation. The modification does not therefore promote competition in generation, instead it will reduce competition in generation.
- If the market were to come closer to balance, and generators were not to hold so much self reserve, there would be less part loaded plant on the system. This will reduce the choice of plant available in the BM making it more difficult for the system operator to balance the market.
- A single cashout price will encourage parties to speculate on market direction. FPNs submitted at gate closure may be less reflective of contract positions than at present as parties attempt to create imbalances in the opposite direction to the market to take advantage of cashout prices. This will not help the system operator to make informed decisions about balancing the system, improving its efficiency and economic operation.
- The system operator balances the system using bids and offers, it is not clear how the proposed changes to Energy Imbalance Prices will provide more accurate signals to the system operator of balancing the system. Lower Energy Imbalance Prices will reduce the cost to parties that are out of balance, but will not change the price of bids and offers and therefore the cost to the SO of balancing the system.
- A single cashout price might increase the number of actions that the system operator has to take to balance the system as participants might submit FPNs that do not reflect their individual positions. The role of centrally administered mechanisms may therefore increase rather than decrease.

Trading may improve closer to real time but this maybe to create an out of balance position that is in the opposite direction to the market leading to an increased need for Balancing Mechanism activity.

From the above comments and in the absence of supporting analysis it is not at all clear that Modification P74 better facilitates the BSC Objectives. Given this lack of confidence, the Modification (and its Alternative) should be rejected.

Libby Glazebrook

Manager, Market Development

P74_MR_005 – SEEBOARD Energy

With respect to draft modification report dated 31st July on above mentioned proposal. We reject recommendations made within section 1.1 of this report.

We have always considered that this modification might only benefit a small number of parties. Therefore, we do not consider that this modification will better facilitate BSC objectives and as such recommendation within section 1.1 should be to reject both original and alternate version of this proposal.

Dave Morton

SEEBOARD Energy Limited

P74_MR_006 – Aquila Networks

Please find that Aquila Networks Response to P74 Consultation on draft Modification Report is 'No Comment'.

regards

Rachael Gardener

Deregulation Control Group & Distribution Support Office, AQUILA NETWORKS

P74_MR_007 – LE Group

LE Group (EPN Distribution Ltd, London Electricity plc, London Electricity Group plc, Jade Power Generation Ltd, London Power Networks plc, Sutton Bridge Power, West Burton Ltd) welcomes the opportunity to comment on the draft modification report on P74: Single Cost-Reflective Cash-Out Price.

We have the following comments to make.

We agree with the recommendation that P74 original should not be made. We do not agree with the recommendation that P74 alternative should be made. We do not believe that either P74 original or P74 alternative better facilitate the BSC objectives than the current baseline. Our rationale is outlined below.

P74 original cannot be reported promptly and does not better separate system and energy balancing actions than the current baseline and therefore does not improve the targeting of energy imbalance costs back to those who cause them.

P74 alternative, by applying the price associated with the larger stack to imbalances in the opposite direction to the market imbalance, subjects these reverse imbalances to cashout prices that include some energy balancing actions. It therefore does not improve the targeting of energy imbalance costs back to those who cause them. In addition, we believe that it will not improve participant and market balance as the risk of exposure to high SBP when short will remain. Also, 'flipping' between SSP and SBP as the single price will increase market volatility.

Further detail on these points was given in our response to the second assessment consultation.

Yours sincerely,

Liz Anderson,

General Manager, Energy Strategy and Regulation

P74_MR_008 – British Gas Trading

Thank you for the opportunity of responding to this modification proposal. British Gas Trading (BGT) support neither the original proposal nor the alternative as better facilitating the applicable BSC objectives.

British Gas Trading (BGT) welcomes these proposals and is aware of the detailed discussions that have taken place in consideration of them. We believe that before discussing the detail of these proposals that we identify the criteria necessary for a successful regime. We believe these to be:

- a strong incentive on every individual party to balance their own supply and demand.

- a consequentially small residual balancing role for the SO
- overall minimisation of balancing costs
- maintenance of liquidity in the forward OTC and PX markets
- where parties are out of balance, that the imbalance costs incurred are reflective of the costs incurred by the SO in resolving that imbalance.

