MODIFICATION REPORT for Modification Proposal P194 'Revised Derivation of the "Main" Energy Imbalance Price'

Prepared by: ELEXON[1] on behalf of the BSC Panel

Date of issue:	09/12/05	**Document reference:**	P194RR
Reason for issue:	Decision	**Issue/Version number:**	Final/ 1.0

This document has been distributed in accordance with Section F2.1.10 of the Balancing and Settlement Code.[2]

Proposed Modification P194 seeks to amend the Energy Imbalance Price calculation. Under P194 the volume weighted average of a pre-defined maximum volume (100MWh) of the most expensive (to the System) balancing actions remaining following application of the existing tagging mechanisms would set the 'Main' Energy Imbalance Price.

No Alternative Modification has been developed.

BSC PANEL'S RECOMMENDATIONS

Having considered and taken into due account the contents of the P194 draft Modification Report, the BSC Panel recommends:

- **that Proposed Modification P194 should not be made;**
- **an Implementation Date for Proposed Modification P194 of 2 November 2006 if an Authority decision is received on or before 23 March 2006, or 22 February 2007 if the Authority decision is received after 23 March 2006 but on or before 13 July 2006; and**
- **the proposed text for modifying the Code, as set out in the Modification Report.**

[1] ELEXON Ltd fulfils the role of the Balancing and Settlement Code Company ('BSCCo').
[2] The current version of the Code can be found at http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx

CONTENTS TABLE

SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

As far as the Modification Group has been able to assess, the following parties/documents would be impacted by P194.

Please note that this table represents a summary of the full impact assessment results contained the P194 Assessment Report.

Parties	
Suppliers	☒
Generators	☒
Licence Exemptable Generators	☒
Transmission Company	☒
Interconnector	☒
Distribution System Operators	☐
Non-Physical Traders	☒
Party Agents	
Data Aggregators	☐
Data Collectors	☐
Meter Operator Agents	☐
ECVNA	☐
MVRNA	☐
BSC Agents	
SAA	☒
FAA	☐
BMRA	☒
ECVAA	☐
CDCA	☐
TAA	☐
CRA	☐
Teleswitch Agent	☐
SVAA	☐
BSC Auditor	☐
Profile Administrator	☐
Certification Agent	☐
MIDP	☐
Other Agents	
SMRA	☐
Data Transmission Provider	☐

Sections of the BSC	
A	☐
B	☐
C	☐
D	☐
E	☐
F	☐
G	☐
H	☐
I	☐
J	☐
K	☐
L	☐
M	☐
N	☐
O	☐
P	☐
Q	☐
R	☐
S	☐
T	☒
U	☐
V	☐
W	☐
X	☒

Code Subsidiary Documents	
BSC Procedures	☐
Codes of Practice	☐
BSC Service Descriptions	☒
Service Lines	☐
Data Catalogues	☒
Communication Requirements Documents	☐
Reporting Catalogue	☒
MIDS	☐
Core Industry Documents	
Grid Code	☐
Supplemental Agreements	☐
Ancillary Services Agreements	☐
Master Registration Agreement	☐
Data Transfer Services Agreement	☐
British Grid Systems Agreement	☐
Use of Interconnector Agreement	☐
Settlement Agreement for Scotland	☐
Distribution Codes	☐
Distribution Use of System Agreements	☐
Distribution Connection Agreements	☐
BSCCo	
Internal Working Procedures	☒
Other Documents	
Transmission Licence	☐
System Operator-Transmission Owner Code	☐

1 DESCRIPTION OF MODIFICATION

For a full description of the original Modification Proposal as submitted by National Grid (which is consistent with the Proposed Modification as developed by the Modification Group), please refer to the P194 Initial Written Assessment (IWA).

2 AREAS RAISED BY THE TERMS OF REFERENCE

The following areas were considered by the Modification Group during the Assessment Procedure for P194:

- Price Average Reference (PAR) Volume;
- Potential Alternative Modifications;
- Impact on Energy Imbalance Prices;
- Actions Setting Energy Imbalance Prices;
- Requirements for increased incentives to balance;
- Incentives to balance;
- Cost Reflectivity of Energy Imbalance Prices;
- Impacts on Behaviour;
- Changes to risk, and consequential risk management;
- Impact on the Residual Cashflow Reallocation Cashflow;
- Impact on Credit Cover;
- Impact on liquidity;
- Impact on Specific Participant Types;
- Other areas identified by consultation respondents.

These issues are discussed in the Assessment Report contained in Annex 3, and are not covered further here.

3 IMPLEMENTATION APPROACH AND COSTS

3.1 Implementation Approach and Costs

The Modification Group agreed an implementation approach whereby changes to Settlement Administration Agent (SAA) reporting would be introduced on initial implementation of the change. This approach would ensure Parties could distinguish between the impact of the existing tagging mechanisms and the P194 mechanism.

