

MODIFICATION REPORT for Modification Proposal P172

Modification Proposal P172 Removal of Emergency Instructions taken for System reasons from Imbalance Price

Prepared by: ELEXON on behalf of the Balancing and Settlement Code Panel (the 'Panel')

Date of issue:	18/01/2005	Document reference:	P172DMR
Reason for issue:	For Decision	Issue/Version number:	Final/1.0

This document has been distributed in accordance with Section F2.1.10¹ of the Balancing and Settlement Code.

RECOMMENDATIONS

Having considered and taken into due account the contents of draft P172 Modification Report, the Balancing and Settlement Code Panel recommends:

- **that Proposed Modification P172 should be made;**
- **that Alternative Modification P172 should not be made;**
- **the Implementation Date for the Proposed and Alternative Modification P172 of 5 Working Days after an Authority decision; and**
- **the proposed text for modifying the Code, as set out in the Modification Report.**

Intellectual Property Rights and Copyright - This document contains materials the copyright and other intellectual property rights in which are vested in ELEXON Limited or which appear with the consent of the copyright owner. These materials are made available for you to review and to copy for the purposes of your establishment or operation of or participation in electricity trading arrangements under the Balancing and Settlement Code ("BSC"). All other commercial use is prohibited. Unless you are a person having an interest in electricity trading in under the BSC you are not permitted to view, download, modify, copy, distribute, transmit, store, reproduce or otherwise use, publish, licence, transfer, sell or create derivative works (in whatever format) from this document or any information obtained from this document otherwise than for personal academic or other non-commercial purposes. All copyright and other proprietary notices contained in the original material must be retained on any copy that you make. All other rights of the copyright owner not expressly dealt with above are reserved.

Disclaimer - No representation, warranty or guarantee is made that the information provided is accurate, current or complete. Whilst care is taken in the collection and provision of this information, ELEXON Limited will not be liable for any errors, omissions, misstatements or mistakes in any information or damages resulting from the use of this information or any decision made or action taken in reliance on this information.

¹ The current version of the Balancing and Settlement Code (the 'Code') can be found at <http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx>

CONTENTS TABLE

Recommendations	1
Summary of Impacted Parties and Documents	4
1 Description of Proposed Modification and Assessment against the Applicable BSC Objectives	5
1.1 Modification Proposal	5
1.1.1 Current Arrangements.....	5
1.1.2 Proposed changes	5
1.1.3 History.....	6
1.1.4 Process Followed	6
1.2 Proposed Modification	8
1.3 Issues raised by the Proposed Modification.....	9
1.3.1 Interaction with other Modification Proposals	9
1.4 Assessment of how the Proposed Modification will better facilitate the Applicable BSC Objectives	11
1.5 Alternative Modification	12
1.6 Issues raised by the Alternative Modification.....	14
1.7 Assessment of how the Alternative Modification will better facilitate the Applicable BSC Objectives	14
1.8 Governance and regulatory framework assessment.....	15
2 Costs	16
3 Rationale for Panel’s Recommendations	18
4 Impact on BSC Systems and Parties	18
4.1 BSCCo.....	18
4.1.1 Proposed.....	18
4.1.2 Alternative	19
4.2 BSC Agents.....	19
4.2.1 Proposed.....	19
4.2.2 Alternative	19
4.3 Impact on other systems and processes used by Parties.....	19
5 Impact on Code and Documentation	19
5.1 Impact on Balancing and Settlement Code.....	19
5.1.1 Proposed Modification	19
5.1.2 Alternative Modification.....	20
5.2 Impact on Code Subsidiary Documents.....	20
5.3 Impact on other configurable items.....	21
5.4 BSCCo Memorandum and Articles of Association	21
5.5 Impact on Core Industry Documents and supporting arrangements	21
6 Summary of Consultations.....	21
6.1 Applicable BSC Objectives – Proposed and Alternative.....	22
6.2 Draft Legal Text.....	22
6.3 Recommended Implementation Date.....	22
6.4 Further Comments	23
7 Summary of Transmission Company Analysis	23
7.1 Comments and views of the Panel.....	23
8 Summary of External Advice.....	23
9 Implementation Approach	23
10 Document Control	24
10.1 Authorities.....	24

10.2 References 24

Annex 1 Draft Legal Text 26

Annex 2 Modification Group Details 26

Annex 3 Assessment Report 27

Annex 4 Clarification of Costs 27

Annex 5 Consultation Reponses 30

SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

The following parties/documents have been identified as being potentially impacted by Modification Proposal P172.

Parties	Sections of the BSC	Code Subsidiary Documents
Suppliers <input checked="" type="checkbox"/>	A <input type="checkbox"/>	BSC Procedures <input checked="" type="checkbox"/>
Generators <input checked="" type="checkbox"/>	B <input type="checkbox"/>	Codes of Practice <input type="checkbox"/>
Licence Exemptable Generators <input checked="" type="checkbox"/>	C <input type="checkbox"/>	BSC Service Descriptions <input checked="" type="checkbox"/>
Transmission Company <input checked="" type="checkbox"/>	D <input type="checkbox"/>	Service Lines <input type="checkbox"/>
Interconnector <input checked="" type="checkbox"/>	E <input type="checkbox"/>	Data Catalogues <input checked="" type="checkbox"/>
Distribution System Operators <input type="checkbox"/>	F <input type="checkbox"/>	Communication Requirements Documents <input type="checkbox"/>
Party Agents		
Data Aggregators <input type="checkbox"/>	G <input type="checkbox"/>	Reporting Catalogue <input checked="" type="checkbox"/>
Data Collectors <input type="checkbox"/>	H <input type="checkbox"/>	MIDS <input type="checkbox"/>
Meter Operator Agents <input type="checkbox"/>	I <input type="checkbox"/>	Core Industry Documents
ECVNA <input type="checkbox"/>	J <input type="checkbox"/>	Grid Code <input type="checkbox"/>
MVRNA <input type="checkbox"/>	K <input type="checkbox"/>	Supplemental Agreements <input checked="" type="checkbox"/> ²
BSC Agents		
SAA <input checked="" type="checkbox"/>	L <input type="checkbox"/>	Ancillary Services Agreements <input type="checkbox"/>
FAA <input type="checkbox"/>	M <input type="checkbox"/>	Master Registration Agreement <input type="checkbox"/>
BMRA <input type="checkbox"/>	N <input type="checkbox"/>	Data Transfer Services Agreement <input type="checkbox"/>
ECVAA <input type="checkbox"/>	O <input type="checkbox"/>	British Grid Systems Agreement <input type="checkbox"/>
CDCA <input type="checkbox"/>	P <input type="checkbox"/>	Use of Interconnector Agreement <input type="checkbox"/>
TAA <input type="checkbox"/>	Q <input checked="" type="checkbox"/>	Settlement Agreement for Scotland <input type="checkbox"/>
CRA <input type="checkbox"/>	R <input type="checkbox"/>	Distribution Codes <input type="checkbox"/>
Teleswitch Agent <input type="checkbox"/>	S <input type="checkbox"/>	Distribution Use of System Agreements <input type="checkbox"/>
SVAA <input type="checkbox"/>	T <input checked="" type="checkbox"/>	Distribution Connection Agreements <input type="checkbox"/>
BSC Auditor <input type="checkbox"/>	U <input type="checkbox"/>	BSCCo
Profile Administrator <input type="checkbox"/>	V <input type="checkbox"/>	Internal Working Procedures <input checked="" type="checkbox"/>
Certification Agent <input type="checkbox"/>	W <input type="checkbox"/>	Other Documents
MIDP <input type="checkbox"/>	X <input checked="" type="checkbox"/>	Transmission Licence <input type="checkbox"/>
Other Agents		
SMRA <input type="checkbox"/>		System Operator-Transmission Owner Code <input type="checkbox"/>
Data Transmission Provider <input type="checkbox"/>		

² Were P172 approved consequential changes may be made to Condition C16 Statements (specifically the Balancing Principles Statement). The Transmission Company have taken an action to progress this change. However, it should be noted that P172 is not dependent on these changes being approved.