Turning to the specifics of these proposals it should be noted that the use of a single price for energy imbalance cashout does not provide the appropriate incentives on Parties to balance their position. Rather it provides a lower incentive to balance than dual price. Single price can be seen to be more akin to a neutral market price to which parties may be neutral to in the short term market. Consequentially the incentives on individual parties to maintain their own balance with a consequentially higher balancing costs incurred by the SO.

The use of the Net Imbalance Price (NIV) calculation in the alternative proposal goes some way towards addressing this concern however there is still reason to believe that this methodology does not completely and transparently separate system and energy actions. Overall, although we agree the NIV calculation improves on the current division between energy and system actions we believe that the other dis-benefits associated with the alternative proposal outweigh the improvements gained through this methodology.

The underlying principle for energy imbalance prices is that they should be representative of the costs of energy balancing to the system operator (SO). Use of a single cashout price, as proposed by P74 and P74 Alternative, will not allow those principles to be met.

We do not agree with the assertion that some imbalance can be seen as 'helpful' imbalance, e.g. where a Party who is out of balance but in the opposite direction to the overall length of the system. Although this Party could be argued to be reducing the overall net system imbalance NGC may have to take within period actions to mitigate the imbalance of that Party. The Party should face the cost of these actions and it is appropriate that this is done through energy imbalance charges.

We remain concerned that a fundamental underlying issue that remains to be resolved in reforming the energy cashout regime is the proper separation of system balancing actions from the calculation of energy prices. Ideally we would like to see a clear and transparent mechanism of tagging system trades out of the price stacks but, recognising the difficulties associated with achieving this within the BSC, we support P78A as an improvement over the current baseline. Notwithstanding this we are of the opinion that this may only be the first step towards development of the best possible solution

We hope that these comments are useful. Should you wish to discuss any of the issues further please do not hesitate to contact me.

Yours faithfully,

Danielle Lane

Transportation Analyst

P74_MR_009 – Innogy

This submission represents the views of Innogy plc, npower Limited, Innogy Cogen Trading Limited, npower Direct Limited, npower Northern Limited, npower Yorkshire Limited.

Generally we believe that the draft Modification Reports for P74 and P78 represent a fair summary of the rationale for the recommendations, and the description of the processes that have been proposed.

The draft report for P74 indicates that the Modification Group failed to reach a clear view that P74A better achieves the relevant BSC objectives. Given the importance of this Modification to the functioning of the market it seems somewhat unfortunate that the PIMG could not be given the additional time that was requested. This would have enabled them to undertake the relevant modelling that was proposed and thus give them greater confidence in formulating a definite conclusion to their deliberations.

We note that the summary of the representations made by parties has not yet been included in the report. Given past difficulties we would wish to reserve our position concerning any issues that might emerge from these summaries until this part of the drafting is complete. We would trust that the report will faithfully record our support for P74A as a pragmatic single cash-out price model, and note that P74, P78 and P78A are, in our view, inappropriate.

P74_MR_010 – AEP

AEP do not support the implementation of either modification proposal P74 or its alternate as we do not believe that either of the proposals better facilitate the relevant objectives.

AEP notes that bid-offer spreads are a common feature of all markets including brokered and screen-based electricity markets in the UK. By applying a single price to parties with short and long imbalances the proposal would not value actions on one side of the market correctly. The proposal would, compared with the current arrangement, lead to less cost-reflective imbalance prices. The proposal would not, therefore, better facilitate the relevant objectives of ensuring the efficient and economic operation of the transmission system or promoting effective competition in the generation and supply of electricity.

AEP have set out below a more detailed rebuttal of the rationale for the Panel's recommendation to the Authority that the alternate modification should be made.

Reduction in the risk of exposure to imbalance, as a consequence of the removal of the buy – sell spread, and the associated costs from implementation of a single Energy Imbalance Price will help to promote competition in generation and supply

The alternate proposal, if implemented, would artificially reduce the risk of certain parties at the expense of other parties through the application of imbalance prices on one-side of the market that do not reflect costs. This could introduce discriminatory effects and cross-subsidies between different classes of parties reducing competition in generation and supply.

A proposed outcome of both the Proposed and the Alternative Modification is that the market will come closer to balance, and consequently parties will not hold so much self reserve. On this basis, the system operator should be able to balance the market more efficiently and effectively

The removal of a dual cash out price will reduce the risks of being out of balance and will reduce the incentives to contract ahead to meet customer demand. The outcome of the proposal is therefore more likely to be that the market will move further out of balance. This will lead to a greater volume of

system operator actions and possibly the need for the system operator to hold significantly higher volumes of reserve than the market is currently self-providing.

