

ASSESSMENT REPORT for Modification Proposal P157 Replacement of current Supplier Charges rules

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Date of issue: 08 October 2004 **Document reference:** P157AR
Reason for issue: For Decision **Issue/Version number:** Final/1.0

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

RECOMMENDATIONS

The VASMG invites the Panel to;

- **AGREE that the Alternative Modification P157 should be made;**
- **AGREE that the Proposed Modification P157 should not be made;**
- **AGREE a provisional Implementation Date for the Alternative Modification P157 of 1 December 2005 if an Authority decision is received on or before 3 March 2005, or 23 February 2006 if the Authority decision is received after 1 March 2006 but on or before 23 June 2005;**
- **AGREE a provisional Implementation Date for the Proposed Modification P157 (in the event that the Authority determines that the Proposed Modification P157 should be made) of 1 December 2005 if an Authority decision is received on or before 3 June 2005, or 1 March 2006 if the Authority decision is received after 3 June 2005 but on or before 23 September 2005;**
- **AGREE that Modification Proposal P157 be submitted to the Report Phase; and**
- **AGREE that the draft Modification Report be issued for consultation and submitted to the Panel Meeting of 11 November 2004.**

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

made or action taken in reliance on this information.

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SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

As far as the VASMG has been able to assess the following parties/documents have been identified as being potentially impacted by Modification Proposal P157.

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

X = Identified in Report for last Procedure
N = Newly identified in this Report

² BSCCo contracted system PARMS will be impacted.

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

1.1 Modification Proposal

Modification Proposal P157 'Replacement of current Supplier Charges rules', (P157, Reference 1), was raised on 5 January 2004 by EDF Energy. P157 proposes to replace the current Supplier Charges rules in Annex S-1 of the Code with a robust set of rules that adhere to the proposed criteria for a corrective technique suggested by the Volume Allocation Standing Modification Group (VASMG) in its report to the Balancing and Settlement Code Panel (the 'Panel') on Issue 6 'Appropriateness of the Current Supplier Charging Mechanism' (Reference 2).

The Proposer believes that a clear and readily understood set of rules would assist with the drive to improve the quality of data entering Settlement. The latest BSC Audit was qualified and it is the Proposer's view that a major contributory factor to this was the level of poor data quality in the Supplier Volume Allocation portion of the market, especially within the Non Half Hourly (NHH) sector. Supplier Charges are intended to be a corrective technique for this issue, but the recent work of the VASMG on Issue 6 has raised serious concerns over the appropriateness of the current rules and their effectiveness as a corrective technique.

The Proposer considers that P157 would better facilitate the achievement of Applicable BSC Objectives c and d. The achievement of Applicable BSC Objective d - promoting efficiency in the implementation and administration of the balancing and settlement arrangements, would be achieved by P157 since the quality of data entering Settlement will be improved through the introduction of a Supplier Charges mechanism that is easily understood and that provides incentives on Parties. The Proposer further argued that any mechanism that is effective in improving data quality should also better facilitate the achievement of Applicable BSC Objective c – promoting effective competition in the generation and supply of electricity, and promoting such competition in the sale and purchase of electricity.

The P157 Initial Written Assessment (IWA, Reference 3) was presented to the Panel at its meeting on the 15 January 2004. In raising P157, the Proposer did not propose a specific solution. Instead, the aim was that the detailed work required to consider and design a replacement to the current Supplier Charges rules should be undertaken as part of the Modification Procedure. For this reason, the Panel submitted P157 to a two-month Definition Procedure.

The Definition Report (Reference 4) was presented to the Panel at its meeting on 11 March 2004. The Panel decided to submit P157 to a three-month Assessment Procedure, with an Assessment Report scheduled to be presented to the Panel at its June 2004 meeting.

During the initial stage of the Assessment Procedure, the Group issued a consultation document (Reference 5) to the Industry detailing its initial conclusions regarding the Proposed Modification and a number of potential alternative solutions.

At its meeting on 13 May 2004, the Panel requested that the Group present an Interim Report at the next Panel meeting to enable the Panel to seek provisional thinking from the Authority. An Interim Report was presented (Reference 6) and the request for provisional thinking was made. The Authority delivered its provisional thinking on 25 June 2004 such that it could be considered at the July 2004 Panel meeting. At this meeting the Panel also considered a second Interim Report (Reference 7) submitted to it by the Group, which contained the Group's views on the Authority's provisional thinking.

The Panel directed the Group that the Proposed or Alternative Modification should have the following features:

- The Genuine Pre-Estimate of Loss for Serial SP08a should include a suitable calculation for in-house Supplier costs to correct bad data;
- The charging method should not be the 'Bond Rebate' method;
- The charge re-distribution method should be linked to the target Standard and hence support its attainment, and be continuous and monotonic; and
- There should be no cap on a "basket" of Serials (this direction was clarified at the August Panel meeting), although a cap on individual Serials is acceptable.

The Group issued a second assessment consultation document (Reference 8) to industry to finalise the composition of any Proposed and Alternative Modification. The Group then decided the components of the Proposed and Alternative Modifications and agreed its provisional recommendations to the Panel.

The Group issued a third Interim Report (Reference 9) to confirm the details of the Proposed and Alternative Modifications it had developed and to specify the additional work it required to complete the Assessment Procedure. The Panel agreed a one month extension to the Assessment Procedure such that an Assessment Report would be presented at the October Panel.

The Group issued a third assessment consultation document (Reference 10) to allow participants to consider P157 on a GB basis following BETTA Go-Active on 1 September 2004. The purpose of this consultation was for all participants to consider P157 on a GB basis as well as for new Scottish participants to consider P157 against the Applicable BSC Objectives.

As part of the Assessment Procedure, the Group has met on eleven occasions to date – 15 March, 23 March, 2 April, 28 April, 28 May, 18 June, 28 June, 12 July, 13 August and 27 August 2004 and 28 September 2004.

Finally the Group issued a fourth consultation (Reference 11) in relation to an issue regarding use of Final Reconciliation (RF) data under the P157 Alternative Modification Proposal. The results of this consultation will be provided as an addendum to this Assessment Report.

1.2 Proposed Modification

There will be Supplier Charges on Serials SP01, SP02, SP04, SP08a, b and c. These Serials are described in more details in section 2.2.1. SP01 and SP02 will be charged on a £ per day basis only i.e. not charged per GSP Group, SP04 will be charged on a £ per day basis as it is currently and SP08a, b and c on a £ per MWh basis. The charges for SP08 a, b and c will be capped overall such that no Supplier shall pay more than 1% of its Supplier Take*Credit Assessment Price in any GSP Group (i.e. no cap applied to SP01, SP02 and SP04 charges). SP01 and SP02 will cease to be applied after 12 months has passed. The funds collected from all Serials will be used in the following manner: 10% will be distributed to all Trading Parties based on their Main Funding Shares: the remaining 90% will be redistributed on a GSP Group basis according to NHH market share – this is the current method of redistribution.

The level of the charges will be reviewed at the Panel's request at least once every two years following the methodology contained in the Code.

1.3 Alternative Modification

The Alternative Modification is the same as the Proposed Modification in all aspects except the redistribution. In the Alternative Modification, the funds collected from all Serials will be used in the following manner: 10% will be distributed to all Trading Parties based on their Main Funding Shares: the remaining 90% will be redistributed on a GSP Group basis to NHH Suppliers who have either achieved the performance Standard (97%) or have performed above average on SP08a for the GSP

Group. The amount each Supplier will receive will be dependent on how far above the average it is and whether it has achieved the Standard.

The Modification Group believes that the Alternative Modification fulfils the directions of the Panel to the Group.

1.4 Summary Table

Aspect of P157	Proposed Modification	Alternative Modification
Chargeable Serials	SP01, 2, 4, 8a, 8b, 8c	As per Proposed
Basis of Genuine pre-estimate of loss	<p>SP01 and SP02 – administration charges</p> <p>SP04 – error in profiles used for missing HH Meters.</p> <p>SP08a – value of volume of energy that is uncertain plus incremental central costs relating to poor performance and in house costs to correct bad data</p> <p>SP08b and c – value of volume of energy that is uncertain plus incremental central costs relating to poor performance</p>	As per Proposed
Redistribution	Leave as currently	A Supplier who has performed either above the average (or Standard if lower) will receive a proportion of the funds collected based on its amount above average (or Standard if lower) and an additional (2x share) if above Standard. Redistribution is on a GSP Group basis
Caps	<p>Amended cap on SP08a, b and c only:</p> <p>$1\% \times \text{Supplier Take} \times \text{CAP}$</p>	As per Proposed

2 ISSUES RAISED BY THE PROPOSED AND ALTERNATIVE MODIFICATIONS

A summary of the issues raised and discussed as part of the assessment of P157 are:

- Peer group comparison (pgc)
- Serials
 - Which should be charged
 - How they should be charged
 - What the charge should be - genuine pre-estimate of loss methodology
- Reviewing Supplier Charges
- Caps
- Redistribution
 - Current method
 - Average performance related
 - Bond rebate method
- 90/10 rule
- Force majeure
- BETTA issues
- Implementation Date

2.1 Use of non financial incentives including peer group comparison

At the start of the Assessment Procedure the Group considered whether financial incentives should be used to tackle current significant issues that are leading to poor data quality entering Settlement, namely the issues highlighted by the BSC Auditor. The Group believed that Supplier Charges should be aimed at maintaining accuracy and timeliness of Settlement over a long period of time. Charges should be used to improve/maintain the overall 'health' of the Settlement system. Non financial incentives on the other hand should be aimed at underlying issues within Settlement that are maybe not yet established as long term problems. Applying a financial incentive to these underlying issues may be problematic as it may lead to double counting the genuine pre-estimate of loss by charging on both these and overall accuracy in Settlement. Additionally, these measures could well be more open to interpretation and more disputable if they are not watertight.

The Group discussed in detail applying financial incentives, as opposed to non financial incentives such as pgc, to several audit issues. To some extent this was done as a response to the provisional thinking letter received from the Authority which stated its view that financial incentives are more likely to be effective in a competitive market than pgc, not least because of the differing importance that Parties are likely to place upon their settlement performance reputations. In addition, if an issue is of sufficient concern to Parties then it must be causing costs, hence a financial compensation mechanism for those adversely affected might be more appropriate. Ofgem stated that where the current Serials may be deficient, it would prefer that the Group suggests new Serials. Ofgem made specific reference to Energisation Status issues.

The issues considered individually were those mentioned by Ofgem in its provisional thinking that the Group had isolated as possibly suitable for pgc in its initial Assessment meetings:

- Inaccurate Energisation Status of Metering Systems;
- Processing of erroneous Estimated Annual Consumptions (EAC)/Annualised Advances (AA);
- Erroneous values of Unmetered Supplies (UMS) NHH;
- Inadequate clearance of exceptions and backlogs in HH; and
- Inadequate clearance of exceptions and backlogs in NHH.

The Group considered each one with regards to whether it ought to be and could be incentivised financially or not.

Inaccurate Energisation Status of Metering Systems

The Group considered the data that ELEXON had available in relation to this issue e.g. what could be published in a pgc table. ELEXON know the number of Metering Systems that are energised in Supplier Meter Registration System (SMRS) (i.e. Supplier and Data Aggregator view) and also the number of Metering Systems that are being settled on (Supplier Volume Allocation Agent (SVAA) view) as measured by SP07, a Serial introduced by P99. A mismatch between these two numbers implies that some Metering Systems that are considered as de-energised are being settled on and/or that there are some Metering Systems that are considered energised but are not being settled on. The Group considered that this was an objective measure and that publishing pgc tables on this might incentivise Suppliers to look at and attempt to investigate and rectify mismatches³.

The Group did acknowledge that there are often costs caused to industry participants as a result of incorrect Energisation Status. These costs are central ELEXON costs as well as the cost to other Parties due to a misallocation of the energy via GSP Group Correction Factor. The Group also acknowledged that a crude £/MWh value for this could be ascertained by looking at how large the error in the industry is and the Energisation Status Project and the auditor have gone some way to quantifying the error. This £/MWh value could be applied to the Metering System count value derived from SP07 and an average NHH consumption applied. However there were several reasons why the Group were unhappy with this approach:

- Energisation Status is a current 'hot' issue and thus fits conceptually with pgc;
- It may be a short term issue since there are processes in place to try to correct it, the Extra Settlement Determination (ESD) is being used to rectify the error;
- Suppliers have been instructed to correct the Energisation Status of Metering Systems, this should therefore reduce the issue;
- A mismatch does not necessarily imply a risk to Settlement. An SMRS labelled de-energised Metering System could be entering Settlement on a zero AA for example which is correct. An SMRS labelled de-energised Metering System could be settling on a non zero AA – in this case the Energisation Status is incorrect but the AA value will enter Settlement such that Settlement accuracy is not affected. Settlement accuracy is only affected in the case where an SMRS labelled de-energised of Metering System is physically energised and consuming energy, but has a non zero EAC which does not get entered into Settlement;
- A mismatch does not necessarily imply an incorrect Energisation Status. Analysis has shown that a proportion of mismatches are due to timing of registrations and updates. The Energisation Status Project has lists from the Data Aggregators (DAs) about the Metering Systems that are considered de-energised by SMRS and/or by the Data Collectors (DCs). Some of these will in

³ In some analysis it was found that a proportion of mismatches are due to timing of registrations and updates.

fact be de-energised and some of these will be incorrectly labelled as de-energised. It is difficult for the Supplier in many cases to know which is the case, without a site visit;

- We are not monitoring the inaccuracy but a proxy to it;
- Additionally identifying the correct Effective From Date of the Energisation Status may not be straight forward.

For all these reasons it was decided that Energisation Status was unsuited to Supplier Charges at present.

Other ways of dealing with this issue, outside the scope of P157, were suggested including tightening up the requirement to read Meters.

Processing of erroneous EAC/AAs

ELEXON currently monitor the number of erroneous EAC/AAs in the following way:

Metering Systems with EAC/AAs that would be included in Settlement under the Aggregation Rules set out in Section S-2 of the BSC, above a certain threshold are highlighted to Suppliers. Suppliers are then required to investigate the EAC or AA and confirm whether it is actually erroneous. Where occurrences are confirmed as erroneous, Suppliers are required to correct the values. Several reasons not to apply a Supplier Charge to the processing of erroneous EAC/AAs were identified:

- Only values above a certain arbitrary threshold are isolated, therefore there could be erroneous values below this threshold;
- Many of values highlighted may have accurate consumption recorded;
- Only the excessive negative values will adversely impact other Parties (positive errors affect the offending Party although there could be a benefit through the GSP Group Correction Factor);
- May be double counting since EACs will also be charged for under SP08

Erroneous values of UMS NHH

The BSC Auditor has identified weaknesses in controls performed by some Agents and Suppliers over the management of UMS Metering Systems. In many cases the EAC values for these Metering Systems have not been updated for a considerable period. There are currently several Change Proposals (CP) going through the ELEXON Change Management Process aiming to clarify obligations and ensure EACs are regularly updated. Two reasons not to apply a Supplier Charge to the erroneous values of UMS NHH were identified:

- It would be premature to apply charges as this is a nascent issue;
- The extent of the error is unknown and can only be ascertained by detailed analysis.

Inadequate clearance of exceptions and backlogs in HH and NHH

Several reasons were given not to apply a Supplier Charge to the inadequate clearance of exceptions and backlogs in HH and NHH:

- HH exceptions have been much improved by action taken;
- A count of NHH exceptions is inappropriate as some errors cause multiple exceptions and some exceptions are immaterial. There may also be some discrepancy in the attribution of exception ownership;
- It would be very complex and hence costly to set up an accurate charging system;

- There may be double counting since exceptions will cause Metering Systems to be settled on an EAC and the Supplier will get charged under SP08 for this.

Based on a combination of the individual reasons as well as the Group's conceptual approach it was believed that Supplier Charges ought not to be applied to these issues.

The Group confirmed that there were no other Serials or issues that it believed Supplier Charges should be applied to at present.

Prior to this discussion the Group had deliberated and consulted as to whether pgc as a method of incentivisation should be used (see appendix 1 below for pgc discussion). Pgc was to form part of the Proposed Modification P157 as stated in the Definition Report. This was due to the fact that many members of the Group and the Panel had been under the impression that in order to achieve public pgc a modification to the Code was required. At the June 2003 Panel meeting the publication of EAC/AA data was questioned in paper 63/015 "Publication of Peer Comparison Data Relating to Erroneously Large EACs/AAs". The position with regards to pgc was later clarified at the July 2004 Panel meeting and is detailed below.

The current wording of paragraph J1.4.2(d) provides that, amongst other things, the functions, duties and responsibilities of the PAB shall be *"the conduct and administration of (including the making of determinations under) the performance assurance standards and tests set out or referred to in BSCP 533 and BSCP 534, including the conduct and administration of, and publication of the results of, any peer group comparison associated with any such performance assurance standards and tests"*

It was therefore confirmed that it is possible to undertake pgc (in certain circumstances) purely by amending the Balancing and Settlement Code Procedures (BSCPs) since the ability to publish public pgc tables is currently provided for in Section J 1.4.2 (d) of the Code, however, due to the absence of objective standards and tests in BSCPs 533 and 534, there is currently no potential to utilise this Section J provision. A Change Proposal (CP1084) that introduces such standards and tests has now been raised such that Section J 1.4.2 (d) can be used. Nevertheless Section J1.4.2 (d) and relevant references in the BSCPs do not allow any and all issues to be published in pgc tables. A Code modification would be required to allow the PAB to publish any data they chose (e.g. the information in the currently coded tables regarding EAC/AAs). However such a modification would be strongly advised against on the grounds that the data published would be non-objective, unfair and could lead to circumstances where erroneous statements or inferences are being made in connection to Parties e.g. a large EAC is flagged up but this is due to genuinely large consumption at the site. To progress this issue via a CP, the relevant performance assurance standards and tests must be set out in the BSCPs and Parties performance must be measured, and hence comparisons made against them (Note these must be related to performance). Also implicit in J 1.4.2(d) is that the standards and tests established must also adhere to equitable principles, the common law and the rule of law by demonstrating such principles as objectivity, fairness, equality, reasonableness, consistency, clarity and accessibility. This applies to all other issues considered for pgc by the Group, the Panel and PAB.

For the reasons given, the inclusion of pgc in the P157 Proposed Modification was considered superfluous as the defect can be addressed outside a change to the Code⁴.

⁴ ELEXON are currently looking at the issues that the Group considered suitable for peer group comparison and considering what objective performance standards and tests could be used in the BSCPs such that performance could be compared in a public arena - these could then be progressed via Change Proposals independent of P157.

2.2 Financial Incentives - Supplier Charges

2.2.1 Serials

The VASMG considered Supplier Charges and concluded that they should be aimed at maintaining accuracy and timeliness of Settlement over a long period of time. The Group considered the Serials that the P99 Supplier Charges were applied to and discussed what changes if any P157 would make.

SP01 and SP02

There is currently a charge associated with these Serials which look at the timeliness of Performance Assurance Reporting and Monitoring System (PARMS) data provision. The Group considered that it was important to incentivise Suppliers to provide data in a timely manner; therefore they agreed that these Serials should have Supplier Charges attached.

SP04

This Serial is concerned with the timely installation of mandatory Half Hourly (HH) metering. The Group felt that it was important that Suppliers install HH metering for all Premises over 100KW, therefore this Serial was also deemed by the Group to be appropriate for Supplier Charges.

SP08a, b and c

This Serial is concerned with the provision of accurate data based on AAs/Actuals into Settlements. Under SP08a, the Group felt that Suppliers ought to be charged if they fail to provide AAs for 97% of NHH Meters at Final Reconciliation (RF) - currently Parties are charged at the Third Reconciliation (R3) and RF runs. SP08b is a charge applied to Suppliers who fail to provide Actuals for 99% of HH Meters above 100kW at the First Reconciliation Run (R1) – this Serial is for compulsory HH metering (MIST⁵) – currently Parties are charged at the Initial Settlement (SF) and First Reconciliation (R1) runs. Finally SP08c is a charge applied to Suppliers who fail to provide actuals for 99% of HH Meters below 100kW at RF – this Serial is for non compulsory HH metering (MOST⁶). The Group considered SP08a, b and c and deemed them appropriate to have Supplier Charges attached under P157.

Please note: Charges should continue to be applied to importing Meters only on the basis that estimations of export are either zero or profiled using strict techniques.

2.2.2 Genuine pre-estimate of loss calculation

The Group considered the legal opinion regarding the requirement to set the charges that are applied to the Serials such that they are reflective of the genuine pre-estimate of loss. Any type of Supplier Charges regime that has a correlation between degree of under-performance and amount charged is a liquidated damage - no matter how simple or complex that correlation. A liquidated damage that is set prior to the charge being incurred must be a genuine pre-estimate of the loss caused as a result of under-performance.

With this in mind the Group began the Assessment Procedure by discussing potential components of a genuine pre-estimate of loss, considering the previous discussions that established this under the Pooling and Settlement Agreement (as part of the 1998 Programme) for the current Supplier Charges.

Two members of the Group offered contrary legal opinions to that provided by BSCCo's lawyer regarding what should constitute the genuine pre-estimate of loss. These opinions were considered and addressed by BSCCo and the Group. These opinions were reiterated in the consultation responses on central incremental costs and redistribution.

⁵ MIST = Metering Data Inside Settlement Timescales

⁶ MOST = Metering Data Outside Settlement Timescales

	Possibilities for inclusion	Used / Discarded
SP08 a, b and c	<ul style="list-style-type: none"> • <u>Value of volume of energy that is assumed to be uncertain</u> • <u>Cost of uncertainty</u> • <u>Cost of special Meter read</u> • <u>Cost of Post Final Settlement Run</u> • <u>Central Incremental Costs</u> • <u>In-house Supplier costs to correct bad data</u> 	<ul style="list-style-type: none"> • Used • Discarded • Discarded • Discarded • Used • Used
SP04	<ul style="list-style-type: none"> • <u>Approximate price £y for procuring a CoP5 HH Metering system to represent the value of risk over x months. Hence a pre-estimate of loss of £y/x per month (to recover cost of installing appropriate systems)</u> • <u>Charge for uncertainty between HH and NHH metering (i.e. use of profiles</u> 	<ul style="list-style-type: none"> • Discarded • Used
SP01 and SP02	<ul style="list-style-type: none"> • <u>Administration costs</u> 	<ul style="list-style-type: none"> • Used

2.2.2.1 SP08

Cost of uncertainty

Several methods were discussed to try to cost in to the genuine pre-estimate of loss the fact that not reaching targets set at the relevant Settlement Runs makes all Parties uncertain with regards to the accuracy of Settlement and therefore Parties try to offset this risk in some way. The Group discussed the two aspects of uncertainty that Parties would have to consider and which of these could be catered for in this aspect of the genuine pre-estimate of loss. There is the uncertainty in the GSP Group Correction Factor⁷ as well as the uncertainty in imbalance payments. The former is considered small and insignificant in this context and the latter is dependent on System Sell Price (SSP) and System Buy Price (SBP) and therefore difficult to predict. The Group also discussed the Settlement Uncertainty Model (SUM) that originated from the difficulties that Financial Directors of companies (in this case Host Suppliers pre-1998) had trying to enter a prudent figure for Reconciliation Charges in their annual accounts. This uncertainty is not applicable to HH and also not necessarily appropriate for a genuine pre-estimate of loss calculation since it is accounting for variations in Reconciliation Charges rather than the uncertainty that data entered into Settlement (even after RF) is accurate.

The following methods were considered, and consulted upon in the first assessment consultation, as ways to calculate the cost of this type of uncertainty to Suppliers:

- A) The Settlement timetable has been set such that there are target percentages that a Supplier ought to have settled on actual data at each Settlement Run. E.g. target AAs at SF = 3%, R1 = 17%, R2 = 43%, R3 = 78%, RF= 97%. This was the methodology used by the 1998 Programme.