1 DESCRIPTION OF PROPOSED MODIFICATION AND ASSESSMENT AGAINST THE APPLICABLE BSC OBJECTIVES

1.1 Modification Proposal

Modification Proposal P172 'Removal of Emergency Instructions taken for System reasons from Imbalance Price' (P172, Reference 1)) was raised on 25 August 2004 by British Gas Trading (BGT). P172 seeks to remove Emergency Instructions issued for System balancing reasons from Energy Imbalance Prices. It is the intention of the Proposer that P172 would apply on a purely prospective basis (i.e. would **not** apply to Emergency Instructions issued prior to its implementation).

1.1.1 Current Arrangements

Under the current baseline, in accordance with Section Q5.1.3 (b) of the Code, an Emergency Instruction issued in respect of a BM Unit under the Grid Code is classed as an Acceptance for the purpose of Settlement. The Code does not contain provisions for applying an alternative price to Acceptances issued as a result of an Emergency Instruction. Therefore, the Lead Party of the affected BM Unit will be paid (or pay) for the Acceptance resulting from an Emergency Instruction at the prevailing Bid or Offer price.

In accordance with the Balancing Principles Statement (Reference 2), the Transmission Company issues Acceptances on an economic basis (i.e. by selecting Bids or Offers in order of relative cost to the Transmission Company until the required balancing volume has been obtained). However, in extreme situations, such as in the case of an Emergency Instruction, it is necessary for the Transmission Company to consider factors other than cost. As a result, it is possible that the Acceptance associated with an Emergency Instruction may be at a prevailing Bid or Offer price which is significantly higher (in terms of relative cost to the Transmission Company) than would have been selected under normal operation.

Currently Acceptances resulting from Emergency Instructions are not distinguished within Settlement, therefore the Acceptance Volume resulting from an Emergency Instruction will have the following effect:

- The Lead Party of the affected BM Unit will either be paid (or pay) for the Acceptance at the prevailing Bid or Offer price via the Period BM Unit Cashflow;
- As a result of the impact on the Period BM Unit Cashflow for the Lead Party of the affected BM Unit, there will be an impact on Balancing System Use of System (BSUoS) charges for all Parties; and
- The Acceptance Volume will feed into the Energy Imbalance Price calculation at the prevailing Bid or Offer price. This may, subject to the existing tagging rules, impact imbalance payments and consequentially Residual Cashflow Reallocation Cashflow (RCRC), for all Parties.

1.1.2 Proposed changes

Under Proposed Modification P172, Acceptances resulting from Emergency Instructions would be distinguished within Settlement in the following way:

- The Lead Party of the affected BM Unit would continue to be paid (or pay) for the Acceptance at the prevailing Bid or Offer price via the Period BM Unit Cashflow;
- As a result of the impact on the Period BM Unit Cashflow for the Lead Party of the affected BM Unit, there would continue to be an impact on BSUoS payments for all Parties; and

- Where the Emergency Instruction was issued for system balancing reasons, the associated Acceptance would feed into the Imbalance Price calculation as an un-priced volume.

Under this approach the Acceptance Volume would still be used in the derivation of the Net Imbalance Volume (NIV), thereby contributing to the determination of which balancing actions set the Energy Imbalance Price. However, as an un-priced volume, the Acceptance would not contribute to the derivation of Energy Imbalance Price (based on the weighted average of priced Acceptance Volumes which are not NIV tagged). P172 proposes that the treatment of Emergency Instructions issued for energy purposes would be unchanged.

1.1.3 History

The first Emergency Instruction was issued under NETA on 19 May 2004, details of this incident were outlined in ELEXON Circular (EL01201) and are summarised here.

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

In this case, the prevailing Bid Price for a large proportion of the Acceptance Volume was £-9,999/MWh. NGC initially postponed submitting the Acceptance Data due to the likely Settlement implications for Market Participants. A Trading Dispute was eventually raised by Damhead Creek Power Station in order to include the Acceptance in Settlement.

The Trading Disputes Committee (TDC) heard the Trading Dispute on 19 August 2004 and agreed that a Settlement Error had occurred. The TDC directed that a Bid Acceptance should be entered into Settlement in the R3 Reconciliation Run on 15 December 2004. Inclusion of the Acceptance Data will impact the calculation of System Sell Price (SSP) for the relevant periods. ELEXON's estimate of the revised SSPs which will result from the inclusion of the Bid Acceptance is:

- -£96.68/MWh in Settlement Period 27³; and
- -£5,870.87/MWh in Settlement Period 28.

NGC has also indicated that the £3.55M cost of the Bid Acceptance and the associated impact on Incentivised Balancing Costs will result in changes to BSUoS charges for the relevant periods.

As a purely prospective Modification Proposal, P172 would not apply to the Damhead Creek incident.

1.1.4 Process Followed

ELEXON presented the Initial Written Assessment (IWA) for P172 (Reference 3) to the Balancing & Settlement Code Panel ('the Panel') at its meeting on 9 September 2004. The Panel agreed with the recommendation that P172 be submitted to a three month Assessment Procedure to be carried out by the Pricing Standing Modification Group (PSMG).

The PSMG met four times, on the 14 September 2004, 11 October 2004, 12 November and the 22 November 2004. P172 was issued for industry consultation to seek the views of industry participants on

³ NB: A negative SSP will mean that a Party who was 'long' during the Settlement Period will pay the absolute value of SSP for its imbalance volume (rather than receive it).

the issues discussed and to support the Group's assessment against the Applicable BSC Objectives. BSC Agent, Transmission Company and participant impact assessment was conducted.

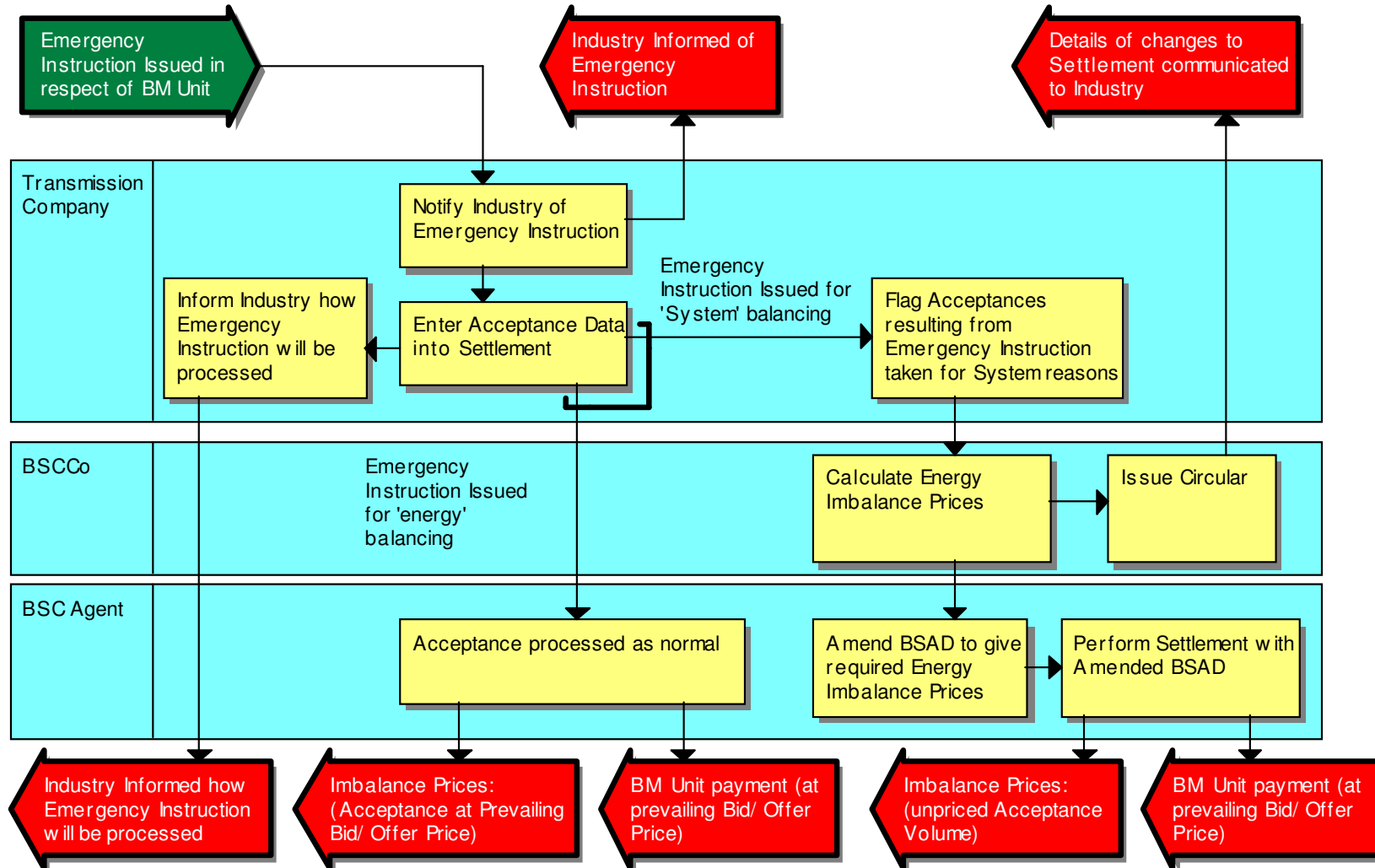
The Assessment Report for P172 (Annex 3) was considered by the Panel at its meeting on 9 December 2004. The Panel determined that P172 should proceed to the Report Phase, in accordance with paragraph F2.7 of the Code. Accordingly a draft Modification Report and legal text were issued for industry consultation on the 16 December 2004, with responses due by 23 December 2004.