3.1.1 Results of Proposed Modification Impact Assessment

PROPOSED MODIFICATION IMPLEMENTATION COSTS[3]

		Stand Alone Cost	Incremental Cost	Tolerance
Service Provider[4] Cost				
	Change Specific Cost	£ 270,581	£270,581	+/- 5%
	Release Cost	£ 208,148		+/-0%
	Incremental Release Cost	£ 16,411	£16,411	+/-0%
	Total Service Provider Cost	**£ 495,140**	**£ 286,992**	+/- 2%
Implementation Cost				
	External Audit	£ 0	£ 0	+/- 0%
	Design Clarifications	£ 24,757	£ 14,350	+/- 100%
	Additional Resource Costs	£ 0	£ 0	+/- 0%
	Additional Testing and Audit Support Costs	£ 40,000		+/- 10%
Total Demand Led Implementation Cost		**£ 559,897**	**£ 301,342**	+/- 5%

ELEXON Implementation Resource Cost		320 Man Days £ 70,400	190 Man Days £ 41,800	+/- 3%
Total Implementation Cost		**£ 630,297**	**£ 343,142**	**+/- 5%**

PROPOSED MODIFICATION ONGOING SUPPORT AND MAINTENANCE COSTS

	Stand Alone Cost	Incremental Cost	Tolerance
Service Provider Operation Cost	£ 0 per annum	£ 0 per annum	+/- 0%
Service Provider Maintenance Cost	£ 0 per annum	£ 0 per annum	+/- 0%
ELEXON Operational Cost	£ 0 per annum	£ 0 per annum	+/- 0%

a) BSC Agent Impact

BSC Agent cost estimates outlined above reflect the following activities:

[3] An explanation of the cost terms used in this section can be found on the BSC Website at the following link: http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf

[4] BSC Agent and non-BSC Agent Service Provider and software costs.

- Changes to Balancing Mechanism Reporting Agent (BMRA) and SAA software and documentation to amend the Energy Imbalance Price calculation;
- Changes to SAA reporting and the Interface Definition documentation to detail the impact of the new PAR tagging mechanism within the Settlement Report (SAA-I014);
- Unit, Module, System, Change Specific, Operational Acceptance, Regression and Deployment/ Backout testing.

b) BSCCo Impact

BSCCo cost estimates outlined above reflect the following activities:

- Review of changes to BMRA and SAA software and documentation;
- Review of Logica test documentation;
- Operation of ELEXON testing, including participant and parallel run testing;
- Project management and planning activities;
- Changes to the Trading Operations Market Analysis System (NB: the estimate of this cost is included in the demand led service provider costs);
- Audit activities; and
- Changes to operational procedures

c) BSC Party and Party Agent Impact

BSC Parties would be impacted by changes to the price calculation (in order to update their price estimation systems) and changes to SAA reporting (SAA-I014). Party impact assessment indicated that these changes would cost between £10-200k and require lead times from 4-9 months (NB: one Party initially indicated a required lead time of at least 12 months but has confirmed that they would be able to support the recommended timescales).

4 RATIONALE FOR MODIFICATION GROUP'S RECOMMENDATIONS TO THE PANEL

This section summarises the recommendations of the Modification Group, as detailed in the Assessment Report in Annex 3.

4.1 Assessment of Proposed Modification Against Applicable BSC Objectives

This section outlines the views of consultation respondents and the Modification Group regarding the merits of P194 when assessed against the Applicable BSC Objectives.

4.1.1 Modification Group's Assessment

The majority view of the Modification Group was that the Proposed Modification would have a detrimental impact on achievement of Applicable BSC Objectives (b) and (c) when compared to the current Code baseline. To a lesser extent some Modification Group members also held the view that the Proposed Modification would have a detrimental impact on the achievement of Applicable BSC Objective d). The arguments identified are outlined below:

Applicable BSC Objective B – "the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System"

Arguments identified not in support of P194:

P194 may encourage Parties to take a long(er) position to avoid System Buy Price, thereby increasing the overall cost of balancing the System. Therefore, P194 may lead to excessive length in the market, leading to an increase in the balancing requirements of the Transmission Company and, overall, less efficient operation of the Transmission System.

Single site generators may avoid contracting outside the Balancing Mechanism or withhold plant in case of trip in order to avoid exposure to System Buy Price. Were this to occur it would be to the detriment of the efficient, economic and co-ordinated operation of the Transmission System by the Transmission Company.

To date there have been no situations where the Transmission Company has not been able to balance the System. As such there is no requirement for increased incentives to balance and the current baseline provides for more efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System than would be the case under P194.

Arguments identified in support of P194:

P194 would provide an increased incentive to balance. Thereby P194 would encourage Parties to trade ahead of Gate Closure, reducing the number of balancing actions required by the Transmission Company and benefiting security of supply. Hence, P194 would benefit the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System. The requirement for increased incentives to balance can be illustrated via historic periods where Energy Imbalance Prices have not risen to sufficient levels to induce a market response, resulting in prolonged periods where the market was short.

Ensuring Energy Imbalance Prices rise to appropriate levels at times of energy shortage will provide the correct signals into the forward markets and help promote new plant build. This will assist the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System over the long term.