The increased incentive for parties to balance their individual positions ahead of Gate Closure should result in increased accuracy of information provided to the system operator ahead of Gate Closure, thus enabling it to make informed decisions about balancing the system, improving efficiency and economic operation

The proposal is likely to weaken the incentives to balance and so the conclusions do not follow. As the provision of accurate information is a Grid Code obligation, there is no reason to suspect that the quality of information provided to NGC should improve or degrade as a result of any modification to the BSC. Concerns about accuracy and quality of information should be addressed through the Grid Code and, if necessary, enforcement by Ofgem of licence obligations to comply with the Grid Code.

Improving the cost-reflectivity of the Energy Imbalance Prices should promote this Objective by providing more accurate signals to the system operator of the costs of balancing the system.

This proposal will not, for the reasons outlined above, improve the cost reflectivity of Energy Imbalance Prices. NGC receives accurate price signals of the costs of balancing the system irrespective of the cash out rules. NGC continually buys and sells energy through the BM and Balancing Services to balance the system. The purpose of energy imbalance prices is to ensure that market participants who are out of balance receive accurate signals of the costs to NGC of balancing the system. This proposal does not improve the accuracy of these signals.

The implementation of a more cost-reflective cash-out price regime could incentivise participants to balance their individual positions ahead of Gate Closure, therefore minimising the actions that the system operator has to take to correct the system energy imbalance. Thus, this assists in minimising the role of centrally administered mechanisms and facilitates the bilateral trading of energy

This proposal will weaken incentives to balance ahead of Gate Closure by artificially reducing the risks associated with being out of balance. The proposal is therefore likely to increase the volume and costs of actions by the System Operator to balance the system. This will increase the role of centrally administered systems and reduce the volume and liquidity in bilaterally traded markets.

Reduction in the risk of exposure to imbalance, whilst maintaining the incentives to balance, and therefore trade bilaterally, ahead of Gate Closure, may have the effect of encouraging participants to trade closer to real-time, with the associated effect of improving liquidity in the forwards and spot markets, thus increasing competition.

As the proposal will not maintain incentives to balance, it is not clear that this proposal will encourage participants to trade closer to real time.

P74_MR_011 – Scottish Power

Thanks for the opportunity to respond to this consultation on the P74 Modification Report.

We would reiterate the views, which we expressed in respect of the second Assessment Phase consultation. We continue to support the view that, if we were required to indicate a preference for one of the options presented as solutions, we would choose the P78 Alternative modification. We believe that this option best meets the Applicable BSC Objectives and would agree with the rationale for this as identified by the majority of the Pricing Issues Modification Group.

However, our previous views also indicated concern that these modification proposals did not undergo a more thorough analysis because of their expeditious treatment in terms of the Assessment timetable. We also identified valid reasons why further analysis requires to be undertaken. We believe that our argument for a more thorough consideration of the issues relating to imbalance pricing has been given more credence in two ways. Firstly, because there are now two further modifications being considered in this area, viz. P90 and P95. Secondly, because there is now an opportunity, as a result of the Authority decision on P28, to establish a Pricing Issues Standing Group, which could assess all the relevant issues and present a holistic solution to the problems identified. In our view, this would provide a more efficient and cost-effective method of dealing with market participants' concerns than the current piecemeal approach, which leads to greater uncertainty in the market. It would also allow for a proper perspective to be adopted in respect of the two main recent changes which might impact on imbalance pricing, viz. reduction in Gate Closure to one hour and the revision to the BRL value.

We note that the Modification Report highlights changes to the BSAD Methodology Statement, which will be required to provide consistency between the Statement and the proposed changes to the BSC. We would dispute the view expressed in the Report that the BSC changes should be "dependent upon the results" of the BSAD consultation. We are concerned that the changes being made to the BSAD Methodology are being undertaken prematurely, when the P74 legal drafting has not been finalised. We contrast this with previous changes made to the BSAD Methodology in respect of BSC modifications, when these were consulted upon once the final BSC changes had been identified. It is conceivable, for instance, that the Authority may reject the Panel's recommendations and decide to persevere with the current baseline. This would render the BSAD changes unnecessary. Furthermore, it is clear from the Panel recommendations that none of the proposed solutions can be implemented prior to 25 February 2003 at the earliest. The period between the submission of the final Modification Report to the Authority and the earliest proposed implementation date would allow ample time for a consistent set of changes to the BSAD Methodology to be made and consulted upon.