The Panel considered the draft Modification Report at its meeting 13 January 2005, having noted the report phase consultation responses, the Panel confirmed its provisional recommendation that Proposed Modification P172 should be made.

It should be noted that Modification Proposal P171 'Retrospective removal of Emergency Instructions taken for System reasons from Imbalance Price' (P171, Reference 4), Modification Proposal P173 'Revised Settlement Arrangements for Emergency Instructions' (P173, Reference 5) and P175 'Development of Provisions Related to Certain Bid-Offer Acceptances Issued Pursuant to the Grid Code (e.g. BC2.9 and BC2.10)' (P175, Reference 6) also seek to amend the treatment of Emergency Instructions within Settlement and were considered by the PSMG in parallel with P172. P171, P173 and P175 are considered in separate documents.

1.2 Proposed Modification

The PSMG developed and refined the Modification Proposal into a full end-to-end solution. The diagram below provides an overview of each of the elements in the Proposed Modification. Details of each element of the Proposed Modification are provided in the Assessment Report.



1.3 Issues raised by the Proposed Modification

The following issues were considered during the Assessment of Proposed Modification P172:

- Circumstances when an Emergency Instruction may be issued under the Grid Code;
- Impact on Energy Imbalance Prices;
- Process or mechanism for differentiating between the energy and System balancing elements of Emergency Instructions;
- Potential Alternative Modifications;
- Solution development; and
- Interaction with other Modification Proposals.

With the exception of the interaction with other Modification Proposals, these issues are discussed in the Assessment Report and are not covered further here.

1.3.1 Interaction with other Modification Proposals

This section outlines at a high level the similarities and differences between the key elements of P171, P172, P173, P175 and the Alternative Modifications considered by the PSMG.

	P171 & P172	P173	P175
Implementation	Retrospective (P171) Prospective (P172)	Prospective	Prospective
Scope	Emergency Instructions (Proposed & Alternative)	Emergency Instructions (Proposed & Alternative)	Emergency Instructions & Intertrips
Prevailing Acceptance price within Imbalance Price Calculation	BOA un-priced in cash out (Proposed)	BOA at Avoided Costs (Proposed)	BOA replaced by BOA that would have been taken in absence of action
	BOA replaced by BOA that would have been taken in absence of action (Alternative)	BOA priced at amended Avoided Costs" (Alternative)	
Volume within Imbalance Price Calculation	Included as "System" volume (Proposed)	BOA volume in cash out (Proposed & Alternative)	BOA volume in cash out
	BOA volume in cash out (Alternative)		
Payment to affected Party under BSC	Party paid (pays) prevailing Bid/ Offer Price (Proposed & Alternative)	Party paid (pays) for BOA at Avoided Costs (Proposed)	Party may claim costs
		Party paid (pays) for BOA at amended Avoided Costs (Alternative)	
Compensation	N/A	N/A	Affected Party able to make compensation claim under BSC (when not able to under other arrangements)

Table 1: Interactions

The PSMG noted that there were elements of each proposal which were similar and result in a number of combinations which, depending on the legal drafting developed, could in theory be implemented together. These were considered by the PSMG as follows:

P171 and P172 (Proposed and Alternatives)

P171 and P172 have the same requirements, with the element of retrospection the only difference between the two proposals; hence the possibility of both proposals being implemented together has not been considered.

Retrospective Element of P171

It was noted that P171 has a retrospective element; the PSMG considered whether it would be possible to implement P171 for historic Emergency Instructions only, whilst implementing another proposal independently as the enduring solution (effectively 'turning off' P171 prospectively). However, it was recognised that in order to do this the enduring change would need to amend the P171 baseline (effectively amending or overwriting sections of the Code which do not currently exist), since the legal drafting of a Modification Proposal must be against the current baseline this approach is not feasible. Therefore, in order to achieve this outcome, a Modification Proposal would have to be raised against the P171 baseline following an Authority decision on P171.

P171/P172 Proposed and P175

Proposed Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions be tagged as un-priced in the Energy Imbalance Price calculation. P175 requires that the same Acceptances are replaced, for the purpose of the Energy Imbalance Price calculation, with Acceptances that would have been taken in the absence of the Emergency Instruction. This different treatment within the Energy Imbalance Price calculation is incompatible; therefore P171/2 Proposed Modifications are incompatible with P175. In addition the scope of P175 extends to intertrips.

P173 Proposed/Alternative and P175

Proposed Modifications P173 requires that Parties affected by an Emergency Instruction would receive Avoidable Costs (or amended Avoidable Costs under the Alternative) incurred in responding to the instruction. Under P175 affected Parties would recover cost incurred via a claim for compensation. Therefore, P173 Proposed and Alternative Modifications are incompatible with P175. In addition the scope of P175 extends to intertrips.

P171/P172 Alternative and P175

Alternative Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions are replaced, for the purpose of the Energy Imbalance Price calculation only, with Acceptances that would have been taken in the absence of the Emergency Instruction. P175 requires the same treatment of Emergency Instructions within the Energy imbalance Price calculation but includes additional elements (such as removal of the BM Unit Cashflow for the instruction and introduction of a compensation claim process). Since P175 would deliver the changes to the Energy Imbalance Price calculation proposed under P171/2 Alternative, with the exception of the retrospective element of P171 as considered above, there is no logical reason for implementing both P175 and P171/2 Alternative Modifications. In addition the scope of P175 extends to intertrips.

P173 Proposed/ Alternative and P171/P172 Alternative

P173 proposes that the prevailing Bid/Offer price of an Acceptance resulting from an Emergency Instruction is adjusted to represent the Avoidable Costs incurred in responding to that Emergency Instruction. Alternative Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions are replaced, for the purpose of the Energy Imbalance Price calculation only, with Acceptances that would have been taken in the absence of the Emergency Instruction. These replacement processes would be applied to separate elements of the Settlement Process and are theoretical compatible. However, in order to create a solution which was robust to either of the proposals being implemented in parallel or individually, the drafting would need to specify which

proposal took precedence in certain calculations (for example where to use the P173 Avoidable Cost based replacement price and when to use the P171/P172 replacement Acceptances). The PSMG considered a number of approaches which would allow this to be achieved. However, it was not possible to identify an approach which would not jeopardise P173 as a standalone Modification. Therefore, the legal drafting developed for P173 does not allow parallel implementation with Alternative Modifications P171/2.

P173 Proposed/ Alternative and P171/P172 Proposed

P173 proposes that the prevailing Bid/ Offer price of an Acceptance resulting from an Emergency Instruction is adjusted to represent the Avoidable Costs incurred in responding to that Emergency Instruction. Proposed Modifications P171 and P172 require that the same Acceptances be tagged as un-priced in the Energy Imbalance Price calculation. These two individual changes would be achieved via amendment of separate sections of the Code. It is possible that both changes could be made with the following effect:

- Acceptance price is amended to reflect Avoidable Costs;
- For the purpose of the BM Unit Cashflow the Acceptance is priced to reflect Avoidable Costs, affected Parties therefore receive Avoidable Costs as payment for the Bid/ Offer; and
- For the purpose of the Energy Imbalance Price calculation the Acceptance is tagged as un-priced. As a result the Acceptance is not included in the weighted average which sets the Energy Imbalance Price.