⁷ The main causes of error in the GSP Group Correction Factor are, Line Loss Factors, Profile errors, Data errors NHH and HH, Estimates HH and EACs NHH. The Group were considering uncertainty caused by the latter two.

It is assumed that the industry by accepting these levels and runs, also accepted that this would imply a certain accuracy of Settlement. (This assumes that Settlement is 100% accurate if all data entered is actual data). In other words, the industry has effectively set a price on certainty by deciding the number of Settlement Runs and the target percentages of actuals at each run. However, it was considered that this price might not necessarily be cost reflective.

It is then assumed that if a Supplier does not reach the target percentages set, that Supplier is increasing the uncertainty of other Suppliers in relation to the accuracy of Settlement and since the industry has effectively set a price on certainty those who decrease it by a certain amount can be charged correspondingly.

See Appendix 2a of this document for further details regarding this methodology.

- B) The Group also considered the additional uncertainty that would be associated with Settlement in the case of nobody sending any actual data in. Some members of the Group suggested that there was little or no uncertainty currently but acknowledged that there might be uncertainty if Performance Levels across the industry were to drop considerably. The calculation that was considered looked at how to approximate the uncertainty in Settlement that would result from a large performance decrease. This methodology requires approximating the extent to which an EAC or estimate would be more inaccurate were performance to drop (the assumption is a linear degradation in the quality of estimation however this is not necessarily the case). It also requires an assumption to be made as to the likelihood of performance dropping to such a level. No suggestion was given for this although it was thought that this would be very unlikely.

See Appendix 2b of this document for further details regarding this methodology.

- C) The Group further considered information regarding Suppliers' Internal Pricing Teams and how they cost uncertainty into their price calculations. All members agreed that the price contains some acknowledgement of the quality of consumption data of customers. However it was considered highly unlikely that any estimate of this would be submitted by Parties since it is highly commercially sensitive information.

See Appendix 2c of this document for further details regarding this methodology.

The Group considered the cost of the forecasting systems used by Parties as well as the data given to traders to use in trading. The Group considered whether the cost associated with forecasting systems used to reduce the uncertainty for each Party was appropriate for inclusion. The Group concluded that this was unsuitable since the investment to improve the accuracy of forecasting systems is justified primarily by avoiding imbalance charges, not by reducing uncertainty. In addition the Group did not think that the methodologies suggested in the consultation paper were apt and therefore the inclusion of any of these would not be open to challenge. Since the Group were convinced (as well as many respondents to the first assessment consultation) that this was a small amount and all Parties were affected to the same extent, it was decided that the cost of uncertainty would not be included in the genuine pre-estimate of loss for SP08.

The cost of uncertainty was discarded from the SP08 genuine pre estimate of loss
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Cost of special Meter read

This was the addition of the cost of a special Meter read to the genuine pre-estimate of loss which was included on the value set in 1998. Initially the Group thought that this was an appropriate measure as it would incentivise people to read Meters and is the cost that a Supplier had avoided and which resulted in an estimated value being entered into Settlement. However on reflection the Group

considered that including this would not fit with a theory of genuine pre-estimate of loss, as it did not reflect the loss other Parties suffered but rather the opportunity cost to the Supplier itself.

The cost of a special Meter read was discarded from the SP08 genuine pre estimate of loss

Cost of Post Final Settlement Run

The Group considered whether this was appropriate for inclusion under SP08. It was thought that if used in association with the value of the volume of energy that is assumed to be uncertain, this might be double counting. However it was pointed out that the calculation of the value of the volume of energy that is assumed to be uncertain looks at the financial charge that having too many EACs has exposed others to via altered GSP Group Correction Factor etc whereas the former assumes that if you have too many EACs at RF you are more likely to raise a Dispute to correct and thus require a Post Final Settlement Run. The Group however discounted this idea since the calculations would be inaccurate as Post Final Settlement Runs are not used to correct EACs alone.

The cost of Post Final Settlement Run was discarded from the SP08 genuine pre estimate of loss

Value of volume of energy that is assumed to be uncertain:

This methodology assumes:

- The change in the overall volume between SF and RF is caused by replacing estimates with actuals;
- The change in the overall volume therefore gives a measure of how much inaccuracy was in the SF estimates;
- The % volume change over the time period was compared with the corresponding % change in estimates to get the average % volume change for % of estimate change;
- The level of inaccuracy in the estimates remaining at RF is comparable to that in the estimates replaced between SF and later Settlement Runs.

Additionally the price used to cost the error of the inaccuracy of estimates in Settlement makes several assumptions, namely that the error is as likely to be positive as it is to be negative. See Appendix 6 below.

The Group felt that this methodology was appropriate for inclusion in the calculation of the genuine pre estimate of loss for SP08 because it calculates an approximation of the volume uncertainty in an average estimated value entered into Settlement and costs how much that volume change would cost other Suppliers.

The methodology for calculating the values for SP08a, b and c is set out in Appendix 3 of this document and is summarised below: The calculations were performed separately for HH and NHH data for a sample of Suppliers in all GSP Groups over certain time periods. The calculations worked out the change in percentage estimates between SF and the latest Settlement Run possible in the data, and the corresponding change in volume that these estimates were assumed to have caused. The average change in volume that a 1% change in the percentage of estimates brings about was calculated. The loss that this will cause other Suppliers in Settlement is calculated by applying a price to this volume. This price is termed the imbalance differential and was calculated as the average of the difference between System Sell Price (SSP) and System Buy Price (SBP) over a year divided by two. This value is used as it is assumed that a Party will have contracted its energy accurately and the inaccuracy of another Supplier's estimation will push a Supplier longer or shorter and hence the difference between its imbalance charges and its contracted charges is used. The average of the difference of both imbalance prices is used since from the data available it was not possible to ascertain whether the estimated data underestimated or over estimated the Supplier's consumption, See Appendix 6 below.

Initially the value for both NHH and HH was calculated over two separate two month periods, May/June and October/November 2001. This resulted in a charge of £4.43/MWh for HH market and £0.11/MWh for NHH market. This was consulted on in the first assessment consultation and also was sent to Ofgem to consider in its provisional thinking letter.

The Group considered the consultation responses that commented on the charge associated with SP08b. The Group and the respondents were all surprised at the magnitude of the charge and suggested some further analysis be done.

Ofgem in its provisional thinking letter considered the genuine pre estimate of loss calculation for SP08a, b and c. Ofgem stated that although it does not hold a view as to an appropriate, exact value of the genuine pre estimate of loss in the NHH market, it is concerned that the genuine pre estimate of loss suggested for SP08a (£0.11 per MWh) would be an order of magnitude lower than under the current arrangements. Ofgem recognised that this amount must be a genuine pre estimate of loss, but was nevertheless concerned that the current proposals may fail to improve the accuracy of data in the NHH market. Ofgem also did not hold a view as to an appropriate, exact value of the genuine pre estimate of loss in the HH market. However, Ofgem noted that the genuine pre estimate of loss for SP08b suggested by the Proposal (£4.43) is far higher than the previous charge under this Serial and suggests it may be worthwhile for the Group to ensure that the genuine pre estimate of loss is the best estimate possible.

The Group reviewed the size of the SP08b and c charge in light of the consultation and Ofgem's comments. The large discrepancy between the HH and NHH charges was queried. It was suggested that the disparity was due to the different ways that estimates are calculated in the HH and NHH markets. The NHH market bases EACs on previous AAs. Both EACs and AAs cover long time periods. The HH market has several ways of calculating estimates. In addition to this although the basing of estimates on previous Actuals is urged, previous Actuals are not necessarily predictive of current performance. Hence the variability was in part explained.

The Group then considered the nature of estimates and that prior to the implementation of CP696 "Allow the Half Hourly Data Aggregator (HHDA) to apply a default value where no consumption data has been provided by the Half Hourly Data Collector (HHDC)" there were more zero estimates entering Settlement at SF and that this could be the cause for the large volume change. Post CP696, default values are being used in Settlement rather than zero estimates, therefore the Group concluded that using data from after the implementation of this CP would lead to a result more realistic to current trading arrangements. Further analysis was therefore carried out using data that covered Settlement Runs SF to R3⁸, for dates between February and June 2003 inclusive (using the same sample of 8 Suppliers in every GSP Group).

The volume weighted average of the (% volume change over the time period divided by the % change in estimates over the same period) was 86% equivalent to a £3.21/MWh charge, lower than the previous value derived using data prior to CP696. The charge has been reduced by nearly 30%. The Group noted that the value for SP08b and c was still high but considered the methodology remained appropriate and that since the genuine pre estimate of loss calculations were to be reviewed every two years the charge may change upon improvements in estimation. Also, because more recent data would be used when the value was reviewed there was a suggestion that knowing the way the genuine pre estimate of loss was calculated may encourage improvements in estimation techniques.

Examples of the £/MWh value calculated and the methodology are contained in Appendix 3 of this document.

⁸ R3 data was used for this analysis as RF data was not yet available.

The value of volume of energy that is assumed to be uncertain was used as part of the SP08 genuine pre estimate of loss

Central Incremental Costs

The Group considered the different aspects of the Performance Assurance Framework (PAF) costs and whether there would be any incremental costs due to Supplier under-performance. BSCCo presented a methodology that could be included which took into account the costs of PAF and BSCCo staff as well as additional effort spent on performance issues including the effort of Operational Support Managers (OSMs) who aid participants with performance related issues. The former costs would not necessarily be avoided if performance on SP08 were to improve since other industry performance issues or areas of non-compliance might arise. Savings suggested are also based on the assumption that the relevant Standards are attained through the implementation of systems and processes that operate in compliance with the procedures outlined in the Code and do not lead to the subsequent creation of settlement error. The latter (including OSMs) costs are value added services to aid participants in relation to performance issues, these costs would also not necessarily be saved but time spent by staff on performance issues would be used on their day to day work. BSCCo maintained that it was difficult to segment the cost into base costs and incremental costs and were the VASMG to use this as part of the genuine pre-estimate it would have to use either the total amount or an estimate of what would be incremental e.g. 15%. Some members of the Group were concerned that there were potential legal problems with including this as part of the genuine pre-estimate of loss. Two members of the Group offered such legal opinions and these were considered and addressed by BSCCo. The legal opinion provided by BSCCo was that the most important concept to note is simply that the charges levied must be a pre-estimate of the actual loss and that where it can be shown that a component of actual loss is an increment in the costs of administering the PAF in any way, then it is not only reasonable but necessary to consider this in formulating a genuine pre-estimate.

The Group considered that it was likely that a portion of the central costs was an increment necessary to deal with poor Supplier performance and that a reasonable percentage was 15%. This value was then divided by the amount of NHH or HH energy in a year (depending on whether it will be used for SP08a, b or c) to get a £/MWh value to add on. The Group consulted on this in its consultation to industry and although the Group concluded that in its opinion there was an increment centrally that could be attributed to under-performance of Suppliers, it was in agreement with the respondents that BSCCo were in the best position to decide a suitable percentage of its central costs that are deemed to be incremental. The analysis was performed and is included in Appendix 4 below.

The central incremental cost was used as part of the SP08 genuine pre estimate of loss

In-house Supplier costs to correct bad data – SP08a only

The theory behind including this is that having incorrect data would lead to a NHH Supplier not reaching the 97% target at RF. If this data is not corrected and a Customer changes Supplier, the Supplier will pass on this problem to the new Supplier. Thus Suppliers that do not reach the 97% target may fail due partly to having received incorrect data. This data is not then corrected due to the cost of correction. Charging Suppliers this cost of correction would encourage them to correct in house data and hence not pass the problems on to the next Supplier who would potentially incur the costs of correction. The VASMG considered that this cost was dependent on the processes, skills and systems that the individual Supplier has in place and it is difficult to quantify how much each Supplier spends on correction. However it was pointed out, that aspects of the genuine pre-estimate of loss should not be omitted from the calculation simply because they are difficult to estimate. The Group agreed with this in theory but initially considered that the cost of correction should not be included for several reasons:

- There is no direct link between charging Customers and Settlements hence the link between correcting bad Customer data and entering correct data into Settlements is not strong e.g. a

Customer could be registered as having a Pre-payment Meter rather than a Credit Meter and this would need to be corrected by the Supplier but would not affect the data entering Settlement;

- There ought to be an incentive somewhere for this but the place is not necessarily the BSC, and within that not Supplier Charges;

In addition, the Group concluded that a realistic number to include in the genuine pre-estimate of loss could not be reached, since it felt that any numbers quoted by Suppliers (if at all) would be widely variable. These variable numbers are, in fact, realistic since it depends what errors there are in the data and how easy they are to correct.

Ofgem stated in its provisional thinking letter that although it does not hold a view as to an appropriate exact value of the genuine pre-estimate of loss in the NHH market, it is concerned that the genuine pre-estimate of loss suggested for SP08a (£0.11 per MWh) would be an order of magnitude lower than under the current arrangements. As stated previously Ofgem recognised that this amount must be a genuine pre estimate of loss, but is nevertheless concerned that the current proposals may fail to improve the accuracy of data in the NHH market. Ofgem stated its current preference to be for the Group to look toward estimating the total industry resources currently devoted to Settlement error correction in the NHH market and to express this amount on a MWh basis, with the intention that this number should be included within the genuine pre estimate of loss applying to SP08a.

The Panel considered the Ofgem provisional thinking and the arguments of the Group at the July 2004 Panel meeting and directed the Group to include in house Supplier costs to correct bad data in at least one of the Modifications to be put forward.

The Group queried whether a realistic number to include in the genuine pre-estimate of loss could be reached, since it felt that any numbers quoted by Suppliers (if at all) would be widely variable, however, two approaches on how to estimate the loss were suggested. The Group decided that in light of Ofgem's concern regarding the low charge as well as Ofgem's urge not to reject something simply because it was too difficult to calculate it would consult on the methodology to try to put a number to this loss. Of the options that were suggested one was a bottom up approach and the other a top down approach.

Top Down Approach

The top down approach looks at the total number and size of new NHH customers that a Supplier gains in one year, and of these, how many (in size and number) had inherited data quality problems. Finally it looks at how much the Supplier spends correcting bad data for Settlement Issues at RF per year. The cost of correcting data per MWh is then calculated by dividing the total cost by the total volume of energy with data quality problems. The proportion of these problems that are inherited is then taken into account by multiplying this value to the proportion of energy with data quality problems that have been inherited – see methodology below:

- Number of new NHH customers gained in one year - A
 - Of these how many had inherited problems - B
- Total number and MWh of NHH customers in that same year - C
 - Of these how many have data quality problems – D
 - What is this in MWh - E
- Total cost of correcting bad data for Settlement Issues at RF in house – F

Cost of correcting in £/MWh = F/E

The proportion of these whose problems are inherited are B/D

Cost of correcting inherited problems = $\pounds(F/E*B/D)/MWh$

One respondent provided data in the second assessment consultation to be used in this calculation. This resulted in a cost of £0.09/MWh

Bottom Up Approach

The bottom up approach looks at the average amount of time spent fixing a Metering System with data quality problems which is then multiplied by the hourly rate of the person fixing the problem. This is then converted into a cost per MWh by assuming an average volume per Metering System and determining the number of years that the fix secures this data for. This value is then multiplied by the Supplier's customer churn rate to take into account the fact that not all data quality issues are inherited or passed to other Suppliers – see methodology below:

- The average MWh per annum of an NHH MPAN (4MWh per annum) – a
- The length of time the fix to correct data quality - b
- Ignore work caused by the errors in the 97% - 100% range, as being an "acceptable" level, in the same way as we ignore it for other components of the genuine pre estimate of loss
- Hourly rate – c
- Length of time to fix - d

Based on this the cost/MWh is calculated as:-

- Each fix costs $\pounds c * d = e$
- Each fix secures aMWh for b years i.e $a*b = f$
- Cost per MWh is $e/f = g$
- Consider customer churn rate over the length considered in b
- Therefore cost per MWh is $g*h = i$

Some members of the Group were unhappy with this as they said there were different types of fixes and these would take different lengths of time and cost differing amounts to fix. It was suggested that either the top down approach be used in preference to this one or that the types of problems and the cost and time to fix them be categorised.

Two respondents provided data in the second assessment consultation to be used in this calculation.

a	b	c	d	e	F	g	h	i
4MWh	2 years	£10	15 mins or ¼ of an hour	$=\pounds10/4$ $=\pounds2.50$	$=4MWh*2$ $=8MWh$	$=\pounds2.50/8 =$ $\pounds0.313/MWh$	30% churn over a two year period	$=\pounds0.313*30\%$ $=\pounds0.09/MWh$
4MWh	1 year	£10	12.5 mins	$=\pounds10/4.8$ $=\pounds2.08$	$=4MWh*1$ $=4MWh$	$=\pounds2.08/4$ $=\pounds0.52/MWh$	=10.3% churn over a two year period	$=\pounds0.52*10.3\%$ $=\pounds0.05/MWh$

Having considered the consultation responses in relation to both the top down and bottom up methodology, the Group decided that a value of £0.09/MWh was appropriate and that this would form part of the genuine pre estimate of loss for SP08a in the modification as instructed by the Panel. The

Group then considered whether the alternative proposal should also contain this component. There were mixed views in the Group about this. Those against including it believed:

- It is an indirect cost and should not be included; and
- It is unlikely to be an accurate value since there are many different types of fixes and problems with data.

Reasons in support of including it were:

- Since the Panel and Ofgem support its inclusion the proposal has a better chance of succeeding; and
- Even though the value might be an approximation it can still be a genuine pre estimate of loss.

It was decided that this would form part of the genuine pre estimate of loss for SP08a for both Proposed and Alternative Modifications. A majority of the Group also decided that the bottom-up approach was more suitable and should be included in the methodology contained within the Code since a majority of consultation respondents supported this approach. The Group requested that the methodology in the Code be as prescriptive and open to as little interpretation as possible,

The in-house Supplier costs to correct bad data was used as part of the SP08a genuine pre estimate of loss

2.2.2.2 SP04

Approximate price £y for procuring a CoP5 HH Metering System to represent the value of risk over x months. This resulted in a pre-estimate of loss of £y/x per month (to recover cost of installing appropriate systems)

The Group did not think that taking into account the price of installation of HH Metering and communications system was appropriate for calculating the genuine pre-estimate of loss for SP04. The Group gave the same rationale for this as for rejection of the cost of a special Meter read, above. It believed that this does not estimate the loss caused to counterparties as a consequence of underperformance, rather it is an opportunity cost to the Supplier itself.

The price for procuring a Metering System was discarded from the SP04 genuine pre estimate of loss

Charge for uncertainty between HH and NHH metering (i.e. use of profiles) – SP04

The Group supported a methodology that would charge for the uncertainty between HH Meter reads and the approximated data produced from profiles for NHH Meter reads. In the event that a Supplier failed to install a HH Meter at a 100kW site, the site would be traded on a profile and the error in the allocated profile would feed into the GSP Group Correction Factor reducing the accuracy of the bills of all the NHH Suppliers in that GSP Group. It was noted that profiling was designed for under 100kW demand and therefore errors would be introduced when applied to above 100kW Premises.

The analysis done was to take some examples of HH actual customer data and see what consumption would have been applied if they had used profiles. The difference or error was multiplied by the imbalance differential ($|\text{difference between SBP and SSP}|/2$) to get the cost of the error for the length of time of the data. This cost was divided by the number of days the data spanned, to get a cost per day value.

The price used in this calculation, termed the imbalance differential was $|\text{SBP} - \text{SSP}|/2$. The rationale behind this price is the same as that for SP08 and is explained fully in Appendix 6.

See Appendix 5 below for further details regarding this methodology.

The charge for uncertainty between HH and NHH metering was used as the SP04 genuine pre estimate of loss

Administration costs – SP01 and SP02

The current charge of SP01 and SP02 is £25 per day, per GSP Group which was based on the administration cost incurred if reports are provided late.

It was agreed that administration costs were the only thing that was applicable for inclusion in the genuine pre-estimate calculation for these Serial. However the Group felt that charging per GSP Group per day did not reflect a genuine pre estimate of loss since administration costs of chasing up missing reports would not vary by GSP Group only by day. It thus considered that the charge ought to be applied per day. It used a cost of £400 per man day and assumed a 5% per day charge - £20 per day for SP01 and £20 per day for SP02.

The administration cost was used as the SP012 and SP02 genuine pre estimate of loss

2.2.3 Summary of Serials and Proposed Charges

	Genuine pre estimate of loss components	How it is charged	Charge
SP01 and SP02	Administration costs	Per day only	£20 per day
SP04	Charge for uncertainty between HH and NHH metering (i.e. use of profiles	Per day per GSP Group – as currently	£1.66 per day
SP08a	Value of volume of energy that is assumed to be uncertain Central Incremental Costs In-house Supplier costs to correct bad data	Per MWh away from Standard at RF only	£0.11/MWh £0.002/MWh £0.09/MWh
			£0.202/MWh
SP08b	Value of volume of energy that is assumed to be uncertain Central Incremental Costs	Per MWh away from Standard at R1 only	£3.21/MWh £0.002/MWh
			£3.212/MWh
SP08c	Value of volume of energy that is assumed to be uncertain Central Incremental Costs	Per MWh away from Standard at RF - as currently	£3.21/MWh £0.002/MWh
			£3.212/MWh

2.2.4 Periodic Review of Supplier Charges

The Group discussed whether and how the genuine pre-estimate of loss value should be periodically reviewed. The Group considered the current increase in the value according to RPI that is currently contained in Annex S-1 of the Code and after looking at the responses to the second consultation

document, the Group decided that such an increase was no longer appropriate and instead the value of the genuine pre-estimate of loss should be reviewed every 2 years.

Details of the review and the reasoning behind each aspect are given below:

- The Panel would have charge of the review but is likely to delegate this to ELEXON to perform. This is the same as several other reviews that are undertaken under the Code;
- The review would rerun the methodology that was confirmed under P157 (see section 2.1.2 above) using more up to date data where possible;
- The methodology will be contained within the Code such that any amendment would go via the Modification Process. This was since the Group felt that any change in the methodology should be considered against the Applicable BSC Objectives and be submitted to Ofgem for decision via the Panel as well as undergoing industry consultation;
- The results of the review would not go out for industry consultation since the methodology used would have been agreed by the industry as part of P157 and participants should therefore be aware that the value of the genuine pre estimate of loss could either reduce or increase;
- The Panel would approve the review i.e. that the revised values had been calculated in accordance with the methodology in the Code; and
- A circular would be issued warning Parties of the review and also of the change, if any, in the values. The values will also appear on the BSC Website

The Group clarified that the review was to recalculate the genuine pre estimate of loss according to the agreed methodology. The Group considered that there was a compromise between being sure that the genuine pre estimate of loss was accurate and increased uncertainty in the market if frequent changes were made. It was pointed out that regular reviews to recalculate the genuine pre estimate of loss would be based on more recent data and hence would be more accurate as would reflect changes made to the trading arrangements (as can be seen with CP696 above). The Group considered that at least 2 years after the Implementation Date was a suitable time for a review followed by reviews every two years. The Group also wanted to allow the facility for the Panel to request a review if necessary before the two year period was over but wanted to restrict reviews to no more than once per year.

Note: the legal text contains the methodology for the review.

2.2.5 Caps

The Group considered whether a cap on the amount of money to be paid in Supplier Charges was appropriate. The Group had several things to consider including the views of consultation respondents, Ofgem's provisional thinking letter and the direction of the Panel.

