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Draft MODIFICATION REPORT for Modification Proposal P198 'Introduction of a Zonal Transmission Losses Scheme'

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Date of Issue:	18 August 2006	**Document Reference:**	P198RR
Reason for Issue:	For consultation	**Version Number:**	0.2

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

Proposed Modification P198 seeks to allocate the 'variable' (heating) element of transmission losses to BSC Parties on a 'zonal' locational basis, according to the extent to which each Party is estimated to give rise to them. The solution for Proposed Modification P198 is based closely on previous Modification Proposal P82. It involves the calculation of one Adjusted Annual Zonal Transmission Loss Factor (TLF) value per TLF Zone for each BSC Year, with no phased implementation. TLF Zones would be based on Grid Supply Point Groups, and the TLFs would be calculated on an annual ex-ante (forecast) basis for each forthcoming BSC Year (1 April – 31 March). All BM Units within a Zone would receive the Adjusted Annual Zonal TLF value for that Zone in every Settlement Period of the applicable BSC Year.

Alternative Modification P198 is the same as the Proposed Modification, except that it comprises:

- An annual ex-ante calculation of four Adjusted Seasonal Zonal TLF values for each TLF Zone, one for each BSC Season; and
- A linear phased implementation of these Adjusted Seasonal Zonal TLF values over the first four BSC Years of the scheme, such that TLFs would be applied at 20% of their full value in BSC Year 1, 40% in BSC Year 2, 60% in BSC Year 3, 80% in BSC Year 4, and 100% in BSC Year 5 and all subsequent years.

BSC PANEL'S RECOMMENDATIONS

Having considered and taken into due account the contents of the P198 draft Modification Report, the BSC Panel recommends:

- **that Proposed Modification P198 should not be made;**
- **that Alternative Modification P198 should not be made;**
- **an Implementation Date for both the Proposed Modification and Alternative Modification of 1 April 2008 if an Authority decision is received on or before 22 March 2007, or 1 October 2008 if the Authority decision is received after 22 March 2007 but on or before 20 September 2007; 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

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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 P198.

Please note that this table represents a summary of the full impact assessment results contained in Appendix 3 of the P198 Assessment Report. A copy of the Assessment Report is attached as Appendix 3 to this Modification Report.

Parties		Sections of the BSC		Code Subsidiary Documents	
Distribution System Operators	☐	A	☐	BSC Procedures	☒
Generators	☒	B	☐	Codes of Practice	☐
Interconnectors	☒	C	☐	BSC Service Descriptions	☒
Licence Exemptable Generators	☒	D	☐	Party Service Lines	☐
Non-Physical Traders	☐	E	☒	Data Catalogues	☐
Suppliers	☒	F	☐	Communication Requirements Documents	☒
Transmission Company	☒	G	☐	Reporting Catalogue	☒
Party Agents		H	☒	Load Flow Model Specification*	☒
Data Aggregators	☐	I	☐	**Core Industry Documents**	
Data Collectors	☐	J	☐	Ancillary Services Agreement	☐
Meter Administrators	☐	K	☐	British Grid Systems Agreement	☐
Meter Operator Agents	☐	L	☐	Data Transfer Services Agreement	☐
ECVNA	☐	M	☐	Distribution Codes	☐
MVRNA	☐	N	☐	Distribution Connection Agreements	☐
BSC Agents		O	☐	Distribution Use of System Agreements	☐
SAA	☒	P	☐	Grid Code	☐
FAA	☐	Q	☐	Master Registration Agreement	☐
BMRA	☒	R	☐	Supplemental Agreements	☐
ECVAA	☐	S	☐	Use of Interconnector Agreement	☐
CDCA	☒	T	☒	**BSCCo**	
TAA	☐	U	☐	Internal Working Procedures	☒
CRA	☒	V	☒	**BSC Panel/Panel Committees**	
SVAA	☐	W	☐	Working Practices	☒
Teleswitch Agent	☐	X	☒	**Other**	
BSC Auditor	☒			Market Index Data Provider	☐
Profile Administrator	☐			Market Index Definition Statement	☐
Certification Agent	☐			System Operator-Transmission Owner Code	☐
Transmission Loss Factor Agent*	☒			Transmission Licence	☐
Other Agents				Network Mapping Statement*	☒
Supplier Meter Registration Agent	☐			Load Flow Model Reviewer*	☒
Data Transfer Service Provider	☐				

*New document/role introduced by P198

1 BACKGROUND

1.1 Types of Transmission Losses

Transmission losses can be considered to comprise two main elements:

- 'Fixed' losses are those which do not vary significantly with the power flow. In transformers, the losses arise from magnetising the iron core. In overhead lines, they include losses dependent on the voltage levels, length of line and climatic conditions.
- 'Variable' losses arise through the heat caused by current flowing through the transformers and lines. Variable losses increase with the current (and associated power flow) and the length of line in which it flows.

References to 'total' transmission losses throughout this document are used to represent the sum of fixed and variable losses (i.e. the total energy lost from the Transmission System at any given point in time).

1.2 Existing Allocation Mechanism for Transmission Losses

Transmission losses are allocated to BSC Parties ('Parties') as part of their Trading Charges, by adjusting individual BM Unit Metered Volumes in Settlement through a Transmission Loss Multiplier (TLM). The rules and calculations for allocating transmission losses to Parties are set out in Section T2 of the Balancing and Settlement Code ('the Code').

Under the existing Code provisions, both fixed and variable transmission losses in each Settlement Period are allocated to Parties on a 'uniform' (non-locational) basis in proportion to each Party's metered energy. The current allocation of transmission losses therefore does not take account of the extent to which individual Parties give rise to such losses. Although a parameter for a 'differential' allocation of some or all transmission losses is included in the Code (the Transmission Loss Factor or TLF), this is currently set to zero so has no practical effect. The value of TLF can only be amended through a modification to the Code.

Further detail regarding the existing arrangements can be found in Section 2 of the P198 Assessment Report in Appendix 3.

1.3 Related Modification Proposals

There are currently three other Pending Modification Proposals being progressed in the area of zonal transmission losses, as follows:

- Modification Proposal P200 'Introduction of a Zonal Transmission Losses Scheme with Transitional Scheme' (raised by Teesside Power Limited on 21 April 2006);
- Modification Proposal P203 'Introduction of a Seasonal Zonal Transmission Losses Scheme' (raised by RWE Npower on 26 June 2006); and
- Modification Proposal P204 'Scaled Zonal Transmission Losses' (raised by British Energy Power & Energy Trading Ltd on 3 July 2006).

All of the proposals seek to introduce a locational allocation of variable losses through the calculation of 'zonal' TLF values, although their precise calculations and application of these values differ. A summary table showing the high-level solutions for these Modification Proposals (and any Alternative Modifications where applicable) is provided on the following page, whilst further detail regarding each proposal can be found in Section 2 of the P198 Assessment Report in Appendix 3. The Modification Reports for P200 and P203 (References 1 and 2) are scheduled to be presented to the BSC Panel ('the Panel') and the Authority in parallel with P198. P204 is currently within the Assessment Procedure, with an Assessment Report to be presented to the Panel at its meeting on 12 October 2006.

Please note that P198, P200, P203 and P204 (and their Alternative Modifications where applicable) are mutually exclusive, such that only one could be approved by the Authority for implementation.

Table 1 – Summary of Pending Transmission Losses Modification Proposals

Aspect of Solution	P198 Proposed	P198 Alternative	P200 Proposed	P200 Alternative	P203 Proposed	P204 Proposed
Scope of Zonal TLF Calculation	Scaled Marginal (Variable Losses Only)	Scaled Marginal (Variable Losses Only)	Scaled Marginal (Variable Losses Only)	Scaled Marginal (Variable Losses Only)	Scaled Marginal (Variable Losses Only)	Scaled Marginal (Variable Losses Only)
Scaling Factor	0.5	0.5	0.5	0.5	0.5	TBC - to ensure no energy credits
Applicable Period for TLFs	BSC Year	BSC Season	BSC Year	BSC Season	BSC Season	TBC
Nature of TLF Calculation	Ex-Ante	Ex-Ante	Ex-Ante	Ex-Ante	Ex-Ante	Ex-Ante
Frequency of TLF Calculation	Annual	Annual	Annual	Annual	Annual	Annual
Applicable Zones for Production BM Units	GSP Group	GSP Group	GSP Group	GSP Group	GSP Group	GSP Group
Applicable Zones for Consumption BM Units	GSP Group	GSP Group	GSP Group	GSP Group	GSP Group	GSP Group
Mitigation of Impacts?	No	Yes	Yes	Yes	No	No
Type of Mitigation	-	Linear Phasing	Hedging	Hedging	-	-
Period of Mitigation	-	4 Years	15 Years	15 Years	-	-

2 DESCRIPTION OF MODIFICATION

This section outlines the solutions for the Proposed Modification and Alternative Modification, as developed by the P198 Modification Group ('the Group') during the Assessment Procedure.

For a full description of the original Modification Proposal as submitted by RWE Npower ('the Proposer'), please refer to the P198 Initial Written Assessment (IWA). Further background to the proposal can be found in Section 2 of the P198 Assessment Report in Appendix 3.