Therefore, P171/2 Proposed Modifications are theoretically compatible with P173 and the legal drafting developed allows the changes to be implemented in parallel.

Conclusion:

Table 2 below illustrates the feasible combinations of Modification Proposals as identified by the PSMG and reflected in the legal drafting developed.

	P171 Pro	P171 Alt	P172 Pro	P172 Alt	P173 Pro	P173 Alt	P175
P171 Pro					Y	Y	N
P171 Alt					N	N	N
P172 Pro					Y	Y	N
P172 Alt					N	N	N
P173 Pro	Y	N	Y	N			N
P173 Alt	Y	N	Y	N			N
P175	N	N	N	N	N	N	

Table 2: Compatible proposals

The PSMG developed legal text which allows certain combinations of proposals as set out in table 2. However, it was the view of the PSMG that, whilst certain combinations of Modifications Proposals may be possible, it could not be considered that such a combination had been fully assessed (since a combination of proposals presents an entirely different outcome than any of the proposals when considered independently as required by the Modification Procedures). As such, it was the view of the PSMG that all the Modification Proposals should be viewed as mutually exclusive.

1.4 Assessment of how the Proposed Modification will better facilitate the Applicable BSC Objectives

The Panel noted the arguments for and against achievement of the Applicable BSC Objectives under Proposed Modification P172 considered by the PSMG as follows:

- Energy Imbalance Prices are intended to represent the cost of energy balancing actions. The processing, under the current Code baseline, of Emergency Instruction may result in actions taken for System reasons significantly distorting Energy Imbalance Prices. This has the potential for Parties to be exposed to Energy Imbalance Prices that are unrepresentative of the energy balancing actions taken by the Transmission Company. P172 would reduce this potential exposure to unrepresentative Energy Imbalance Prices. It was the view of the PSMG that these benefits would better facilitate achievement of Applicable BSC Objective (c) "Promoting effective competition in the generation and supply of electricity and promoting such competition in the sale and purchase of electricity"; and
- Some members of the Group noted that under P172 Parties could submit high Bid/Offer prices with the confidence that, were these accepted as a result of an Emergency Instruction, they would not be subject to high Energy Imbalance Prices. It was suggested that this could result in Parties submitting even more extreme Bid/Offer prices. It was the view of these PSMG members that if this occurred it would be detrimental to Applicable BSC Objective (b). However, having considered the responses to the assessment consultation the PSMG agreed that, due to the relative infrequency of Emergency Instructions, Parties would be unlikely to change their approach to submission of Bid/Offer prices were P172 implemented.

It was the unanimous view of the PSMG that Proposed Modification P172 would reduce the potential for Parties to be exposed to Energy Imbalance Prices unrepresentative of the energy balancing actions taken by the Transmission Company, thereby better facilitating achievement of the Applicable BSC Objectives.

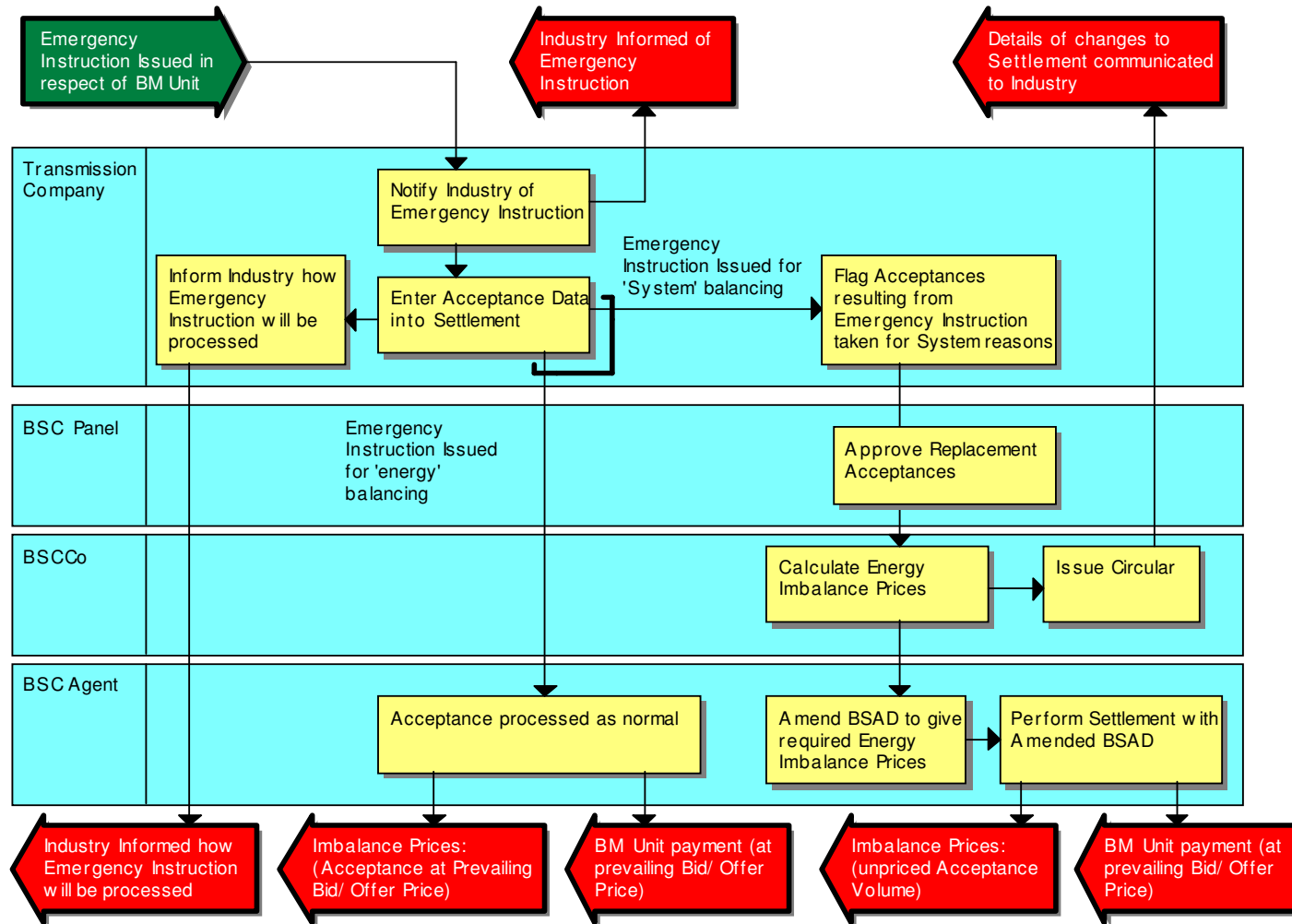
Having considered the arguments identified by the PSMG, it was also the unanimous view of the Panel that Proposed Modification P172 would, on balance, better facilitate achievement of the Applicable BSC Objectives as compared to the current baseline.

1.5 Alternative Modification

P172 proposes that Acceptances resulting from Emergency Instructions taken for System purposes are excluded from Energy Imbalance Prices. The PSMG noted that, in practice an Emergency Instruction (even if issued for System purposes) may deliver both energy and System balancing. Noting that Proposed Modification P172 would not recognise any consequential energy balancing delivered by an Emergency Instruction, the PSMG developed an Alternative Modification.

Under the Alternative Modification P172, replacement Bids/ Offers would be derived from the Bids and Offers that would have been taken had the Emergency Instruction not been issued. These Acceptances would then be included in the existing Imbalance Price calculation in place of the Emergency Instruction. However, the Lead Party would continue to be paid for the original Emergency Instruction Acceptance at the prevailing Bid/Offer price. This approach would be utilised in an attempt to represent the consequential energy balancing that may be delivered by an Emergency Instruction issued for System balancing reasons.

The PSMG developed the Alternative Modification into a full end-to-end solution. The diagram below provides an overview the Alternative Modification. For further details on the development of Alternative Modification P172 please refer to the Assessment Report (Annex 3).