We note the proposed legal drafting changes in respect of this modification and would agree that they are generally appropriate. However, we would wish to highlight the need to make explicit that the BSAD data to be provided by NGC is net. This would avoid confusion for market participants and could be done simply by inserting the word "Net" in the description of the BSAD cost and volume adjustment variables in Section Q6.3. This is how the same variables are described in the corresponding BSAD changes.

I trust that you will find these comments helpful. Nonetheless, should you require further clarification of any of the above, please do not hesitate to contact me.

Yours Sincerely,

Man Kwong Liu

Calanais Ltd.

For and on behalf of: - *Scottish Power UK Plc.; Scottish Power Energy Trading Ltd.; Scottish Power Generation Ltd.; Scottish Power Energy Retail Ltd.; SP Transmission Ltd.*

P74_MR_012 – Immingham CHP LLP

Thank you for the opportunity for commenting on the P74/P78 draft Modification reports. Please treat this reply as a response to both draft reports.

The current imbalance price setting rules fail to deliver the intended outcomes. In particular, they load energy imbalance charges, including some associated with system balance, on out of balance parties and unnecessarily increase market risk. The methodology is therefore punitive and penal to parties in imbalance.

As a general remark, we consider that P74 and P78, both original and alternative formulations, better meet the applicable objectives than the existing imbalance pricing rules, and **we support the recommendations in both the draft reports** as endorsed by the BSC Panel. Of the four choices, **we strongly believe P78 Alternative best facilitates the applicable objectives**. The primary reason for this judgement relates both to efficiency as it provides the most cost reflective approach and to facilitating competition in the market by removing barriers to intermittent technologies. In addition we believe this is the modification most likely to incentivise parties to balance their position.

We have previously provided full responses to the initial and full assessment phases on both modifications that lay out our views in greater detail, and these are remain generally applicable to the draft reports.

Maureen McCaffrey

For Immingham CHP LLP

P74_MR_013 – Scottish and Southern

This response is sent on behalf of Scottish and Southern Energy, Southern Electric, Keadby Generation Ltd. and SSE Energy Supply Ltd.

Further to your note of 1st August 2002, and the associated Modification Report for P74, we agree with the proposed BSC Panel recommendation to the Authority that the Original Modification Proposal P74 should not be made and we broadly agree with the proposed BSC Panel recommendation to the Authority that the Alternative Modification Proposal P74 should be made; although, for the avoidance of doubt, we would prefer that the Authority approve the Alternative Modification Proposal P78, rather than the Alternative Modification P74.

If the Modification Proposal P74 is approved, we agree with the proposed BSC Panel recommendation on the timing for the Implementation Date, as outlined in Section 1.1 of the Modification Report.

Regards

Garth Graham

Scottish & Southern Energy plc

P74_MR_014 – Campbell Carr for Electricity Direct and British Sugar

Although the PIMG could not come to a definitive conclusion on every proposition posed in these two Modifications, there has been an impressive degree of progress on several points. These must have been crucial in the Panel's unanimous recommendation in favour of both of the Alternative Modifications. This response addresses both Modifications together because so many of the areas covered are common.

This response is in two main parts. In the first, we discuss some of the key issues where there is scope for confusion or disagreement in order to offer a clear considered view on the point. In the second, the proposals are assessed against the BSC Objectives.

Main Issues

Cost-reflectivity

The transmission company has clearly stated that no action taken by it in the reverse direction of the system's overall balance is for energy balancing reasons – they are all for systems reasons.

There is therefore no energy cost to reflect in the reverse price. The current pricing mechanism for the reverse price must therefore be penal and cannot be cost-reflective.

The only energy reason for reverse-flow actions over a full trading period is to prepare plant to carry reserve. Given the extent of option contracting by NGC and the extent of part-loading of plant (even without actions taken to buy the market back from its hitherto habitual long position), there seems no foreseeable need for NGC to procure reserve in forward markets or in the balancing mechanism.

There can still be actions for within-period energy imbalances (not all of which will be removed by CADL). Participants cannot trade out of such positions. The within-period imbalance cannot be accurately attributed to any party because a party causing/contributing to the within-period reverse-flow imbalance may have a net imbalance in the opposite direction over the whole of the trading period.