Applicable BSC Objective – (c) - "Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity"

Arguments identified not in support of P194:

P194 would increase the impact of imperfections in the tagging mechanism on imbalance prices; therefore Parties would be exposed to Energy Imbalance Prices which are not reflective of the true cost of energy balancing the system. This would inappropriately target the costs of balancing the System to the disadvantage of some Parties. This would have a detrimental impact on the promotion of effective competition.

It may be the case that Parties can not balance their positions any more accurately than they do at the present time. In particular, small Parties may be detrimentally affected, since there may not be products on the market which allow them to trade in small enough volumes to avoid imbalance. Therefore, the introduction of an increased incentive to balance which can not be responded to would penalise some Party types, presenting a barrier to market entry and impeding the promotion of effective competition.

It may not be possible to provide any rational justification for any PAR Volume used. Therefore, the PAR Volume is an arbitrary value designed to deliver the desired results. On this basis it would be impossible to justify any value used as the PAR Volume apart from via consideration of its effects historically. Setting the parameter on historic data may be inappropriate for future periods and could result in inappropriate Energy Imbalance Prices. This would inappropriately target the costs of balancing the System to the disadvantage of some Parties and have a detrimental impact on competition.

Any change to market rules creates uncertainty and is detrimental for the promotion of competition since instability of the market rules is a significant disincentive to new entrants or for existing parties to invest in new generation assets. In particular if the rule change is based on an arbitrary methodology design to deliver particular results via consideration of historic data.

Arguments identified in support of P194:

P194 will enhance the signals provided by Energy Imbalance Prices to the forward markets which will benefit the promotion of competition by encouraging Parties to trade ahead of Gate Closure.

Increasing the incentive to trade ahead of Gate Closure will increase liquidity in the market and benefit the promotion of competition.

Ensuring Energy Imbalance Prices rise to appropriate levels at times of energy shortage will provide the correct signals into the forward markets and, over the long tem, help to promote new plant build where necessary thereby benefiting the promotion of competition.

Applicable BSC Objective d) – "The promotion of efficiency in the implementation and administration of the balancing and settlement arrangements"

Arguments identified not in support of P194:

Introducing a new variable (i.e. the PAR Volume) could lead to more Modification Proposals and introduce instability in the market and would be inefficient; and

No defect exists, hence there is no requirement for change and incurring costs to support implementation of P194 would be inefficient.

4.2 Implementation Date

The Modification Group recommended the following implementation approach for P194:

- An Implementation Date for Proposed Modification P194 of 2 November 2006 if an Authority decision is received on or before 23 March 2006, or 22 February 2007 if the Authority decision is received after 23 March 2006 but on or before 13 July 2006.

If approved, P194 would apply to Settlement Runs and Volume Allocation Runs carried out in relation to Settlement Days on or after the Implementation Date. Settlement Runs and Volume Allocation Runs carried out in relation to Settlement Days before the Implementation Date would not be affected by P194.

4.3 Legal Text

The Modification Group walked through the legal drafting at its final meeting and further reviewed the text via correspondence.

The legal drafting can be summarised as follows:

- Section T amended to include the PAR volume of 100MWh;
- Amendments to Annex T-1 to identify balancing actions to be excluded from the price calculation. This change introduces a PAR Tagging mechanism which will identify actions which are not within the PAR volume. The drafting approach is consistent with that currently used to specify the NIV tagging process;
- Amendments to the price calculation to exclude PAR tagged balancing actions; and
- Section X introduction of new definitions.

An overview of the legal text is included alongside the draft legal text in Annex 1 of this document.

5 RATIONALE FOR PANEL'S RECOMMENDATIONS TO THE AUTHORITY

5.1 Panel's Consideration of the Assessment Report

The Panel considered the P194 Assessment Report at its meeting on 10 November 2005. This section summarises the Panel's discussions in formulating its provisional recommendation for inclusion in the draft Modification Report. Details of the Report Phase consultation responses, the Panel's discussion of the responses and its final recommendation to the Authority can be found in Sections 5.2, 5.3 and 5.4 respectively.

5.1.1 Price Average Reference Volume

The Panel agreed that, were P194 approved, a PAR Volume of 100MWh would be appropriate. It was noted by the Panel that this value would avoid a single balancing action setting Energy Imbalance Prices in a significant portion of Settlement Periods and thereby realised the intent of the proposal. The Panel did not share the concerns identified by the Modification Group that the PAR Volume would always be an arbitrary value with no rational justification.

5.1.2 Impact on Competition

The Panel noted that a key argument expressed in relation to P194 during the Assessment Procedure was the perceived detrimental impact on certain participant types. The Panel highlighted a number of specific areas of consideration in relation to this issue.