1.6 Issues raised by the Alternative Modification

The following issues were considered during the Assessment of Alternative Modification P172:

- Circumstances when an Emergency Instruction may be issued under the Grid Code;
- Impact on Energy Imbalance Prices;
- Process or mechanism for differentiating between the energy and System balancing elements of Emergency Instructions;
- Solution development;
- Retrospection; and
- Interaction with other Modification Proposals.

With the exception of the interaction with other Modification Proposals (see section 1.3.1), these issues are discussed in the Assessment Report and are not covered further here.

1.7 Assessment of how the Alternative Modification will better facilitate the Applicable BSC Objectives

The Panel noted the arguments for and against achievement of the Applicable BSC Objectives under Alternative Modification P172, when compared to the current baseline, are identical to those for the Proposed Modification (see section 1.4).

It was the unanimous view of the PSMG that Alternative Modification P172 would reduce the potential for Parties to be exposed to Energy Imbalance Prices unrepresentative of the energy balancing actions taken by the Transmission Company, thereby better facilitating achievement of the Applicable BSC Objectives as compared to the existing baseline.

Having considered the arguments identified by the PSMG, it was the unanimous view of the Panel that Alternative Modification P172 would, on balance, better facilitate the Applicable BSC Objectives as compared to the current baseline.

The Panel noted the arguments as to whether the Alternative Modification would better facilitate the Applicable BSC Objectives as compared to Proposed Modification P172 identified by the PSMG as follows:

- Energy Imbalance Prices are intended to represent the cost of energy balancing actions. Under the Proposed Modification, the cost of any consequential energy balancing delivered by an Emergency Instructions would not be included in Energy Imbalance Prices. The Alternative Modification includes the costs that would have been incurred to deliver this energy balancing had the Transmission Company not been restricted in its choice of balancing actions by the circumstances that gave rise to the Emergency Instruction. Thereby, the majority of the PSMG were of the view, Alternative Modification P172 would reduce, to a greater extent than the Proposed Modification, the potential for Parties to be exposed to unrepresentative Energy Imbalance Prices. It was the view of the PSMG that this benefit in terms of the calculation of Energy Imbalance Prices would better facilitate achievement of Applicable BSC Objective (c);
- Some members of the PSMG were of the view the requirement to derive replacement Acceptances would add an additional level of complexity to the Settlement arrangements and that this could be detrimental to efficiency and thus the facilitation of Applicable BSC Objective (d);
- Some members of the PSMG were of the view that, due to the additional process to identify replacement Acceptances, the time during which Parties would be unsure of their exposure (due to

uncertainty in Energy Imbalance Prices) would be extended under the Alternative Modification. This uncertainty could be detrimental to effective competition and the facilitation of Applicable BSC Objective (c); and

- A minority of the PSMG were of the view that the use of replacement Acceptances would depart from the established tagging principles whereby actions are considered distinctly energy or System balancing rather than a combination of both. Introducing this additional approach could be viewed to be inefficient and as such detrimental to the achievement of Applicable BSC Objective (d).

On balance, by a slim majority, the PSMG were of the opinion that Alternative Modification P172 would better facilitate the Applicable BSC Objectives as compared to the Proposed Modification. This majority was of the view the competitive benefits of a further reduction in the potential exposure to unrepresentative Energy Imbalance Prices would outweigh any detrimental impact on efficiency. The contrary view, held by the minority, was that any detrimental impact in terms of efficiency would not be justified by the competitive benefits of more representative Energy Imbalance Prices in the very limited circumstance of an Emergency Instruction. One PSMG member was of the opinion the Alternative Modification would not be more representative of the costs incurred in energy balancing the system, as it may not account for all the considerations taken into account by the Transmission Company.

Contrary to the majority view of the PSMG, it was the majority view of the Panel that Alternative Modification P172 would not better facilitate achievement of Applicable BSC Objectives, as compared to the Proposed Modification.

The majority of Panel members were of the view that the detrimental impact in terms of efficiency would not be justified by the relatively minor competitive benefits of more representative Energy Imbalance Prices in these very limited circumstances. In addition, these members supported the view that the use of replacement Acceptances would depart from established tagging principles whereby actions are considered distinctly energy or System balancing, rather than a combination of both. One Panel member noted the precedent set by applying this approach, in the limited circumstance of Emergency Instructions, may create an inconsistency with the cash out arrangements as a whole and could have wider implications.

Contrary to this view, a minority of Panel members supported the argument that the benefits of a further reduction in the potential exposure to unrepresentative Energy Imbalance Prices would outweigh any detrimental impact on efficiency. It was the view of these members that identification of replacement Acceptances under Alternative Modification P172 is an amended version of an existing process (i.e. the Manifest Errors process) and, as such, the efficiency impact would not be significant. One Panel Member noted that an Emergency Instruction could result in a significant volume of energy being taken off the System e.g. 10%. This Panel Member felt that it would be inappropriate for this energy to be un-priced since it would clearly have an impact on the other balancing actions required by the System Operator.

In summary, it is the majority view of the Panel that Alternative Modification P172 would not better facilitate the Applicable BSC Objectives as compared to the Proposed Modification.

1.8 Governance and regulatory framework assessment

Under P172 (Proposed and Alternative) the Transmission Company would determine whether an Emergency Instruction should be considered specifically as a System action. The Transmission Company indicated that this determination would be made in accordance with the methodology currently used to tag System actions for Balancing Services (as set out in the BSAD methodology statement). The Transmission Company impact assessment indicated that a consequential change to the Condition C16 statements (specifically the Balancing Principles Statement) would be made to clarify

this process. It should be noted that the implementation of P172 is not dependent on this change being made.

For the avoidance of doubt, the manual solution which requires the Settlement Administration Agent (SAA) to manipulate the BSAD file submitted by the Transmission Company does not impact either the BSAD methodology or the submission of BSAD by the Transmission Company.

2 COSTS⁴

It should be noted that the cost outlined in this section are based on implementation of P172 via a manual solution as developed by the PSMG. During the Assessment Procedure automated solutions were also considered as outlined in the Assessment Report (Annex 3).

PROGRESSING MODIFICATION PROPOSAL				
Meeting Cost		£500		
Legal/expert Cost		£2,500 ⁵		
Impact Assessment Cost		£5,000		
ELEXON Resource		50 Man days £12,500		
IMPLEMENTATION COSTS P172 PROPOSED				
		Stand Alone Cost	Incremental Cost	Tolerance
Service Provider⁶ Cost				
	Change Specific Cost	£41,542 ⁷	£41,542 ⁷	+/- 0%
	Release Cost ⁸	£0	n/a	+/- 0%
	Incremental Release Cost	£0	£0	+/- 0%
	Total Service Provider Cost	£41,542	£41,542	+/- 0%
Implementation Cost				
	External Audit	£0	£0	+/- 0%
	Design Clarifications	£0	£0	+/-0%
	Additional Resource Costs	£0	£0	+/-0%
	Additional Testing	£0		+/-0%

⁴ Clarification of the meanings of the cost terms in this section can be found in annex 7 of this report

⁵ During the Assessment Procedure, additional legal advice was taken. Therefore, the legal costs will be greater than the IWA estimate, this figure includes an estimate of the increase.