2.1 Proposed Modification

The Proposed Modification would allocate the variable element of transmission losses to Parties on a 'zonal' locational basis through the TLF, according to the extent to which each Party is estimated to give rise to variable losses. The solution for Proposed Modification P198 is based closely on Proposed Modification P82[3], and involves the following 'scaled marginal' methodology for calculating locational TLFs:

1) An electrical model of the Transmission System (a 'Load Flow Model') would be built, containing 'Nodes' to represent points where energy flows on or off the Transmission System or where two or more circuits on the network meet. Each Node on the Transmission System would be identified by the Transmission Company, and would be allocated to a specific Zone on the transmission network on the basis of a 'Network Mapping Statement' maintained by BSCCo. The TLF Zones would be set by the Panel, based on the geographic areas covered by Grid Supply Point (GSP) Groups. Since there are currently 14 GSP Groups, there would therefore be 14 TLF Zones.

2) TLFs would be calculated on an ex-ante basis (i.e. forecasted) for each BSC Year, using Metered Volumes and Network Data for Sample Settlement Periods from a preceding 12-month period (the 'Reference Year'). The required Metered Volumes and Network Data would be provided by the Central Data Collection Agent and the Transmission Company respectively.

3) Prior to the start of each BSC Year (1 April – 31 March), the Load Flow Model would be run by a Transmission Loss Factor Agent ('the TLFA') to calculate how an incremental (or 'marginal') increase (or 'injection') in power at each individual Node would affect the total losses from the Transmission System. The output of the Load Flow Model would be a TLF value for each Node in each of the Sample Settlement Periods. Positive TLF values would be produced for Nodes where an incremental increase in generation (or reduction in demand) had the effect of decreasing total transmission losses. Negative TLF values would be produced for Nodes where an incremental increase in generation (or reduction in demand) had the effect of increasing total transmission losses. For example, if an injection of an extra unit of energy at a Node increased total losses by 0.02%, the TLF for that Node in that Settlement Period would be -0.02.

4) The TLFA would average these raw Nodal TLFs across all the Nodes in each TLF Zone by 'volume-weighted' averaging, to give 14 Zonal TLF values for each Sample Settlement Period (one per TLF Zone). The TLFA would then convert these to Annual Zonal TLFs by 'time-weighted' averaging.

[3] Modification Proposal P82 'Introduction of Zonal Transmission Losses on an Average Basis'. P82 was approved by the Authority in January 2003 for implementation in April 2004. However, this decision was quashed by the High Court in January 2004 following a judicial review, and P82 was remitted to the Authority for redecision where it was subsequently rejected. Further information can be found in Section 2.4 of the P198 Assessment Report in Appendix 3.

5) The TLFA would adjust the Annual Zonal TLFs by a scaling factor of 0.5 such that the volume of energy allocated via the TLFs was comparable to the volume of variable losses calculated by the Load Flow Model.[4] These 14 Adjusted Annual Zonal TLFs (one per TLF Zone) would be made publicly available by BSCCo no less than three months prior to their use in the TLM Settlement calculation for the applicable BSC Year.

6) Each BM Unit would be allocated to a specific TLF Zone by BSCCo on the basis of the Network Mapping Statement, with any question or dispute over their zonal allocation to be resolved by the Panel. Using the Network Mapping Statement, the TLFA would determine the TLF value to be applied to each BM Unit in the TLM Settlement calculation for the applicable BSC Year. This BM Unit-Specific TLF would be the Adjusted Annual Zonal TLF value for the Zone in which the BM Unit was located. All BM Units within a Zone would therefore receive the same single TLF value (the Adjusted Annual Zonal TLF for that Zone), for every Settlement Period within the applicable BSC Year. A positive TLF value would increase the value of TLM used to scale a BM Unit's Metered Volume (a benefit to generators and disadvantage to Suppliers), whilst a negative TLF value would decrease the value of TLM (a benefit to Suppliers and disadvantage to generators).

7) The BM Unit-Specific TLFs calculated by the TLFA would be registered in BSC Systems by the Central Registration Agent, and would be used by the Balancing Mechanism Reporting Agent and the Settlement Administration Agent within the Balancing Mechanism Reporting Service and Settlement calculations respectively.

8) The remaining 'fixed' element of transmission losses would continue to be allocated to Parties on a non-locational basis as currently, and the existing overall 45:55 allocation of total transmission losses to generation and demand would be retained.

9) Under Proposed Modification P198, there would be no phased implementation or 'hedging' of exposure to the new zonal TLFs, which would therefore take full effect from the first Settlement Period on the Implementation Date.

Further detail regarding the solution for the Proposed Modification can be found in Section 4 of the P198 Assessment Report in Appendix 3.

2.2 Alternative Modification

Under the Alternative Modification, the TLFA would calculate Nodal TLFs and Zonal TLFs in the same way as for the Proposed Modification, but would time-weight by BSC Season rather than by BSC Year to calculate a set of four Seasonal Zonal TLFs for each TLF Zone – one for each BSC Season.

The BSC Seasons are already defined in Section K of the Code, and are:

BSC Spring: 1 March – 31 May inclusive;

BSC Summer: 1 June – 31 August inclusive;

BSC Autumn: 1 September – 30 November inclusive; and

BSC Winter: 1 December – 28 February inclusive (or 29 February in a leap year).

These Seasonal Zonal TLFs would be multiplied by the same 0.5 scaling factor as under the Proposed Modification to ensure that the level of variable losses allocated through these TLFs was comparable to that calculated by the Load Flow Model. However, under the Alternative Modification, the Seasonal Zonal TLFs would also be multiplied by an additional 'beta' (β) scaling factor to create the final set of four Adjusted Seasonal Zonal TLFs.

[4] Such scaling is necessary due to the square load relationship of heating losses to power (i.e. they increase in proportion to the square of the current). Without the scaling, the zonal TLFs would recover more than the actual level of variable losses calculated by the Load Flow Model. Further information can be found in Section 4.4 of the P198 Assessment Report in Appendix 3.

The value of the β scaling factor would be as follows:

Applicable BSC Year 1:	0.2
Applicable BSC Year 2:	0.4
Applicable BSC Year 3:	0.6
Applicable BSC Year 4:	0.8
Applicable BSC Year 5 onwards:	1.0.

Adjusted Seasonal Zonal TLF values would therefore be phased in linearly over the first four BSC Years of the scheme, such that they were applied at 20% of their full value in BSC Year 1, 40% in BSC Year 2, 60% in BSC Year 3, 80% in BSC Year 4, and 100% in BSC Year 5 and all subsequent years. This scaling would be undertaken by the TLFA as part of its annual ex-ante calculation of TLFs, and would apply equally to all BM Units.

All BM Units within a Zone would receive the Adjusted Seasonal Zonal TLF value for that Zone in the applicable season. TLFs would be recalculated for each BSC Year, based on data from a previous Reference Year.

Since the BSC Spring season (1 March – 31 May) spans the beginning of a new BSC Year on 1 April, the new set of TLFs for each year would therefore come into effect part-way through this season. This would result in a changeover from the BSC Spring seasonal TLF value applied to a BM Unit in the last Settlement Period on 31 March to a new value for that season which was effective from the first Settlement Period on 1 April.

Further detail regarding the solution for the Alternative Modification can be found in Section 4.8 of the P198 Assessment Report in Appendix 3.

3 AREAS RAISED BY THE TERMS OF REFERENCE

The following areas were considered by the Group during the Assessment Procedure for P198:

- The participation of impacted parties within the Group and the consultation process;
- Relevant background information to the Group's assessment (including other previous related Modification Proposals in the area of transmission losses);
- The detail of the Proposed Modification solution and legal text;
- The results of a TLF modelling exercise undertaken by Siemens PTI (PTI) to establish the likely magnitude, variability and sensitivity of TLF values during 2006/07 (using historic data from 2005/06) – supporting the Group in its consideration of the solution for P198;
- The Proposed Modification implementation approach and costs (based on the responses received to an industry impact assessment);
- Potential options for an Alternative Modification (including consideration of the responses received to the first Assessment Procedure industry consultation);
- The results of a cost-benefit analysis undertaken by OXERA Consulting (OXERA) to estimate the future costs and benefits of P198 to the market over a ten-year period commencing 2006/07 – supporting the Group in its consideration of the merits of P198;
- The detail of the Alternative Modification solution and legal text;
- The Alternative Modification implementation approach and costs (based on an industry impact assessment);
- The responses received to the second Assessment Procedure industry consultation; and

- The responses received to an additional industry consultation regarding the correction of a data error in the OXERA cost-benefit analysis.

These areas are discussed in the P198 Assessment Report contained in Appendix 3, and are not covered further here.

4 IMPLEMENTATION APPROACH AND COSTS

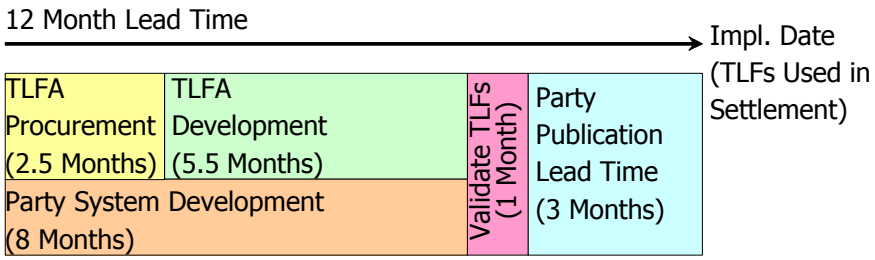
4.1 Proposed Modification

This section summarises the implementation approach and costs in respect of the Proposed Modification. Further detail can be found in Section 4.5 of the P198 Assessment Report in Appendix 3.