At the start of the Assessment Procedure the Group rejected the current cap calculated for each Supplier and decided to work out the cap value in a different way from how it is derived currently. Currently the monthly cap for each Supplier is its proportion of the GSP Group Take multiplied by the GSP Group monthly cap. The Group looked at how much a Supplier approximately paid for its energy and then what the maximum amount it considered it would be able to cope with being charged by a Supplier Charge type scheme, taking into account the profit margin Suppliers make. The Group considered that 1% of the cost of the Suppliers market (NHH+HH) in a particular GSP Group was appropriate. This would be $1\% \times \text{market share} \times \text{price}$. It was suggested that a suitable price would be the Credit Assessment Price since this is derived from imbalance and market prices and is considered to represent the average cost of energy in the market as well as the fact that it is a fairly fixed number. There was some concern about the choice of 1% - i.e. whether it was high enough and if so whether it would continue to be relevant – see analysis in Appendix 7. The Group did however feel that 1% was significantly higher than the current cap and would therefore be applied less frequently whilst

preventing significant liability. This revised cap was detailed in the initial assessment consultation and the first Interim Report which Ofgem based its provisional thinking on.

Ofgem in its provisional thinking considered whether a cap was appropriate. It stated that it has serious concerns about capping liability for charges under the Proposal and that these concerns arise for a number of reasons:

- Caps limit the charge and therefore limit the compensation to a level below that determined as an appropriate pre-estimate of loss. They are geared to the payer rather than the recipient of compensation;
- Caps in the present arrangements cover a basket of serials. This approach introduces complexity in calculation, making the incentives less transparent and the system and management costs more expensive;
- Caps dull the incentive to perform to an appropriate standard, due to the risk of failure being less severe;
- Development costs of central and Parties' systems to handle caps may be wasted if they are rarely invoked.

Nevertheless, it claimed that the introduction of caps could have beneficial effects, especially if there were not a reasonable level of confidence in the genuine pre estimate of loss , meaning that particular classes of Party – perhaps smaller Parties - may otherwise be exposed to disproportionately high charges arising from a relatively low number of problem Meters against a high volume of energy. A barrier to entry could arise from fears of high charges although compensation payments should be available for a high performer. Ofgem noted that one of the arguments advanced in favour of the retention of caps arises because of substantial charges being postulated for exceptionally poor performance using the high proposed SP08b genuine pre estimate of loss , therefore the Modification Group should ensure that they have confidence in this value. Additional fears arise because redistribution is not being taken into account.

Ofgem did not consider that high charges per se (after redistribution), are an issue, but would be concerned if the arrangements show a combination of high charges and low confidence in the genuine pre estimate of loss.

The Panel, at its July 2004 meeting considered the cap the Group had suggested as well as noting Ofgem's concerns in the provisional thinking letter. It directed the Group to exclude caps from at least one of the modifications it put forward.

Following this meeting Ofgem summarised its current view which was that it would strongly prefer that caps were not utilised and that greater consideration was given to estimating the appropriate level of compensation for Parties performing well. In Ofgem's view caps applied to a basket of Serials would be unlikely to better facilitate the relevant objectives as they would introduce unnecessary complexity and opacity.

At the August Panel meeting, the Panel clarified its instruction to mean that a cap could be included in the modification but that it should not be applied to a "basket" of Serials (SP08a, b and c are not considered a "basket").

The Group recognised that given Ofgem's concerns and the Panel direction it should put forward strong reasons if it were to argue to retain a cap and should carefully consider the nature and form any cap would take.

Firstly the Group considered the issue of applying a cap to a basket of Serials. The Group decided that it would be appropriate to apply the new cap (1% of its Supplier Take*Credit Assessment Price) only to

Serials SP08a, b and c and not to have the cap being applied to charges on SP01, SP02 and SP04. The former two would anyway not be applied after a 12 month period.

Secondly the Group considered the possibility of only applying the cap to Parties with small numbers of Metering Systems. Since the Supplier Charge is based on percentage movement of errors across the whole industry, a Supplier that has a small number of Metering Systems might not have a portfolio that is representative of the industry as a whole and the charge may not be at the appropriate level. Caps should therefore apply to mitigate against potentially unfair charges.

To determine the level at which we lose confidence in the relevance of a nationally derived number, the Group considered that market research samples of 1000 are used because they have 95% certainty that there is only a 3% sampling error. The sampling error increases to 5% for samples of 400 and 8% with samples of 150. (The mathematics behind this is that the sampling error equals the square root of $p \cdot q$ divided by n , all multiplied by 1.96, where p and q are the proportions of positives and negatives and n is the sample size. The use of p and q was considered appropriate since even though the charge for the uncertainty that estimates are not the same as actuals is more complex, the result is probably as or more uncertain as the result from a simple market research question. If we assume that a 50/50 result is the most uncertain (worst case scenario) the percentages mentioned are arrived at.)

The Group therefore suggested that the cap could be limited to portfolios with less than 400 Metering Systems as this is the point at which we only have 95% confidence that the sampling error is less than 5%. The option of only applying the cap to Suppliers with less than 400 Metering Systems was included in the second consultation document.

Following this consultation the Group considered the new cap ($1\% \cdot \text{Supplier Take} \cdot \text{Credit Assessment Price}$) again and looked at whether it was appropriate to maintain a cap and apply it to all Suppliers or only Suppliers with a small number of Metering Systems.

The Group were keen to retain the cap for all Suppliers for the following reasons:

- Caps stop significant liability in exceptional circumstances rather than limiting liability under normal circumstances;
- Small Parties (small both in energy *and* number of Metering System terms) will, in the opinion of the Group and consultation respondents, be put off entering the market if there was no cap and hence significant liability under Supplier Charges;
- It was considered that applying the cap only to Suppliers with a small number of Metering Systems may be open to gaming since Suppliers could transfer poor performing Metering Systems to a particular Supplier Id and ensure that this Id contained no more than 400 Metering Systems and hence would qualify for application of a cap;
- Charges without caps may become penal in nature;
- The perceived lack of competition amongst Agents would make it very difficult for Suppliers to transfer the risk of Supplier Charges hence lack of caps would increase the cost to the market since no Agent would take on the risk of such significant liability from the Supplier.;
- Small Suppliers (small both in energy *and* number of Metering System terms) have problems negotiating contracts with Agents;
- Parties are willing to forgo the compensation due to them in order to have the security of a cap in place in the market;
- the decrease in certainty for Suppliers with small numbers of Metering Systems was considered to be a continuum not have a cut off point and thus applying the cap to for example Parties with 400 Metering Systems but not those with 401 Metering Systems was deemed unfair;

- The new cap calculation takes Supplier size into account and hence is considered proportional and more appropriate than the current cap. In addition it is simpler to work out and reflects the fact that there is approximately 1% margin in the Supply business and the cap is set right at that margin.

The Group thus decided that the cap should be applied only to Serial SP08 but should pertain to **all** Suppliers since the concerns it had regarding small Suppliers was not just regarding small numbers of Metering Systems but also small Suppliers in energy terms.

2.2.6 Redistribution

The Group considered three main categories of redistribution during the Assessment Procedure:

- Current redistribution method;
- Average performance type options; and
- Bond Rebate option

At the Panel meeting of July 2004 the Panel instructed the Group that the redistribution in at least one of its modifications should be based on a method (not bond rebate) that is linked to the target Standard and hence supports its attainment and is continuous and monotonic.

2.2.6.1 Current Method

The current redistribution works as follows:

- 10% of funds collected are distributed to all Trading Parties based on their Main Funding Share;
- 90% of funds are redistributed to NHH Suppliers in the relevant GSP Group based on their NHH market share.

Some members of the Group stated their view that the redistribution method ought not to be changed. Two reasons were given:

- That the Supplier Charges genuine pre estimate of loss calculation was conceptually linked with the method of redistribution. It is reasonable to redistribute the funds in proportion to which Parties are damaged and it is inherent in the process of calculating the GSP Group Correction Factor that Suppliers are "damaging" themselves. This should be merely a method of compensation and hence cannot form an incentive.
- It is not legally possible to extricate redistribution from the charge i.e. the theory behind charging Parties a genuine pre estimate of loss is that poor performers are causing other Parties a loss and should pay recompense, thus redistribution is the allocation of the funds collected to the Parties that suffered the loss.

The Group considered that leaving the redistribution as it currently is should be the method of redistribution for one of the modifications it developed.

2.2.6.2 Average performance

The basic average performance option works as follows:

- 10% of funds collected should be distributed to all Trading Parties based on their Main Funding Share
- 90% of funds collected in a GSP Group will be redistributed to NHH Suppliers performing above the average performance on SP08a in that GSP Group (e.g. % of AAs at RF) based on their market share.

Under the average performance option those Suppliers who are performing below the GSP Group average on SP08a would not receive any of the funds gained - THEIR NET CHARGE WILL BE A GENUINE PRE-ESTIMATE OF LOSS. Those Suppliers who are performing on or above GSP Group average on SP08a would receive all of the funds collected based on their market share - THEIR NET CHARGE WILL BE LESS THAN A GENUINE PRE-ESTIMATE OF LOSS.

The Group agreed that the average performance option accomplished two things. It encourages above average performance and thus would gradually work to encourage Parties to move above the average, hence increasing the average. Additionally it would also encourage eventual movement towards the target of 97%. The Group felt that this solution meant that revising the value of 97%, as a level below which Suppliers would be charged, did not need to be considered as the solution encourages an increase in the average performance and does not solely target 97%.

In it's provisional thinking letter, Ofgem noted several things about the proposal which redistributes to only those who are performing above average:

- Particularly sharp incentives are created for performance around the average level. This may result in significant swings in the payments within the redistribution mechanism;
- The proposal contains a weak incentive at the upper end of performance;
- Poor performance by a large Supplier and excellent performance by a small Supplier can lead to disproportionate compensation for the small Supplier.

Ofgem's stated it's view that it would strongly prefer these effects to be removed. Ofgem considers that the simplicity and predictability of the arrangements would be significantly enhanced by a simple linear relationship between performance and payment, rather than the present proposal which has steps and plateaus which introduce distortion and make it difficult for Parties to forecast the benefits of any performance enhancing investment.

At it's July meeting, the Panel also noted some concerns with the average performance methodology. The Panel were keen that the redistribution method chosen would focus on the Performance Standard of 97% to encourage Suppliers to meet the Standard and not simply perform above average. They felt that this would address Ofgem's concern regarding the weak incentive at the upper end of performance. The Panel therefore directed that one of the modifications submitted by the Group should have a redistribution methodology linked to the target Standard and hence support its attainment, and be continuous and monotonic in order to address another of Ofgem's main concerns.

In addition to the concerns raised by Ofgem and the Panel, the Group themselves noted some issues with the average performance redistribution:

- There may be legal objections since some Suppliers will not receive damages due to them. There was a view that any Supplier that is underperforming is damaging other Parties, but is also itself subject to GSP Group Correction Factor. All Suppliers should be compensated for this regardless of their own performance. BSCCo legal opinion stated that the rule against penalties relates to the reasonableness of funds paid out by a Party as 'recompense' for breach of a contract – this rule is not concerned with the use to which those funds are put once recovered as long as that use is not itself in further breach of the contract or otherwise illegal. Re-distribution is not mandatory - and need not be "netted off" against the amount of Supplier Charges levied when considering whether a pre-estimate of loss (i.e. the charge levied) is genuine. Parties therefore have the ability to agree to a different scheme by which to use the funds gained from Supplier Charges;
- The average performance method may not be appropriate for the following reason. Each GSP Group can be viewed as a duopoly between the incumbent Supplier and the second largest Supplier. The dynamics of the arithmetic are that the incumbent Supplier, with a majority of the

volume, effectively sets the GSP Group average performance. The average will always be close to the incumbent's performance, and whether the average is higher or lower than the incumbents is almost totally dependent on whether the second largest Supplier's performance is lower or higher than the incumbents. The "average" is therefore determined by the performance of the dominant incumbent Supplier and the second largest Supplier. If the incumbents performance falls below the GSP Group average, then their Supplier Charges, which are based on their larger volume, are distributed to the other Suppliers, by far the largest share going to the second largest Supplier which typically is around a quarter the volume of the incumbent. Because the second largest Supplier's performance is the primary determinant of whether the incumbent is above or below the average, most of the Supplier Charges and redistribution may be a transfer of monies between it and the incumbent. The reverse applies because when the incumbent is above average, the second largest Supplier will almost certainly be below it, but the money flowing in the opposite direction is less because the second largest Supplier's market share in that GSP Group is significantly less. This may make the proposed method more unstable than the current arrangements and may be capable of providing windfall gains for small Suppliers. The primary objective will always be to just beat the incumbent Supplier, and the returns from redistribution could far outweigh the costs in Supplier charges;

- This may provide an opportunity for gaming. For example, a company operating under more than one Supplier Id could transfer "problem" Metering Systems from one Id to the other in order to recover a proportion of the overall Supplier Charges incurred and thus ensure the funds back are maximised to the company as a whole. This could be significant.

For the average performance option the Group considered several variations to try to address Ofgem's comments and solve the issues the Group and Panel had with this option. The variations are as follows:

- A certain percentage redistributed to NHH Suppliers above the Standard and the remainder to all those performing above average on SP08a. This was discarded due to problems with what to do if no Parties perform above Standard. Also if a small Party alone was above Standard it may potentially receive a windfall gain;
- The basic average performance methodology (described above) with Parties who perform above the Standard receiving back a higher proportion of the funds. This would also be based on market share. This was to address concern that the Standard was not being incentivised as well as the weak incentive at the upper end of performance;
- The basic average performance methodology with Parties receiving more of the funds the higher above the average they are. This would also be based on market share. This was to address the concern that the proposal contains a weak incentive at the upper end of performance;
- The basic average performance methodology with Parties receiving more of the funds the higher above the average they are and even more if they are above the Standard. The Group felt that this method would also address the Panel direction of a continuous redistribution method focussing on the Standard;
- The basic average performance methodology with the charging aspect performed at a GSP Group level but the redistribution performed at a market level using the market average and a Supplier's overall market share – this can be applied to any of the above options. This alternative would remove two of the problems associated with the average performance option. The problem of large swings in funds between the largest and second largest Supplier would not be an issue as the composition of the market as a whole is not similar to that of a GSP Group. The problem of gaming would be removed since moving Metering Systems between Supplier Ids would no longer affect redistribution.

The Group felt that if an average performance type option were selected the redistribution of all funds collected under all Serials (SP01, 2, 4, 8b and 8c) would be redistributed to those Suppliers in the NHH market (i.e. related to performance on SP08a) since these Suppliers were damaged via the GSP Group Correction Factor.

The Group considered that for one of the modifications it developed, the funds collected should be used in the following manner:

- 10% would be circulated to all Trading Parties based on their Main Funding Shares.
- 90% would be redistributed on a GSP Group basis to NHH Suppliers who have either achieved the performance Standard (97%) or have performed above average on SP08a for the GSP Group. The amount each Supplier would receive will be dependent on how far above the average it is and whether it has achieved the Standard.

The mathematical calculation for the proportion of redistribution a Supplier that is above either the average or the Standard will receive is contained and described in the legal text for the Alternative Modification.

The Modification Group believes that this would fulfil the directions of the Panel to the Group in terms of redistribution.

2.2.6.3 Bond Rebate

The Bond rebate option developed by the Group is as follows:

All Suppliers would be charged the genuine pre estimate of loss for all Serials with 10% being distributed to all Trading Parties based on Main Funding Share, as at present. For the remaining 90% of the funds different Serials would be treated differently, as follows:

- SP01, SP02 and SP04 would be distributed to all Trading Parties based on Main Funding Share (as with the original 10%);
- SP08a, b and c would be retained in a company specific bond for the period of 12 months. After 12 months, the Supplier's performance would be compared to that of 12 months ago. If performance had improved a rebate would be given relative to the size of the improvement. After this time, the remainder of the funds (and all funds in the situation that performance had not improved) would be forfeit and would be redistributed on a GSP Group basis to all Supplier's in the GSP Group excluding the forfeiting Supplier and based on market share.

Three variations on this option were discussed by the Group dealing with when a Supplier actually pays. Variations are:

- The Supplier pays at the same time as it would have done for all other options, money is redistributed immediately. 12 months later the balance (whether positive or negative) is paid by or to all Parties in a similar way to Residual Cashflow Reallocation Cashflow (RCRC) – this is complex and would leave Parties accruing for the possibility of owing money a year later dependent on their and other Supplier's improvement;
- The Supplier pays at the same time as it would have done for all other options, and ELEXON keep the funds for the period of 12 months after which the monies are reclaimed or forfeit. This necessitates ELEXON to store large amounts of working capital and this might be disadvantageous to smaller Parties who have a higher cost of capital – several members considered that this would be anti-competitive and inefficient;
- The Supplier incurs and is invoiced for the money (when for all other options it would have paid it out) and only pays when the rebate amount is known i.e. 12 months later. This has been considered to avoid problems relating to ELEXON holding the funds, however it could be viewed

as a delaying mechanism since Suppliers only pay on performance when they are actually charged. The Group stated a preference for this option.

Ofgem also mentioned the bond rebate option in its provisional thinking letter. It welcomed the innovative thinking that the Group is generating, and Ofgem has considered the bond rebate approach and has three serious reservations:

- When would the charge be paid:
 - If ELEXON actually banks the monies (bond) from the first year of payments, then there would be a very large amount of working capital tied up. This may be inefficient overall.
 - If ELEXON merely bills but doesn't collect the cash until a year later, the arrangement becomes a delaying mechanism.
- The proposal does not appear to have compensation as an objective. Rather the objective seems to be to ring fence potential compensation until a year has passed. This puts pressure on cash and may disadvantage smaller Parties.
- The overall payments and compensation after redistribution seem difficult to evaluate against genuine pre-estimate of loss and as a result suffer from complexity.

The Panel were concerned regarding these issues and directed that either the Proposed or the Alternative should not contain a bond rebate type of redistribution.

Some responses to these problems were considered by the Group.

On the pro bond rebate side:

- If ELEXON does collect the money immediately, the amount of money collected is the same as would be collected if a straightforward payment method (i.e. no rebate) as at present. The cash flow difference is on redistribution, not charging, so as far as transgressors are concerned it is cash flow neutral with the existing methodology. The cash flow difference on re-distribution is for the beneficiaries to consider;
- If ELEXON does not collect the money then it *is* a delaying mechanism, but only if a Supplier improves, which is the whole point;
- The proposal is considered by some members to have compensation as its basis, however in their opinion, "wronged" Suppliers put a higher value on the improvement of a "poor" performer than receiving compensation for the "wrongs" suffered. Suppliers are therefore mutually encouraging each other to get better at what they do rather than just seeking compensation from each other, but at the same time receiving compensation if they don't; and
- Some members of the Group felt that caps on Supplier Charges could be removed under the bond rebate option. The rationale for this suggestion was that caps were required to deal with exceptional circumstances. Under the bond rebate options it was highly unlikely that the same exceptional circumstance would occur at the same time in the following year, and Suppliers are given a year to correct any problems.

However in agreement with some arguments against bond rebate:

- Some members of the Group suggested that the delay blunts the incentive to perform;
- Several members of the Group considered that having different redistribution options for different Serials did add to the complexity, others disagreed;

- An additional issue with the bond rebate option was that it would not work as an additional incentive for those Suppliers entering and exiting the market whose performance is dependent on number of Metering Systems and rate of their acquisition and decline.

The Group and consultation respondents stated a preference for the invoicing option. This would mean that Suppliers were invoiced for the payment but with a payment date set 13 months in the future and if a rebate amount, and/or a redistribution amount was owed a Credit Note would be issued and the Party would pay the net amount.

Note that for this option ELEXON Finance Department drew attention to the fact that raising an invoice with Supplier Charges on 13 month payment terms and BSCCo Charges on 10 days terms would cause problems. It suggested that both the charge and the rebate are aggregated and charged net in 13 months to address the cash and invoicing issues. In addition a non legally binding invoice could be issued to inform Parties of their expected charge before rebate, to give them some incentive to reduce it through good performance in the year and the resulting rebate. The Group considered this advice and agreed that should the bond rebate option be progressed, the current PARMS reporting would be used to flag to Parties the amount due in 13 months should no rebate be applicable. An invoice would then be issued in 12 months for the net amount.

After some consideration the Group considered that bond rebate type redistribution would not form part of either modifications to be developed fully by it due to the concerns raised by Ofgem, the Group and consultation respondents detailed above.

2.2.7 90/10 rule

The Group considered why the rule for taking 10% of the funds received through Supplier Charges and distributing it to all Trading Parties exists. The reason one member of the Group remembered as accounting for this rule was as follows:

- 10% to compensate against the increase in the level of central costs (e.g. Trading Disputes), which is split across all Trading Parties.
- 90% to compensate against the NHH error from GSP Group Correction Factor.

Some members of the Group considered that there was not sufficient justification for adjusting the 90:10 rule at present, and since all Trading Parties are contributing to central administration costs it seems reasonable to take out a nominal 10% to compensate all Parties.

However it was considered by some that the amount distributed to all Trading Parties should be increased - to further greater incentivise the NHH market and since the amount paid by Trading Parties towards the central costs is higher. Others felt that the amount distributed to all Trading Parties should be decreased/removed since the Group were unable to clearly justify its existence.

The Group overall decided that the theory behind giving all Trading Parties a portion of the costs was valid and although it considered the number to be fairly arbitrary, since there was a request to include 'deeper' costs the Group would leave this as it stands.

2.2.8 Force Majeure

The Group considered whether it required a further force majeure provision to that already extant in Annex S-1 of the Code. The Group referred to discussions under Modification Proposal P115 "Disapplication of Supplier Charges Under Certain Circumstances" (P115). The VASMG concurred with the views put forward by the P115 Modification Group that there is a link between Section S and Annex S-1 and hence a link between the obligations laid down in Section S2 and the Supplier Charges regime in Annex S-1 which describes how the Supplier carries out those obligations. Supplier Force Majeure can be applied to the provisions dealing with Supplier Liquidated Damages. Further provision was considered unnecessary by the Group since each force majeure occasion would by its nature be an

unpredictable event therefore specifying anything would be difficult. The Group decided that this should be considered on a case by case basis and should be left to the discretion of the PAB/Panel.

2.2.9 New GSP Groups – outstanding issue

Following BETTA Go-Active on 1 September 2004 a third P157 consultation document was issued to allow participants to consider P157 on a Great Britain (GB) basis. The purpose of this consultation was for participants to consider P157 on a GB basis as well as for new Scottish participants to consider P157 and related documents against the Applicable BSC Objectives.

The VASMG met on 28 September to discuss the responses to the third consultation and to consider any further GB wide impacts on P157. At this meeting a new issue was identified relating to the P157 Alternative Modification.

For 14 months following the BETTA Effective Date, Final Reconciliation (RF) data relating to Suppliers operating in the two Scottish GSP Groups will not be available under the Code. These Suppliers will therefore not be eligible to pay any SP08a charges which relates to the percentage of NHH Meters settled on Annualised Advances (AAs) at RF. However data will be available in relation to SP01, SP02 and SP04 from the BETTA Effective Date and for SP08b and c from the First Reconciliation (R1) run. These Suppliers will therefore be required to pay Supplier Charges for performance against these Serials. Under the current rules the 10% of the funds collected will be distributed to all Trading Parties based on their Main Funding Share. The further 90% will be redistributed to NHH Suppliers within the GSP Group based on their market share.

Under the P157 Alternative Modification it is proposed that the 90% of funds collected will be distributed to NHH Suppliers within the GSP Group based on their performance at RF. Only those Suppliers who have achieved the performance Standard (97%) or have performed above average on SP08a for the GSP Group will receive a share of the funds. The amount each Supplier will receive will be dependent on how far above the average it is and whether it has achieved the Standard. As RF data for Suppliers operating in the two Scottish GSP Groups will not be available until 14 months after the BETTA Effective Date, it will not be possible to calculate the amount of money to be redistributed to each Supplier.