One Panel member indicated that the appropriateness of the Proposed Modification differed when considering supply and generation. Generators are able to match their prices within the balancing mechanism to the marginal costs of energy in the Settlement Period. In addition, generators have the ability to manage their output and hence imbalance exposure. Therefore, it may be appropriate to apply a marginal imbalance price to generators. However, in the absence of a significant demand side response, Suppliers are not able to price at the margin within the balancing mechanism. Also it is impossible for Suppliers to predict or manage demand in order to avoid exposure to imbalance prices. As such, it would be inappropriate to apply a marginal imbalance price to Suppliers.

One Panel member noted that there are a number of factors in the market which limit the ability of Parties to balance their positions, theses include:

- The existence of Gate Closure, which limits the ability of Parties to refine their positions up to real time;
- The finite lower limit on the volume of energy that can be traded, which restricts the accuracy to which Parties (in particular smaller Parties) can manage their imbalance positions;
- Vertical integration reduces liquidity and thereby limits the ability of some Parties to obtain counter parties with which to trade out their potential imbalance positions;
- The inherent uncertainty of demand limits the ability of Suppliers to avoid imbalance exposure; and
- The risk of plant trip post Gate Closure ensures single site generators will always face the risk of exposure to Imbalance Charges.

As a consequence of these limitations, it would be detrimental for competition to increase the risk of imbalance exposure.

5.1.3 Other Comments

Two Panel members indicated the view that a single Energy Imbalance Price may be beneficial for competition as compared to the current dual price mechanism. However it was recognised that this issue was outside the scope of P194.

The Panel requested that the arguments presented in the P194 Assessment Report be related to the views of the Authority expressed in the P136/7 decision letter, this information is provided in Annex 4 of this document.

One Panel member expressed the view that it would be inappropriate to introduce marginal pricing whilst imperfections remained in the tagging mechanisms.

5.1.4 Applicable BSC Objectives: Proposed Modification

The unanimous provisional view of the Panel was that the Proposed Modification would not better facilitate achievement of the Applicable BSC Objectives when compared to the current Code baseline, for the following reasons:

Applicable BSC Objective a)

The Panel agreed that the Proposed Modification would have no impact on Applicable BSC Objective (a).

Applicable BSC Objective b)

The Panel noted the arguments identified by the Modification Group in relation to Applicable BSC Objective b).

The majority of Panel members indicated that it was a purely subjective judgement whether P194 would lead to Parties balancing their positions more accurately or taking long(er) positions to avoid exposure to System Buy Price. Therefore, these Panel members indicated that it could not be concluded that P194 would either positively or adversely affect achievement of Applicable BSC Objective b).

Some Panel Members supported the argument that P194 may encourage Parties to take a long(er) position or avoid contracting generation to avoid exposure to System Buy Price. As such, P194 would increase the overall cost of balancing and lead to less efficient operation of the Transmission System.

Some Panel members believed that that P194 would provide an increased incentive to balance, particularly during periods of System stress. As such, P194 would reduce the volume of balancing actions required and benefit the efficient operation of the Transmission System.

Whilst it was concluded that P194 would impact on Applicable BSC Objective b), the majority of Panel members recognised that an assessment of the nature of that impact (i.e. whether the affect would be positive or negative) was a purely subjective judgement of the balance of arguments expressed. Hence, the Panel concluded by majority that it could not be illustrated that P194 would better facilitate achievement of Applicable BSC Objective b).

Applicable BSC Objective c)

The Panel noted the arguments identified by the Modification Group in relation to Applicable BSC Objective c).

It was the unanimous view of the Panel that some Parties can not balance their positions any more accurately than they do at the present time. In particular small Parties may be detrimentally affected, since there may not be products on the market which allow them to trade in small enough volumes to avoid imbalance. Therefore, the introduction of an increased incentive to balance which can not be responded to would penalise some Party types, presenting a barrier to market entry and impeding the promotion of effective competition.

Some Panel members supported the argument that P194 would increase the impact of imperfections in the tagging mechanism on Energy Imbalance Prices and result in prices less reflective of the cost of energy balancing.

It was considered by the Panel that the use of a PAR Volume of 100MWh appropriately addressed the perceived defect identified under P194. Therefore, the Panel did not support the argument that P194 would detrimentally affect competition via the use of a PAR Volume which must, by its nature, be an arbitrary value with no rational justification. In addition, the Panel did not support the argument that any change to market rules creates uncertainty and therefore adversely affects competition, it was noted that this argument could be raised against any Modification Proposal.

On balance it was the unanimous view of the Panel that P194 would adversely affect achievement of Applicable BSC Objective c).

Applicable BSC Objective d)

The Panel noted the arguments identified by the Modification Group in relation to Applicable BSC Objective d). It was noted that the arguments considered against Objective d) were secondary to the main arguments expressed against Applicable BSC Objectives b) and c).

The majority of Panel members indicated the view that P194 would not have a material impact on the achievement of Applicable BSC Objective d). However, Some Panel members supported the view that the introduction of a new parameter and amendment of the baseline where no clear defect has been illustrated would be inefficient and therefore detrimental for achievement of Applicable BSC Objective d).

On balance it was the majority view of the Panel that P194 would not affect the achievement of Applicable BSC Objective d).