⁶ BSC Agent and non-BSC Agent Service Provider and software Costs

⁷ This cost includes both the SAA changes and amendments to TOMAS

⁸ In this case the Release costs are zero as there are no BSC Agent software changes.

	and Audit Support Costs			
Total Demand Led Implementation Cost		£41,542k	£41,542k	+/- 0%

ELEXON Implementation Resource Cost		210 Man days £46k	80 Man days £18k	+/- 10%
Total Implementation Cost		£87,542k	£59,542k	+/- 10%

ONGOING SUPPORT AND MAINTENANCE COSTS (Proposed)

	Operational Cost	Tolerance
Service Provider Operation Cost	£ 527 per incident	+/- 0%
Service Provider Maintenance Cost	£ 0	+/- 0%
ELEXON Operational Cost	£220 per incident	+/-10%

IMPLEMENTATION COSTS P172 ALTERNATIVE

		Stand Alone Cost	P172 Alternative Incremental Cost	Tolerance
Service Provider⁶ Cost				+/- 0%
	Change Specific Cost	£41,542 ⁷	£41,542 ⁷	+/- 0%
	Release Cost ⁸	£0	n/a	+/- 0%
	Incremental Release Cost	£0	£0	+/- 0%
	Total Service Provider Cost	£41,542	£41,542	
Implementation Cost				+/- 0%
	External Audit	£0	£0	+/-0%
	Design Clarifications	£0	£0	+/-0%
	Additional Resource Costs	£0	£0	+/-0%
	Additional Testing and Audit Support Costs	£0		+/- 0%
Total Demand Led Implementation Cost		£41,542k	£41,542k	

ELEXON Implementation Resource Cost		210 Man days £46k	80 Man days £18k	+/- 10%
Total Implementation Cost		£87,542k	£59,542k	+/- 10%

ONGOING SUPPORT AND MAINTENANCE COSTS (ALTERNATIVE)		
	Operational Cost	Tolerance
Service Provider Operation Cost	£527 per incident	+/- 10%
Service Provider Maintenance Cost	0	+/- 0%
ELEXON Operational Cost	£550 per incident	+/- 10%

3 RATIONALE FOR PANEL'S RECOMMENDATIONS

Proposed and Alternative Modifications

The Panel supported the unanimous view of the PSMG that both the Proposed and Alternative Modifications would better facilitate the Applicable BSC Objectives, as compared to the current baseline. Contrary to the view of the PSMG, it was the majority view of the Panel that Alternative Modification P172 would not better facilitate the Applicable BSC Objectives as compared to the Proposed Modification. Therefore, it is the view of the Panel that Proposed Modification P172 should be made.

Implementation Date

The recommended Implementation Date for Proposed and Alternative Modification P172 allows a 5 Working Day lead time following an Authority decision in order to implement the Code changes. Documentation and process changes to support the amended Code obligations would then be delivered in the next available Release. This approach was favoured as it would reduce the potential for an Emergency Instruction to be issued post Authority approval but prior to the Implementation Date. Therefore, the recommended Implementation Date for P172 Proposed and Alternative Modification is:

- 5 Working Days following an Authority determination.

4 IMPACT ON BSC SYSTEMS AND PARTIES

An assessment has been undertaken in respect of BSC Systems and Parties and the following areas have been identified as potentially being impacted by the Proposed and Alternative Modifications.

4.1 BSCCo

4.1.1 Proposed

The CVA Programme and CVA Operations will be required to support implementation and document the processes for dealing with Emergency Instructions. In addition ELEXON Systems Assurance will be required to support the implementation of P172. An operational cost would be incurred per Emergency Instruction.

Changes would also be required to TOMAS in order to allow prices to be calculated in accordance with Proposed Modification P172 (specifically to allow individual Acceptances to be treated as un-priced). The required changes to TOMAS would incur an estimated demand led cost of £33,700.

4.1.2 Alternative

The CVA Programme and CVA Operations will be required to support implementation and document the processes for dealing with Emergency Instructions. In addition ELEXON Systems Assurance will be required to support the implementation of P172. BSCCo would also be required to support the Panel in the determination of the replacement Acceptances. Hence, an operational cost greater than that for the Proposed would be incurred per Emergency Instruction.

Changes would also be required to TOMAS in order to allow prices to be calculated in accordance with Alternative Modification P172. The required changes to TOMAS would incur an estimated demand led cost of £33,700.

4.2 BSC Agents

4.2.1 Proposed

The BSC Agent (SAA) would be required to enter Emergency Instruction data into Settlement and adjust BSAD to give Energy Imbalance Prices as notified by BSCCo. This would require changes to documentation to formalise the process. In addition there would be an operational cost per incident for making the required data changes.

4.2.2 Alternative

The BSC Agent (SAA) would be required to enter Emergency Instruction data into Settlement and adjust the prevailing price of the Acceptance at a later Settlement Run. This would require changes to documentation to formalise process. In addition there would be an operational cost per incident for making the required data changes.

4.3 Impact on other systems and processes used by Parties

An assessment has been undertaken by the PSMG in respect of systems and processes used by Parties and the following areas have been identified as potentially impacted by the Modification Proposal.

System / Process	All Options
Settlement Calculations	Parties may be required to amend their systems to account for the amended treatment of Emergency Instructions within Settlement.

5 IMPACT ON CODE AND DOCUMENTATION

5.1 Impact on Balancing and Settlement Code

5.1.1 Proposed Modification

Legal text for Proposed Modification P172 is included in Annex 1. The changes required are summarised here.

Section Q:

- Requirement for Transmission Company to indicate the issuing of Emergency Instructions via the BMRA added;

- Process for submission of post event Acceptance Data for Emergency Instructions defined;
- Emergency Instructions taken for 'System' reasons tagged as 'Excluded Acceptances' by the Transmission Company.

Section T:

- 'Excluded Acceptances' not included in the Period Priced Accepted Offer Volume or Period Priced Accepted Bid Volume, consistent with Acceptances which have been Continuous Acceptance Duration Limit (CADL) tagged.

Annex V:

- Publication of information relating to Emergency Instructions via BMRS.

Annex X:

- New definitions added.

5.1.2 Alternative Modification

Legal text for Alternative Modification P172 is included in Annex 1. The changes required are summarised here.

Section Q:

- Requirement for Transmission Company to indicate the issuing of Emergency Instructions via the BMRA added;
- Process for submission of post event Acceptance Data for Emergency Instructions defined;
- Emergency Instructions taken for 'System' reasons tagged as 'Excluded Acceptances' by the Transmission Company;
- Introduction of a process for identifying 'Deemed Bid-Offer Pairs' to replace those actually submitted by the Lead Party of the affected BM Unit (for the purpose of the Energy Imbalance Price calculation only). 'Deemed Bid-Offer Pairs' selected such that the 'Excluded Acceptance' would be represented in the Energy Imbalance Price calculation by Accepted Bid-Offer Paris equivalent to those that would have been taken by the Transmission Company to deliver an equivalent volume in the absence of the circumstances that gave rise to the Emergency Instruction.

Annex V:

- Publication of information relating to Emergency Instructions via BMRS.

Annex X:

- New definitions added.

5.2 Impact on Code Subsidiary Documents

An assessment has been undertaken by the PSMG in respect of all Code Subsidiary Documents and the following documents have been identified as potentially impacted by the Modification Proposal.

Item	Proposed / Alternative
SAA SD	The SAA Service Description would need to be amended to support the adjustment of BSAD in order to give Energy Imbalance Prices representative of the P172 methodology.
BSCP18	Amended in order to allow the Transmission Company to flag data Acceptance Data related to an Emergency instruction as specifically System balancing if appropriate.

BSCPXX	A new BSC Procedure for the processing of Emergency Instructions may be required.
NDFC	The NETA Data File Catalogue would require amendment.

5.3 Impact on other configurable items

An assessment has been undertaken by the PSMG in respect of other configurable items and the following have been identified as potentially impacted by the Modification Proposal.

Item	Proposed / Alternative
SAA URS	The SAA User Requirements Specification would need to be amended to support the adjustment of BSAD in order to give Energy Imbalance Prices representative of the P172 methodology.
IDD	New interface from BSCCo to Central Systems required

5.4 BSCCo Memorandum and Articles of Association

An assessment has been undertaken by the PSMG in respect of BSCCo Memorandum and Articles of Association as a consequence of the Proposed Modification and the Alternative Modification and no impact has been identified.

5.5 Impact on Core Industry Documents and supporting arrangements

Under P172 (Proposed and Alternative) the Transmission Company would determine whether an Emergency Instruction should be considered specifically as a System action. The Transmission Company indicated that this determination would be made in accordance with the methodology currently used to tag System actions for Balancing Services (as set out in the BSAD methodology statement). Transmission Company impact assessment indicated that a consequential change to the Condition C16 statements (specifically the Balancing Principles Statement) would be made to clarify this process. It should be noted that the implementation of P172 is not dependent on this change being made.

For the avoidance of doubt, the manual solution which requires the SAA to manipulate the BSAD file submitted by the Transmission Company does not impact either the BSAD methodology or the submission of BSAD by the Transmission Company.