2.2.9.1 Potential Solutions

The VASMG considered four potential solutions to address this issue. Each of these options is discussed below:

Obtain the RF data from Scottish Electricity Settlements Limited (SESL)

The first option would be to obtain the RF data from SESL. A number of issues with this approach have been identified during an initial assessment of the problem:

- There would have to be certainty that the data is equivalent with that to be used for England & Wales Parties. To use different data that results in a substantially different outcome may be inequitable in relation to either Scottish or & Wales Parties.
- An agreement or arrangement would have to be entered between SESL and BSCCo to ensure the provision of the data to BSCCo. This agreement would have to include the ability to use the data as well as arrangements around when and how the data would be produced by SESL. The ability for SESL to enter into such agreements may be prejudiced by matters outside its controls due to the fact that no conclusion has been reached on the governance framework supporting SAS Run Off.
- The arrangements may create issues for SESL in that SAS modifications may be required to enable the provision of the data (for example if such data were deemed to be market level data

which may be considered Confidential Information under the SAS) and physical resource may be required to administer the provision of the data.

- There would have to be some sort of guarantee that the data (being data resulting from RF) would continue to be produced i.e. SAS processes in relation to RF could not be changed for the purposes of SAS run-off. The Group noted that the exact nature of the Settlement Agreement for Scotland (SAS) Run off arrangements has not been concluded and it is possible that RF runs for SAS may not be carried out.
- The Code would have to be amended to take account of the use of SAS Data - based on the issues noted above it is unlikely that agreement could be reached within the timescales for P157.

Delay the Implementation Date

The simplest option would be to delay the Implementation Date for the Alternative Modification until 14 months after the BETTA Effective Date, however the Group were concerned that this would result in a significant time delay between the modification being submitted to the Authority and the changes actually taking effect. It was noted that the provisional Implementation Date for the Alternative Modification was in the November 2005 release (with a start date of 1 December 2005 for accrual of charges) should the Authority decision be received before or on 3 March 2005, or the February 2006 release (with a start date of 1 March 2006 for accrual of charges) should the Authority decision be received after 3 March 2005 but before or on 23 June 2005. If this option were to be chosen the earliest implementation for the P157 Alternative Modification would be June 2006 assuming the BETTA Effective Date is 1 April 2005.

Treat Scottish GSP Groups differently

As explained above, Suppliers in a GSP Group mainly receive money collected from Suppliers operating in that GSP Group rather than it being distributed to all other NHH Suppliers i.e. each GSP Group is treated independently. Therefore one option that the Group discussed would be to set Suppliers in Scottish GSP Groups' performance at 1 (or 97%) so that all Suppliers in the GSP Group would be performing at the average and the redistribution would simply be based on market share (i.e. the equivalent of the old rules continuing for Suppliers in the Scottish GSP Groups).

Alternatively a member of the VASMG suggested that all Supplier Charges for Suppliers operating in the two Scottish GSP Groups could be set to zero. The problem with this latter solution is that as the Implementation Date for P157 is the November 2005 release it is likely to be later than the planned BETTA Effective Date⁹. A Proposed Transitional Modification Consultation is planned to be issued shortly looking at the "Use of SAS data" and highlighting an issue with Supplier Charge caps under the current arrangements. If Supplier Charges were to be set to zero for Suppliers operating in the Scottish GSP Groups under P157 then it would be preferable that the legal text for P157 and the Proposed Transitional Modification used similar solutions. However it is outside the scope of P157 to deal with proposed changes to the BETTA baseline and the VASMG are only able to agree the P157 legal text. The P157 Modification Report would need to note any interaction with the Proposed Transitional Modification.

Finally the Group noted that under this option Suppliers operating within the two Scottish GSP Groups would be treated differently to other Suppliers and concern was raised that this could be seen as being discriminatory.

⁹ Currently planned to be 1 April 2005

Phased Implementation

The final option is to have a phased implementation so that from the P157 Alternative Modification Implementation Date (November 2005/February 2006) all Suppliers would be paying the new charges and would have the new caps applied but the redistribution would not change i.e. 90% of funds will be redistributed to NHH Suppliers in the GSP Group based on market share. Then 14 months after the BETTA Effective Date the redistribution element in the Code will be switched on. The Group noted that under this option all Suppliers will be treated the same.

2.2.9.2 Conclusion

Having considered the options above, the Group acknowledged that trying to obtain Scottish data was complicated as it would be difficult to gain agreement for the provision of data prior to the submission of the P157 Modification Report to the Authority, however there was some support for this option. Some members of the Group felt that treating Suppliers operating in Scottish GSP Groups differently would be complex for Suppliers operating in both the Scottish and England & Wales GSP Groups to reconcile their charges and that it was not appropriate for certain Suppliers to be treated differently to others, however there was some support for setting the charges to zero. Finally some members of the Group concluded that although delaying the Implementation Date for the Alternative Modification was the simplest option they felt that this would introduce a significant delay to all aspects of the P157 Alternative Modification, whereas a phased implementation would at least allow the revised Supplier Charges and cap to be implemented, achieving some of the benefits of the modification at an earlier time.

The VASMG felt that as this was a change to the implementation approach that had not previously been consulted on, then it would be appropriate to issue an industry consultation. The P157 Assessment Report was due to be presented to the BSC Panel on 14 October 2005, therefore the timescales for the consultation have been limited. The consultation responses and hence the implementation approach for the Alternative Modification will be forwarded following their receipt. It is worth noting that a decision regarding treatment of new Scottish GSP Groups could be applied to any new GSP Groups in the future.

2.2.10 Implementation Date

The Group considered the previously suggested Implementation Date of July 2005 and decided to reassess this date since the Assessment Procedure had been extended several times. The Group noted that a Calendar Day implementation would have a retrospective effect, but felt that it was justified as a date set in the future would ensure that Parties had enough time to improve performance before the new charges took effect.

The advantages of a Calendar Day Implementation Date are as follows:

- Calendar Day implementation means that the old rules are stopped and the new ones started. There are thus no problems deciding how to combine the new rules with the old especially regarding caps and redistribution which are calculated on a Parties overall position for any given month;
- Calendar Day implementation set for a future date means that Parties will know the rules in advance of the implementation. In this way the problem of lack of knowledge of obligations that would be associated with an earlier Calendar Day implementation (e.g. November 2004), is ameliorated;
- A July 2005 or post July 2005 Implementation Date allows pre P99 rules to be fully run off before P157 is introduced hence data used in P157 will be solely post P99 data; and

- Development can take place in the scheduled June 2005/November 2005 Release, which will allow system and process changes to be made in the most efficient manner.

Ofgem in its provisional thinking considered the implications of a Calendar Day Implementation Date set in the future and is currently of the view that this would be the most appropriate approach.

In its consideration of the actual Implementation Date the Group noted that the BETTA Effective Date is planned for 1 April 2005. Implementation of P157 shortly after this date could disadvantage Scottish participants who will recently have implemented new systems and processes to deal with Supplier Charges under the England and Wales arrangements. It was therefore agreed that the Implementation Date for the Proposed Modification should be a Calendar Day, 1 December 2005 Implementation Date. The change will be deployed in the November 2005 release but the month of December 2005 will be the first month for which Suppliers will accrue Supplier Charges. This is because the "switching on" of changes to the PARMS system must be made on the first of a month such that new rules do not have to be combined with old rules for different days of the same reporting month. The Proposed Modification shall have a fallback date of 1 March 2006 and in this case the change will be deployed in the February 2006 release but the month of March 2006 will be the first month for which Suppliers will accrue Supplier Charges.

For the Alternative Modification the Group had to consider an additional issue regarding the provision of RF data for Suppliers operating in the two Scottish GSP Groups to allow the new redistribution methodology to work. This data would not be available for 14 months after the BETTA Effective Date. The Group issued a fourth consultation to gain industry views on the most appropriate way to deal with this issue. The consultation responses and hence the implementation approach for the Alternative Modification will be forwarded following their receipt. It should be noted that whilst this issue has been characterised as a BETTA issue, the same concerns would arise with any new GSP Group.

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

The Group considered the achievement of Applicable BSC Objectives c and d as being most suitable for P157:

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;

Applicable BSC Objective d) - promoting efficiency in the implementation and administration of the balancing and Settlement arrangements.

The majority of the Group considered that overall the Proposed Modification better facilitated the achievement of the Applicable BSC Objectives in comparison to the current baseline. The Group and consultation respondents' comments that are relevant to the current Proposed Modification are:

- Revision of the genuine pre estimate of loss will make the process more cost reflective since the charges are more accurate;
- The existing cap calculation was not considered justifiable and has been removed. An amended cap has been introduced (see section on caps below) – having no cap was seen as being a barrier to entry to Parties and a cap that is inappropriate and is invoked frequently is detrimental to competition since Parties will not be incentivised to improve data as their maximum liability is not significant;
- Supplier Charges are supposed to be compensatory and the current redistribution does that.

A minority did not believe that the Proposed Modification better facilitated the achievement of the Applicable BSC Objectives:

- The reason the current mechanism does not provide an incentive is because of the redistribution – it is possible for a Party to receive back via the current redistribution much of the monies it paid out;
- The level of monies that will be circulated under P157 will be of a magnitude less than the level of monies that are currently circulated;
- The proposal makes gross assumptions in order to derive and apply average charge rates for poor performance against Serials, particularly SP08a, b, c. The proposed charges disregard individual Supplier data accuracy performance, and assume an average accuracy of estimated data based on a limited sample of doubtful validity. This will give charges which are over generous for some parties and penal for others, and for HH Suppliers this discrimination will be greater than under the current arrangements due to the higher proposed rates.

2.4 Modification Group's cost benefit analysis of Proposed Modification

The Group decided that it was not viable to perform a quantitative cost benefit analysis and a qualitative cost benefit analysis could be seen in the Group and consultation response discussions as to whether P157 would better facilitate the achievement of the Applicable BSC Objectives or not.

The reason it was considered impracticable was since it would be difficult to isolate and quantify the benefit for P157 alone without including in the P99 benefits.

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

A majority of the Group considered that overall the Alternative Modification better facilitated the achievement of the Applicable BSC Objectives as compared to both the current baseline and the Proposed Modification. The Group and consultation respondents' comments relevant to the Alternative Modification are:

- Revision of the genuine pre estimate of loss will make the process more cost reflective since the charges are more accurate;
- The existing cap calculation was not considered justifiable and has been removed. An amended cap has been introduced (see section on caps below) – having no cap was seen as being a barrier to entry to Parties and a cap that is inappropriate and invoked frequently is anticompetitive since Parties will not be incentivised to improve data as their maximum liability is not significant;
- It should act as an incentive on Parties to address poor data quality issues – mainly as a result of the amended redistribution;
- The disincentive for a new Party to enter the market is reduced since there is less uncertainty in the market as P157 should improve performance (amended redistribution should provide an incentive) - less time and money should be spent on improving poor performance and consequently costs should be reduced;
- The efficiency of BSCCo should increase as less time should be required to be spent on improving poor performance and dealing with data quality issues;

- The level of monies that will be circulated under P157 will be of a magnitude less than the level of monies that are currently circulated. However, this may still better meet the Applicable BSC Objectives if the monies are circulated amongst the right Parties.

However a minority considered that the Alternative Modification did not better facilitate the achievement of the Applicable BSC Objectives:

- P157 does not create a clear, transparent and predictable incentive which was the defect identified by the Modification Proposal;
- The Alternative Modification redistribution could be discriminatory by nature, and thus would not meet the Applicable BSC Objectives;
- The Alternative represents a shift away from charges being related to the genuine pre estimate of loss and the use of Liquidated Damages to a system of fines and incentives;
- The proposal is more complicated;
- The industry has yet to see the benefits from P99 so it is difficult to calculate if P157 is better than the current mechanism in place;
- The proposal makes gross assumptions in order to derive and apply average charge rates for poor performance against Serials, particularly SP08a, b and c. The proposed charges disregard individual Supplier data accuracy performance, and assume an average accuracy of estimated data based on a limited sample of doubtful validity. This will give charges which are overgenerous for some parties and penal for others, and for HH Suppliers this discrimination will be greater than under the current arrangements due to the higher proposed rates.

2.6 Modification Group's cost benefit analysis of Alternative Modification

The Group decided that it was not viable to perform a quantitative cost benefit analysis and a qualitative cost benefit analysis could be seen in the Group and consultation response discussions as to whether P157 would better facilitate the achievement of the Applicable BSC Objectives or not.

The reason it was considered impracticable was since it would be difficult to isolate and quantify the benefit for P157 alone without including in the P99 benefits.

2.7 Governance and regulatory framework assessment

During the assessment of the Proposed and Alternative Modification, the VASMG considered the wider implications of P157 in the context of the statutory, regulatory and contractual framework within which the Code sits, as is required by the Code (Annex F-1, paragraph 1(g)). The VASMG was of the opinion that, were P157 to be implemented, there would be no such wider implications.

3 COSTS¹⁰

PROGRESSING MODIFICATION PROPOSAL

Meeting Cost	£6,500
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¹⁰ Clarification of the meanings of the cost terms in this section can be found in annex 6 of this report

Legal/expert Cost	£2,500
Impact Assessment Cost	£3,500
ELEXON Resource	160 Man days £45,000

PROPOSED MODIFICATION IMPLEMENTATION COSTS

		Stand Alone Cost	Tolerance
Service Provider¹¹ Cost			
	Total Service Provider Cost	£68,000	+/-14%
Implementation Cost	Design Clarifications	£6,800	+/-100%
Total Demand Led Implementation Cost		£74,800	+/- 22%

ELEXON Implementation Resource Cost		235 Man days £70,500	+/- 10%
Total Implementation Cost		£145,300	+/- 16%

ONGOING SUPPORT AND MAINTENANCE COSTS

	Stand Alone Cost	Tolerance
Service Provider Operation Cost	£0 per annum ¹²	n/a
Service Provider Maintenance Cost	£ 9,500 per annum	n/a
ELEXON Operational Cost	£0 per annum ¹¹	n/a

¹¹ BSC Agent and non-BSC Agent Service Provider and software Costs see annex 4 of this report

¹² The operation of PARMS under P157 will not incur additional operational costs.

ALTERNATIVE MODIFICATION IMPLEMENTATION COSTS

		Stand Alone Cost	Tolerance
Service Provider¹¹ Cost			
	Total Service Provider Cost	£182,000	+/-14%
Implementation Cost			
	Design Clarifications	£18,200	+/-100%
Total Demand Led Implementation Cost		£200,200	+/- 25%

ELEXON Implementation Resource Cost		370 Man days £111,000	+/- 10%
Total Implementation Cost		£311,200	+/- 20%

ONGOING SUPPORT AND MAINTENANCE COSTS

	Stand Alone Cost	Tolerance
Service Provider Operation Cost	£0 per annum ¹³	n/a
Service Provider Maintenance Cost	£25,500 per annum	n/a
ELEXON Operational Cost	£0 per annum ¹¹	n/a

Implementation of Proposed Modification, its interaction with P99 and impact on cost

The cost of P157 were it to be implemented alongside P99 would be lower than quoted above since there is ELEXON resource already committed to PARMS changes. The P99 phase 4 software release which addresses various contingency events is due to be implemented as part of the June 2005 release and hence it would only be feasible to take advantage of any savings for the P157 Proposed Modification since it requires a lead time of 5 months (the Alternative Modification requires a lead time of 8 months). The ELEXON cost would be reduced from 235 ELEXON man days (£70,500) to 70 ELEXON man days (£21,000). The Service Provider cost would also be reduced from £68,000 to £51,500. The total implementation cost would thus be £77,700 +/- 19%.

To enable these cost savings implied by an implementation coincident with phase 4 of P99 an early decision would be required such that P157 changes could be implemented in June 2005 and only “switched on” or made effective on 1 December 2005 so as not to force too many major successive changes on Scottish GSP Groups (see BETTA discussion section 9.2). The Group agreed with this and hence agreed that an Authority decision would be required by 30 January 2005 to take advantage of reduced costs associated with coincident P99 implementation although P157 would not be effective until 1 December 2005 (the November 2005 release).

4 RATIONALE FOR MODIFICATION GROUP’S RECOMMENDATIONS TO THE PANEL

A majority of the Group supported the Proposed Modification for reasons given in Section 2.3, namely that the revised genuine pre estimate of loss values and cap were more apt and some supported maintenance of current redistribution. However a majority of the Group supported the Alternative Modification over both the current baseline and over the Proposed Modification so considered that the Alternative and not the Proposed should be implemented. The reasons given to support the Alternative over and above the Proposed were related to the difference between them, i.e. redistribution. The majority who supported the Alternative considered that the amended redistribution would provide an added incentive to participants to enter accurate data into Settlement and hence better facilitated Applicable BSC Objectives c and d see Section 2.5.

The rationale for the Implementation Date of 1 December 2005² suggested is that November 2005 is the earliest release that it was felt appropriate for Scottish GSP Groups to have a change to Supplier Charges rules recently implemented under BETTA.

5 IMPACT ON BSC SYSTEMS AND PARTIES

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

5.1 BSCCo

The table below provides a summary of the effort required by BSCCo to support the Proposed Modification.

Area of Business	Impact of Proposed Modification	Impact of Alternative Modification
Market Monitoring	5 man days’ effort to amend the Market Monitoring documentation	Same as for the Proposed Modification
Assurance	15 man days’ effort to review changes to system to ensure they are compliant with requirements and redraft of the BSCP in accordance with the requirements (TBC)	Same as for the Proposed Modification (TBC)
Governance & Regulatory Affairs	0.25 man day effort to update the Panel Plan will need and include brief explanation of the issue in the Panel Reference Document as well as 0.5 man days per annum ongoing operational effort	Same as for Proposed Modification.
SVA	15 man days’ effort to amend BSCP536	Same as for Proposed

Area of Business	Impact of Proposed Modification	Impact of Alternative Modification
Programme	Implementation Support as in Section 3	Modification Implementation Support as in Section 3
Corporate Assurance	3 man days' programme assurance to update the BPM and Obligations Register 40 man days' to provide project assurance and provide IT support to the testing and installation and housekeeping of the revised PARMS	Same as for Proposed Modification
Website	1 man day effort to publish serials and associated charges on the BSC (ELEXON) website and review changes to these values if necessary, in conjunction with the issuing of an ELEXON Circular	Same as for Proposed Modification

5.2 BSC Systems

The Performance Assurance Reporting and Monitoring System (PARMS) will be amended in the Supplier Charges module as according to the BSC Agent Impact Assessment. The total costs are described in the cost section (Section 3 and Annex 3). There will be no changes to the Serials but the charges, the Settlement Runs associated with charges, the methodology for capping and the use of Supplier Charges funds will be amended.

System / Process	Potential Impact of Proposed/Alternative Modification
Reporting	The PARMS system will be amended.

5.3 Parties and Party Agents

Four responses were received from Parties in response to the Requirements Specification, one of which indicated that P157 would have no impact in terms of costs, changes or implementation timescales but stated surprise and disappointment that the "Bond Rebate" method and associated removal of caps have been withdrawn from any of the P157 proposals.

The remaining responses stated that the Proposed and Alternative Modifications will impact Parties in terms of a business impact and cost since Parties will outlay different amounts of money in terms of Supplier Charges, and there will be an administrative effort to implement P157.

Actual systems and procedures will not require changing for some Parties. Those Parties that validate Supplier Charges invoices will need to amend the validation methods. In addition some Parties have internal monitoring tools to monitor and report on the combined position of different Supplier Ids there will be costs associated with amending these tools.

See Annex 5 of this report for Party and Party Agent Impact Assessment Responses.

6 IMPACT ON CODE AND DOCUMENTATION

6.1 Balancing and Settlement Code

Sections S (Annex S-1) and Section X will be amended as a result of P157.

6.2 Code Subsidiary Documents

The reports in BSCP536 will need amending as a result of the changes to the PARMS system.

6.3 BSCCo Memorandum and Articles of Association

No changes required.

6.4 Impact on Core Industry Documents and supporting arrangements

No changes required.

7 SUMMARY OF FIRST CONSULTATION

The sections referred to in the questions below are references to the consultation document issued to industry. See annex 3 for consultation responses in full. It should be noted that the "average performance" method of redistribution was consulted on as the Proposed Modification in this consultation. The "bond rebate" method had not been discussed by the Group prior to the consultation being issued.

Consultation question	Respondent agrees	Respondent disagrees	No Opinion expressed
Do you believe Proposed Modification P157 better facilitates the achievement of the Applicable BSC Objectives?	5 (14 + 1)	2 (15)	1 (1)
Please give rationale and state objective(s)	Qualified 2 (9)	Qualified 1 (15)	
The questions below all refer to the genuine pre-estimate of loss calculation			
Do you agree with the calculation of the value of volume of energy that is assumed to be uncertain as put forward in Section 2.1.2.2?	7 (25 + 1)	3 (28)	1 (1)
Do you consider that the cost of uncertainty as put forward in Section 2.1.2.2 should be included in the genuine pre-estimate of loss calculation?	1 (9)	5 (20)	4 (10 + 1)
If so, are any of the methods suggested (A, B, C) relevant or can you state an alternative?	Qualified 1 (15)		
Do you agree that central incremental costs should be included in the genuine pre-estimate of loss calculation as put forward in Section 2.1.2.2?	7 (25 + 1)	3 (28)	1 (1)
Please state rationale.			
Is the value of 15% put forward by the VASMG as a reasonable estimate for the increment in central costs appropriate? See Section 2.1.2.2	5 (22)	4 (31)	2 (1 + 1)
Please state rationale.			
Do you agree with the method in which the genuine pre-estimate of loss for SP04 has been calculated? See Section 2.1.2.2	7 (25 + 1)	2 (25)	2 (4)

Please state rationale.			
Do you agree with the method in which the genuine pre-estimate of loss for SP01 and SP02 have been calculated? See Section 2.1.2.2. Please state rationale.	6 (22 + 1) Qualified 1 (10)	3 (21)	1 (1)
The questions below all refer to caps			
Do you agree with the VASMG's decision to retain caps in Supplier Charges? See Section 2.1.3. Please state rationale.	8 (38)	Qualified 1 (15)	2 (1 + 1)
Do you agree with the new calculation that will be used to work out each Supplier's cap in the GSP Group i.e. 1% of Supplier Take in GSP Group * Credit Assessment Price? See Section 2.1.3. Please state rationale.	6 (31)	3 (22)	2 (1 + 1)
The questions below all refer to redistribution			
Do you agree with the suggested method of redistribution put forward by the VASMG? See Section 2.1.4. Please state rationale.	3 (10 + 1)	7 (43)	1 (1)
Do you agree with VASMG decision to leave the 90/10 rule as it is currently? See Section 2.1.4. Please state rationale.	7 (36 + 1)	3 (19)	1 (1)
Do you agree with the VASMG's decision to leave the current force majeure provisions in place? See Section 2.1.5.	9 (50 + 1)		2 (4)
Do you believe that Supplier Charges and the genuine pre-estimate of loss ought to be reviewed and if so how often? Please give rationale.	8 (41 + 1)	1 (9)	2 (4)
Do you agree with the VASMG's approach to peer group comparison – that it should be one of the tools available to the PAB to encourage good performance? See Section 2.2 Please state rationale.	4 (21 + 1)	5 (29)	2 (4)
Do you agree with the preferred P157 Implementation Date of Calendar Day July 2005 that is supported by the VASMG even though this is retrospective in nature? See Section 2.3 Please give rationale. If you disagree please state preferred alternative and rationale.	7 (23 + 1) Qualified 2 (15)	1 (15)	1 (1)
Do you consider any of the alternatives suggested by the VASMG should be progressed? See Section 2.5 Please state rationale.	6 (39)	4 (14 + 1)	1 (1)

Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	6 (25 + 1)	3 (19)	2 (4)
Does P157 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	4 (30)	5 (23)	2 (1 + 1)

7.1 Modification Group's summary of the consultation responses

1 respondent made no comment throughout.

7.1.1 Applicable BSC Objectives

The majority of respondents agreed that P157 better facilitated the achievement of Applicable BSC Objectives c and d. Two respondents qualified their support.