Provisional recommendation to the Authority

The Panel therefore agreed a unanimous provisional recommendation to the Authority that:

- The Proposed Modification should not be made.

5.1.3 Implementation Date

The Panel agreed the Implementation Date recommended by the Modification Group.

5.1.4 Legal Text

The Panel reviewed the draft text and agreed that it addresses the defect identified by the Modification Proposal.

5.2 Results of Report Phase Consultation

11 responses (representing 54 Parties and 1 non-Party) were received to the P194 Report Phase consultation. In addition, the Chemical Industries Association indicated they were not able to provide a formal response but referred to their views as previously expressed during the Assessment Consultation and noted these were unchanged.

A summary of the consultation responses is provided in the table below (bracketed numbers indicate the number of Parties and non-Parties represented by respondents).

Q	Consultation question	Yes	No
1.	Do you agree with the Panel's provisional recommendation to the Authority contained in the draft Modification Report that the Proposed Modification should not be made?	7 (46 + 1)	4 (8 + 0)
2.	Do you agree with the Panel's view that the legal text provided in the draft Modification Report correctly addresses the issue or defect identified in the Modification Proposal?	10 (54 + 0)	1 (0 + 1)
3.	Do you agree with the Panel's provisional recommendation concerning the Implementation Date for P194?	10 (54 + 0)	1 (0 + 1)

The majority of arguments expressed in the Report Phase consultation were consistent with those identified during the Assessment Procedure. However, a number of substantial further comments and views in relation to the Panel's initial assessment of P194 against the Applicable BSC Objectives were highlighted as summarised below:

Further analysis provided by the Proposer

The Proposer provided further explanation of why it believed the current average pricing mechanism does not provide sufficient incentive on participants to avoid imbalance. In addition, the Proposer provided analysis of the week commencing 21 November 2005 and associated arguments in support of P194. During this period there was a spell of cold weather and the market was short across the peak demand Settlement Periods for every day. The Proposer suggested that energy spot prices[5] are not rising to the marginal cost of energy purchased in the balancing mechanism during these periods. It is asserted that energy spot prices are linked to Energy Imbalance Prices rather than the marginal cost of energy. Because the average price of Offers accepted in the balancing mechanism is less than the marginal cost of energy, it is financially beneficial for Parties to meet increases in demand through imbalance rather than contracting ahead of Gate Closure. As a consequence, it is the view of the Proposer that the market is encouraged to go short during periods of peak demand, adversely impacting Security of Supply.

Counter Arguments

A number of respondents expressed views which were contrary to those expressed by the Panel in its initial assessment of P194 against the Applicable BSC Objectives. Whilst the arguments expressed were previously identified during the Assessment Procedure a number of respondents provided further justification and explanation to support their views. Particular areas identified were:

- A number of respondents (in support of P194) did not agree with the initial view of the Panel that P194 would have a disproportionate impact on certain categories of Party. A number of arguments were expressed in this area, primarily these focused on the view that the ability of a Party to balance its position is less relevant than ensuring that the cost of resolving imbalance is appropriately reflected onto Parties with imbalance positions. Provided the cost of resolving imbalance is appropriately reflected onto Parties with imbalance positions, each Party can make its own commercial decisions to the extent to which it is economic to balance its position. It was noted that each MWh of imbalance on the System leads to the same requirement to balance whichever participant causes it. It was also considered that, if there is sufficient requirement for Parties to purchase energy in smaller volumes to avoid imbalance exposure, suitable products will become available on the market;
- A number of respondents did not support the view that P194 would lead to participants taking long(er) positions. It was recognised that, all other factors being equal, P194 would lead to a higher System Buy Price when the System is short and a lower System Sell Price when the System is long. Therefore, P194 would provide increased incentives for Parties to avoid being in imbalance in the same direction as System. It was noted that P194 would primarily impact periods where the System was either very short or very long, therefore it would provide increased incentives for participants to avoid the market being "excessively" long or "excessively" short; and
- A number of respondents (not in support of P194) re-iterated concern with the proposed introduction of the PAR Volume, since they believed there could be no rational justification for any value used. Therefore, although these respondents agreed with the Panel's provisional recommendation that P194 should not be made, they did not agree with the initial view expressed that were P194 approved, a PAR Volume of 100MWh would be appropriate.

Please refer to the attached consultation responses for full details of the representations received.

[5] The price at which energy can be purchased outside the Balancing Mechanism close to Gate Closure, for example via a power exchange

Supply generation distinction

One respondent noted the view of the Panel that, although a marginal price signal may be appropriate for generators it is less so in the case of Suppliers. In particular the view that, since generators can price at the marginal cost of energy within the Balancing Mechanism whereas Suppliers can not respond in the same manner, it may be appropriate to apply marginal Energy Imbalance Prices to a generator but not to a Supplier. It was the view of this respondent that the ability to price at the margin within the Balancing Mechanism is not relevant to the consideration of imbalance pricing.