Although the point was exhaustively debated at the time of Modification P18A, there remains considerable confusion about the role of imbalance prices. They are not designed for cost allocation but for cost reflection. It is therefore irrelevant whether particular actions for energy purposes have been excluded from the calculation of the energy price if the inclusion or otherwise of such an action does not significantly move the resulting imbalance price.

A participant imbalance in the reverse direction allows the transmission company to avoid taking a balancing action and so its cost-reflective value should be that of the action avoided. This tends to favour the single-price proposed in P74 (although the reverse-flow price proposed in P78 may be favoured for other reasons).

From a pure economic perspective, the market can only be out of balance in one direction and so there can only be one marginal value of imbalance energy.

Incentive to balance

The current regime is an incentive on suppliers to spill (this is supported by the algebra presented in the Assessment Reports – P74 Annex 6b, 78 Annex 5). This is related to the fundamental nature of price-setting in the balancing mechanism whereby the range of prices of Bid Acceptances will usually be less than the range of Offer Acceptance prices. Even with BSAD adjustments, trade tagging and CADL, the probability of price spikes in the buy direction is considerably higher, hence a supplier incentive to over-contract.

Both proposals reduce the penalty for being out of balance in the reverse direction and so will tend to reduce the incentive on suppliers to spill.

This will lead to a more balanced market.

The frequency of NGC energy purchases (both before and after gate closure) will increase and its energy sales will reduce. BSUoS will inevitably increase but this should not be regarded as an increase

in the cost of balancing because that cost is currently being borne by suppliers through excess contracting, the cost of which feeds through to customers. In reality, in a balanced market, there will only be central purchase of residual balancing services and the overall cost should be lower to the customer.

As indicated by the algebra, the incentive to balance in P74 is based purely on the direction of the market but the incentives in P78 are more complex. Both improve on the current mechanism whereby market balance is irrelevant.

Both proposals incentivise suppliers to balance to their own forecasts of demand. This is not fully obvious in P74 because there is an apparent incentive to take a position opposite to the market. In reality, this incentive is a chimera because no party (including NGC) will have sufficient information about the intentions of other parties before gate closure. Any out of balance position taken is therefore a gamble and, to the larger the gamble taken, the greater the risk that the gambler will tip market balance against himself.

Nevertheless, the incentive to take a contrary position is lower in P78 because the potential reward is less. Whether this leads to a more balanced net position cannot be judged – it depends on the extent to which such “voluntary” imbalances offset involuntary ones (when generators trip or else when suppliers mis-forecast).

Incentive to spill

NGC's main contention against P74 is a belief that parties will be happier to take the “average” imbalance price rather than to contract ahead of gate closure or else to submit bids and offers. This is mistaken for the following reasons:

As demonstrated by the algebra already mentioned, the incentive on suppliers is to contract to avoid expected imbalance prices. In a free market, the spot price will adjust up to the point where suppliers are indifferent as between exposure to expected imbalance prices in both directions and taking that spot price. At this point, suppliers will be fully contracted provided that generators are offering energy at that price.

Annex 6c of the P74 Assessment Report demonstrates that generators will be likely to be offering spot contracts at their risk-adjusted expected spill price (and will contract at that price for price certainty rather than spilling at risk of only getting SSP) but will also be better off offering the energy to NGC rather than spilling because their risk-adjusted position is better.

Although the Transmission Company believes that it is wrong that any imbalance should earn more than has been earned from a BM Acceptance, this is a moral position rather than an economic one:

An intentional imbalance is a risk position whose ex ante value must reflect both the expected system prices, whereas a BM Acceptance is a contract at a defined price;

An unintentional balance is also a risk position but one that, by definition, is not in the control of the out-of-balance party. Therefore, in an incentive regime, there is a perverse incentive in rewarding this position at the value of system imbalance.

Liquidity

It has been asserted that liquidity will be drained from the spot and forward markets and replaced by CfDs. It is not certain whether parties will use CfDs rather than spot trading to manage imbalance risk but it should be noted that any long-term contract (base load or shaped) can remove liquidity from

shorter-term markets and the fact that the long-term contract is in the form of a CfD is not particularly relevant. A CfD is just another form of long to medium-term contract.

In addition P74 (but not P78) removes notification risk from the market because of the fallback of CfD terms in the event of notification failure. This must increase the potential for liquidity in prompt markets.