- One claimed it would be acceptable, only as a package with exclusion of peer group comparison; and
- Another claimed there was a need for further assessment in the area of redistribution.

Those who supported P157 did so for the following reasons:

- The current Supplier Charges are not proving to be effective as a corrective technique as performance is not improving in many areas. Immaterial/insignificant net charges are levied, and there is over-complexity and a lack of transparency of Suppliers' performance;
- P157 simplifies the number of charges to be applied;
- P157 should improve performance and hence data quality. This should reduce uncertainty within the market and less time and money should be spent on improving poor performance and consequently costs should be reduced;
- The recent qualified audit also indicates that Suppliers are not sufficiently incentivised to deliver expected data accuracy.

The minority of respondents did not believe that P157 better facilitates Applicable BSC Objectives c and d.

Reasons given were that:

- The solutions proposed are not particularly clear or fair. Some of the Supplier Charges proposed are not a genuine pre-estimate of loss, and some elements of the 'genuine pre-estimate of loss' appear logically unsound. Thus these aspects may be open to legal challenge, with a risk of losing this Performance Assurance technique and consequent risks to all market participants
- The redistribution method is unsuitable. One respondent believed that there is a clear link between the genuine pre-estimate of loss calculation and re-distribution, which is currently not met by P157. In addition, one respondent considered that restricting the payment of the 'compensation' to certain Parties appears to be discriminatory. One respondent believed that P157 did not give either clarity or incentives.
- There is no requirement for P157 at present, since the industry is only now receiving invoices for the pre-P99 regime and therefore it is too early to judge what impact these charges will have on Suppliers' behaviour. In addition, P99 has only just been implemented so the industry are not

yet able to judge what impact this will have on Supplier performance. Thus one respondent claims it has no standard against which to judge P157.

7.1.2 SP08 Genuine Pre-Estimate of Loss

Value of volume of energy assumed to be uncertain

The majority of respondents supported the calculation of the value of volume of energy that is assumed to be uncertain. The approach taken seems, according to one respondent, to be sensible in that it takes into account the variances between estimated and actual data between SF and DF and it is based on the assumption that the uncertainty in the Settlement bill is directly related to the change in the volume of estimated data versus actual data. There was however some surprise at the high level of this cost in the half hourly market. Further analysis was suggested and will be performed.

The minority of respondents did not support the calculation. Reasons given were that:

- It could depend significantly on the sample chosen (it may vary significantly by Profile Class/Standard Settlement Configuration (SSC) and GSP Group) as well as the behaviour of Suppliers in response to the change in the 'incentive'. *In response to this concern the Group noted that the analysis used a sample of 8 Suppliers of differing sizes in all GSP Groups and was done at a Supplier level hence there ought to be no variation by Profile Class/SSC and GSP Group. In addition the Group agreed to carry out further analysis to increase the sample size;*
- One respondent was concerned regarding SP08a that the value of the volume of energy assumed to be uncertain (£0.11/MWh) is half the incremental central costs (£0.21/MWh). In response to this concern the Group noted that central incremental costs are being reassessed by BSCCo – see Appendix 3;
- This respondent also expressed concern for SP08b/SP08c, the value of the volume of energy assumed to be uncertain (£4.43/MWh) seems very high. Again the respondent believes that more detailed analysis should be carried out. Additionally, this respondent stated that the value of uncertainty could not possibly be the same figure for both R1 and RF. There is a difference in magnitude of the impact to Settlements and on other Suppliers of the accuracy of Meter reads at R1 and RF that is not reflected in this figure. Parties contracting to accurate final outcomes will only be subject to cash flow variations in the interim Settlement Runs. Although it is desirable to have accurate actual data at SF, and an orderly progression to accurate Settlement at RF, inaccurate intermediate imbalance costs are not necessarily the cost suffered by other Parties. Therefore, Serial SP08b should be measured at RF, or its calculation should be based on the negative effect on cash flow.
- In addition, one respondent considered that data changes between SF and DF give an indication of estimations and errors at SF. However, it noted that the qualified audit suggests that even Supplier data in DF (Post-Final) runs are not meeting expected accuracy levels.

Cost of uncertainty

The minority of respondents agreed that this should be a part of the genuine pre-estimate of loss. One of these supported option A – (uncertainty at each Settlement Run) - and considered that one of the risks that a Supplier has to manage is the uncertainty in the final volume of energy that it will purchase for its customers. This respondent deemed the cost of uncertainty to be insignificant. The other respondent was unsure which option was most appropriate although it did have some sympathy with the thought process used for Option B – (uncertainty associated with no actual data entering Settlement). The majority of respondents thought it should not be included and 3 respondents did not express a definite opinion but made some comments.

- Several respondents believe that the cost of uncertainty is likely to be minimal and hence should not be included. One respondent noted that this was the opinion of the Group but said that the Group did agree that price contains some acknowledgement of the quality of consumption data of customers. This respondent considers that the cost of uncertainty should be included (even if it is found to be minimal) where there is a suitable method of calculating it. It would be interested to see whether any alternative methods are identified as part of this consultation;
- One respondent does not believe that any Party takes into account the cost of the uncertainty of Settlements being inaccurate;
- One respondent noted that none of the alternatives represent a clear and unambiguous methodology that can clearly justify the inclusion of this factor and would not be robust and unchallengeable.

Central Incremental Costs

The majority of respondents supported the inclusion of central incremental costs as part of the genuine pre-estimate of loss. Arguments in support of its inclusion were:

- Central effort required in the Performance Assurance Framework (PAF) would increase as Supplier performance deteriorates;
- All Suppliers have to meet the PAF costs and consequently those Suppliers who perform well are being subject to a genuine loss.

The minority of respondents did not support the inclusion of central incremental costs. Legal reasons were given by the respondent and are detailed below:

- "The inclusion of central incremental costs is only right if they are caused as a direct result of Supplier underperformance. On this basis, we don't believe that the cost attributed to the OSM should be included – managing a Supplier's performance, and working to improve it, are already part of the OSM's responsibility, so we cannot see how an additional cost is incurred. The inclusion of additional costs incurred, perhaps due to special PAB meetings to discuss performance with a Supplier, could qualify, but in essence we expect that all of these costs would be covered within the annual BSCCo budget and so again should not be included. Our legal opinion supports this view on the basis that central incremental costs should not be included in the genuine pre-estimate of loss calculation, as they can in no way be credited as part of a Supplier's loss, and are purely consequential costs. The Modification Group had difficulty in measuring attributable central incremental costs, so again this would be open to challenge";
- One respondent consulted with its legal team and asked if a liquidated damage could include avoidable costs too, or must it be limited to a genuine pre-estimate of costs. They replied: This depends on how such a pre-estimate of loss is agreed to be calculated by the Parties. Under the current contract, avoidable losses such as the costs associated with the Board are not included. Clause S1.3.1 states that the charges set out in the Menu of Supplier Charges represents a "genuine pre-estimate of the loss likely to be suffered by the Parties as a result of a failure by a Supplier to meet the applicable Performance Level and is reasonable in all the circumstances", and further in clause S1.3.2 which states that "each of the Parties acknowledge that the charges in the Menu of Supplier Charges constitute the sole remedy of a Party in respect of any claim for damages arising from any failure by a Supplier to meet the applicable Performance Level or Serial".

Given the above wording, it is clear that the intention between the Parties is not to include any losses other than those which result directly from the Supplier failing to meet the standards. To add in these extra costs of, for example, this Board would make the charges not limited to

compensation, but penal too, as the Supplier which fails the most will contribute the most to the costs of this Board. Liquidated damages should be compensatory and not penal in nature, and it is for the claiming Party to prove that this is the case in the event of dispute.”

As regards the 15% - proportion of incremental central costs viewed as reasonable by the VASMG, The majority of respondents agreed with this amount (some of these expressed doubt of its source) and the minority of respondents considered that this was unjustified (one suggesting that an inflated figure of 50% seemed more appropriate). One respondent did not express an opinion. Comments included:

- It is difficult to assess this figure, and perhaps consideration should be given to consulting PAB as to what it deems reasonable. Having said that 15% does appear to be a 'reasonable' figure as clearly managing Suppliers poor performance will incur additional PAF costs;
- No exact calculation can be made but 15% feels intuitively of the right magnitude. Only BSCCo would be able to attempt such a calculation;
- We believe this is reasonable. There is no case to change away from the present assumption without an analysis of central costs by BSCCo. We do not think this to be necessary;
- The 15% weighting is arbitrary and cannot be justified - consequently it is difficult to comment on whether this is a reasonable estimate;
- It is not clear from the assessment report exactly which central costs have been identified as relating to the pursuit of SVA data accuracy. It is expected that costs would be considerably more than 15% of the PAF costs. If performance met original 1998 expectations, most of the PAF costs would be eliminated. In the absence of more information, 50% of PAF costs should be considered.

7.1.3 SP04 Genuine Pre-estimate of Loss

The majority of respondents agreed with the methodology suggested by the Group for calculating the SP04 genuine pre-estimate of loss. One reason given was that it seemed reasonable to charge for the uncertainty between HH Meter reads and the approximated data produced from profiles for NHH Meter reads. In addition this respondent believed that the price of installation of HH Metering and communications should be excluded (as is proposed), since this is not a loss caused to other Parties as a consequence of under performance used. Another stated that the proposed methodology was a suitable means of incentivising Suppliers to install a HH Meter at a 100KW site, thereby avoiding a site being traded on an inappropriate profile.

Several comments were made regarding the sample of data used for analysis. It was suggested that a larger sample could be used to validate this method, and that Customers across all Profile Classes 3 to 8 should be used. As a result the Group agreed to undertake further analysis across Profile Classes 5 and 7.

The minority of respondents did not support the methodology suggested:

- One respondent considered that the theory behind the calculation seemed to make sense i.e. comparing similar sized customers with or without HH Meters / profiles, but had the following concerns about the methodology which it felt would significantly compromise a genuine pre-estimate of loss for SP04:
 - the imbalance differential will change dependent on what period is used to calculate SSP and SBP;
 - this methodology would come unstuck for NHH sites with profiles where their consumption is away from the norm, for example, due to seasonal factors or, say, bakeries where the load differential is significantly different during the night and day.

The Group noted that the Customer data used was 365 day x 48 half hour matrix and the imbalance price applied was also 365 x 48 matrix, hence the change in imbalance differential by Period has been accounted for as has variation over the course of a year.

- Another respondent considered that using profiling data as the basis of these charges is not appropriate. Profiles in this context reflect at best the load shape of 100kW sites and are therefore unreflective of those sites significantly above 100kW. If load shapes are used for the basis of this charge it could be argued that there is already an incentive for Suppliers to install HH Metering at these sites. An alternative would be to weight the charge in line with the cost of installation i.e. to deter those Suppliers who deliberately trying to evade this cost. *The Group did not consider the cost of installation to be a genuine pre-estimate of loss and considered that the point of the charge was that profiles do not reflect sites above 100kW and this calculation was aimed at establishing the inaccuracy of profiles.*

One respondent did not express an opinion. However, it commented that it seems rather harsh that a 99kW site/Metering System can operate permanently with a NHH Meter causing uncertainties with no charge, while a 101kW site with profiled values suffers charges. All NHH metering is estimated at a half-hour level, however, a site with HH metering has reduced uncertainty, and should expect to pay less towards the SVA arrangements, so the method suggested could be viewed as incentivising a Supplier to help itself.

7.1.4 SP01 and SP02

The majority of respondents agreed with the method proposed. Several had comments:

- One wanted to emphasise that failure to produce these reports under these Serials cannot be considered as a pre estimate of loss. However, there does need to be an incentive on Suppliers to produce these reports accurately and on time, and as the suggested charges to be applied seem reasonable, this seems preferable than the alternative, which is to escalate Parties to PAB;
- This is essentially an administration cost, and the methodology appears to reflect the actual work content;
- Qualified support was received from one respondent who commented that this seems a reasonable charge for the administrative costs caused by failure to comply with these Serials. However, it may be worth considering a change to the basis of charging (possibly with a smaller charge on a per Serial or per provider basis) to take account of the P99 data provision arrangements and overcome the problem that if one Agent fails to provide a report in a GSP Group there is then no incentive to ensure that any of the other reports are delivered;
- SP01 and 02 charging seems to have worked in the past;
- The method is clearer. The respondent accepts that an incentive on the timely delivery of reports is a good idea, however it doesn't want this to be the main focus of Supplier Charges, which should be accurate data.

The minority of respondents considered this methodology was inappropriate:

- One respondent believes that PAB has the processes to manage under performance for these two Serials. It does however note that Liquidated Damages do incentivise performance in this area. These Serials are a measure of timeliness not accuracy;
- One respondent considered that although the existing charge did seem to have incentivised Suppliers to send in their reports promptly it did not believe such an administration charge was a genuine pre-estimate of loss since it is a consequential loss;

- One respondent disagreed with the changes made to the charging of SP01 and SP02 by the VASMG away from being on a per GSP Group basis. This respondent was of the opinion that since reports are required by GSP Group, and central effort to obtain them will be focussed by GSP Group, there is no reason to move away from charging by GSP Group and day. The charge needs to be large enough to avoid the situation where a large Supplier or a Supplier with a large error avoids or delays other charges by failing to submit PARMS data.

7.1.5 Caps

The majority of respondents agreed with the initial decision of the Group to retain caps. One respondent expressed concern as to why Ofgem were so clearly opposed to the retention of the cap.

Arguments given in favour of a cap were as follows:

- One respondent considered that although ideally there would be no caps, and the charges simply would reflect costs to other Parties, on the basis that the real costs to other Parties are very difficult to determine, and that the estimated costs may be determined pessimistically, it accepts a cap on charges as a compromise;
- Uncapped liabilities would act as a barrier to new entrants and therefore restrict competition.
- Backing off liability through renegotiation of the Agent contracts may prove a struggle and would certainly result in higher Agent fees for everyone, which would ultimately be passed on to the Customer;
- Removal of the cap could lead to limitless liabilities and therefore could exceed a genuine pre estimate of loss - if the cap was removed there would be a risk of straying into the areas of 'penalties'. In addition unlimited liability is unsuitable for commercial contracts;
- Caps need to be set to cover exceptional circumstances, not to be invoked on a regular basis;
- Since there has been limited analysis and discussion of the likely behaviour of the new Supplier Charges and re-distribution, caps are an essential safety mechanism.

One respondent gave a qualified negative response claiming that caps may not be required if the final set of Supplier Charges and the re-distribution method are consistent with a genuine pre-estimate of loss, reflect what liquidated damages are all about and are not at all penal. (This respondent supported retaining the existing re-distribution method).

One respondent gave no opinion but quoted its response to the Definition Consultation in which it supported the removal of caps so that Suppliers would be exposed to the full effect of the Supplier Charges. It also notes that Ofgem has expressed strong views on caps. In its decision letter on P115 Ofgem notes "the impact of caps in diminishing both the incentives and the status of Supplier charges as a genuine pre-estimate of loss". It also goes on to state that a 'level of error that would result in a Supplier exceeding its cap will not be reflected fully in the Supplier Charges, although other participants will have incurred a financial loss'. In considering whether caps should be retained the respondent believes that the Group should consider whether the removal of a cap would have an adverse effect on competition, in particular whether the removal of caps would increase barriers to entry and consequently deter new entrants. If it can be established that the removal of caps would not have an adverse impact on competition then it would support removal of caps.

Additionally it notes that Ofgem will need to consider the impact of P157 on small businesses. It suggests that the Group considers how a revised cap or the removal of a cap would impact different Parties and in particular what impact it would have on smaller businesses.

The majority of respondents supported the VASMG revised method of calculating caps ($1\% \times \text{Supplier Take} \times \text{Credit Assessment Price}$). The following reasons were given:

- The figure seems reasonable when taking into account Ofgem concerns about applying a cap, in that 1% is higher than the current cap, and therefore it would be applied less often, whilst at the same time preventing the limitless liability which is a major concern. The application of a Credit Assessment Price seems reasonable in that it represents the average cost of energy as it is derived from imbalance and market prices;
- If a cap is retained the suggestion appears to be a reasonable approach and is reflective of a Supplier's dominance in any GSP Group;
- The value suggested represents a compromise, which should be subject to periodic review;
- Modelling indicates that that this level is suitable such that the cap is only triggered in exceptional circumstances. In addition using the Credit Assessment Price – an established Code value is useful.

The minority of respondents did not support the cap calculation suggested by the VASMG:

- One respondent considers 1% is too extreme a jump.
- Another respondent considers that the proposed cap is far too high. The fundamental rationale behind Supplier Charges is that (for NHH) 97% of the Meter reading should be actual by RF. The implication is that inaccuracies will arise due to the Meters for which actual reads are not available. It is not credible that the error that can arise in this remaining volume will get anywhere near 1% of a Supplier's total volume in a GSP Group. This respondent believes that the cap should be reflective of the likely outer bounds of the volume of inaccuracy. It therefore finds the proposed cap unacceptably high and wants to see the cap reduced by a factor of 10;
- Another considers the 1% figure to have some of the desired properties but that it is essentially an arbitrary figure that would be unlikely to be able to withstand a legal challenge.

Allowing the PAB/Panel to change the level of the cap was also commented on:

- One respondent believes that the caps should only be changed via formal industry change and not at the discretion of PAB;
- Another considers that the provision that allows PAB/the Panel to change this level without going through the modification process also appears to conflict with the concept of a genuine pre-estimate of loss, and would therefore be open to legal challenge.

One respondent did not express an opinion, but commented that if caps are to be applied, the proposed methodology is an improvement on the existing method of determining the cap. It noted that there was some concern amongst the Group as to whether the percentage of Supplier Take was high enough. The revised limit is around three times higher than the current cap and it would appear from the model supplied that the likelihood of a cap being breached is much reduced. Given the concerns that Ofgem has raised previously concerning the retention of caps, the respondent suggested that the Group consider the merits of applying a higher percentage of Supplier Take.

7.1.6 Redistribution

The minority of respondents supported the suggested redistribution method:

- The suggested method of redistribution should yield an improved incentive on Suppliers, when compared with the present method;
- Net redistribution to those performing over the average of the GSP Group based on market share should be seen as an improvement on the current baseline. It should encourage Parties to perform above the average and hence increase the average.

However one of these respondents wanted to see the VASMG give more consideration to how it will work in practice. This is because in each of the GSP Groups, there will be a dominant Supplier (the original PES) and the next largest Supplier is likely to be the same brand across all GSP Groups. The Group therefore need to examine and be confident that the method for re-distribution of monies gives a fair balance of incentive versus reward between all Suppliers.

The majority of respondents did not support the redistribution method. Several reasons were given:

- One respondent sought legal advice on the collection and redistribution of Supplier Charges (genuine pre estimate of loss). The response from its legal team was as follows;

"These are linked under the current Annex S-1. The Performance Assurance Board (the "Board") collects the charges and distributes them in a 90:10 ratio between the qualifying Suppliers and qualifying Trading Parties respectively. The collection and redistribution of charges should be linked as it provides a clear connection between the charges collected and the Parties which receive compensation as a direct result of a failure by a Supplier in meeting the applicable Performance Level. To remove the link weakens the compensatory requirement of liquidated damages and as a result the charges could be argued to be penal in nature."

This respondent did however consider that if the redistribution method could be legally amended the suggested method was suitable since it provides an incentive both to be above average and to improve to the standard of 97%;

- Whilst the concept of redistributing funds to only those Suppliers who are on or above the average target would appear to act as a good incentive to drive up performance, this could lead to anomalies between large and small Suppliers. In particular on those Suppliers that were formally the host PES in a GSP Group, as it is these Suppliers which in essence will set the target average, thereby potentially skewing the results for the other Suppliers within a GSP Group. This will not produce the simplicity or the incentives outlined as an objective of the Modification Proposal. It does not meet the BSC objectives of promoting competition or increasing efficiency. As a result, further work needs to be done by VASMG in this area;
- Collecting on one basis and redistributing on another may cause anomalies in a number of instances and may provide an opportunity for gaming. For example, a company operating under more than one Supplier ID could transfer "problem" MPANs from one ID to the other in order to recover a proportion of the overall Supplier Charges incurred and thus ensure the funds back are maximised to the company as a whole. This could be significant if other Suppliers are below the target 97% and there is a large pot of Supplier Charges;
- In principle, 'good' performers are those which are suffering 'damages' and should be recipients of a share of the amounts collected from 'poor' performers. However, there are some concerns that referencing 'good' and 'poor' performance to an average performance in the GSP Group could create artificial step differences in charge redistribution. The level of performance should be taken into consideration more precisely, for example in a combination of total GSP volume (or share) and performance relative to average;
- Redistribution forms a key part of the Supplier Charges regime, and implementing a method that means some Suppliers will not receive damages due to them is fundamentally wrong. Any Supplier that is underperforming is obviously damaging other Parties, but it is damaging itself within the calculation of GSP GROUP CORRECTION FACTOR. This Supplier is also being affected by the underperformance of other Suppliers, and should be compensated for this regardless of its own performance. The redistribution method therefore should ensure that all Suppliers are compensated correctly on the basis of the genuine pre-estimate of loss incurred;

- The proposed method is flawed as it rewards Suppliers who are still performing below the target level of performance (currently 97%);
- The method outlined (which would compensate some Parties but not others for the impact of a Supplier's non-performance) is discriminatory and undermines the concept of liquidated damages.

7.1.7 90/10 Rule

The majority of respondents agreed with the initial decision of the Group, to leave the 90/10 rule as it is currently:

- There is not sufficient justification for adjusting the 90:10 rule at present, particularly as the 10% is to compensate the increase in central costs which is split across all Trading Parties not just Suppliers;
- As all Trading Parties are contributing to central administration costs it seems reasonable to take out a nominal 10% to compensate all Parties, 10% feels intuitively the right magnitude;

However, one respondent who supports the view of the Group believes that the 90/10 rule does have the potential to be contentious if it is not based on consideration of what proportion of under performance impacts other Suppliers through the GSP GROUP CORRECTION FACTOR and what proportion impacts all Trading Parties through an increase in central costs.

The minority of respondents considered that the rule ought to be changed:

- One suspects that the true full costs of the arrangements required to monitor, investigate and rectify SVA Supplier performance deficiencies is not being fully reflected on the Parties responsible. An increased share of the amounts collected should be apportioned to all Trading Parties to rectify this situation. In the absence of more information on costs, this respondent suggests 25% should be allocated to all Trading Parties, as a compromise;
- One prefers an 80/20 split on the basis that it would be a greater incentive on the NHH market to perform and it would mitigate against the increased liquidated damage in the HH market;
- One is unclear why this rule is in place. This respondent stated that the Group were unable to clearly justify its existence, and therefore this element should be removed.

7.1.8 Force majeure

All respondents who commented supported the VASMG's decision to leave the current force majeure provisions in place:

- It is good practice to have these and they are an essential part of any reasonable arrangement;
- The existing force majeure clauses within the Code adequately cover events that could impact on the performance of a Supplier;
- Force majeure is by its nature, unpredictable therefore trying to specify anything would be difficult;
- The Authority's decision on P115 states that 'the effectiveness of the incentives to try to resolve the underlying issues that cause underperformance would be eroded if a process was in place to disapply Supplier Charges'. Further force majeure provisions are not required. It may be appropriate to review them however if there is any evidence to suggest that they are being subject to abuse.