Legal Drafting

The majority of respondents agreed with the Panel's provisional view that the legal drafting appropriately addresses the issue identified under P194. One respondent did not support the legal drafting on the basis they did not support P194. One respondent questioned whether Section T4.4.4C was necessary. This section of the drafting provides a link to the process used to identify actions setting the Energy Imbalance Price under P194 and is consistent with the existing drafting for NIV tagging and considered appropriate.

Implementation Timescales

The majority of respondents agreed with the Panel's provisional recommendation concerning the implementation date for P194. One respondent indicated that the Implementation Date for P194 should be at least 12 months after the Authority decision to allow sufficient time to factor in the changes to imbalance methodology into contracting arrangements. Another respondent supported the proposed date but suggested it be brought forward to February 2006. It should be noted that, it light of the required lead times for an Authority decision and implementation of the necessary system changes; it does not appear that a February 2006 Implementation Date could feasibly be supported.

Further Comments

A number of consultation respondents highlighted wider issues with the cash out arrangements and suggested alternative / additional changes that may be appropriate:

- One respondent noted that, under the current baseline, the Transmission Company can potentially be required to accept low price Bids and high price Offers up to the limit of +/-£99,999/MWh. Under the current baseline, and to a greater extent under P194, these actions could influence Energy Imbalance Prices. This impact could be considered inappropriate since, were demand able to respond, it may prefer to be disconnected rather than pay an increasing price to ensure continuous provision of energy. This respondent suggested that, in the absence of a demand side response, there should be a limit on Energy Imbalance Prices equivalent to the price at which demand would choose to be disconnected.
- It was noted by one respondent that the current treatment of Balancing Services Adjustment Data requires the System Operator to use its discretion to determine whether the cost of pre–Gate Closure balancing actions should be included in the calculation of Energy Imbalance Prices. The respondent suggested that the influence of such actions would be greater under P194 and, were the proposal approved, further consideration of this area would be necessary. In particular, it was suggested that the discretionary element should be removed and a mechanical approach used for all balancing actions.

5.3 Panel's Consideration of Draft Modification Report

5.3.2 Consultation responses

Proposer Response

The Panel noted the additional justification and information provided by the Proposer.

The Transmission Company representative reiterated the view that P194 would provide more appropriate incentives for Parties to contract ahead of Gate Closure. It was the view of the representative that it is untrue to say participants cannot balance their positions more accurately. For example, Suppliers are able to predict load and can optimise exposure to shortfalls and surpluses. The representative felt that it is important the imbalance process reflects the appropriate opportunity costs and any dilution of that incentive (e.g. via an averaging approach) means there may as well be an administered price. It was also noted participants have the opportunity to trade small volumes (0.5 MWh of energy) on the power exchange. The view was also expressed that the use of 100 MWh PAR Volume appeared to address the industry's mechanistic concerns related to the potential use of small volumes to set Energy Imbalance Prices previously expressed in relation to marginal pricing. It was felt that the suggested use of the PAR Volume mechanism had focused discussion on the principles of marginal and average pricing, rather than issues associated with small volumes of actions setting imbalance prices.

One Panel member noted it was clearly significant that the System Operator had raised concerns with the current mechanism and related these to recent periods of stress on the System. However, this Panel member was not persuaded to reconsider for a number of reasons. For example, there are more general issues with the pricing mechanism that need to be addressed. Until the appropriate actions to set Energy Imbalance Prices can be robustly identified, it is inappropriate to set the Energy Imbalance Price on a restricted sample. In addition, there is limited liquidity in the market and some participants currently cannot purchase the required volumes through the forwards market. The Panel Member suggested the prices under P194 would be penal. Therefore, any increase in the incentive to balance can not be justified in light of the current level of liquidity in the market.

Relative merits of average and marginal pricing mechanisms

The Panel noted the view of some consultation respondents that the appropriateness of the resulting imbalance prices is the primary area to consider, rather than the impact on certain categories of participant.

One Panel member expressed the view economic theory suggests a marginal mechanism would provide the correct price signal. If a marginal price is used, the correct incentives on participants to balance their positions will follow; this will in turn create appropriate length in the market. It is feasible that, were P194 implemented, the market would evolve and liquidity would develop as a consequence of marginal pricing. It was the view of this Panel Member that there must be a good justification for not having a marginal pricing mechanism and that no convincing arguments for this had been identified during the progression of P194. The Panel Member also noted that the nature of the market means changes will often create financial winners and losers; the fact that this occurs should not be used as rationale for rejecting a change if it is appropriate. It was the view of this Panel member that at some point, if not under P194, a marginal pricing mechanism should be introduced.

A number of Panel Members highlighted features of the current market which they believe justify the utilisation of an average mechanism as opposed to that proposed under P194:

- Previous arguments in relation to increased influence of imperfections in the current tagging mechanisms under P194 were reiterated;
- The view that the current market structure leads to a lack of liquidity which would prevent participants responding to any increased incentive to balance was noted; and
- It was recognised that the market relies extensively on averaging, for example volumes are settled on the basis of half hourly averages and profiling is used to establish these volumes. In this content using an average approach to derive Energy Imbalance Prices can be justified.