4.1.1 Implementation Lead Time

The Proposed Modification would require a twelve-month implementation lead time, based on the critical path set out in Figure 1 below. Although there would be other implementation activities undertaken in parallel with these (such as changes to BSC Agent documentation and Code Subsidiary Documents), the additional activities are not shown since they do not determine the required timescales.

Figure 1 – Proposed Modification Implementation Timescales



An explanation of these lead times can be found in Section 4.5 of the P198 Assessment Report.

4.1.2 Implementation Date

The Group unanimously agreed that the Implementation Date for the Proposed Modification should coincide with Parties' contractual rounds, such that the TLF values could be factored into Parties' contracts prior to their first use in Settlement. Given the required twelve-month lead time, the Group agreed that the earliest possible Implementation Date for the Proposed Modification would therefore be 1 April 2008. The Group agreed a fall-back Implementation Date of 1 October 2008 on the basis that, whilst an October implementation might not be tied to Parties' full annual contract rounds, it would allow TLFs to be factored into autumn contracts and would prevent delaying implementation until the following April.

The new zonal TLFs would come into effect from the first Settlement Period on the Implementation Date. For a 1 April implementation, this would also be the first Settlement Period on the first day of the BSC Year. For a 1 October implementation, the first set of TLF values applied from this date would still be annual values calculated using a full Reference Year of data – however, they would only apply for six months during this first year. TLFs for all subsequent years would be calculated and applied on an annual basis for each full BSC Year. The Group agreed that the legal text needed to be sufficiently flexible to cover the possibility of either an April or October implementation in the first year of the scheme. Clarifications were therefore included within the legal drafting to cover the eventuality that the Proposed Modification would be implemented part-way through a BSC Year.

4.1.3 Implementation and Operational Costs

The tables below show the estimated central implementation and operational costs of the Proposed Modification.

PROPOSED MODIFICATION IMPLEMENTATION COSTS[5]

		Cost	Tolerance
Logica CSA Cost	Change Specific Cost	£18,762	Nil
	Release Cost	£17,114	Nil
	Total Logica CSA Cost	£35,876	Nil
TLFA/Load Flow Model Reviewer Cost	Development, Testing and Deployment	£250,000	+/- 50%
BSC Audit Cost	Planning and Development	£15,000	+/- 50%
Implementation Cost	External Programme Audit	£0	Nil
	Design Clarifications	£14,294	+/- 100%
	Additional Resource Costs	£0	Nil
	Additional Testing/Audit Support Costs	£20,000	+/- 50%
Total Demand Led Implementation Cost		£335,170	+/- 50%
ELEXON Implementation Resource Cost		600 man days £132,000	+/- 5%
Total Implementation Cost		**£467,170**	**+/- 35%**

[5] 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

PROPOSED MODIFICATION ONGOING SUPPORT AND MAINTENANCE COSTS

	Cost	Tolerance
Logica CSA Operation Cost Per BSC Year Logica CSA Maintenance Cost Per BSC Year	£2,645 £0	Nil Nil
TLFA/Load Flow Model Reviewer Operational Cost Per BSC Year	£100,000	+/- 50%
BSC Auditor Cost Per BSC Year	£40,000	+/- 50%
ELEXON Operational Cost Per BSC Year	70 man days £15,400	+/- 5%
Total Operational Cost Per BSC Year	**£158,045**	**+/- 45%**

a) Implementation Costs

The twelve-month implementation lead time for the Proposed Modification, coupled with a 1 April Implementation Date, means that it would not be possible to align the TLFA systems development with BSCCo's standard release strategy. The Proposed Modification would therefore be implemented largely as a 'stand-alone' project, with the associated release overheads that this would incur.

A high-level summary of the different elements of the implementation costs is provided below. Further detail can be found in Section 4.5 of the P198 Assessment Report in Appendix 3.

i) Transmission Company

In addition to the central costs shown on the previous page, the Transmission Company estimated that it would incur £40,000 in initial implementation costs (including development costs and operational costs for the first BSC Year of the scheme) as a result of the Proposed Modification. A copy of the Transmission Company analysis can be found in Appendix 3 of the P198 Assessment Report.

ii) BSC Parties

The non-confidential costs quoted by those Parties which responded to the Proposed Modification impact assessment ranged from nil to six-figure sums, with the average being in the region of £200,000. The costs provided by these Parties reflected the extent of the changes which would be required to their systems to take account of zonal TLF values. Some respondents included confidential cost information to support their responses. This information has not been provided to the Group or the Panel, but will be submitted to the Authority as part of the final Modification Report. Copies of the non-confidential responses received can be found in Appendix 3 of the P198 Assessment Report.

iii) BSCCo/Logica Central Services Agent

Since the system functionality for the use of annual zonal TLFs would be based on that previously developed for P82, the Logica Central Services Agent (CSA) and ELEXON costs for the Proposed Modification are limited to testing this functionality and updating documentation. A copy of the Logica impact assessment can be found in Appendix 3 of the P198 Assessment Report.

iv) TLFA/Load Flow Model Reviewer

The TLFA (the new BSC Agent responsible for calculating zonal TLFs using a Load Flow Model) and the Load Flow Model Reviewer (an independent expert appointed to verify the compliance of the Load Flow Model with its specification) would be new roles created by P198, for which a competitive tender process would be required. In the absence of available impact assessments for these organisations, these costs were estimated by BSCCo based on the following:

- The range of development costs quoted within the bids which were submitted for the P82 TLFA role in 2003; and
- The actual expenditure which was incurred by the P82 Load Flow Model Reviewer as part of the P82 development work during 2003.

The 50% tolerance associated with the TLFA/Load Flow Model Reviewer costs reflects the uncertainty of the applicability of these costs to Proposed Modification P198, and the possibility for cost-savings if the outcome of the TLFA competitive tender was that the P82 organisation was re-used.

v) BSC Auditor

Since the BSC Audit is required to include the systems and processes of all BSC Agents, the BSC Audit Scope would need to be extended to cover the new TLFA role created by P198. The exact impact and costs resulting from this extension would depend on the specific TLFA audit requirements set by the Panel as part of its annual agreement of the BSC Audit Scope.

Since the P82 judicial review ruling occurred before the P82 TLFA had been incorporated into the BSC Audit Scope, no costs for the Audit impact of a zonal transmission losses scheme were available to the Group. The costs of extending the BSC Audit to include the Market Index Data Providers (MIDPs) in 2002/2003 were therefore used by BSCCo to estimate the likely order of magnitude of the additional Audit costs for Proposed Modification P198. The 50% tolerance associated with these costs reflects the uncertainty of the applicability of the MIDP Audit costs to the TLFA role.

b) Operational Costs

Under the Proposed Modification, zonal TLFs would be calculated on an ex-ante basis for each BSC Year. The total BSC Agent and ELEXON operational costs for each year therefore include the activities required to calculate TLFs for the following year, in addition to other operational activities such as allocating TLF values to any new BM Units which registered part-way through a year. The 50% tolerance associated with the TLFA, Load Flow Model Reviewer and BSC Auditor operational costs reflects the uncertainty associated with these costs in the absence of available impact assessments from these organisations. The TLFA costs were estimated by BSCCo based on the range of operational costs quoted within the bids received for the P82 TLFA role, whilst those for the Load Flow Model Reviewer were based on the day rate of the P82 Load Flow Model Reviewer and an assumption of five man day's effort per BSC Year (equivalent to the provision of services in support of one Trading Dispute per year). The BSC Auditor costs were estimated by BSCCo, and were based on the annual operational costs of extending the BSC Audit Scope to include the MIDPs in 2002/2003.

In addition to the central costs shown in the table, the Transmission Company estimated that it would incur £40,000 per annum in ongoing operational costs as a result of the Proposed Modification.

4.2 Alternative Modification

4.2.1 Implementation Approach

The Group unanimously agreed that the same implementation approach should be followed for the Alternative Modification as for the Proposed Modification, whereby the Implementation Date should be tied to Parties' contractual rounds.

4.2.2 Implementation and Operational Costs

The tables on the following pages show the estimated central implementation and operational costs of the Alternative Modification. The sections below outline the additional costs associated with the Alternative Modification when compared to the Proposed Modification.

a) Transmission Company

The Transmission Company confirmed that the Alternative Modification would have no additional impact on it compared with the Proposed Modification. A copy of the Transmission Company analysis can be found in Appendix 3 of the P198 Assessment Report.

b) BSCCo

The Alternative Modification would increase the amount of required ELEXON implementation effort by thirteen man days (equating to £2,860) compared with the Proposed Modification, in order to amend BSC Systems documentation to reflect the use of multiple TLF values per BM Unit.

There would be no increase in ELEXON operational costs.

c) BSC Parties

The majority of Parties which responded to the Alternative Modification impact assessment stated that any additional costs incurred by the Alternative Modification would be subsumed within the figures already provided in respect of the Proposed Modification. Some respondents included confidential cost information to support their responses. This information has not been provided to the Group or the Panel, but will be submitted to the Authority as part of the final Modification Report. Copies of the non-confidential responses received can be found in Appendix 3 of the P198 Assessment Report.

d) BSC Agents

The costs of amending BSC Systems to take account of seasonal TLF values under the Alternative Modification would be approximately £7,000 higher than the implementation costs for the Proposed Modification. This would be offset by a reduction in operational costs by approximately £1,000 per BSC Year of the scheme. These differences in costs reflect the Group's choice of a scripted loading approach to seasonal TLF values, in order to reduce the possibility for human error when entering the values into BSC Systems. Further detail regarding this approach can be found in Section 4.8 of the P198 Assessment Report.