7.1.9 Reviewing Supplier Charges

The majority of respondents considered that reviewing Supplier Charges and the genuine pre-estimate of loss was a good idea. Various timings were suggested ranging from annual reviews to every three years or when there was a material change in the market. Reasons given were:

- It does seem appropriate to periodically review Supplier Charges and the genuine pre-estimate of loss but this should be balanced against providing Suppliers a degree of certainty over what charges will be applied. It may be appropriate to undertake a review every 2-3 years unless an exceptional event suggests that an earlier review would be appropriate;
- As the Settlements process takes 14 months from SF to RF, clearly it will take time to assess the effectiveness of the new Supplier Charges. A review every two years seems to be the right balance between accuracy and effort;
- Reviews should take place as regularly as required, probably annually, to ensure accuracy and currency and also to avoid complacency amongst participants. P157 has highlighted crucial issues surrounding performance and Supplier Charges;
- Supplier Charges should be reviewed when market forces dictate and on the basis of what the Customer requires. If performance is not being readily achieved it should be reviewed regardless of any timescales. This right to review should be the responsibility of the PAB and / or BSC Panel;
- Reviews should only be carried out where a material change to the market (including technology) means that current arrangements are no longer efficient or effective as they were before the change. Frequent reviews represent a cost to the market and are usually accompanied by increased risk.

The minority of respondents felt that it was unnecessary to prescribe for a review, since it remains the gift for any Party to raise a Modification Proposal if it is concerned.

Two respondents had additional comments to make.

- One considered that it does not seem right that the applicable charges are automatically increased each year, in line with RPI, when the loss is based on costs which are unrelated to RPI. Any charge that is deemed to be a 'genuine pre-estimate of loss' should be calculated as such;
- Other central costs, if included, should also be reviewed annually, particularly as BSCCo have budgeted for considerable cost savings in forthcoming years.
- Presumably the cap will change as the Credit Assessment Price changes.

7.1.10 Peer group comparison

The minority of respondents supported the introduction of named pgc along the lines suggested by the VAMSG. The following comments were made:

- In particular this should be used to address any issues highlighted by the BSC Auditor.
- It should be a tool available to PAB as part of the escalation process and should be used to support other financially based incentives. There needs to be adequate warning, protection and appeal procedures for it to be respected within the industry, and for it to be effective. Robust processes can be put in place to ensure that the information presented is accurate. PAB should be given flexibility to decide what information should be presented;
- This approach is low cost and can only increase the focus on the need for Suppliers to address performance issues;

- It is an additional corrective technique that should be available to the PAB;
- The information may be useful to Ofgem as part of its market monitoring work and potentially in its compliance and enforcement work.

In addition it was commented that the provisions for prior review and appeal before publication are critical and that Parties must clearly be made aware of standards they have to achieve before any figures are published.

The majority of respondents did not support named pgc for the following reasons:

- One or two discrete performance measures would be put into the public domain with the potential for editorial comment to undermine the whole organisation. This would create new and unwelcome Public Relations issues for a Supplier to deal with and therefore detract its focus from issues of data quality;
- This approach does not work well for participants that have low market shares;
- There is no evidence that pgc will have a marked effect on Supplier performance. Introducing this will increase BSCCo's administrative burden and inevitably costs, but will not deliver any justifiable benefit;
- PAB already have the ability to do coded pgc and this has not been fully utilised yet;
- Accuracy of pgc data is questionable;
- There are issues with regards to commercial confidentiality and legal questions over the right to data and use of information. It is unlikely to take account of the fact that a Supplier may have 10 sites or 1,000,000 sites, with the result that the headline figures are skewed in some way;
- PAB already have a variety of options within the current escalation process, pgc adds no additional benefit;
- The full effect of the recent PAB escalations has not been seen - the PAB escalation route is, and always will be, a stronger incentive to Suppliers to improve their performance;
- Agent market is not fully developed. Agent performance (in particular for small Suppliers) can be difficult to influence. With limited competition, Suppliers cannot simply switch agents if the service they provide causes poor performance. It has been suggested that where there is competition, Agents will serve larger clients better/faster for fear of losing the account therefore smaller Suppliers will always be at a disadvantage. Smaller independent Suppliers cannot afford to set up their own DC/DA business if one or more GSP Groups prove troublesome;
- The real issue is the impact in Settlements and the consequential effect on other Suppliers, but pgc will not provide any additional insight into these areas.

Several respondents expressed desires that should pgc be introduced:

- PAB must have structured pgc escalation process;
- It should only be used where it is clear that it will be more effective than other methods;
- It must recognise any commercial confidentiality;
- It must be accurate;
- There must also be a route of appeal for Suppliers to question the validity of their being named and for what.

One respondent did not express an opinion but commented that it believes there should be full transparency of performance on a routine basis. This would permit objective comparison, and allow

attention to be concentrated on those Parties with problems. Anything short of this it believes to be for the benefit of Parties with poor performance.

7.1.11 Implementation Date

The majority of respondents agreed with the VASMG suggestion of a Calendar Day Implementation Date of July 2005. Two of these qualified their responses. One stated that this was the least disruptive option, however, the later any decision by the Authority to implement P157, the more decisions/actions will already have been taken by Suppliers which could have differed if they had been aware of the change. The other stated that if the Proposed Modification is amended or an Alternative Modification developed, a more suitable date might be found.

Other reasons in support of this date were:

- It is set in the future, therefore it gives all Parties an opportunity to address issues and Suppliers will have fair warning of the new rules in advance of implementation;
- The added benefits are that it allows pre P99 rules to be fully run off before P157 is introduced, which avoids any confusion and is a cleaner solution as all data used will be post P99 data;
- Calendar Day implementation has the advantage that there are no problems deciding how to combine the new rules with the old, especially regarding caps and redistribution which are calculated on a Party's overall position for any given month;
- Although P157 should be implemented as soon as possible there are difficulties concerning alternative Implementation Dates;
- Although retrospection should generally be avoided one respondent considered it to be justified in this instance.

One respondent in support of the date commented that it does not support retrospective modifications with material impact on Parties, and believes the Implementation Date should be tied to the Ofgem decision date in order to avoid significant retrospection, bearing in mind that not all of the chargeable Serials have significant lead times.

The one dissenting respondent believed that whilst it can see the benefits associated with the approach chosen by the Group, if the result of this modification is a more accurate, more reflective, regime of Supplier Charges, it should be implemented at the earliest practical opportunity. If a decision is reached quickly, November 2004 would seem to be the most practical option.

7.1.12 Alternative

Two alternatives were put forward by the VASMG in its consultation:

- Setting the charges in the Supplier Charges to zero; and
- The Proposed Modification without pgc.

1 respondent considered the former was a good alternative, (another gave qualified support for this approach), and 3 respondents considered the latter was a good alternative.

Support for setting Supplier Charges to zero:

- The industry should use other methods to encourage performance improvements;
- No Supplier charges are imposed in Scotland and it is believed that the market's average Performance Level there is similar to England & Wales. This seems to indicate that Supplier Charges do not necessarily have a marked influence on a Supplier's level of performance

Support for the Supplier Charges Module only was due to:

- Industry having yet to see benefits of current PAB 97% escalation process or the benefits of P99 introduced on the 1st May 2004;
- Lack of conviction that pgc has any value.

A number of respondents also provided comments about the redistribution method suggested in the consultation document, in particular the "bond rebate" option that was not issued for consultation but was circulated to the Group during the consultation period. The comments are as follows:

- One respondent believes that there may be further scope in the design of a method of re-distribution of Supplier Charges. This will be a sensitive issue between Suppliers, and it will be important to secure the confidence of all Suppliers that the method is fair;
- Further work on re-distribution may be required to avoid anomalies and possible gaming;
- the objectives of the Modification Proposal would be better achieved by means of a "Performance Bond" methodology as described in John Sykes' paper to the VASMG dated 19 May 2004;
- A modified version of the proposal without the restriction on re-distribution, without the provision for the Panel/PAB to vary the cap percentage and with appropriate changes to the rationale for the genuine pre-estimates of loss to make these legally robust.

Finally a number of other comments were made:

- Consideration should be given for Agents to be licensed and Supplier Charges passed directly to them if identified as the cause. This would directly encourage Agents to improve performance/service levels to all Suppliers;
- Financial sanctions via Supplier Charges could be abandoned altogether, and replaced with stricter escalation procedures against persistent offenders from PAB to Panel. Although, consideration would need to be given to ensure such a process was not draconian, and was more reflective of the impact of a Party's poor performance on other Parties;
- Consideration should be given to reviewing some of the targets e.g. 97% of actual NHH data at RF, as clearly larger Parties are struggling to meet this target.

Those who did not support an alternative considered:

- The suggested alternatives do not provide better mechanisms for incentivising better performance;
- Abolition of Supplier Charges is not an acceptable or credible course of action at this time;
- Effective financial incentives will be an important corrective technique within the Performance Assurance Framework;
- There is support for the introduction of named pgc;
- Other solutions to the overall problem of data timeliness and accuracy could be considered, but are outside the scope of this modification, and would undoubtedly be expensive.

7.1.13 Comments

A number of respondents provided additional comments as detailed below:

- One respondent supported measures to incentivise improved Supplier performance, and believes the outline proposals can help this. However, other performance failings, particularly erroneous registrations and erroneous data such as those which caused the audit qualification and require considerable effort to rectify, will not be directly captured by the current Supplier Charges mechanism. It considers that either:

- Measures are required to improve data accuracy in these areas; or
- Costs of failing to provide accurate data should be borne entirely by those causing them, and not shared between all Parties.

Hopefully, revised charges will increase incentives to deliver accurate and timely data under the chargeable Supplier Serials, and this will carry over into other areas of Supplier data processing;

- It is believed that there is insufficient competition in Agent Market for Suppliers to have a choice. Consideration ought to be given as to how to encourage competition and improve service levels in the Agent market as this is at the heart of the Supplier Hub concept. Without this Supplier Hub management may fail;
- It is difficult to estimate true loss to Parties and therefore any solution can only be seen as, at best, a “gesture of goodwill” rather than actual loss. The genuine pre-estimate of loss is a difficult calculation to make but it must be made to ensure fairness and legality. It should also be borne in mind that any true loss would also include impact of poor performance on areas such as cash flow, etc. which would be difficult to calculate as part of a genuine pre-estimate of loss;
- It is also a concern that the current Supplier Charges set up has not been allowed time to work – this proposal is seeking to change a regime that is only just starting to have a real effect with the recent issue of the first few monthly invoices. The industry has not therefore seen what effect these invoices are having, or will have, on Supplier’s behaviour. Changes under P99 have only just been implemented and again the industry does not know how successful or otherwise these will be. However, if the effect of these changes is to give a better pre-estimate of loss, then they should be implemented at the earliest practical opportunity;
- The Group may wish to consider whether it would be useful to seek a provisional view from the Authority on particular aspects of the modification (for example how retention or removal of caps better facilitates Applicable BSC Objective c);
- The BSCCo BSC Review has not been completed yet and this may aid development of this proposal. The same applies to the financial/performance benefits from P99 introduction.

8 SUMMARY OF SECOND CONSULTATION

In this consultation the Proposed Modification contained the components that the Panel directed and thus had an inhouse Supplier cost component to the SP08a genuine pre estimate of loss, no cap and an average redistribution type method of redistribution. The Alternative Modification had all the components of the Proposed Modification as options as well as the possibility of a bond rebate or current method of redistribution.

Consultation question	Respondent agrees	Respondent disagrees	No Opinion expressed
SECTION A: APPLICABLE BSC OBJECTIVES			
Do you believe that the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives? If your answer is no, is this due to the cost of the Proposed Modification and if so at what point do the costs outweigh the benefits?	Qualified 3 (11+7)	4 (31)	2 (10)
Do you believe that the Alternative Modification would better facilitate achievement of the Applicable BSC Objectives? If your answer is no, is this due to the cost of the Alternative Modification and if so at what point do the costs outweigh the benefits?	2 (11+6) Qualified 3 (24+1)	3 (16)	1 (1)
Do you support the Proposed or Alternative Modification more?	Alt: 6 (33 + 6) Alt: Qualified 1 (9)		2 (10 + 1)
SECTION B: GENUINE PRE-ESTIMATE OF LOSS CALCULATION			
Do you agree with the methodology for calculating the genuine pre-estimates of loss associated with the following Serials? i) Delivery of Routine Performance Reports (Serial SP01) ii) Delivery of Routine Performance Logs (Serial SP02) iii) Installation of HH Metering in 100kW premises (Serial SP04) iv) 100kW HH Energy and MSIDs on Actuals (Serial SP08b) v) Non-100kW HH Energy and MSIDs on Actuals (Serial SP08c)	i) 6 (24 +7) ii) 6 (24 +7) iii) 7 (39 + 7) iv) 7 (39 + 7) v) 7 (39 + 7)	i) 2 (18) ii) 2 (18) iii) 0 iv) 1 (3) v) 1 (3)	i) 1 (10) ii) 1 (10) iii) 2 (13) iv) 1 (10) v) 1 (10)
For NHH Energy and MSIDs on AAs (Serial SP08a), do you think the methodology is appropriate (putting aside the issue of in-house Supplier costs to correct bad data)?	6 (38 + 7)	1 (3)	2 (11)
For NHH Energy and MSIDs on AAs (Serial SP08a), do you think including the in-house Supplier costs to correct bad data in the genuine pre-estimate of loss is appropriate?	4 (20 + 7)	3 (21)	2 (11)
Even if the answer to Question 6 was no: Which of the methodologies suggested is more appropriate? (top down/bottom up)? (NB: Please provide data/numbers that can be used in the calculations where possible - these can be kept confidential if requested.)	Top down 1 (9) Bottom up 4 (26 + 7)		4 (17)
SECTION C: REDISTRIBUTION PRINCIPLE			
Which method of redistribution do you believe should be used as part of P157? Please state why you don't like other options if applicable.	i) c 5 (24 + 7) ii) a 2 (6+7) ii) b 3 (13+1)		1 (10)

i) Bond rebate <ul style="list-style-type: none"> a. Pay now redistribute now b. Pay now redistribute later c. Invoice now pay and redistribute later ii) Average performance <ul style="list-style-type: none"> a. Basic b. Relative to amount above average c. Additional (2x share) if above Standard d. Both of the above (b+c) e. Redistribute on a market basis using a, b, c or d iii) Leave as it is currently	ii) c 2 (9+1) ii) d 3 (14+1) ii) e 2 (9+1) iii) 4 (30)		
Do you consider that a cap should be applied to Supplier Charges in conjunction with the average performance type redistribution option?	5 (22+6) Qualified 1 (5)	1 (15) Qualified 1 (0+1)	1 (10)
Which of the two following capping methodologies do you believe should be used in conjunction with the average performance type option? i) 1% of Supplier Take in GSP Group * Credit Assessment Price and being applied to SP08a. b and c only (APPLICABLE TO ALL SUPPLIERS); or ii) 1% of Supplier Take in GSP Group * Credit Assessment Price and being applied to SP08a. b and c (APPLICABLE ONLY TO SUPPLIERS WITH LESS THAN 400 MPANS) <i>Please state appropriate rationale and why you don't support the other option if appropriate.</i>	i) 5 (21+7) Qualified 1 (5) ii) 1 (15) Qualified 1 (5)		2 (11)
Do you agree that a cap need not be applied if a bond rebate type of redistribution is used? <i>Please state rationale.</i>	5 (35+7)	3 (7)	2 (11)
Do you agree with the process for reviewing the genuine pre-estimate of loss? <i>Please give rationale.</i>	5 (15+7)	3 (27)	1 (10)
SECTION D: IMPLEMENTATION DATE			
Do you agree with the preferred P157 Implementation Date of Calendar Day July? Please give rationale. <i>If you disagree please state preferred alternative and rationale</i>	6 (21+1) Qualified 1 (6+6)	1 (15)	1 (10)
Do you consider that resubmissions for days before this Implementation Date should be treated according to P157 rules?	5 (38+6) Qualified 1 (0+1)	1 (3)	2 (11)
SECTION E: FURTHER COMMENTS			
Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? <i>Please give rationale</i>	1 (1)	7 (48+7)	1 (3)
Does P157 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	4 (14+7)	4 (37)	1 (3)

8.1 Modification Group's summary of the consultation responses

Nine responses, representing 52 BSC Parties and 7 non-BSC Parties, were received. The following sections provide a summary of the responses received to the 16 questions asked in the consultation document.

8.1.1 Proposed Modification versus Applicable BSC Objectives

Three respondents expressed qualified support for the Proposed Modification.

Reasons given were that both Applicable BSC Objectives c and d would be better facilitated due to:

- Revision of genuine pre estimate of loss will make the process more cost reflective;
- P157 should act as an incentive on Parties to address poor data quality issues;
- P157 should improve performance and this should therefore reduce uncertainty within the market and less time and money should be spent on improving poor performance and consequently reduce costs. In addition the efficiency of the BSCCo should increase as less time should be required to be spent on improving poor performance and dealing with data quality issues.

However several concerns were expressed:

- P157 does not create a clear, transparent and predictable incentive which was the defect identified by the Modification Proposal;
- Certain redistribution options proposed could be discriminatory by nature, and thus would not meet the Applicable BSC Objectives;
- The proposed redistribution method (the not bond rebate option) together with no caps is untenable;
- The level of monies that will be circulated under P157 will be of a magnitude less than the level of monies that are currently circulated. However, this may still better meet the applicable BSC objectives if the monies are circulated amongst the right Parties.

Four respondents believed that the Proposed Modification would not better facilitate achievement of the Applicable BSC Objectives.

These respondents gave the following reasons:

- The proposals deter competition since a move away from caps and the principal of liquidated damages to the use of complicated methods of redistribution will deter new entrants;
- The proposals represent a shift away from charges being related to the genuine pre estimate of loss and the use of Liquidated Damages to a system of fines and incentives;
- P157 does not solve the defect of the present system of redistribution that tends to discriminate unduly against some Suppliers and does not grant funds on the basis of performance;
- The proposals are more complicated and exacerbate the situation;
- The industry has yet to see the benefits from P99 so it is difficult to calculate if P157 is better than the current mechanism in place;
- The Average Performance option is not considered to be a fair method and in house costs to correct bad data should not be included in the genuine pre estimate of loss;

- The proposal makes gross assumptions in order to derive and apply average charge rates for poor performance against Serials, particularly SP08a, b, c. The proposed charges disregard individual Supplier data accuracy performance, and assume an average accuracy of estimated data based on a limited sample of doubtful validity. This will give charges which are overgenerous for some Parties and penal for others, and for HH Suppliers this discrimination will be greater than under the current arrangements due to the higher proposed rates. Without caps the proposed charges will introduce excessive discrimination.

Two respondents did not express an opinion. One claimed it was difficult to give a Yes/No answer, when important elements remain to be defined. It also commented that the removal of caps had made this option unsound. The other commented that the cost of P157 would not be prohibitive but that uncapped liabilities can act as a barrier to new entrants and restrict competition.

8.1.2 Alternative Modification versus Applicable Objectives

Two respondents believed that the Alternative Modification would better facilitate achievement of the Applicable BSC Objectives. One of these respondents indicated that it would provide an incentive to address data quality issues. The other respondent preferred the Bond Rebate (invoice now, pay later) method, with an above average performance being used to redistribute forfeit amounts. This option requires no caps, as the payer always has the opportunity to recover his costs by improving his performance. The advantages the respondent believes this has are:

- It concentrates on making the individual Supplier improve his performance and stop him passing on data of poor quality, rather than compensating other Suppliers for his actions. It values other Suppliers' improvements higher than receiving compensation when they don't;
- The charges and rebate amounts remain in proportion to Supplier size;
- It is a Supplier's own money at stake, not someone else's
- It is related to the individual improvement against the standard, is unrelated to other Suppliers performance and is a true incentive to improve absolutely not relatively;
- It is easy to understand, calculate and predict;
- It gives Suppliers a practical mechanism by which to incentivise their agents and share risk and reward with them.

Four respondents expressed qualified support for the Alternative Modification. Several of the respondents indicated that it would provide an incentive for improved performance. However, concerns relating to the inclusion of capping for small Suppliers (i.e. complexity and appeals over qualification) and the movement away from the current redistribution methodology were expressed. One respondent commented that timing and payment of refunds was critical

Three respondents believed that the Alternative Modification would not better facilitate achievement of the Applicable BSC Objectives. All re-iterated the concerns with the Proposed Modification, discriminatory redistribution, the inappropriate charges calculated and the fact that results of P99 have not been seen. But whilst one of these respondents indicated that the Alternative Modification would be even more discriminatory, the other respondent indicated the inclusion of capping (by limiting the extent of the discrimination) made the Alternative Modification marginally preferable to the Proposed Modification.

8.1.3 Proposed versus Alternative Modification

Seven respondents indicated a preference for the Alternative Modification over the Proposed Modification. Two main reasons for this were given:

- The inclusion of caps was deemed important;
- Bond rebate method will provide more of an incentive;

Two respondents did not provide an answer to the question.

8.1.4 Genuine Pre estimate of loss Methodologies (excluding SP08a)

Six respondents supported the methodology proposed for SP01 and SP02. One noted that even though it agreed, it was doubtful whether or not all the charges can be deemed as a genuine pre estimate of loss. SP01 and SP02 charges seem more reflective of an administration cost, rather than a genuine pre estimate of loss. However, the charges applied would appear to be at least an incentive for Parties to provide accurate & timely reports which is preferable to escalating a Party to PAB.

Two respondents did not support the proposed methodology. One did not believe that administrative costs were a genuine pre-estimate of loss and questioned whether the failure of a Supplier to comply with these Serials actually damages other Suppliers at all. The other considered that although a missing set of reports requires similar central cost to manage as an individual GSP Group report, Supplier Charges operate on a GSP Group level and charges at that level both cover the possibility of individual reports being missing and provide incentive to ensure the reports are sent. One respondent did not provide an answer.

Seven respondents supported the methodology proposed for SP04. Two respondents did not provide an answer.

Six respondents supported the methodology proposed for SP08b and SP08c. Although one was concerned that the value was high. One respondent did not support the proposed methodology. It disagreed with the use of the imbalance price differential in the calculation. It stated that it would expect market price or SSP as an indicator of the value of assumed errors. It also considered that the derivation of the assumed error relative to true volume in estimated data is over-simplified and wanted information about the variability between Suppliers or GSP Groups. It questioned this rationale with regards to the replacement of erroneous actuals with accurate estimates, the replacement of estimates with more accurate estimates and the replacement of actuals with more accurate actuals. The respondent was also concerned at the high charge calculated and claimed its errors were not that high.

One respondent did not provide an answer to this question.

8.1.5 Genuine Pre estimate of loss Methodology for SP08a (excluding issue of in-house correction costs)

Six respondents supported the methodology proposed for SP08a. Although this has resulted in a figure lower than the current one, the methodology appears robust

One respondent did not support the proposed methodology. It agreed with the value of the volume of energy methodology but considered the estimates of central costs associated with monitoring and managing NHH performance and errors in general to be underestimates. It questioned limiting it to incremental costs only.

Two respondents did not provide an answer to this question.

8.1.6 Inclusion of In-house Correction Costs in SP08a Genuine Pre estimate of loss

Four respondents supported the inclusion of the in-house cost incurred by Suppliers for correcting bad data in the genuine pre estimate of loss methodology for SP08. Two noting that the consequences of poor data quality are passed on through the Change of Supplier process and this should be reflected in the genuine pre estimate of loss although direct cause and effect cannot be proven, the assumption

that a poor performer passes on more bad data than a good one is not unreasonable. One of these considered that there may be an issue with the accuracy of this measure given the variances in types, costs and time taken in resolving problems.

Three respondents did not support the inclusion of the in-house cost incurred by Suppliers for correcting bad data in the genuine pre estimate of loss methodology for SP08. One respondent questioned whether the cost should be factored in because Suppliers were already being 'encouraged' to address poor data issues through various ELEXON initiatives and because it doubted that the proposed approach would result in the right Parties being compensated. Another respondent opposed the inclusion because it questioned the proposition that a Supplier should be able to recover the cost of meeting a Code obligation (i.e. correction of bad data). Another respondent accepted that there are data quality transfer issues within the industry but did not believe this can be calculated to a level of accuracy required to meet the genuine pre estimate of loss definition. The ability of a Supplier to be able to fix data problems (and the time it takes) will vary across the industry and will be impacted by things such as their relationship with their Data Collectors, how they utilise different systems and the processes they use.