One Panel member queried how many companies should go in the hope a liquid market develops.

PAR Volume

The Panel noted the view expressed by a number of participants that the use of a PAR Volume would be arbitrary and no value could be justified. The Panel reiterated its view that the use of a PAR volume of 100MWh would be appropriate in the context of P194. It was noted that there are numerous parameters already utilised in the Code which have a material impact on participants. It was also recognised that, although a value of 100MWh may be arbitrary, it is not necessarily inappropriate. A volume of 100MWh would remove issues associated with small volumes setting Energy Imbalance Prices and is therefore an appropriate mechanism if a marginal approach were to be implemented. One Panel member expressed the view that the use of 100MWh would provide a better approximation of the marginal cost of energy and therefore, when assessed against the current baseline, is appropriate.

5.3.2 Applicable BSC Objectives

Having considered the report phase consultation responses the Panel concluded by majority that P194 would not better facilitate the Applicable BSC Objectives.

The majority of Panel members reiterated the view that P194 would have a disproportionate adverse financial impact on some categories of participants and therefore have a detrimental impact on achievement of Applicable BSC Objective C. Some of these members believed P194 would also have a detrimental impact on achievement of Applicable BSC Objective B, as it would provide incentives for participants to take long(er) positions and therefore adversely impact efficient operation of the Transmission System. Others believed that any beneficial impact on Applicable BSC Objective B in terms of increased incentives to balance and consequential increases in the efficiency of Transmission System operation would be outweighed by an adverse impact on competition. A minority of Panel members also felt there would be a detrimental impact on Applicable BSC Objective D for the reasons highlighted in section 5.1.4 of this document, it was noted that this impact was secondary to the consideration of Applicable BSC Objectives B and C.

One Panel member (not available during consideration of the P194 Assessment Report) indicated the view that P194 would better facilitate the Applicable BSC Objectives. This Panel member supported the arguments identified in support of P194 in the context of Applicable BSC Objectives B and C during the assessment procedure as outlined in section 4.1 of this report.

5.4 Panel's Final Recommendation to the Authority

On the basis of the above discussions, the Panel therefore agreed a **MAJORITY** recommendation to the Authority that:

- The Proposed Modification **SHOULD NOT** be made

The Panel unanimously agreed the following recommended implementation approach for P194:

- An Implementation Date for the Proposed Modification of 2 November 2006 if an Authority decision is received on or before 23 March 2006, or 22 February 2007 if the Authority decision is received after 23 March 2006 but on or before 13 July 2006

The Panel unanimously agreed the legal text for modifying the Code in respect of the Proposed Modification, as provided in Annex 1.

6 TERMS USED IN THIS DOCUMENT

Other acronyms and defined terms take the meanings defined in Section X of the Code.

Acronym/Term	Definition
PAR Volume	Price Average Reference Volume, the volume of actions that would be used to set the Main Energy Imbalance Price under P194
PAR Tagging	The process of removing Acceptance Volumes from the calculation of Energy Imbalance Prices that would be introduced under P194
Main Energy Imbalance Price	The Energy Imbalance Price applied to imbalances in the same direction as the system.
Energy balancing actions	Balancing actions taken purely to increase the level of generation or demand on the Transmission System.

System balancing actions	Balancing actions which are not taken purely to increase or decrease the level of generation or demand on the Transmission System. For example to resolve a constraint on the physical flow of electricity caused by the finite capacity of the Transmission System.
NIV	Net Imbalance Volume
SO	System Operator
SBP	System Buy Price
SSP	System Sell Price
RCRC	Residual Cashflow Reallocation Cashflow
BSAD	Balancing Services Adjustment Data
SAA	Settlement Administration Agent
BMRA	Balancing Mechanism Reporting Agent

7 DOCUMENT CONTROL

7.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	14/10/05	Tom Bowcutt	Sarah Jones	For peer review
0.2	15/10/05	Tom Bowcutt	Industry	Consultation
0.3	29/11/05	Tom Bowcutt	Sarah Jones	Technical Review
0.4	02/12/05	Tom Bowcutt	Panel	Approval
1.0	13/12/05	Tom Bowcutt	Authority	Decision

7.2 References

Ref	Document Title	Owner	Issue Date	Version
1	P136 - Marginal Definition of the 'main' Energy Imbalance Price ELEXON - Website P136	BSCCo	-	-
2	P137 -Revised Calculation of System Buy Price and System Sell Price ELEXON Website - P137	BSCCo	-	--

7.3 Intellectual Property Rights, Copyright and Disclaimer

ANNEX 1 LEGAL TEXT

Draft legal text for the Proposed Modification is attached as a separate document, Annex 1A.