The use of seasonal TLFs and linear phasing under the Alternative Modification would also impact the TLFA and Load Flow Model Reviewer. However, the additional impacts on these organisations would be covered by the tolerance associated with the costs provided for the Proposed Modification.

4.2.3 Implementation Lead Time

Although the Alternative Modification would increase the amount of Logica and ELEXON implementation effort, this additional work could be paralleled with the TLFA procurement and development. The same twelve-month lead time could therefore be achieved for the Alternative Modification as set out for the Proposed Modification – giving the same Implementation Dates. As for the Proposed Modification, the new zonal TLF values would therefore take effect from the first Settlement Period on the Implementation Date. For a 1 April implementation, this would also be the first Settlement Period on the first day of the BSC Year (part-way through the BSC Spring season). For a 1 October implementation (part-way through BSC Autumn), TLF values would only apply for six months during the first BSC Year of the scheme – from part-way through the BSC Autumn season to part-way through BSC Spring, when the next year's BSC Spring TLF value would take effect. TLFs for all subsequent years would be applied on a seasonal basis for each full BSC Year. Clarifications were included within the legal drafting to cover the eventuality that the Alternative Modification would be implemented part-way through a BSC Year.

ALTERNATIVE MODIFICATION IMPLEMENTATION COSTS[6]

		Cost	Tolerance
Logica CSA Cost	Change Specific Cost	£25,864	Nil
	Release Cost	£17,114	Nil
	Total Logica CSA Cost	£42,978	Nil
TLFA/Load Flow Model Reviewer Cost	Development, Testing and Deployment	£250,000	+/- 50%
BSC Audit Cost	Planning and Development	£15,000	+/- 50%
Implementation Cost	External Programme Audit	£0	Nil
	Design Clarifications	£14,294	+/- 100%
	Additional Resource Costs	£0	Nil
	Additional Testing/Audit Support Costs	£20,000	+/- 50%
Total Demand Led Implementation Cost		£342,272	+/- 50%
ELEXON Implementation Resource Cost		613 man days £134,860	+/- 5%
Total Implementation Cost		**£477,132**	**+/- 35%**

[6] 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

ALTERNATIVE MODIFICATION ONGOING SUPPORT AND MAINTENANCE COSTS

	Cost	Tolerance
Logica CSA Operation Cost Per BSC Year Logica CSA Maintenance Cost Per BSC Year	£1,550 £0	Nil Nil
TLFA/Load Flow Model Reviewer Operational Cost Per BSC Year	£100,000	+/- 50%
BSC Auditor Cost Per BSC Year	£40,000	+/- 50%
ELEXON Operational Cost Per BSC Year	70 man days £15,400	+/- 5%
Total Operational Cost Per BSC Year	**£156,950**	**+/- 45%**

5 RATIONALE FOR MODIFICATION GROUP'S RECOMMENDATIONS TO THE PANEL

This section summarises the recommendations of the Group, as detailed in the P198 Assessment Report in Appendix 3.

5.1 Assessment of Proposed Modification Against Applicable BSC Objectives

Table 2 – Modification Group's View of Proposed Modification

Proposed Modification better facilitates?	Applicable BSC Objectives				
	(a)	(b)	(c)	(d)	Overall
Yes	Minority	**Majority**	Minority	None	Minority
No	None	Minority	**Majority**	Minority	**Majority**
Neutral	**Majority**	Minority	Minority	**Majority**	Minority

Applicable BSC Objective (a) – The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

The **MAJORITY** view of the Group was that the Proposed Modification would have a **NEUTRAL** effect on the achievement of Applicable BSC Objective (a). This was consistent with the view provided within the Transmission Company Analysis, where the Transmission Company concluded that P198 would have no impact on its ability to discharge its licence obligations (see Appendix 3 of the P198 Assessment Report).

The view of a **MINORITY** of members was that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (a), by removing the market distortions and discrimination generated by the existing uniform allocation of variable losses. This reflected the view provided by the Authority in the P75 and original P82 decision letters that *"addressing the cross-subsidy in the present transmission losses charging arrangements through more cost-reflective charging will also help to remove the discrimination that exists in the present arrangements".*

Applicable BSC Objective (b) – The efficient, economic and co-ordinated operation of the GB transmission system

The **MAJORITY** view of the Group was that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (b). These members believed that the external cost-benefit analysis had highlighted a significant reduction in the level of variable losses should the Proposed Modification be approved, as a result of more efficient short-term plant despatch. One member argued that this would have a positive effect on Applicable BSC Objective (b), even at the lower end of the savings identified by the cost-benefit analysis. Although some of these members believed that the cost-benefit analysis demonstrated that the long-term signals provided by P198 might be ambiguous, they believed that the identified savings from redespatch would still deliver a net efficiency benefit.

One member of the Group also argued that, in addition to introducing more efficient short-term despatch, P198 would introduce long-term signals influencing business decisions regarding investment in both generation and demand. This member believed that the results of the cost-benefit analysis demonstrated that Parties are already taking account of the possible introduction of a zonal transmission losses scheme in their planning decisions, since the introduction of such a scheme has been discussed for several years.

The view of a **MINORITY** of members was that the Proposed Modification would have a **NEUTRAL** impact on the achievement of Applicable BSC Objective (b). This view was generally based on the findings of the cost-benefit analysis that P198 would not result in the relocation of any existing generating plant. These members argued that this demonstrated that the Proposed Modification would not provide a long-term signal to the market relative to other existing signals, and that any efficiency benefit would therefore be negligible. One member believed that the Proposed Modification would not have a significant impact on plant despatch. Noting that this was not necessarily supported by the cost-benefit analysis, this member considered that the analysis had been based on an economic despatch model which might not be representative of realistic market conditions. Another member argued that a reduction in the level of variable losses was not a relevant consideration against Applicable BSC Objective (b) – which they believed related to the efficient operation of the Transmission System, rather than the efficiency of the system itself.

The view of another **MINORITY** of members was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (b). These members did not believe that the Proposed Modification would lead to more efficient despatch.

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

The **MAJORITY** view of the Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (c). These members noted the distributional effects of P198 highlighted in the cost-benefit analysis, and believed that these represented windfall gains and losses which would penalise existing investment decisions with a negative impact on competition. Some members disagreed with the findings of the cost-benefit analysis regarding renewables, which they argued would be disproportionately impacted by the Proposed Modification. One member also argued that the Proposed Modification would have a negative impact on Combined Heat and Power (CHP) plant. Another member considered that it would be impractical for demand to respond to the P198 signals, and did not agree that the existing arrangements represented a cross-subsidy. Additionally, some members believed that the Proposed Modification would increase volatility and would raise the cost of capital for new entrants to the market, thereby representing a barrier to entry.

A **MINORITY** of members believed that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (c). Some of these members did not believe that the distributional impacts of P198 were a valid consideration against its approval, since they believed that these represented the removal of the cross-subsidy between Suppliers (north to south) and generators (south to north) which was inherent in the existing uniform allocation of variable losses. Some members also believed that the zonal nature of the scheme would ensure that individual BM Units were not unduly penalised, whilst basing the scheme on an ex-ante calculation would allow Parties to estimate the impact of TLFs on their charges and reflect these in their advance contracts. The same member argued that Parties already took account of regulatory risk in becoming a Code signatory, and therefore did not believe that the Proposed Modification would have any impact in this area. Another member argued that the Proposed Modification would give better signals for participants in the Balancing Mechanism, thereby promoting competition.

One member of the Group argued that P198 would also introduce long-term signals influencing business decisions regarding investment in both generation and demand. This member believed that the results of the cost-benefit analysis demonstrated that Parties are already taking account of the possible introduction of a zonal transmission losses scheme in their planning decisions, since the introduction of such a scheme has been discussed for several years.

Another **MINORITY** of members believed that the Proposed Modification would have a **NEUTRAL** impact on the achievement of Applicable BSC Objective (c). These members believed that the arguments detailed above were finely balanced, such that there was no overall positive or negative impact on competition. One of these members stated that they did not believe that the Proposed Modification would have any impact on investment.

Applicable BSC Objective (d) – Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The **MAJORITY** view of the Group was that the Proposed Modification would have a **NEUTRAL** effect on the achievement of Applicable BSC Objective (d). These members believed that the implementation costs of the proposal were not significant. Some members considered that increased cost and complexity in the balancing and settlement arrangements was not in itself a negative effect, if the process which was being introduced promoted efficiencies.

A **MINORITY** of members believed that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (d). These members argued that the Proposed Modification would add cost and complexity to the BSC arrangements, reducing overall efficiency. One member considered that the method used to recover variable losses through TLFs was significantly under-recovering these due to the averaging effect (see Section 4.4.3 c) of the P198 Assessment Report in Appendix 3), and believed that this could therefore not be more efficient than the current Code baseline.

Summary

On balance, a **MAJORITY** of members believed that any benefits under Applicable BSC Objective (b) would be limited and would be outweighed by a negative impact on Applicable BSC Objective (c). These members therefore believed that the Proposed Modification **WOULD NOT** better facilitate the achievement of the Applicable BSC Objectives overall, and should not be made.