Two respondents did not provide an answer to this question.

8.1.7 'Top-down' Methodology Versus 'Bottom-up' Methodology for Data Correction Cost

Four respondents indicated a preference for the 'Bottom-up' approach. One noted that the problem with the Top-down approach is that it involves knowledge of overall levels of error, and assumptions about how this differs according to the type of the customer. However, one of these respondents qualified its preference for this approach over the 'Top-down' approach by noting that both were crude (owing to the great variation in the cost of correcting different types of 'bad data') and hence should not be included at all. One respondent recognised that the data provided by different Suppliers will differ under the bottom up approach but did not consider this to be an issue.

One respondent indicated a preference for the 'Top-down' approach.

Three respondents did not state a preference and one respondent stated that neither option should be used.

One respondent noted that a comparison of the results of the two approaches would be useful.

(NB: This question was put to all respondents even those who did not support the inclusion of the cost of correcting bad data in the genuine pre estimate of loss methodology for SP08a.)

8.1.8 Preferred Re-distribution Methodology

Six respondents indicated a preference for the 'Invoice now, pay and redistribute later' variant of the Bond Rebate option.

Reasons given were:

- ELEXON would not have to hold finances of participants and will therefore also not tie up working capital of Parties;
- The delay between invoice and payment does not dilute the incentive as Suppliers will still have to accrue the charges against the annual performance, and by so doing will have to improve their own performance to reduce the liabilities. In addition there is no delay in terms of "cost" to a Suppliers business, and once the invoice is issued, the business carries the cost;
- There are issues with the other options as the pay now redistribute now is too complex whereas the pay now redistribute later could be seen as anti competitive;

- When the Supplier is invoiced it will then know it has a year to improve its performance and reduce the monies it has to pay out. Suppliers could potentially use this as a tool for negotiating with agents to improve performance, for example they could agree to share a proportion of the avoided charges;
- Suppliers put a higher value on performance improvement than receiving compensation.

One of these respondents noted that the Bond Rebate scheme and performance-based redistribution were not mutually exclusive. This respondent stated a preference for a Bond Rebate 'front-end' with a subsequent performance-based redistribution (i.e. 'average basic') for any forfeited monies.

With regards to the average performance type options this respondent (supporting the bond rebate option) indicated that, aside from the 'basic average' variant that could lead to a 'duopoly' effect, none of the performance-based redistribution methodologies raised any concerns. Another respondent stated that, which average performance method is used depends on whether or not there is a Bond Rebate as an initial redistribution. If there is, then a basic average performance option could be used, (potentially excluding the forfeiting Supplier). If however there is no Bond Rebate front end, the basic average performance option introduces anomalies hence an average performance relative to amount above average and with an additional (2x share) if above Standard was appropriate.

Other respondents also expressed opinions regarding the average performance option. One respondent noted concerns with the basic average performance option with regards to weaker incentives at the upper end of performance and the potential for windfall gains. This respondent also preferred the average performance relative to amount above average and with an additional (2x share) if above Standard to fulfil the objective of being a continuous redistribution method whilst not discarding any of the other options.

Another respondent preferred average performance relative to amount above average only since it believes that this method offers more of an incentive to a Supplier to get above the market average. If the Supplier goes above and beyond the average then extra incentives are given. This in turn will encourage all Suppliers to strive for the industry target.

One respondent who favoured the bond rebate option considered that the basic average performance redistributed on a market basis was preferable due to the fact that on a GSP Group basis, it will be difficult for Suppliers to impact the average performance in the GSP Group, due to the duopoly nature of GSP Groups currently.

A different respondent also did not favour the basic average performance options due to the duopoly nature but considered all other options were plausible.

Two respondents indicated a preference for the current redistribution methodology. One rejected the Bond Rebate option because it is complicated, and whilst potentially an incentive, it does not provide the necessary compensation which is rightly due to damaged Parties in a timely fashion. It rejected the Average Performance option since some Suppliers will not receive damages due to them if they happen to be performing below the average. In addition it was concerned that the average Performance Level is most closely linked to the performance of the incumbent Supplier, with the incumbent more adversely affected than other Suppliers if they are below the average, potentially giving smaller Suppliers windfall gains. The other respondent rejected both options, whilst recognising that they may provide more incentives than the current methodology, for two main reasons:

- Supplier Charges and this modification are not explicitly concerned with the setting of incentives;
- Doubt regarding the objective used to target the incentives being the volume of estimated data without reference to the accuracy of that estimation.

Reasons given in support of retaining the current methodology were given by four respondents. Several reasons were given:

- P157 has found it so hard to develop consensus for a new way forward;
- It is theoretically a reasonable way to recompense Suppliers suffering GSP Group correction due to assumed errors in estimated data;
- It is simple, understandable, and links directly into the genuine pre-estimate of loss;
- Concerns over the inclusion of avoidable costs in liquidated damages and in particular on the collection and redistribution of Supplier charges¹³.

One of these respondents acknowledged that it returns charges to those which have caused them, but considers that this appears to be justified on the basis that they 'suffer' the consequences in GSP Group correction of their own errors.

One respondent was against the current methodology.

One respondent did not provide an answer to the question.

8.1.9 Capping of Supplier Charges under Average Performance-type Redistribution Methodologies

Six respondents supported the application of caps to Supplier Charges where an average performance-type redistribution methodology were adopted. The reasons for supporting capping included:

- Suppliers are not yet confident in the mechanism;
- Could lead to limitless liability and therefore could exceed the genuine pre estimate of loss and become a penalty;
- Could have an adverse effect on competition, and act as a barrier to entry for smaller participants;
- Might be difficulty in backing off liability through renegotiation of the Agent contracts - higher Agent fees for everyone which would ultimately be passed on to the Customer;
- There are concerns with the charging rates.

One of these respondents noted that capping would be unnecessary where a Bond Rebate 'front-end' combined to this type of redistribution methodology.

One respondent considered that Ofgem's original provisional thinking and the subsequent Panel direction to VASMG did not provide clarity to the VASMG. Ofgem's clarification on its provisional thinking looks to soften its view on the use of caps on some Serials if detailed and well reasoned arguments are put forward. This should be discussed further at the next VASMG meeting.

Two respondents did not support capping. One respondent gave two reasons:

- A cap would limit the charge applicable, and as such therefore limits the compensation below the agreed genuine pre estimate of loss level;

¹³ The respondents legal view on this is as follows; "These are linked under the current Annex S-1. The Performance Assurance Board (the "Board") collects the charges and distributes them in a 90:10 ratio between the qualifying Suppliers and qualifying Trading Parties respectively. The collection and redistribution of charges should be linked as it provides a clear connection between the charges collected and the Parties which receive compensation as a direct result of a failure by a Supplier in meeting the applicable Performance Level. To remove the link weakens the compensatory requirement of liquidated damages and as a result the charges could be argued to be penal in nature. 'ELEXON's legal view is that collection and redistribution can be separated.

- A cap may dull the incentive on a Supplier to improve its performance, if it knows that the cost of failure is limited.

The other respondent supported the removal of caps if it would not have an adverse impact on business viability and hence competition and this was confirmed by the Authority's provisional thinking

One respondent did not provide an answer to the question.

8.1.10 General Cap versus Cap on 'Small Suppliers' Only (Preference with Average Methodology)

Five respondents favoured applying the cap to the charges of all Suppliers. The rationales provided included:

- It is a substantial increase to the current cap levels and would as a result incentivise improvements;
- Concern over the statistical validity of the determined average charge rates;
- It is difficult to determine what exceptional circumstances may arise but it is possible that they could happen to larger as well as smaller Suppliers;
- Where thresholds are applied issues always arise concerning those around the boundary of the threshold;
- Applying a cap only to 'small Suppliers' would add complexity.

One of the respondents who supported applying a cap to all Suppliers indicated that it did not support the capping methodology since it is not reflective of the 'likely outer bounds of the total volume of inaccuracy', by a factor of ten, and as such could permit disproportionately excessive Supplier Charges to be levied.

Another respondent believed that if Bond Rebate is used then a cap should be introduced to cover small Suppliers where the calculation of genuine pre estimate of loss may not be robust. However, if the average performance method alone is used it believes that some form of capping is necessary, to prevent against the averaging arithmetic producing extreme results. In addition it claimed that capping ought to be applied to redistribution as well as charging to prevent windfall gains and disproportionate net charges.

One respondent, whilst not supportive of capping, favoured applying the cap to the charges of all small Suppliers only rather than all Suppliers on the basis that any adverse effect arising from abolishing caps would most likely affect smaller players.

Two respondents did not provide an answer to this question.

8.1.11 No Capping under Bond Rebate Scheme

Five respondents agreed that capping would not be required under the Bond Rebate scheme. These respondents believed that caps would be unnecessary because the final amount payable would be under the control of a Supplier, and this method should protect smaller Suppliers from exposure to significant charges in exceptional circumstance.

Three respondents disagreed and believed that charges should be capped although one of these recognised that there were reasons to not apply a cap, namely that the bond rebate is an incentive scheme and charges are likely to be smoother and exceptional circumstances are better handled under this scheme owing to uncertainty over the accuracy of the charges being applied. Other reasons against were to avoid significant liability and consequent adverse effect on competition.

One respondent did not provide an answer to the question.

8.1.12 Biennial Review of Charging Levels

Five respondents supported the proposed process. Reasons given were that:

- It represents a sensible balance between effort and time elapsed;
- It is appropriate to 'periodically review' the genuine pre estimate of loss estimates.
- It will also help to review the calculation on HH. The current calculation has been carried out on limited information. As time progresses more data will be available and thus the accuracy will increase.

One of these respondents noted that the Authority recently questioned the process for revising the third party generating limit outwith the Modification process. It further noted however that the proposed process would rerun the agreed methodology with up to date data and any change in the methodology could only occur via a Change Proposal. Consequently, it would not expect the Authority to have the same concerns.

Three respondents did not support the proposed process. One respondent believed that the Modification Procedure provided an existing and adequate mechanism for change. Another respondent favoured an annual review since this will ensure that changes are encompassed without undue delay and since it should be a fairly straightforward piece of work once the methodology is agreed. The last of these respondents favoured providing greater flexibility for more frequent Panel reviews.

One respondent did not provide an answer to the question.

8.1.13 Proposed Implementation Date (i.e. Calendar Day, July 2005)

Seven respondents supported the proposed Implementation Date. Two respondents noted that this would enable the pre P99 rules to be completely run-off prior to implementation and gives Parties time to address issues in advance. In addition development could take place within a scheduled release. One of these responses was qualified since any further delays to the Modification process could result in perhaps only 9 months to correct data. However, one respondent supporting the proposed Implementation Date added that this should correspond to a minimum of 3 months notice for market participants to plan and manage the change.

One respondent did not support the proposed Implementation Date, indicating that the changes should be introduced as quickly as possible given that the P157 process had revealed that the current genuine pre estimates of loss are inaccurate.

One respondent did not provide an answer to the question.

8.1.14 Treat Re-submissions for Days Prior to Implementation Date according to P157 Rules

Six respondents supported the proposed treatment of re-submissions. Most of these supported the approach for reasons of simplicity. However, another reason to support this approach was because P157 would introduce more cost-reflective charging and to minimise the administrative costs and the charging impacts on participants. One of these agreements was qualified.

One respondent did not support the proposed treatment of re-submissions because it was retrospective, noting that ideally re-submissions should be treated according to the rules applicable at the time the data was originally submitted.

Two respondents did not provide an answer to this question.

8.1.15 Alternative Solutions not Progressed by the VASMG

Seven respondents did not believe that there were alternative solutions that ought to be considered by the VASMG. One noting that the Group's work had been exhaustive and another that a considerable number of alternatives had been discussed. However, one respondent suggested that P157 does little to tackle the root causes of poor data in the market. It concentrates on aspects of the output measures rather than addressing the source of the problems, some of which may extend beyond the scope of the Code. It suggested a more appropriate approach was to use the findings of the Customer Transfer Programme (CTP) to identify cost effective solutions and to propose alternatives.

One respondent indicated that poor data quality is a defect, but that it cannot be cured by changing the incentive scheme as the root cause of the defect is far more fundamental and an alternative is needed to address the root cause of the defect, the lack of a competitive market in the provision of Agent Services.

One respondent, whilst not providing a direct answer to the question, noted that a more fundamental review is required to address the defect. This review should not be time constrained as required by the Modification process.

Some fundamental questions that have been touched on but not explored were suggested:

- What is the cost and value to Parties of the current Settlement timetable? Should changes be made, e.g. Settlement Runs over a longer timescale to allow longer to capture or correct data, or a cut-off at which Parties accept (and write off errors in) the data which exists, estimated or actual, correct or erroneous;
- Could Supplier Charges be applied more flexibly to performance issues as they arise e.g. to the various issues leading to qualified audit, instead of pursuing potentially expensive (and often ultimately only approximate) correction methods;
- Is it cost effective to pursue the level of accuracy and performance to which the Code aspires;
- More specific consideration of how individual Suppliers performance in various areas is causing loss and costs borne by other Parties; more precisely what those losses and costs are; how to redistribute funds to compensate; and
- How can we incentivise general Performance Levels e.g. is the level of estimated data the real issue, or the accuracy of that estimated data?

A suggested first step to inform discussion would be more transparency of current performance, i.e. Peer Group Comparison.

8.1.16 Further Issues

Five respondents raised no issues whilst four respondents raised issues - one of these noted a typographical error in the consultation document.

One respondent questioned the cost effectiveness of performance monitoring being scrutinised at a Supplier Id level. Current methodology can result in Suppliers with multiple Supplier Ids being asked to complete actions and provide performance plans to PAB for each Id they hold. This is time consuming and not cost effective. In its opinion PARMS reports could be submitted as currently, but with BSCCo aggregating the statistics for reporting to the PAB. This would reduce the cost burden on both PAB and Suppliers.

In addition it commented that whilst, perhaps not strictly within the scope of P157 it is mindful of the costs associated with Modification Proposals and would be pleased if the VASMG would also consider the issue of performance reporting in its deliberations.

One respondent noted that the Alternative Modification is still defined in terms of optional features. Both Proposed and Alternative have the same genuine pre estimate of loss, and could have the same cap provisions judging from Ofgem's latest clarification of its provisional thinking on caps. The Bond Rebate method also requires a method of redistributing the forfeit amounts.

It considered that opinion appears to be polarised between those who believe in retaining the current redistribution methodology on the basis of compensation, and those who are seeking to take advantage of the legal opinion that redistribution is a matter for the Parties to agree, thereby creating a more incentivised regime that the compensation method can never achieve.

It therefore suggested orientating the Proposal and the Alternative around these two fundamental alternatives rather than mixing them both as at present.

The final respondent noted that the concept of Supplier Hub and performance incentives around this is based on the premise that there is a healthy and competitive market in the provision of Agent Services. This in its opinion is not the case since larger Suppliers can influence the behaviour of Agents better than small Suppliers due to the size of their account. Many Agents are linked to groups that have supply businesses and there is no legal or regulatory protection regarding the behaviour of that relationship. Some Agents refuse to offer services to third parties. It considered the concept of charging a Supplier especially smaller Suppliers a genuine pre estimate of loss for an activity which they are largely unable to influence is a breach of its human rights.

9 SUMMARY OF THIRD CONSULTATION

Consultation question	Respondent agrees	Respondent disagrees	Opinion unexpressed
Do you believe Proposed Modification P157 better facilitates the achievement of the Applicable BSC Objectives?	3 (16) qualified 1 (15)	5 (24 + 1)	1 (1)
Do you believe Alternative Modification P157 better facilitates the achievement of the Applicable BSC Objectives?	5 (25 + 1)	4 (30)	1 (1)
Does P157 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	3 (17)	6 (38 + 1)	1 (1)
Are there any further comments on P157 that you wish to make?	1 (15)	8 (40 + 1)	1 (1)

9.1 Modification Group's summary of the consultation responses

10 responses representing 56 Parties and 1 non Party were received to the third Assessment Consultation, one of these made no comment throughout. (Two of these responses were submitted after the response deadline but were considered by the Group.)

9.1.1 Proposed Modification

A minority of respondents considered that the Proposed Modification better facilitated the achievement of the Applicable BSC Objectives. Two of these agreed with the arguments in support of the Proposed Modification that were outlined in the consultation document, namely the more accurate genuine pre estimate of loss and the more appropriate cap. The compensatory nature of the redistribution was also mentioned in the consultation document and hence referred to by one of these Parties. One of the other respondents supported the retention of the existing re-distribution method however it qualified its positive response by stating concerns with some elements of the calculation of genuine pre estimate of

loss, namely the unconvincing inclusion of central incremental costs and in house costs for correcting bad data.

A majority of respondents did not consider that the Proposed Modification better facilitated the achievement of the Applicable BSC Objectives. Four of these explained their dislike of it.

Three of these respondents were not satisfied with the calculation of the genuine pre estimate of loss and the assumptions made in the methodology. Reasons given were:

- There is no a clear, robust relationship between the percentage of estimated data and either the accuracy or impact on other Suppliers/Parties. The change in overall volume between SF and RF is not caused by replacing estimates with actuals as changes may be due to replacement of erroneous actual or estimated data by more accurate estimated data, and can give reductions in values as well as increases. Changes are also caused by inclusion or removal of data due to registration errors, charges for which were explicitly removed by Modification Proposal P99 (though reasons were unclear). The proposed level of charges could vary significantly depending on the estimation methods used;
- The level of inaccuracy in the estimates remaining at RF is not necessarily comparable to that in the estimates replaced after SF. Data at the early stages of settlement contains higher levels of error, which are corrected by Supplier processes such that the level of error remaining at RF is much less;
- The applicable price for a corrective technique to recover amounts from Suppliers due to underestimated demand data should be about the market price or similar. There is no justification for using the much lower average of the average difference between SBP and Market Price and the average difference between Market Price and SSP.
- The total central cost associated with Supplier Charges and the performance framework associated with achieving Supplier performance targets should be charged to those not performing satisfactorily and thus causing that work to be required. Instead, a price based on dividing some small incremental costs amongst all Suppliers is suggested, for which there is no justification;
- The HH rate is almost certainly too high, and the NHH figure is probably too low. The HH charges may well increase risk in that market and may well be seen as discriminatory;
- The charge for Serial SP08a is reduced by a factor of around 10 and yet the cap is significantly increased. The new cap size is too high, on the basis it is not credible that the error that can arise in the energy volume without Meter readings will get anywhere near 1% of a Supplier's total volume in a GSP Group.

One of the respondents commented that the precise methodology of the genuine pre estimate of loss determination for SP08 has not yet been published, but it is likely that other mathematical assumptions have been made which invalidate the results. It added that a cap on SP08 charges would not be necessary if the genuine pre estimate of loss was determined more accurately.

One of the dissenting respondents added that the benefits of the Modification to the industry and customers have not been quantified and may be outweighed by the costs to BSC Parties.

Another dissenting respondent quoted the defect outlined by the proposal that ascribes qualification of the latest BSC Audit in the main to poor data quality in the NHH Sector. It maintained that both Proposed and Alternative Modifications reduce the incentive on NHH Suppliers to improve data quality by replacing estimated data with actual data and therefore do not resolve the defect referred to by the Proposer.

In addition, the present arrangements for Supplier Charges are flawed, yet the proposals put forward are more complicated and exacerbate the situation that they propose to remedy. The proposals will not result in any increases in efficiency or competition and therefore do not better meet the Applicable BSC Objectives.

One respondent that did not support the Proposed since it considered the current redistribution method to be flawed.

9.1.2 Alternative Modification

A majority of respondents considered that the Alternative Modification better facilitated the achievement of the Applicable BSC Objectives. Four respondents stated the reasons that were outlined in the consultation document, namely the more accurate genuine pre estimate of loss, the more appropriate cap and the amended redistribution which should act as an incentive on Parties to address poor data quality issues which should increase competition in the market and should increase the efficiency of BSCCo as less time should be required to be spent on improving poor performance and dealing with data quality issues. Respondents felt that the changed distribution of Supplier Charges offered an improved incentive on Suppliers performance.

A minority of respondents did not consider that the Alternative Modification better facilitated the achievement of the Applicable BSC Objectives. The lack of support for the genuine pre estimate of loss was reiterated as for the Proposed Modification. In addition several respondents did not support the amended redistribution. Reasons given were:

- The inclusion of redistribution based on average performance on SP08a is wrong and will cause problems if the Alternative Modification is implemented. These problems have already been elucidated during the assessment phase of P157;
- The costs for implementing redistribution based on average performance are also a significant negative aspect making the Proposed Modification more attractive;
- The Alternative Modification combines the flawed genuine pre estimate of loss principles with a redistribution method that is less equitable and further away from the principle of Liquidated Damages. It represents a shift away from charges being related to a genuine pre estimate of loss to a system of fines and incentives.

One respondent stated that it does not support the proposal to penalise for non-compliance on the grounds that Suppliers (particularly small Suppliers) have very little influence over the performance of agents despite contractual arrangements. However this respondent stated that the Alternative Modification appears to be more advantageous since it will reward those Suppliers that have achieved or exceed the target Standard. Therefore, in its opinion the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives.

9.1.3 Additional Issues and Comments

Several respondents brought up additional issues:

- The issues leading to audit qualification are not those specifically targeted by the existing Supplier Charges. A more flexible Supplier charging regime would allow the central and other Party costs of correction to be targeted on those responsible as the issues arise;
- It is interesting to note the significant difference in the implementation costs between the Proposed and Alternative Modifications (£112k). The reason for such a variance is obviously the costs that the Alternative Modification has included within it redistribution based on average performance on SP08a and for reporting with average performance. Is it really worth spending this extra amount for these elements of the Alternative Modification?

- At present there are no Supplier Charges in Scotland, and the Serials are based on iPARMS. BETTA will introduce the "P99" Serials and Supplier Charges in Scotland on 1 April 2005, presumably in respect of Settlement Days on or after 1 April 2005. Any implementation of P157 will follow on relatively soon after that, and certainly before the SP08a figures will have been determined. The Implementation Dates and methodologies need to be re-examined in this light;
- Consideration needs to be given to the Implementation Date as BETTA is to be introduced in April 2005. As there are no Supplier Charges in Scotland, it would seem reasonable and perhaps less risky to delay the Implementation Date until 1 December 2005;
- Caps should be applied to any charging mechanism.

One respondent expected further detail on why the assumptions in the genuine pre estimate of loss calculation undertaken by the Group completely undermine the results, for at least one Supplier, as further data and analysis becomes available.

9.2 Comments and views of the Modification Group

The Group discussed the consultation responses received from the third Assessment Consultation including the two late Assessment Consultation Responses. The Group addressed the issues brought up in the responses.

9.2.1 Applicable BSC Objectives

The Group considered whether subsequent to the third Assessment consultation, P157 better facilitated the achievement of the Applicable BSC Objectives or not.

A majority of the Group considered that the Proposed Modification better facilitated the achievement of the Applicable BSC Objectives. One of these was qualified in that it preferred the Alternative Modification but considered the Proposed better than the current baseline.

A majority of the Group considered that the Alternative Modification better facilitated the achievement of the Applicable BSC Objectives. This majority preferred the Alternative Modification to the Proposed Modification as well as to the current baseline.

See Section 2.3 and 2.5 for the arguments put forward by the Group.

9.2.2 BETTA

The impact of BETTA on P157 was discussed specifically with regards to the response from two of the consultation respondents who pointed out that up until the BETTA Effective Date, the two Scottish GSPs would not have had any Supplier Charge regime. The P99 regime would be applied at BETTA Go Live and would be amended almost immediately by P157 if it were implemented in June or July 2005. For this reason the Group questioned the suggested Implementation Date of July 2005 for the Proposed Modification and considered that the earliest Implementation Date appropriate for P157 was in the November 2005 release. For issues relating to BETTA interaction with P157 see section 2.2.9.