The proposed changes can be summarised as follows:

Section	Change
Section T - 1.8.1	New paragraph specifying the PAR Volume as 100MWh
Section T -4.4.4C	New paragraph outlining that Accepted Bid / Offer Volumes and energy BSAD volumes may be identified as PAR Tagged in accordance with Annex T-1
Section T - 4.4.5	Amended to exclude PAR Tagged actions from the calculation of Energy Imbalance Prices
Section T - 4.4.10	Existing data items representing the Non-NIV tagged portion of energy BSAD renamed. This is to reflect the calculation of two versions of theses values; – NTESVA and NTESVA are the BSAD energy volumes that are tagged by NIV tagging – TESVA and TESVA are the total BSAD energy volumes tagged by NIV tagging and PAR Tagging. The remaining BSAD energy volumes (UEBVA and UESVA) are then used to calculate the Energy Imbalance Price The requirement for this change is detailed further in the P194 Requirements Specification.
Annex T 3.1 (d) and (f)	Amended to specify the results of NIV Tagging are used for PAR Tagging (rather than feeding directly into the calculation of Energy Imbalance Prices)
Annex T 4.1 (a) and (b)	Consistent with the approach used for NIV Tagging, Buy and Sell Actions remaining following NIV Tagging are ranked in the following order; – Sell Actions: Ranked in order of increasing price (from n″ = 1 being the lowest price and therefore most expensive to the System) – Buy Actions: Ranked in order of decreasing price (from n″ = 1 being the highest price and therefore most expensive to the System)
Annex T 4.1 (c) and (d)	Where the volume of actions remaining following NIV Tagging is less than the PAR Volume, PAR Tagging will not be performed
Annex T 4.1 (d) and (f)	Actions which are outside the PAR Volume and therefore PAR tagged are identified. This is achieved using the following approach (similar to that currently used for NIV Tagging): Values of f and Ø are identified such that: PAR Volume = Sum of all actions where n″ less than f plus the proportion Ø of the volume of the action n″ equal to f Having solved the equation above, actions are identified as PAR Tagged where: – n″ > f (i.e. the action is outside the PAR Volume); or – For the action on the threshold, where n= f the proportion of the action (1-Ø) will be removed (i.e. the portion of the action outside the PAR Volume)
Annex T 4.1 (g)	Where actions have the same price, each of these actions is PAR Tagged in the same proportion. This is identical to the approach used for NIV Tagging.

ANNEX 2 PROCESS FOLLOWED

Copies of all documents referred to in the table below can be found on the BSC Website at: http://www.elexon.co.uk/changeimplementation/ModificationProcess/ModificationDocumentation/modProposalView.aspx?propID=212

Date	Event
26/08/05	Modification Proposal raised by National Grid
08/09/05	IWA presented to the Panel
15/09/05	First Assessment Procedure Modification Group meeting held
23/09/05	Requirements Specification issued for BSC Agent impact assessment
28/09/05	Second Assessment Procedure Modification Group meeting held
10/10/05	Request for Party/Party Agent impact assessments request issued
10/10/05	Request for Transmission Company analysis issued
10/10/05	Request for BSCCo impact assessment issued
27/09/05	BSC Agent impact assessment response returned
24/10/05	Party/Party Agent impact assessment responses returned
24/10/05	Transmission Company analysis returned
30/09/05	BSCCo impact assessment returned
07/10/05	Assessment Procedure consultation issued
24/10/05	Assessment Procedure consultation responses returned
27/10/05	Third Assessment Procedure Modification Group meeting held
10/11/05	Assessment Report presented to the Panel
14/1105	Draft Modification Report issued for consultation
28/11/05	Draft Modification Report consultation responses returned
08/12/05	Draft Modification Report presented to the Panel
12/12/05	Final Modification Report issued to the Authority for decision

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL[6]	
Meeting Cost	£2,000
Legal/Expert Cost	£5,000
Impact Assessment Cost	£5,000
ELEXON Resource	65 Man days £17,000

[6] Clarification of the meanings of the cost terms in this annex can be found on the BSC Website at the following link: http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf

ANNEX 3 ASSESSMENT REPORT

The P194 Assessment Report is attached as a separate document, Annex 3A.

The Assessment Report includes:

- The conclusions of the Modification Group regarding the areas set out in the P194 Terms of Reference;
- Details of the Group's membership;
- The full results of the Assessment Procedure impact assessment; and
- Full copies of all responses to the Assessment Procedure consultation.

ANNEX 4 P136/7 AUTHORITY DECISION LETTER

The Panel noted that the areas considered during the assessment of P194 aligned with those highlighted in by the Authority in its decision letter for P136/7 as outlined below:

Area	Assessment Report Reference
Link between the Balancing Mechanism and forward and spot markets	Requirements for increased incentives to balance (Section 12)
Incentives on market participants	Incentives to balance (Section 3.6) and impacts On Behaviour (Section 3.8)
Cost reflective pricing	Cost Reflectivity of Energy Imbalance Prices (Section 3.7)
Risk of manipulation	Actions Setting Energy Imbalance Prices (Section 3.4)
Potential that marginal cash-out prices could distort the market through the RCRC mechanism	Impact on the Residual Cashflow Reallocation Cashflow (Section 3.10)