Notified contracts are likely to predominate even so for the following reasons:

Once a contract has been notified, only residual credit risk need be allowed for under BSC terms – market credit terms are likely to be less onerous and hence cheaper.

Parties will prefer notified contracts because delivery is made at gate closure rather than on delivery of meter reads (at settlement). This is of particular benefit to suppliers.

Non-physical Traders will be able to take a fallback physical position and so will be in a better position to offer risk management “across the system”. This increases the competition for provision of risk management and is more efficient than reliance solely on Consolidators.

Assessment against the BSC Objectives

Modification P74

This proposal incentivises better balance of the system. As such, NGC only needs to take a residual balancing position rather than habitually needing to dispose of significant volumes of excess energy. This therefore allows more efficient and economic operation of the balancing mechanism.

The Original Proposal priced imbalances in the main direction in the same way as the current mechanism and so, in this respect is at least as good as the current baseline. The Alternative Modification utilises NGC’s assessment of those balancing actions taken for energy balancing reasons and therefore provides a more cost-reflective price than the baseline – again in the main direction.

Both the Original Proposal and the Alternative value reverse-flow imbalances at approximately NGC’s avoided cost of managing energy imbalances and so are both significantly more cost-reflective than the base line. This cost-reflective position therefore facilitates competition in generation and supply by correctly pricing imbalance positions.

Modification P78

This proposal also incentivises better balance of the system, which allows more efficient and economic operation of the system.

The proposal removes more systems-balancing actions from the calculation of the main price and so is more reflective of the cost of energy imbalance than is the baseline.

The principle behind calculation of the reverse price differs from that of P74. The price used is intended to represent the cost that the out-of-balance party could have incurred before gate closure had that party traded out its position then. The price must therefore reflect some form of pre-gate closure market price. Because NGC will not have taken any energy actions in the reverse direction for energy reasons, there is no cost that such a price can reflect. The resultant price is therefore more cost-reflective than the current position, which erroneously reflects the cost of systems actions (and not energy actions).

However, there remains a debate between whether a market index should be used for this reverse price or whether some form of proxy is preferable. The Transmission Company adheres to its original proposal that a market index should be used and this is to be preferred on theoretical grounds.

However, the proposed proxy price remains better on practical grounds as is exhaustively explained in the Assessment Report. We therefore support the Panel in recommending the Alternative, noting that the price used is meant to “reflect” the cost that the individual party avoided by going into imbalance rather than seeking to precisely measure that cost and so this proxy seems a sufficiently close approximation for the intended price.

Conclusion

The current price-setting mechanism has serious flaws that distort the market and needs to be improved to facilitate competition. Such distortions will not be improved significantly by the introduction 1-hour gate closure or by the recent reduction in BRL. By punishing all imbalances, parties are led down a “least-bad” route rather than an efficient one that optimises the cost of managing imbalance risk.

Both Modifications and their Alternatives improve the situation by removing distortions and perverse incentives. It is unfortunate that the situation cannot be remedied before the coming winter.

The Panel is correct to recommend the Alternatives of both Modifications. The P74 Alternative improves the cost-reflectivity of the “Main Price” and ensures the promptness of price reporting (although this could have been easily accommodated by a minor change to the Original Proposal).

The case for the P78 Alternative is less clear-cut relative to the Original but is to be preferred because it is close to the Original but with lower implementation risks and costs.

P74 Alternative is to be preferred over P78 Alternative because it is more likely to stimulate market liquidity but both proposals are a significant improvement on the status quo.

Yours sincerely

Robert Barnett

Economics Consultant, Campbell Carr Limited

P74_MR_015 – BP Gas Marketing Limited (Late Response)

Thank you for the opportunity to offer our thoughts on the P74 modification.

BP Gas Marketing Ltd. support any reasonable modification that incentivises the better balancing of the system.

The proposal of a single price allow more transparency of pricing, and aids in the reduction of operational risk and promotes more efficient and economic operation of the BM.

The use in the P74 Alternative of avoided cost of managing energy imbalances to value reverse flows allows a more cost reflective position that aids competition. Further the cost reflectivity is an improvement on the current basis for valuing the balancing actions taken for energy balancing reasons.

Therefore we support P74 Alternative over P74.

Best regards,

Ian M. Mullins

Regulatory Advisor, BP Gas, Power & Renewables