Another member stated that, although they believed that the balance between the potential benefits and disbenefits of the Proposed Modification would lead to a neutral effect overall, they believed that the Proposed Modification should not be made since the case for change was unproven.

A **MINORITY** of members believed that the Proposed Modification **WOULD** better facilitate the achievement of both Applicable BSC Objectives (b) and (c), and should therefore be made. Some of these members also believed that the Proposed Modification would better facilitate the achievement of Applicable BSC Objective (a).

Another **MINORITY** of members believed that any potential benefit under Applicable BSC Objective (b) and any negative impact under Objective (c) would be finely balanced. These members therefore stated that they remained **NEUTRAL** as to whether the Proposed Modification would better facilitate the achievement of the Applicable BSC Objectives overall.

5.2 Assessment of Alternative Modification Against Applicable BSC Objectives

Table 3 – Modification Group's View of Alternative Modification

Better facilitates Applicable BSC Objectives?	Compared with Proposed Modification	Compared with existing Code baseline
Yes	**Majority**	Minority
No	Minority	**Majority**
Neutral	Minority	Minority

5.2.1 Alternative Modification compared with Proposed Modification

Applicable BSC Objective (a) – The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

The **UNANIMOUS** view of the Group was that the Alternative Modification would have a **NEUTRAL** effect on the achievement of Applicable BSC Objective (a) compared with the Proposed Modification.

Applicable BSC Objective (b) – The efficient, economic and co-ordinated operation of the GB transmission system

The **MAJORITY** view of the Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (b) when compared with the Proposed Modification. These members believed that the external TLF modelling and cost-benefit analysis exercises had demonstrated that seasonal TLF values would represent a better reflection of the actual behaviour of BM Units within Zones, provide a more accurate short-term signal to generators, lead to more efficient plant despatch, and thereby offer the greatest reduction in variable losses. However, these members did not believe there to be any difference in the long-term locational signals generated by the Proposed and Alternative Modifications.

The view of a **MINORITY** of members was that the Alternative Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (b) when compared with the Proposed Modification. These members believed that introducing a linear phasing element into the solution would delay the realisation of the benefits associated with seasonal TLFs.

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

The **MAJORITY** view of the Group was that that Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (c) when compared with the Proposed Modification. Some of these members argued that the results of the TLF modelling exercise had demonstrated that seasonal TLF values would be a more accurate allocation of variable losses than a single annual average. Other members argued that a phased implementation would mitigate the windfall gains and losses created by a sudden step-change to a zonal transmission losses scheme, and would provide time for Parties to gradually take account of the new zonal TLFs in their contracts. One member stated that the contracts of some Parties were of three years' duration, and considered that a phased implementation over four years would ensure that such Parties were not disproportionately penalised on the basis of contracts entered into under the current arrangements.

The view of a **MINORITY** of members was that the Alternative Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (c) when compared with the Proposed Modification. Although some (but not all) of these members believed that the use of seasonal TLFs would better facilitate this Objective, all of these members believed that introducing a linear phasing element into the solution would delay the realisation of the benefits associated with a zonal transmission losses scheme.

Applicable BSC Objective (d) – Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The **MAJORITY** view of the Group was that the Alternative Modification would have a **NEUTRAL** effect on the achievement of Applicable BSC Objective (d) when compared to the Proposed Modification, since these members noted that the implementation costs of both the Proposed and Alternative Modifications were very similar.

The view of a **MINORITY** of the Group was that the Alternative Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (d) when compared to the Proposed Modification. These members believed that introducing a seasonal change in TLF values would add further complexity to the BSC arrangements, and would decrease predictability and stability.

Summary

On balance, a **MAJORITY** of members believed that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (b) and (c) compared with the Proposed Modification. Most of these members believed that these Applicable BSC Objectives would be better facilitated by both the seasonal TLFs and phasing elements of the Alternative Modification, and that the Alternative would have a neutral impact on the achievement of Applicable BSC Objective (d) compared with the Proposed Modification. These members did not believe that it was inconsistent to support both elements of the Alternative, arguing that the seasonal element would give a more accurate allocation of losses whilst phasing would smooth the effect of a step-change in the rules (especially for Parties with long-term contracts).

One member believed that the introduction of a seasonal change in TLF values would have a negative impact on the achievement of Applicable BSC Objective (d) when compared with the Proposed Modification. However, this member believed this to be outweighed by the benefits of phasing under Objectives (b) and (c), such that they believed that the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives overall when compared with the Proposed Modification.

A **MINORITY** of members believed that the Alternative Modification **WOULD NOT** better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification. One of these members believed that any additional benefit to Applicable BSC Objectives (b) and (c) resulting from seasonal TLFs would be outweighed by the delay in these benefits resulting from linear phasing. Another member did not believe that either of the seasonal TLFs or phasing elements of the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification, and believed that both of these elements would have a negative impact on the achievement of Applicable BSC Objective (d).

Another **MINORITY** of members stated that they remained **NEUTRAL** as to whether the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives when compared with the Proposed Modification. One of these members believed that any potential increase in accuracy through the use of seasonal TLFs would be balanced out by its increased complexity and volatility, and stated that they found it difficult to see how phasing would better facilitate the achievement of the Applicable BSC Objectives.

5.2.2 Alternative Modification compared with Existing Code Baseline

On balance, the **MAJORITY** view of the Group was that the Alternative Modification **WOULD NOT** better facilitate the achievement of the Applicable BSC Objectives when compared with the existing Code baseline, and that the Alternative Modification should therefore not be made. Whilst some believed that the Alternative Modification would be better than the Proposed Modification, all of these members believed that the arguments expressed against the Proposed Modification in Section 5.1 above would still be present under the use of seasonal TLFs, and would not be fully mitigated by the inclusion of a linear phasing approach.

The view of a **MINORITY** of members was that the Alternative Modification **WOULD** better facilitate the achievement of the Applicable BSC Objectives when compared with the existing Code baseline. Although some of these members believed that the Alternative Modification would be inferior to the Proposed Modification due to its inclusion of seasonal TLFs and/or linear phasing, all of these members believed that the Alternative would still partly address the cross-subsidy present in the existing arrangements.

Another **MINORITY** of members believed that any potential benefit under Applicable BSC Objective (b) and any negative impact under Objective (c) would be finely balanced. These members therefore stated that they remained **NEUTRAL** as to whether the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives overall.

5.3 Final Recommendation to the Panel

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

- The Proposed Modification **SHOULD NOT** be made; and that
- The Alternative Modification **SHOULD NOT** be made.

5.4 Implementation Date

The Group unanimously agreed the following recommended Implementation Dates for both the Proposed and Alternative Modifications:

- 1 April 2008, if an Authority decision is received on or before 22 March 2007; or
- 1 October 2008, if an Authority decision is received after 22 March 2007 but on or before 20 September 2007.

An explanation of these dates can be found in Section 4. A specific question on the Group's recommended Implementation Dates was included within the P198 second Assessment Procedure consultation, and details of the responses received can be found in Section 5.6 of the P198 Assessment Report in Appendix 3.

5.5 Legal Text

The Group has reviewed the legal text for both the Proposed and Alternative Modifications, and has agreed that it delivers the solutions developed by the Group. An explanation of the Group's legal text requirements can be found in Section 4 of the P198 Assessment Report in Appendix 3.

5.6 Interaction with P200

In accordance with the BSC Modification Procedures, P198 and P200 were assessed separately by their respective Modification Groups as to whether they would better facilitate the achievement of the Applicable BSC Objectives compared with the existing Code baseline – and not compared with each other. The P198 Group noted that the majority recommendation of the P200 Group was that neither the P200 Proposed nor Alternative Modifications should be made. The P200 Group had considered that it would be useful to indicate a preference between P198 and P200, so that this could be taken into account by the Panel and the Authority. However, the P200 Group had been divided over whether one of the proposals would be better than the other, such that there was no majority preference between them.

5.7 Interaction with P203

As for P200, P203 was assessed separately to the other related Modification Proposals on its own merits. The majority recommendation of the P203 Modification Group was that P203 should not be made. However, a majority of members of the P203 Group considered that it would be useful to indicate a preference between P198 and P203, so that this could be taken into account by the Panel and the Authority.

A majority of members of the P203 Group expressed a preference for Proposed Modification P203 over Proposed Modification P198, due to the use of seasonal rather than annual TLF values. No members of the P203 Group expressed a preference for Proposed Modification P198 over Proposed Modification P203. A minority of members abstained – either because they did not have a strong preference either way, or since they did not believe that it was appropriate to express a preference between stand-alone Modification Proposals.

A narrow majority of members of the P203 Group expressed a preference for Alternative Modification P198 over Proposed Modification P203, due to its inclusion of phasing. A large minority of members of the P203 Group did not support phasing, and therefore expressed a preference for Proposed Modification P203 over P198 Alternative. One member abstained.

5.8 Interaction with P204

P204 is currently part-way through the Assessment Procedure. The P204 Modification Group has not yet developed a provisional view of whether P204 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline.

6 RATIONALE FOR PANEL'S RECOMMENDATIONS TO THE AUTHORITY

6.1 Panel's Consideration of Assessment Report

The Panel considered the P198 Assessment Report at its meeting on 10 August 2006. 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 6.2, 6.3 and 6.4 respectively.