6 SUMMARY OF CONSULTATIONS

The P172 draft Modification Report consultation was issued on 16 December 2004 with responses due on 23 December 2004.

Consultation question	Respondent agrees (Parties represented)	Respondent disagrees	Opinion unexpressed
Do you agree with the Panel's views on Proposed Modification P172 and the provisional recommendation to the Authority contained in the draft Modification Report that Proposed Modification P172 should be made?	8 (28+1)	1 (15)	2 (5)

Do you agree with the Panel's views on Alternative Modification P172 and the provisional recommendation to the Authority contained in the draft Modification Report that Alternative Modification P172 should not be made?	5 (4+1)	5 (43)	1 (1)
Do you agree with the Panel's view that the legal text provided in the draft Modification Report correctly addresses the defect or issue identified in the Modification Proposal?	5 (32)	0	6 (16+1)
Do you agree with the Panel's provisional recommendation concerning the Implementation Dates for P172?	8 (42+1)	0	3 (6)

6.1 Applicable BSC Objectives – Proposed and Alternative

The majority of respondents agreed with the Panel's provisional recommendation that the Proposed Modification should be made as it would remove the impact of a System action from the Energy Imbalance Price. A number of these respondents noted a preference for the Proposed Modification over the Alternative due to the reduced complexity and the consistency with the treatment of other System actions.

Several respondents who agreed with the Panel's view in relation to the Proposed Modification stated that although they agreed that the Proposed Modification was better than the current baseline, they felt that the Alternative Modification was better than the Proposed Modification as it would provide a more appropriate reflection of the cost of actions that would have been taken in the absence of an emergency.

Those respondents who did not agree with the Panel's view in relation to the Proposed Modification supported a change to the current baseline but indicated a preference for the Alternative Modification.

One respondent did not agree with the Panel's recommendation that the Proposed Modification be made. This respondent agreed that both the Proposed and Alternative Modifications would better facilitate achievement of the Applicable BSC Objectives, but was of the view the Alternative Modification was better than the Proposed. This respondent noted that the Alternative is not significantly more complex than the Proposed Modification. Also the current tagging process often only tags out part of an Acceptance which is deemed to be a System action, therefore this new P172 process is not inconsistent with the current rules.

Another respondent did not agree or disagree with the Panel in relation to the Proposed Modification, although it stated a preference for the Alternative over the Proposed Modification. This respondent felt that the Alternative would provide an Energy Imbalance Price more reflective of the actions which would have been taken in the absence of an Emergency Instruction.

6.2 Draft Legal Text

All of those respondents who expressed an opinion agreed that the draft legal text correctly addresses the defect or issue identified in the Modification Proposal.

6.3 Recommended Implementation Date

All of those respondents who expressed an opinion agreed with the Proposed Implementation Date for the Alternative and Proposed Modifications, of 5 Working Days following an Authority decision.

6.4 Further Comments

One respondent noted that until the current arrangements are changed, all classes of market participant continue to face the risk that extreme prices will be applied to System Operator actions which impact industry cashflows.

7 SUMMARY OF TRANSMISSION COMPANY ANALYSIS

The full analysis may be found in Annex 4.

The Transmission Company was of the view that the Proposed or Alternative Modification would not impact its ability to efficiently discharge its obligations under the Transmission Licence or its ability to operate an efficient, economical and co-ordinated Transmission System. Also, the Transmission Company did not believe either the Proposed or Alternative Modification would have any impact on the security of supply. Minimal costs were identified in relation to the implementation of either the Proposed or Alternative Modification.

It was the view of the Transmission Company that the costs of balancing taken for "System" reasons should not affect Energy Imbalance Prices, and also that tagging these "System" actions is consistent with other tagging methodologies employed in the BSC to treat the Bid-Offer Acceptance as an un-priced volume. The Transmission Company was concerned that the use of a replacement price would be inconsistent with these other tagging methodologies and would require proof that this approach would be better than using un-priced volumes. Also, the Transmission Company were of the view Proposed Modification P172 better facilitates the achievement of Applicable BSC Objective c) compared to both the current baseline and Alternative Modification P172.

A further point was made by the Transmission Company regarding BSUoS charges and RCRC cashflows. At present, the RCRC payments will be approximately equal and opposite to the increase in BSUoS charges created by the Emergency Instruction. If P172 is implemented, this "offset" provided by the RCRC cashflow will be removed and this will simply serve to change the "winners and losers". The Transmission Company believe that the fundamental issue to be addressed is the cost of the Bid-Offer Acceptance as well as the impact on Imbalance Prices. As such, the Transmission Company do not believe that P172 alone would achieve this.

7.1 Comments and views of the Panel

The Panel noted that the Transmission Company Analysis reported that implementation of P172 would have minimal impact on its processes and systems.

8 SUMMARY OF EXTERNAL ADVICE

None commissioned.

9 IMPLEMENTATION APPROACH

Proposed Modification

The recommended Implementation Date for Proposed Modification P172 allows a 5 Working Day lead time following an Authority decision in order to implement the Code changes. Document and process changes would be delivered on 29 June 2005, if an Authority decision is received by 9 March 2005. Alternatively, should an Authority determination be received after this date, but on or before 6 July 2005, the changes would be delivered on 2 November 2005.

If approved, Proposed Modification P172 would be implemented on a Settlement Day basis. As such P172 would only apply to Emergency Instructions issued on Settlement Days on or after the Implementation Date.

Alternative Modification

The recommended Implementation Date for Alternative Modification P172 allows a 5 Working Day lead time following an Authority decision in order to implement the Code changes. Document and process changes would be delivered on 29 June 2005, if an Authority decision is received by 9 March 2005. Alternatively, should an Authority determination be received after this date, but on or before 6 July 2005, the changes would be delivered on 2 November 2005.

If approved, Alternative Modification P172 would be implemented on a Settlement Day basis. As such, P172 would only apply to Emergency Instructions issued on Settlement Days on or after the Implementation Date.

10 DOCUMENT CONTROL

10.1 Authorities

Version	Date	Author	Reviewer	Change Reference
0.1	13/12/04	Change Delivery	Change Delivery	Initial Draft
0.2	15/12/04	Change Delivery	Industry	For consultation
0.3	29/12/04	Change Delivery	Change Delivery	Updated following consultation
0.4	06/01/05	Change Delivery	Panel	For Decision
1.0	18/01/05	Change Delivery	Change Delivery	For Decision

10.2 References

Ref No.	Document Title	Owner	Issue Date	Version	Hyperlink
1	Modification Proposal P172	-	25.08.2004	-	http://www.elexon.co.uk/documents/Change_and_Implementation/CVA_-_Circulars/P172.pdf
2	Balancing Principles Statement	NGC	04.10.2004	4.1	http://www.nationalgrid.com/uk/indinfo/balancing/pdfs/Appendix_B_BPS_v1.pdf
3	Modification Proposal P172 Initial Written Assessment	ELEXON	03.09.2004	1.0	http://www.elexon.co.uk/documents/BSC_Panel_and_Panel_Committees/BSC_Panel_Meetings_2004_-_082_-_Papers/82_006a.pdf
4	Modification Proposal P171	-	25.08.2004	-	http://www.elexon.co.uk/documents/modifications/171/P171.pdf
5	Modification Proposal P173	-	25.08.2004	-	http://www.elexon.co.uk/documents/Change_and_Implementation/CVA_-_Circulars/P173.pdf
6	Modification Proposal P175	-	01.10.2004	-	http://www.elexon.co.uk/documents/modifications/175/P175.pdf

7	Modification Proposal P171 and P172 Requirements Specification	PSMG	28.09.2004	1.0	http://www.elexon.co.uk/documents/modifications/172/P1712AS_FINAL_101.pdf
---	--	------	------------	-----	---

ANNEX 1 LEGAL TEXT

Attachment 1 contains the legal text for both the Proposed and Alternative Modifications.