6.1.1 Assessment Procedure Consultation Responses

The Panel noted the responses received to the additional consultation on the correction of a data error within the OXERA cost-benefit analysis (see Appendix 9 of the P198 Assessment Report in Appendix 3). The Panel noted that the respondents to this consultation had confirmed that the correction of the data error did not alter their overall views regarding P198, and that in some cases it had reinforced respondents' views. The Panel noted that one respondent had identified what they perceived to be a further error in the cost-benefit analysis. This respondent believed that northern embedded generation would be disproportionately impacted by P198, as northern Suppliers would pay less for losses – making the use of embedded generation less advantageous in the north. The respondent believed that this would therefore incentivise more embedded generation in the south (where the cost of losses would be higher for Suppliers) at the expense of that in the north. BSCCo advised that it did not believe the points made by the respondent represented an error in the cost-benefit analysis, but rather a view that the analysis did not fully cover the specific circumstances of the respondent concerned. The Panel noted that the arguments expressed by the respondent had been made by OXERA in the context of embedded renewable generation, but not specifically for non-renewable embedded generators. The Panel therefore agreed that no further assessment of P198 was required, and that the Modification Proposal could proceed to the Report Phase.[7]

The Panel Chairman noted that one respondent to the P198 second Assessment Procedure consultation had expressed concern at the length of the P198 consultation period (see Section 5.9 of the P198 Assessment Report in Appendix 3). The Panel noted that a two-week consultation period had been provided, which was consistent with the normal duration for Assessment Procedure consultations – and that this had been the maximum time available within the constraints of the P198 Assessment Procedure timetable. The Panel noted that efforts had been made by BSCCo to support the consultation process by hosting an educational seminar, and that responses had been received from smaller participants who did not usually respond to Modification Proposal consultations. The Panel supported the Group's view that it was comfortable with the consultation period provided, and noted that participants would also have a further opportunity to comment on P198 during the two-week Report Phase consultation.

The Panel Chairman also noted that one respondent to the second Assessment Procedure consultation had stated that they believed any impact of P198 on the cost of capital or regulatory risk lay outside the scope of the Applicable BSC Objectives (see Section 5.5 of the P198 Assessment Report in Appendix 3). BSCCo advised that the Group, in setting the scope of the cost-benefit analysis, had agreed that the analysis should focus only on those areas which fell within the remit of the BSC. The Group had been comfortable that any potential impacts on regulatory risk and the cost of capital were a relevant consideration under Applicable BSC Objective (c), since these areas could affect the cost base of Parties and therefore competition. The Group had also noted that these areas had been considered under Objective (c) during the progression of previous transmission losses Modification Proposal P82.

[7] One response to this consultation was received on 11 August 2006 (three days after the consultation deadline), and therefore did not receive consideration by the Panel on 10 August 2006. This response is contained within Appendix 9 of the P198 Assessment Report for completeness, but is marked as a late response. The late response is not believed to contain any arguments which had not previously been considered by the Group and the Panel during the Assessment Procedure.

The Panel noted that one respondent to the second Assessment Procedure consultation had commissioned a paper from NERA Economic Consulting, which put forward economic arguments to dispute what it perceived as the assertion of the OXERA cost-benefit analysis that regulatory risk did not affect the cost of capital.[8] The Panel noted that the OXERA cost-benefit analysis had acknowledged that regulatory risk exists in the market, but had concluded that P198 itself would not increase regulatory risk and would therefore not increase the cost of capital (see Section 4.7 of the P198 Assessment Report in Appendix 3). The Panel agreed that it was a matter of judgement for participants as to whether they agreed with this conclusion. The Panel noted that the Group had taken the NERA paper into account in the same way as the other consultation responses – and that this was reflected in the views of members of the Group, some of whom supported the OXERA findings whilst others agreed with the NERA view.

One Panel member noted the concerns expressed by one respondent to the P198 second Assessment Procedure consultation regarding the differences between the TLF values calculated by PTI and OXERA for 2006/07 using the same historic 2005/06 data. The Panel noted that the differences between these values were a consequence of the different sample periods used in the respective calculations, and that a detailed comparison and explanation of these values had been provided in the OXERA report. The Panel noted that PTI had been able to reuse the Load Flow Model which it had developed for the live implementation of P82, and that its calculated TLFs had therefore been based on the full data sample which would have been used in live operation (containing 623 Sample Settlement Periods, weighted by Load Periods to be representative of a whole year). BSCCo confirmed that the approach used by PTI would be that used by the TLFA in the live implementation of P198. This detailed focus on one year had supported the Group in testing the sensitivity of TLF values to different elements of the solution (for example, the effects of averaging in the calculation), and in considering potential options for an Alternative Modification.

For the OXERA indicative forward-modelling (which focused on the impact of TLFs on the market under the solutions developed by the Group), a smaller number of 'snapshot' periods (three per year/season) had been used to reduce the amount of computations required in generating TLFs for the ten years of the study period. BSCCo clarified that the snapshots used by OXERA did not correspond to any individual Sample Settlement Periods, but were artificial approximations designed to be representative of typical network loading conditions at points of high, medium and low demand. The Panel noted that OXERA had initially undertaken a detailed validation of the results generated by its load-flow model using the full 623 Sample Settlement Periods, to ensure that its model generated TLF values which were consistent with those calculated by PTI. Following this initial validation, OXERA had then compared its TLF values generated on the basis of its snapshot approach with those calculated on the basis of the full 623 Sample Settlement Periods – in order to validate whether the use of load snapshots produced reasonable estimates of TLFs. BSCCo advised that the annual TLFs produced by OXERA using the snapshot methodology had been broadly similar to those calculated on the basis of 623 Sample Settlement Periods, and that this was also the case for the seasonal TLFs calculated for the BSC Winter and Spring seasons. For BSC Summer and Autumn, the snapshot approach had produced more of a divergence in TLF values – with the values for Scotland in the Summer season being negative rather than positive. The Panel noted that the PTI modelling had concluded that the Northern Scotland TLF Zone had switched from net export to net import during some of the Summer Sample Settlement Periods (see Section 4.4.2 of the P198 Assessment Report in Appendix 3), and that this explained the divergence in the PTI and OXERA TLF values since these had been based on different sample periods.

The Panel noted that the Group had agreed to leave the choice of methodology and assumptions for the cost-benefit analysis to the service provider. The Panel therefore agreed that no further explanation of these results was required, and that the area was a matter of judgement for participants as to whether the approach used represented a limitation in the analysis.

[8] A copy of the NERA paper is contained in the P198 second Assessment Procedure consultation responses in Appendix 7 of the P198 Assessment Report.

One Panel Member queried why the study period for the cost-benefit analysis had been set as ten years. BSCCo clarified that the Group had agreed that it was unlikely to be possible to undertake detailed quantitative modelling beyond this point – due to the lack of available network data (for example, the Transmission Company's Seven Year Statement), and the greater amount of assumptions which would be required regarding future market conditions. Another Panel Member supported this view.

A Panel Member noted that one respondent to the second Assessment Procedure consultation had considered that it might be prudent to factor the possibility of a legal challenge into the proposed implementation timetable. BSCCo advised that the Group had agreed that adding extra implementation lead time to cover the possibility of a legal challenge would not be appropriate or necessary – since Section F1.2 of the Code obliges the Panel to ensure that Approved Modifications are implemented in a timely manner, and the Conditional Implementation Date process introduced by Modification Proposal P180 allows further 'fall-back' Implementation Dates to be put forward to the Authority in the event of a judicial review or appeal.[9]

The Panel noted that many of the arguments expressed by consultation respondents fell outside the vires of the BSC. Whilst some Panel members were sympathetic to some of these arguments (for example, those relating to potential impacts on the environment, consumers or Transmission Network Use of System Charging), the Panel agreed that such considerations could not form part of its assessment of P198 against the Applicable BSC Objectives but could be considered by the Authority as part of its wider statutory duties. The Panel noted that the Authority had published a letter stating that its current assumption was that a Regulatory Impact Assessment would be undertaken for P198 as part of its decision-making process.[10]

6.1.2 Applicable BSC Objectives

a) Proposed Modification

The **MAJORITY** provisional view of the Panel was that the Proposed Modification **WOULD NOT** better facilitate the achievement of the Applicable BSC Objectives. Generally, these Panel Members believed that Applicable BSC Objectives (b) and (c) were the most relevant to the assessment of P198, and that any benefits under Applicable BSC Objective (b) would be limited and would be outweighed by negative impacts on Objective (c).

The **MINORITY** provisional view of one Panel Member was that the Proposed Modification **WOULD** better facilitate the achievement of the Applicable BSC Objectives. This Panel Member believed that positive benefits under Applicable BSC Objective (b) would outweigh any potential negative impacts under Objective (c), which this Member believed to be minor.

The specific views expressed by Panel Members in relation to each Applicable BSC Objective are set out below.

Applicable BSC Objective (a) – The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

Most Panel Members did not believe that the Proposed Modification would have any impact on the achievement of Applicable BSC Objective (a).

One Panel Member did believe that the existing uniform allocation of variable losses gave rise to market distortions and discrimination. However, this Member did not necessarily believe that the Proposed Modification would address these effects, due to concerns over the consequence of zonal averaging in the calculation of TLFs (see below).