ANNEX 2 MODIFICATION GROUP DETAILS

Member	Organisation	14/09	11/10	12/11	22/11	29/11
Sarah Parsons	ELEXON (Chairman)	✓	✓	✓	✓	✓
Tom Bowcutt	ELEXON (Lead Analyst)	✓	✓	✓	✓	✓
Danielle Lane	(Proposer) P171 and P172	✓	X	X	x	X
Mark Duffield	Proposer P173	✓	✓	✓	✓	✓
Garth Graham	Scottish and Southern	✓	✓	✓	✓	✓
Man Kwong Liu	SAIC	X	X	✓	✓	✓
Bill Reed	RWE Trading	✓	✓	✓	✓	✓
Paul Jones	E.On Uk	✓	✓	✓	✓	X
Lisa Waters	Waters Wye	✓	X	X	x	X
Jan Devito	Jade Energy	✓	X	✓	✓	X
Martin Mate	British Energy	✓	X	✓	x	✓
Helen Bray	EDF	x	✓	✓	✓	X
Mark Manley	BGT	x	✓	✓	✓	✓
Mark Brackley	National Grid	✓	✓	✓	✓	✓

Attendee	Organisation					
Simon Bradbury	Ofgem	✓	✓	✓	✓	✓
Fiona Lewis	Ofgem	✓	✓	✓	X	✓
Paul Chesterman	EDF	✓	X	X	X	✓
Adam Cooper	Enenergy-Koch	✓	X	X	X	X
Rekha Patel	Conocophillips	✓	X	✓	X	X
Roger Salomone	ELEXON	x	✓	✓	✓	✓
Sanjukta Round	Cornwall Consulting	x	X	✓	X	X
Barbara Vest	GDF	x	Part	✓	X	X
Keith Munday	Bizz Energy	x	x	x	✓	X
John Capener	British Energy	x	x	x	✓	X
David White	ELEXON	✓	x	x	✓	X

Terms of reference for the PSMG included:

- **Energy/ System balancing:** Details of an appropriate process or mechanism for differentiating between the energy and System balancing elements of Emergency Instructions;
- **Solution development:** Details of the solution to P172, including;
 - A mechanism to allow Emergency Instructions issued for System reasons to be differentiated within Settlement;
 - An assessment of the relative merits of both manual and automatic solutions; and
 - Details of the point in the Settlement/ Reconciliation process that the price of the Acceptance within the Imbalance Price calculation should be amended.
- **Background:** Details of the circumstances under which and Emergency Instruction may be issued under the Grid Code;
- **Consideration of the interaction with P171 and P173:** Details of the interaction between P171, P172 and P173; and
- **Alternative Modifications:** Details of any Alternative Modification that would better facilitate achievement of the Applicable BSC Objectives in comparison to P172.

ANNEX 3 ASSESSMENT REPORT

The Assessment Report for P172 is included as a separate attachment

ANNEX 4 CLARIFICATION OF COSTS

There are several different types of costs relating to the implementation of Modification Proposals. ELEXON implements the majority of Approved Modifications under its CVA or SVA Release Programmes. These Programmes incur a base overhead which is broadly stable whatever the content of the Release. On top of this each Approved Modification incurs an incremental implementation cost. The table of estimated costs of implementing the Proposed/Alternative Modification given in section 2 of this report has three columns:

- **Stand Alone Cost** – the cost of delivering the Modification as a stand alone project outside of a CVA or SVA Release, or the cost of a CVA or SVA Release with no other changes included in the Release scope. This is the estimated maximum cost that could be attributed to any one Modification implementation.
- **Incremental Cost** - the cost of adding that Modification Proposal to the scope of an existing release. This cost would also represent the potential saving if the Modification Proposal was to be removed from the scope of a release before development had started.
- **Tolerance** – the predicted limits of how certain the cost estimates included in the template are. The tolerance will be dependent on the complexity and certainty of the solution and the time allowed for the provision of an impact assessment by the Service Provider(s).

The cost breakdowns are shown below:

PROGRESSING MODIFICATION PROPOSAL	
Meeting Cost	This is the cost associated with holding Modification Group meetings and is based on an estimate of the travel expenses claimed by Modification Group members.
Legal/expert Cost	This is the cost associated with obtaining external expert advice, usually legal advice.
Impact Assessment Cost	Service Provider Impact Assessments are covered by a pre-determined monthly contractual charge. Therefore the cost included in this report is an estimate based on the level of impact assessment that the modification is expected to require and may not reflect the actual cost attributed to the modification, which will be based on a percentage of the contractual impact assessment costs for each month that it is assessed.
ELEXON Resource	This is the ELEXON Resource requirement to progress the Modification Proposal through the Modification Procedures. This is estimated using a standard formula based on the length of the Modification Procedure.

SERVICE PROVIDER⁹ COSTS	
Change Specific Cost	Cost of the Service Provider(s) Systems development and other activities relating specifically to the Modification Proposal.
Release Cost	Fixed cost associated with the development of the Service Provider(s) Systems as part of a release. This cost encompasses all the activities that would be undertaken regardless of the number or complexity of changes in the scope of a release. These activities include Project Management, the production of testing and deployment specifications and reports and various other standard release activities.
Incremental Release Cost	Additional costs on top of base Release Costs for delivering the specific Modification Proposal. For instance, the production of a Test Strategy and Test Report requires a certain amount of effort regardless of the number of changes to be tested, but the addition of a specific Modification Proposal may increase the scope of the Test Strategy and Test Report and hence incur additional costs.

IMPLEMENTATION COSTS	
External Audit	Allowance for the cost of external audit of the delivery of the release. For CVA BSC Systems Releases this is typically estimated as 10% of the total Service Provider Costs, with a tolerance of +/- 20%. At present the SVA Programme does not use an external auditor, so there is no External Audit

⁹ A Service Provider can be a BSC Agent or a non-BSC Agent, which provides a service or software as part of the BSC and BSC Agent Systems. The Service Provider cost will be the sum of the costs for all Service Providers who are impacted by the release.

	cost associated with an SVA BSC Systems Release.
Design Clarifications	Allowance to cover the potential cost of making any amendments to the proposed solution to clarify any ambiguities identified during implementation. This is typically estimated as 5% of the total Service Provider Costs, with a tolerance of +/- 100%.
Additional Resource Costs	<p>Any short-term resource requirements in addition to the ELEXON resource available. For CVA BSC Systems Releases, this is typically only necessary if the proposed solution for a Modification Proposal would require more extensive testing than normal, procurements or 'in-house' development.</p> <p>For SVA BSC Systems Releases, this will include the management and operation of the Acceptance Testing and the associated testing environment.</p> <p>This cost relates solely to the short-term employment of contract staff to assist in the implementation of the release.</p>
Additional Testing and Audit Support Costs	Allowance for external assistance from the Service Provider(s) with testing, test environment and audit activities. Includes such activities as the creation of test environments and the operation of the Participant Test Service (PTS). For CVA BSC Systems Releases, this is typically estimated as £40k per release with at tolerance of +/-25%. For SVA BSC Systems Releases this is estimated on a Modification Proposal basis.

TOTAL DEMAND LED IMPLEMENTATION COSTS	
<p>This is calculated as the sum of the total Service Provider(s) Cost and the total Implementation Cost. The tolerance associated with the Total Demand Led Implementation Cost is calculated as the weighted average of the individual Service Provider(s) Costs and Implementation Costs tolerances. This tolerance will be rounded to the nearest 5%.</p>	

ELEXON IMPLEMENTATION RESOURCE COSTS	
<p>Cost quoted in man days multiplied by project average daily rate, which represents the resources utilised by ELEXON in supporting the implementation of the release. This cost is typically funded from the "ELEXON Operational" budget using existing staff, but there may be instances where the total resources required to deliver a release exceeds the level of available ELEXON resources, in which case additional Demand Led Resources will be required.</p> <p>The ELEXON Implementation Resource Cost will typically have a tolerance of +/- 5% associated with it.</p>	

ONGOING SUPPORT AND MAINTENANCE COSTS	
ELEXON Operational Cost	Cost, in man days per annum multiplied by project average daily rate, of operating the revised systems and processes post implementation.

Service Provider Operation Cost	Cost in £ per annum payable to the Service Provider(s) to cover staffing requirements, software or hardware licensing fees, communications charges or any hardware storage fees associated with the ongoing operation of the revised systems and processes.
Service Provider Maintenance Cost	Cost quoted in £ per annum payable to the Service Provider(s) to cover the maintenance of the amended BSC Systems.

ANNEX 5 CONSULTATION RESPONSES

Attachment 3 contains the responses to the draft Modification Report consultation.