[9] Modification Proposal P180 'Revision to BSC Modification Implementation Dates, where an Authority decision is referred to appeal or judicial review'.
[10] http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15174_P198_Code_Mod_Impact_Assessment_260506.pdf

Applicable BSC Objective (b) – The efficient, economic and co-ordinated operation of the GB transmission system

One Panel Member – although considering that the actual despatch efficiencies and reduction in losses which would result from the Proposed Modification might be less than those identified by the OXERA cost-benefit analysis (since this Member believed that the discount rate used by OXERA had been too low) – did believe that the Proposed Modification would deliver significant positive benefits in these areas. Another Panel Member agreed that the Proposed Modification would give rise to short-term benefits. This Member argued that, although losses might be a second-order consideration, the Proposed Modification would have a marginal effect on marginal decisions.

Other Panel Members argued that the despatch benefits identified by the cost-benefit analysis would not be realised in practice – believing either that they would not be sufficient to deliver an overall net benefit, or that any resulting net benefit would be very limited. Some of these Members believed that the cost-benefit analysis demonstrated that the potential for longer-term savings in losses through redespatch would be reduced from beyond 2012. Other Members noted that the cost-benefit analysis had been based on the assumption of economic despatch, and believed that this might not be representative of realistic market conditions. These Members argued that any actual loss savings resulting from the Proposed Modification could therefore be less than those identified by the cost-benefit analysis.

Some Members believed that the Proposed Modification would not make a difference to long-term locational signals relative to other existing signals in the market, noting the conclusion of the cost-benefit analysis that the impact of P198 in this area was ambiguous.

Some Panel Members argued that the fundamental principle behind any non-uniform transmission losses charging scheme should be to generate price signals to reduce the amount of losses. These Members believed that, since the signals provided by such a scheme were relative rather than absolute, it was important that they were correct – and considered that the analysis undertaken by PTI and OXERA demonstrated that the signals generated by annual zonal TLFs under the Proposed Modification would be inaccurate, due to the averaging within the calculation. Although some of these Members stated that they were sympathetic to a non-uniform losses allocation in principle, they therefore did not believe that the Proposed Modification would generate the correct signals to incentivise more economically-efficient despatch and location decisions.

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

Some Panel Members argued that the Proposed Modification would create windfall gains and losses for existing generators, which would be unable to respond to any locational signals provided by the scheme by relocating their plant. These Members therefore considered that the distributional effects identified by the cost-benefit analysis would be anti-competitive, since they believed that these would lead to stranded assets. Some Members believed that it would not be possible for demand to respond to the P198 signals, although one Member believed that large energy users would be able to respond to price signals. Some Members indicated that they would have been more sympathetic to a scheme which only applied TLFs to new connections, or which phased in TLF values over a significant period such as 15-20 or 40-50 years. Other Panel Members expressed concern regarding the distributional effects of the scheme, although these Members did not necessarily identify these effects as representing windfall gains and losses.

Another Panel Member believed that, whilst the distributional effects of the Proposed Modification might be perceived as unfair or regrettable, they were not anti-competitive or disruptive – and would not result in bankruptcy for any Parties. This Member believed that costs for participants would continue to be the same, but that the Proposed Modification would mean that prices were more reflective of these costs. This Member believed that the only potentially negative impact of the Proposed Modification on competition would be as a result of creating local geographic monopolies; however, the Member believed that this impact would be minor.

Some Panel Members argued that the Proposed Modification would give rise to disproportionate impacts on renewable generators – believing that the location of these generators was determined by resource, and would therefore be primarily within the disadvantageous northern generating Zones. One Panel Member disagreed and argued that the Proposed Modification would incentivise southern renewable generation closer to demand, where it was needed. Another Panel Member believed that the BSC was not the appropriate forum to specifically protect or incentivise renewable generation, and that any such protection should be provided separately by Ofgem and the government. This Member believed that the effects of the Proposed Modification on renewables were therefore not an issue for competition under the scope of the Applicable BSC Objectives.

Some Panel Members believed that the Proposed Modification would increase the cost of capital to new entrants to the market. These Members therefore disagreed with the conclusion of the OXERA cost-benefit analysis that P198 would have no impact in this area. One of these Members argued that zonal loss charging would represent another variable in investment decisions – and believed that, whilst larger Parties could establish a fixed cost of capital, smaller players would be unable to offset this increased investment risk. This Member stated that investment decisions were taken against a fixed rate of return, and that a small increase in the cost of capital could have a significant effect.

Some Panel Members did not believe that the Proposed Modification would increase the cost of capital to the extent to which it had individual impacts on Parties, although these Members believed that it would increase perceptions of regulatory risk more generally. One of these Members noted that there had been a previous public disparity between the views of the Authority and the Department of Trade and Industry regarding the merits of zonal loss charging, and believed that this – combined with the potential that P198 would be subject to a legal challenge – would create additional regulatory risk. This Member also considered that such risk might disincentivise investment in the GB market.

One Panel Member strongly disagreed with the views of those consultation respondents and members of the Group who believed that the Proposed Modification would increase regulatory risk or the cost of capital, and believed that the arguments which had been put forward to support these views were not economically robust.

Some Panel Members believed that the use of zonal averaging within the TLF calculation under the Proposed Modification would involve approximations and would generate inaccurate signals for Parties. These Members considered that the PTI analysis had demonstrated that the average TLF for a given Zone would not be representative of all the individual TLF values for the Nodes which made up that average, and believed that this nodal variation from the average would benefit some BM Units within a Zone whilst disadvantaging others. One Member also believed that use of a zonal average would prevent competition within a Zone.

Some of these Members indicated that they would have been more sympathetic to a zonal losses scheme which was based on the calculation of TLFs at the nodal level – with some of these members expressing a preference for a seasonal nodal calculation, whilst one Member expressed potential support for a half-hourly calculation. BSCCo clarified that a nodal TLF calculation had been considered by the Group as a potential option for an Alternative Modification to P198 (see Section 4.6.3 of the P198 Assessment Report in Appendix 3). However, the Group had unanimously concluded that such an approach was not appropriate for a scheme which included both generation and demand – since TLFs for demand and embedded generation could only be applied at the GSP Group level, and the Group believed that it was essential that Zones for generation and demand were the same. BSCCo also advised that the Group had considered the possibility of a half-hourly, potentially ex-post, application of TLFs (see Section 4.6.2 of the P198 Assessment Report), but had agreed by majority that this would create an unhedgable risk for Parties and significant implementation costs with little additional benefit. One Panel Member stated that they would be more sympathetic to a nodal TLF calculation which applied only to new generators, and not to existing generators or demand.

Some Panel Members also believed that the Proposed Modification would create uncertainty for Parties, since they considered that the nature of the zonal averaging would mean that the TLF value applied to an individual BM Unit would be affected by the actions of other BM Units within its Zone – as well as other additional factors outside its control such as Transmission System constraints.

Applicable BSC Objective (d) – Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The majority of Panel Members did not believe that the Proposed Modification would have any impact on the achievement of Applicable BSC Objective (d). However, one Panel Member believed that what they perceived as the negative effects of the zonal averaging element of the calculation could lead to TLF values being legally challenged, were the Proposed Modification to be implemented. This Member believed that this potential for ongoing legal expenses post-implementation would have a negative effect on the efficiency of the balancing and settlement arrangements.

b) Alternative Modification

i) Alternative Modification compared with Proposed Modification

The **UNANIMOUS** provisional view of the Panel was that the Alternative Modification **WOULD** better facilitate the achievement of the Applicable BSC Objectives when compared to the Proposed Modification.

All Panel Members believed that the use of seasonal TLFs would provide more accurate signals than those generated by annual TLF values – noting the results of the PTI modelling (which demonstrated the variability of TLFs between seasons) and the OXERA analysis (which identified higher savings in losses from the use of seasonal TLFs) in this area. Some Members also believed that the inclusion of phasing within the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives compared to the Proposed Modification, by mitigating the initial distributional effects of the scheme.

Other Panel Members did not support the phasing element of the Alternative, since they believed that this would delay the benefits associated with the use of seasonal TLFs. One of these Members considered that phasing over four years could reduce the benefits associated with the Alternative Modification by 50% in present-value terms. Another Member stated that they had found it difficult to assess the Alternative Modification against the Applicable BSC Objectives, since it appeared to contain two contradictory elements by combining a more accurate calculation with a delay in the realisation of its benefits. However, on balance, these Panel Members did believe that the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification, since they believed that the benefits of using seasonal TLFs would outweigh any initial delay in delivering these benefits.

ii) Alternative Modification compared with Existing Code Baseline

The **MAJORITY** provisional view of the Panel was that the Alternative Modification **WOULD NOT** better facilitate the achievement of the Applicable BSC Objectives when compared with the existing Code baseline. Some Panel Members believed that a seasonal application of TLFs would not fully address the inaccuracies which they perceived to be associated with a zonal averaging approach. Other Panel Members argued that phasing the introduction of TLF values over four years would not be sufficient to mitigate fully what they perceived as the windfall gains and losses for existing investments (which could have a lifetime of 15-20 years), and the associated negative effect on perceptions of regulatory risk and the cost of capital.

The **MINORITY** provisional view of one Panel Member was that the Alternative Modification **WOULD** better facilitate the achievement of the Applicable BSC Objectives when compared with the existing Code baseline. This Member did not support the phasing element of the Alternative. However, although they believed that the Proposed Modification would also better facilitate the achievement of the Applicable BSC Objectives compared with the current baseline, they believed that the increased benefits of a seasonal application of TLFs would outweigh any initial delay in realising these benefits. On balance, this Member therefore believed that the Alternative Modification would better facilitate the Applicable BSC Objectives compared with both the Proposed Modification and the existing Code baseline.

c) Provisional recommendation to the Authority

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

- The Proposed Modification **SHOULD NOT** be made; and that
- The Alternative Modification **SHOULD NOT** be made.

6.1.3 Implementation Date

The Panel provisionally agreed with the Group's recommendations regarding the Implementation Date for P198.

6.1.4 Legal Text

The Panel provisionally agreed that the draft legal text delivered the solutions for the Proposed and Alternative Modifications as set out in the P198 Assessment Report.

6.1.5 Interaction with P200 and P203

Although not part of its formal recommendations to the Authority, the Panel agreed that it would be useful to indicate a preference between P198, P200 and P203 so that this could be taken into account by the Authority in its decision as to which (if any) of the proposals would best facilitate the achievement of the Applicable BSC Objectives overall.

The unanimous provisional view of the Panel was that P200 would not be better than P198, despite (or because of) the inclusion of a transitional hedging scheme (for both of these proposals, the Panel unanimously agreed that the Alternative Modifications would be better than their respective Proposed Modifications). Further details regarding the Panel's views concerning P200 can be found in the P200 Modification Report.

The unanimous provisional view of the Panel was that P203 would be better than Proposed Modification P198, as it believed that the use of seasonal TLF values would be more accurate than annual values. However, the majority provisional view of the Panel was that P203 would not be better than Alternative Modification P198, due to its lack of phasing. A minority of Panel Members, who did not support phasing, disagreed and believed that P203 would be better than P198 Alternative since it would not delay any benefits associated with the scheme. Further details regarding the Panel's views concerning P203 can be found in the P203 Modification Report.

6.2 Results of Report Phase Consultation

[This section to be completed following the Report Phase consultation.]

6.3 Panel's Consideration of Draft Modification Report

[This section to be completed following the Panel meeting at which the draft Modification Report and Report Phase consultation responses are considered.]

6.4 Panel's Final Recommendation to the Authority

[This section to be completed following the Panel meeting at which the draft Modification Report and Report Phase consultation responses are considered.]

7 TERMS USED IN THIS DOCUMENT

An explanation of all the terms used in this document can be found in Section 7 of the P198 Assessment Report in Appendix 3.

8 DOCUMENT CONTROL

8.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	15/08/06	Kathryn Coffin	Sarah Jones	For technical review
0.2	18/08/06	Kathryn Coffin	Interested parties	For industry consultation
0.3	dd/mm/yy	Kathryn Coffin	Sarah Jones	For technical review
0.4	dd/mm/yy	Kathryn Coffin	Change Delivery	For quality review
0.5	dd/mm/yy	Change Delivery	BSC Panel	For Panel decision
0.6	dd/mm/yy	Kathryn Coffin	Sarah Jones	For technical review
1.0	dd/mm/yy	BSC Panel		For Authority decision

8.2 References

Ref.	Document Title	Owner	Issue Date	Version
1	Draft Modification Report for Modification Proposal P200 'Introduction of a Zonal Transmission Losses Scheme with Transitional Scheme' ELEXON - Modification Proposal 200	BSCCo	18/08/06	0.2
2	Draft Modification Report for Modification Proposal P203 'Introduction of a Seasonal Zonal Transmission Losses Scheme' ELEXON - Modification Proposal 203	BSCCo	18/08/06	0.2

8.3 Intellectual Property Rights, Copyright and Disclaimer

APPENDIX 1: LEGAL TEXT

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

Draft legal text for the Alternative Modification is attached as a separate document, Appendix 1B.

APPENDIX 2: PROCESS FOLLOWED

The table below shows the timetable and process followed in progressing P198 through the Modification Procedures.

In order that the external TLF modelling and cost-benefit analysis could be completed, a longer Assessment Procedure timetable was required for P198 than the normal maximum of three months. The total duration of the Assessment Procedure was seven months, and this timetable was agreed by the Panel in accordance with Section F2.2.9 of the Code.

Copies of all documents referred to in the table can be found on the BSC Website at ELEXON – Modification Proposal 198 – with the exception of Panel presentation slides which can be found at ELEXON - BSC Panel Meetings 2006, and the details of the P198/P200 industry education seminar which can be found at ELEXON - Diary and Event Archive.

Date	Event
16/12/05	Modification Proposal P198 raised by RWE Npower
12/01/06	IWA presented to the Panel – 4-month Assessment Procedure initiated, and initial expenditure agreed for TLF modelling and cost-benefit analysis
18/01/06	First Modification Group meeting held
26/01/06	Second Modification Group meeting held
08/02/06	Modelling Requirements Specification finalised
09/02/06	Verbal update presented to the Panel
13/02/06	Proposed Modification Requirements Specification issued for BSC Agent impact assessment
13/02/06	Proposed Modification request for Party/Party Agent impact assessments issued
13/02/06	Proposed Modification request for Transmission Company analysis issued
13/02/06	Proposed Modification request for BSCCo impact assessment issued
13/02/06	First Assessment Procedure Consultation issued
20/02/06	External TLF modelling exercise commenced by Siemens PTI
27/02/06	Proposed Modification impact assessment responses returned
27/02/06	First Assessment Procedure Consultation responses returned
02/03/06	Third Modification Group meeting held
09/03/06	Interim Report presented to the Panel – 2-month Assessment Procedure extension granted
13/03/06	Fourth Modification Group meeting held
21/03/06	Cost-Benefit Analysis Requirements Specification finalised

Date	Event
08/04/06	Verbal update presented to the Panel – further expenditure agreed for TLF modelling and cost-benefit analysis
13/04/06	Siemens PTI TLF modelling exercise concluded
18/04/06	Proposed Modification external cost-benefit analysis commenced by OXERA
21/04/06	Modification Proposal P200 raised by Teesside Power
24/04/06	Fifth Modification Group meeting held
25/04/06	Further external TLF modelling work commenced by Siemens PTI
10/05/06	Sixth Modification Group meeting held
11/05/06	Verbal update presented to the Panel – final TLF modelling expenditure noted
11/05/06	Alternative Modification external cost-benefit analysis commenced by OXERA
31/05/06	Alternative Modification Requirements Specification issued for BSC Agent impact assessment
31/05/06	Alternative Modification request for Transmission Company analysis issued
31/05/06	Alternative Modification request for Party/Party Agent impact assessment issued
30/05/06	Alternative Modification request for BSCCo impact assessment issued
08/06/06	Verbal update presented to the Panel – further 1-month Assessment Procedure extension granted
12/06/06	Alternative Modification impact assessment responses returned
14/06/06	OXERA cost-benefit analysis concluded
15/06/06	Seventh Modification Group meeting held
26/06/06	Modification Proposal P203 raised by RWE Npower
30/06/06	Second Assessment Procedure Consultation issued
03/07/06	Modification Proposal P204 raised by British Energy Power & Energy Trading Ltd
05/07/06	Industry education session held to support P198/P200 consultations
13/07/06	Verbal update presented to the Panel
14/07/06	Second Assessment Procedure Consultation responses returned
18/07/06	Eighth Modification Group meeting held
01/08/06	Cost-Benefit Analysis Data Correction Consultation issued
08/08/06	Cost-Benefit Analysis Data Correction Consultation responses returned
10/08/06	Assessment Report presented to the Panel
18/08/06	Report Phase Consultation issued
01/09/06	Report Phase Consultation responses returned
14/09/06	Draft Modification Report presented to the Panel
TBC	Final Modification Report submitted to the Authority

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL[11]

Meeting Costs	£7,000 (half shared with P200)
Legal/Expert Cost	£116,500
Impact Assessment Cost	£5,000
ELEXON Resource	230 man days, equating to £57,000

Please note that the above costs are unchanged from those provided in the P198 Assessment Report. These costs had been increased from those originally provided in the IWA to reflect:

- The two-month extension to the Assessment Procedure granted by the Panel at its meeting on 9 March 2006;
- The further one-month extension to the Assessment Procedure granted by the Panel at its meeting on 8 June 2006;
- The actual ELEXON effort expended by the point the final extension was granted; and
- The final approved expenditure for the TLF modelling exercise and cost-benefit analysis.[12]

APPENDIX 3: ASSESSMENT REPORT

The P198 Assessment Report is attached as a separate document, Appendix 3A.

[For the purposes of the Report Phase consultation and the Panel's consideration of the draft Modification Report, the P198 Assessment Report can be found on the BSC Website at: ELEXON - Modification Proposal 198.]

The Assessment Report includes:

- The discussions and conclusions of the Group regarding the areas set out in the P198 Terms of Reference;
- Details of the Group's membership;
- The full results of the external TLF modelling exercise conducted by PTI;
- The full results of the external cost-benefit analysis conducted by OXERA;
- The full results of the Assessment Procedure impact assessments; and
- Full copies of all responses received to the two Assessment Procedure consultations and the subsequent cost-benefit analysis data correction consultation.

APPENDIX 4: REPORT PHASE CONSULTATION RESPONSES

[To be attached following the Report Phase consultation.]

[11] Clarification of the meanings of the cost terms in this appendix 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.

[12] This expenditure was approved by the Panel in accordance with Section F2.6.8 of the Code, which requires a Modification Group to seek the agreement of the Panel before undertaking any activities which may incur significant costs.