9.2.3 Agent Competition

The Group acknowledged that some Parties have problems with their Agents and that smaller Suppliers especially may not have as much influence over their Agents as they would like. This also applies to all Suppliers in GSP Groups where they do not have a significant mass of Customers. The Group noted this "structural" problem of lack of competition in Agent Services but pointed out that a Supplier could always choose to perform Agent tasks themselves. Additionally, Agent services are open to competition in that no Supplier is locked into an unwanted commercial connection with any Agent and thus have the ability to change Agent or perform the services themselves.

9.2.4 Genuine pre estimate of loss calculation for SP08

9.2.4.1 *Value of the volume of energy deemed to be uncertain*

The Group considered the comments made in the consultation regarding the assumptions used in the calculation of the aspect of the genuine pre estimate of loss. The Group discussed all the arguments put forward against calculation of the genuine pre estimate of loss but considered that it had understood the assumptions the methodology was making throughout and that it considered that this was the most accurate method it had of calculating a genuine pre estimate of loss and that there is an acceptable level of error in this calculation. The Group recognized that the most accurate way to calculate the loss was on an MPAN by MPAN basis, however it realised that it was unrealistic for each Supplier to perform this analysis and that central systems do not have access to this data. Additionally it was pointed out that the genuine pre estimate of loss is an estimate and that it was happy with the estimation process it had used throughout.

The Group did ask for further details on the price applied to the volume of energy deemed to be uncertain and the explanation given is in appendix 6.

9.2.4.2 *Central incremental Costs*

The suitability of the calculation of the central incremental costs and its inclusion as part of the genuine pre estimate of loss was discussed. The Group discussed whether the central incremental costs ought to be applied to all energy in the market, as was presented in previous P157 documents or whether the costs ought only be applied to the estimated market size. For example, using the total market size we have a calculation that is:

genuine pre estimate of loss (£/MWh) = "central incremental costs" (£) / "market size" (MWh)

Using the estimated market size only we would have a calculation that is:

genuine pre estimate of loss (£/MWh) = "central incremental costs" (£) / "estimated market size" (MWh)

The Group felt that it was inappropriate to change the manner in which the central incremental aspect of the genuine pre estimate of loss was calculated for several reasons:

- A certain proportion of estimated data is deemed acceptable (3% in NHH, 1% HH) and thus if this logic is followed through the costs should be applied only to the "unacceptable" estimated data – this would give a very large value to the genuine pre estimate of loss; and
- Additionally if P157 is effective and the estimated market size increases and central incremental costs decrease, using one or both of the "acceptable" and "unacceptable" estimated data market, a marginal and potentially spurious value for the genuine pre estimate of loss might be calculated.

One member of the group considered that central incremental costs should not be included in the genuine pre estimate of loss at all since the 10% redistribution to all Trading Parties should cover this aspect of loss.

However a majority of the Group considered that the central incremental costs calculation should remain part of the calculation for SP08 genuine pre estimate of loss and should stay as has been suggested in the past i.e. apply the incremental central cost value in £ to the total market size in MWh.

9.2.4.3 *In House costs to correct poor data*

The Group considered the methodology and a majority supported its inclusion as part of the SP08a genuine pre estimate of loss. The Group requested that the methodology in the Code be as

prescriptive as possible to avoid a situation where limited data was received from Parties during the review of the value of the charge potentially changing the charge considerably

9.2.5 Level of Cap

The Group considered the consultation response that commented that the cap was larger than the margin of error and hence too high. The Group considered the cap to be appropriate.

10 TRANSMISSION COMPANY ANALYSIS

10.1 Initial Analysis

Q	Question	Response
1	Please outline any impact of the Proposed Modification on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated transmission system.	We do not believe that the proposed modification P157 has any impact on the ability of the Transmission Company to discharge its obligations under the Transmission Licence.
2	Please outline the views and rationale of the Transmission Company as to whether the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives.	We support the continuation of Supplier Charges as an appropriate mechanism to incentivise the provision of better quality data into Settlement. We believe that the principles outlined in P157, to achieve a Supplier Charges Mechanism that is easily understood and provides effective incentives on Parties, meet BSC Applicable Objectives c) for promoting effective competition in the generation and supply of electricity and d) for promoting efficiency in the implementation and administration of the balancing and settlement arrangements. However, we would endorse the views expressed by the Mod Group that any potential benefits arising from the proposed modification would have to be measured against the costs of introducing the necessary changes to the existing processes.
3	Please outline the impact of the Proposed Modification on the computer systems and processes of the Transmission Company, including details of any changes to such systems and processes that would be required as a result of the implementation of the Proposed Modification.	No impact has been identified from the proposed modification P157 on the computer systems and processes of the Transmission Company.
4	Please provide an estimate of the development, capital and operating costs (broken down in reasonable detail) which the Transmission Company anticipates that it would incur in, and as a result of, implementing the Proposed Modification.	No costs have been identified.
5	Please provide details of any consequential changes to Core Industry Documents that would be required as a result of the implementation of the Proposed Modification.	No changes have been identified.
6	Any other comments on the Proposed Modification.	

10.2 Second Analysis

Q	Question	Response
1	Please outline any impact of the Proposed and Alternative Modifications on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated transmission system.	We do not believe that the proposed modification P157 has any impact on the ability of the Transmission Company to discharge its obligations under the Transmission Licence.
2	Please outline the views and rationale of the Transmission Company as to whether the Proposed and Alternative Modifications would better facilitate achievement of the Applicable BSC Objectives.	We support the continuation of Supplier Charges as an appropriate mechanism to incentivise the provision of better quality data into Settlement. We believe that the principles outlined in P157 and its Alternative, to achieve a Supplier Charges Mechanism that is easily understood and provides effective incentives on Parties, meet BSC Applicable Objectives c) for promoting effective competition in the generation and supply of electricity and d) for promoting efficiency in the implementation and administration of the balancing and settlement arrangements. However, we would endorse the views

		expressed by the Mod Group that any potential benefits arising from the proposed modification would have to be measured against the costs of introducing the necessary changes to the existing processes. We have no specific comment to make as to whether the Original or the Alternative is better in achieving the Applicable BSC Objectives.
3	Please outline the impact of the Proposed and Alternative Modifications on the computer systems and processes of the Transmission Company, including details of any changes to such systems and processes that would be required as a result of the implementation of the Proposed and Alternative Modifications.	None envisaged
4	Please provide an estimate of the development, capital and operating costs (broken down in reasonable detail) which the Transmission Company anticipates that it would incur in, and as a result of, implementing the Proposed and Alternative Modifications.	None envisaged
5	Please provide details of any consequential changes to Core Industry Documents that would be required as a result of the implementation of the Proposed and Alternative Modifications.	None envisaged
6	Any other comments on the Proposed and Alternative Modification.	None

10.3 Comments and views of the Modification Group

The Transmission Company did not make any material remarks relating to P157 and its progress and the Group thus did not make any comments on the response.

11 SUMMARY OF EXTERNAL ADVICE

No external advice was sought.

12 DOCUMENT CONTROL

12.1 Authorities

Version	Date	Author	Reviewer
0.1	20/09/04	Dena Harris	VASMG
0.2	20/09/04	Dena Harris	ELEXON and VASMG
0.3	6/10/04	Dena Harris	ELEXON
0.4	8/10/04	Dena Harris	ELEXON

12.2 References

Ref	Document	Owner	Issue date	Version	Document Link
1	P157 Modification Proposal	N/a	05/01/04	1.0	http://www.elexon.co.uk/documents/modifications/157/P157.pdf
2	Issue 6: Report from the VASMG	VASMG	07/11/03	Final	http://www.elexon.co.uk/documents/BSC_Panel_and_Panel_Committees/BSC_Panel_Meetings_2003_-_069_-_Papers/69_020.pdf
3	P157 Initial Written Assessment	ELEXON	09/01/04	1.0	http://www.elexon.co.uk/documents/modifications/157/71_012a.pdf

4	P157 Definition Report	ELEXON	05/03/04	1.0	http://www.elexon.co.uk/documents/modifications/157/74_012a_P157DR.pdf
5	P157 Assessment Consultation	ELEXON	10/05/04	1.0	http://www.elexon.co.uk/documents/modifications/157/P157AC10.doc
6	P157 Interim Report	ELEXON	04/06/04	1.0	http://www.elexon.co.uk/documents/modifications/157/78_009a_P157_IR.pdf
7	P157 Second Interim Report	ELEXON	02/07/04	1.0	http://www.elexon.co.uk/documents/modifications/157/79_005a_P157_IR.pdf
8	P157 Second Assessment Consultation	ELEXON	20/07/04	1.0	http://www.elexon.co.uk/documents/modifications/157/P157_Assessment_Consultation_(2)_Document.pdf
9	P157 Third Interim Report	ELEXON	3/09/04	1.0	http://www.elexon.co.uk/documents/modifications/157/82_009a.pdf
10	P157 Third Assessment Consultation	ELEXON	7/09/04	1.0	http://www.elexon.co.uk/documents/modifications/157/P157AC310.pdf
11	P157 Fourth Assessment Consultation	ELEXON	30/09/04	1.0	http://www.elexon.co.uk/documents/modifications/157/

ANNEX 1 DRAFT LEGAL TEXT

Attachment 1: Draft legal text Proposed Modification – this will be available at a later date since the final form of the content will be confirmed after the fourth assessment consultation

Attachment 2: Draft legal text Alternative Modification – this will be available at a later date since the final form of the content will be confirmed after the fourth assessment consultation

ANNEX 2 MODIFICATION GROUP DETAILS

[illegible]

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Attendee	Organisation	Email	15/03/04	23/03/04	02/04/04	28/04/04	28/05/04	18/06/04	28/06/04	12/07/04	13/08/04	27/08/04
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ANNEX 3 ASSESSMENT CONSULTATION RESPONSES

Attachment 3: First Assessment Consultation

Attachment 4: Second Assessment Consultation

Attachment 5: Third Assessment Consultation

Attachment 6: Fourth Assessment Consultation – to be sent

ANNEX 4 BSC AGENT IMPACT ASSESSMENTS

See attachment 7

ANNEX 5 PARTY AND PARTY AGENT IMPACT ASSESSMENTS

See attachment 8

ANNEX 6 CLARIFICATION OF COSTS

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

- **Stand Alone Cost** – the cost of delivering the Modification as a stand alone project outside of a CVA or SVA Release, or the cost of a CVA or SVA Release with no other changes included in the Release scope. This is the estimated maximum cost that could be attributed to any one Modification implementation.
- **[Incremental Cost** - the cost of adding that Modification Proposal to the scope of an existing release. This cost would also represent the potential saving if the Modification Proposal was to be removed from the scope of a release before development had started] – not applicable to P157.
- **Tolerance** – the predicted limits of how certain the cost estimates included in the template are. The tolerance will be dependent on the complexity and certainty of the solution and the time allowed for the provision of an impact assessment by the Service Provider(s).

The cost breakdowns are shown below:

PROGRESSING MODIFICATION PROPOSAL	
Meeting Cost	This is the cost associated with holding Modification Group meetings and is based on an estimate of the travel expenses claimed by Modification Group members.
Legal/expert Cost	This is the cost associated with obtaining external expert advice, usually legal advice.
Impact Assessment	Service Provider Impact Assessments are covered by a pre-determined

Cost	monthly contractual charge. Therefore the cost included in this report is an estimate based on the level of impact assessment that the modification is expected to require and may not reflect the actual cost attributed to the modification, which will be based on a percentage of the contractual impact assessment costs for each month that it is assessed.
ELEXON Resource	This is the ELEXON Resource requirement to progress the Modification Proposal through the Modification Procedures. This is estimated using a standard formula based on the length of the Modification Procedure.

SERVICE PROVIDER¹⁴ COSTS

Change Specific Cost	Cost of the Service Provider(s) Systems development and other activities relating specifically to the Modification Proposal.
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IMPLEMENTATION COSTS

Design Clarifications	Allowance to cover the potential cost of making any amendments to the proposed solution to clarify any ambiguities identified during implementation. This is typically estimated as 10% of the total Service Provider Costs, with a tolerance of +/- 100%.
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TOTAL DEMAND LED IMPLEMENTATION COSTS

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

ELEXON IMPLEMENTATION RESOURCE COSTS

Cost quoted in man days multiplied by project average daily rate, which represents the resources utilised by ELEXON in supporting the implementation of the release. This cost is typically funded from the "ELEXON Operational" budget using existing staff, but there may be instances where the total resources required to deliver a release exceeds the level of available ELEXON resources, in which case additional Demand Led Resources will be required.

This ELEXON Implementation Resource Cost has a tolerance of +/- 10% associated with it.

ONGOING SUPPORT AND MAINTENANCE COSTS

¹⁴ A Service Provider can be a BSC Agent or a non-BSC Agent, which provides a service or software as part of the BSC and BSC Agent Systems. The Service Provider cost will be the sum of the costs for all Service Providers who are impacted by the release.

ELEXON Operational Cost	Cost, in man days per annum multiplied by project average daily rate, of operating the revised systems and processes post implementation.
Service Provider Operation Cost	Cost in £ per annum payable to the Service Provider(s) to cover staffing requirements, software or hardware licensing fees, communications charges or any hardware storage fees associated with the ongoing operation of the revised systems and processes.
Service Provider Maintenance Cost	Cost quoted in £ per annum payable to the Service Provider(s) to cover the maintenance of the amended BSC Systems.

ANNEX 7 APPENDICES

Appendix 1: Peer group comparison discussion

The Group considered pgc tables and discussed what should be reported via this method. The Group decided that it was appropriate for the pgc tables to be used to tackle so called "hot" issues such as the audit issues highlighted by the BSC Auditor.

The Group discussed the following issues:

- What should be published;
- Where it should be published;
- What safeguards to put in place to ensure accurate data was published.

The Group considered which Serials and Audit Issues would be incentivised via publishing performance publicly in pgc tables. The Group concluded that rather than choosing one or more issues for pgc, P157 should be used to introduce the provision within the Code to allow PAB to use pgc for issues it felt would be beneficial as part of the PAB escalation process.

The VASMG also considered whether pgc should be named or unnamed. It was clarified that unnamed pgc already occurs and a Code change is not required to change the performance areas that pgc covers, hence under P157 only named pgc would be considered.

It was questioned whether pgc would be an incentive. One member suggested that the very fact that no one in the industry wants named, public pgc to be introduced is an indication of its likelihood to work since Suppliers seem to fear its effects. One member suggested that the fact that the press can have access to the pgc tables and may use the data to write articles and draw conclusions regarding particular Suppliers would provide an incentive. It was also suggested that PAB escalation is a painful process to go through and suggested that the Group should not underestimate the PAB escalation process as an incentive. It was pointed out that escalation to PAB is a strong "last resort" measure and incentive techniques that would encourage improved performance would be preferable. Pgc tables that name Suppliers will sharpen up the PAB process and thus aid the PAB in improving performance. One member believed that pgc would be a low cost tool and will not make performance any worse.

The VASMG also expressed a desire to have less rather than more pgc tables so that the usefulness of the tool is not diluted.

The VASMG considered that the following changes would be required:

Section J 1.4.2 of the Code will be amended such that for the avoidance of doubt pgc tables can be published publicly.

BSCP534 will also be amended such that when and where the pgc tables will be published is explained. The Group wished to cater for several risks via the content of BSCP534:

- 1) That the data is incorrect;
- 2) That Parties have no warning to improve before pgc published;
- 3) That Parties have no prior information telling them the standards to which pgc may be applied.

Wording could be inserted into BSCP534 and this would ensure that Parties were aware of the Standards they have to keep and the potential for pgc tables to be published on any of these Standards. The wording could appear thus:

"In addition to the pgc reports produced from the PARMS reports the PAB may also publish pgc on any performance matter affecting the industry, for the avoidance of doubt this includes all matters that the PAB are tasked with in accordance with Sections B-1, J, J-1, S-1 and any issues raising from the BSC Audit."

The pgc tables will be published on the BSC Website and will appear in the following format:

		GSP Group 1	GSP Group 2	GSP Group 3	etc
Party Name A	Supplier Id 1				
Party Name A	Supplier Id 2				
Party Name B	Supplier Id 1				

The VASMG wished Party name to appear such that energywatch and other interested Parties could understand who the table was referring to, since Supplier Id is difficult for a non industry expert to work out.

The VASMG also wished Parties to receive a copy of the data used to generate the information in the table (by email) xWD before publication with its name and position visible. It will thus have xWD to check and query the data. In addition, the Group also wished to include a proper appeals process. It was suggested that there is an appeals process already for PARMS data thus if this data is not queried then it can be assumed to be correct and hence used in a pgc table. If the data to be used is not PARMS data, then an appeals process is required. It is thought this could work similarly to the Query process for Supplier Charge reports contained in BSCP536.

The PAB will consider whether to use pgcs part of the escalation of a particular issue. The PAB shall notify industry via the Performance Assurance Administrator (PAA) y months in advance of a particular issue and data relating to it may be published in a pgc table of what data is to be used and the methodology for creating the pgc table. This notification period will not be for consultation but to allow industry to improve performance prior to publication of data

An example of a pgc table based on % AAs reached at RF for NHH and % Actuals reached at R1 for HH will be in an appendix to the BSCP534.

The VASMG also felt it appropriate to alter the PAB escalation table to include reference to pgc:

Severity Levels Table

Under 'example activities' for Severity Level 4...'consider pgc'

Severity Level	Meaning	Example Issues	Example Activities
4	There is concern that without a change of approach or commitment, a severity 3 problem will not be resolved, or not be resolved within a reasonable timescale.	Energy settled on Actuals is unsatisfactory and the participant is not meeting pro-forma milestones to deliver improvements.	All activities for lower Severity Levels, <i>plus</i> Targeted Technical Assurance visit. Escalate to PAB. Feature in the Panel assurance report <u>Consider publishing peer group comparison tables as</u>

			described in section XX
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The Group (and consultation respondents) were split over whether pgc was a positive aspect to the Proposed Modification and it was agreed that Supplier Charges without pgc may be a suitable Alternative Modification.

Appendix 2a Cost of Uncertainty a

Cost of uncertainty

A)

The calculation would appear thus:

- Consider the cost of certainty in a run per MWh
- Calculate additional %age energy settled on AAs between Run [a]
- Calculate amount of NHH traded in a day [b]
- Calculate the additional energy settled on AAs in a day [c] = [a] * [b]
- Calculate cost to administer the Settlement Run arrangements this could be the sum of the SVAA, NETA CSA, FAA etc costs or purely the SVA side costs [d]
- Calculate cost of a Settlement Runs used to increase accuracy i.e. not the first one that is required anyway. Where 365*5 is number of Settlement Runs in a year and 4/5 excludes the first run that is required even if all data entered is fully accurate;
[e] = [d]/(365*5)*(4/5)
- Calculate the cost of a Settlement Run per MWh [f] = [e]/[c]
- [e]/[c] = £[f]/ MWh away from standard

	SF	R1	R2	R3	RF	Average
Target AAs	3%	17%	43%	78%	97%	
% AAs added [a]	3%	14%	26%	35%	19%	
Energy traded per day TWh [b]	0.35	0.35	0.35	0.35	0.35	
additional energy on AAs [c]	0.01	0.05	0.09	0.12	0.07	
cost of run £ [e]	21,900	21,900	21,900	21,900	21,900	
cost £/MWh [f]	2.08	0.45	0.24	0.18	0.33	0.66

Source of data:

[b] = (http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/1262_Energy.pdf) The paper is a bit dated but shows on page 2, that in 2001 350 TWh were consumed of which around 128 TWh were for domestic.

[d] = from the Business Strategy highlighted amounts used:

Item	Year to March 2005 Budget £m
BSCCO Operational	15.46
Demand Led	6.00
Contracted	28.50

NETA Funding	13.23
BSCCO BETTA Project	2.30
OVERALL TOTAL	65.49

Appendix 2b Cost of Uncertainty b

Cost of uncertainty

B)

Uncertainty associated with the potential of nobody sending any data in:

The percentage uncertainty in the volume of an average EAC is $x\%$

The cost of the uncertainty associated with this uses the imbalance differential $\text{£}3.714 * x\% = \text{£}y/\text{MWh}$

If we want to see what the uncertainty would be if only 10% of actual data (AAs) were entered into Settlement. We can assume that if:

- only 10% of actual data entered into Settlement
- and at the moment 90% of actual data is entered into Settlement
- then the accuracy of an EAC would decrease by 9

So the percentage uncertainty in volume of an average EAC in this case would be $9x\%$ and the corresponding cost of uncertainty would be $\text{£}9y/\text{MWh}$

But we need to add a probability factor of this scenario occurring – $z\%$

So cost of uncertainty = $\text{£}9yz/\text{MWh}$

Q: is it linear?

Q: can we get a value for z

Appendix 2c Cost of Uncertainty c

Cost of uncertainty

Internal Pricing teams within companies appear to cost uncertainty into their pricing calculations. What the pricing team do is something like this:

- Take the customer's actual data.
- Ask the traders for pricing data
- Add on profit
- Add on a certain amount which factors in safety of customer, the rate the customer wants and a measure of the uncertainty of the customer – the latter depends on whether the customer is HH or NHH AND whether data is actual or estimated.

It is difficult to estimate what this would be and is highly confidential company specific information.

Appendix 3 Value of the Volume of energy deemed to be uncertain

Note: the legal text for both Proposed and Alternative Modifications contains a description of this methodology in mathematical terms.

This methodology assumes (for price assumptions see appendix 6):

- The change in the overall volume between SF and RF is caused by replacing estimates with actuals;
- The change in the overall volume therefore gives a measure of how much inaccuracy was in the estimates that have been replaced;
- The % volume change over the time period was compared with the corresponding % change in estimates to get the average % volume change for % of estimate change;
- The level of inaccuracy in the estimates remaining at RF is comparable to that in the estimates replaced after SF.

It estimates the % volume change to be expected per % of estimated volume from a sample of Suppliers and GSP Groups as:

The calculations were performed separately for HH and NHH Suppliers

Data for NHH was used for May, June, October and November 2001 for a sample of 8 Suppliers, for all GSP Groups.

Date for HH was used for dates from February to June 2003 inclusive for a sample of 8 Suppliers, for all GSP Groups.

The absolute magnitude of the percentage change in volume per Supplier per GSP Group (a) was compared with the corresponding percentage change in estimates (b).

(a) was calculated for NHH between SF and DF and for HH between SF and R3 (latest Settlement Run data available for dates used)

The absolute magnitude of the percentage change in volume per percentage change in estimates (a)/(b) was calculated followed by the volume weighted average of these values (c) - this represents the average inaccuracy in an average estimate

The loss that this will cause other Suppliers in Settlement is calculated by applying a price to this volume. To find the price/cost of that energy – (P), The value of $|SBP - SSP|/2$ over a year from 11 Mar 2003 to 10 March 2004 inclusive was calculated:

The average of SSP over a year from 11 Mar 2003 to 10 March 2004 inclusive = £15.11

The average of SBP over a year from 11 Mar 2003 to 10 March 2004 inclusive = £22.53

The value of $|SBP - SSP|/2$ differentials is £3.714

$P = £3.714$

This value is used as it is assumed that a Party will have contracted its energy accurately and the inaccuracy of another Supplier's estimation (either positive or negative error) will push a Supplier longer or shorter and hence the imbalance prices are used to calculate the cost. The reason that the SSP is taken away from SBP and divided by two is that a Supplier will gain SSP if it goes short for another Suppliers error and will lose SBP if pushed long. It is further assumed that on average a Supplier will be pushed long 50% of the time and short the other 50% of the time by another Supplier's inaccurate estimation – see appendix 6 below.

The charge per MWh that a Supplier is below the Standard is thus computed as (c) * (P)

For this data any spurious looking data in the HH sample was removed. This was data that for any of the dates considered had an increase in estimates between SF and DF. If this occurred, the whole Supplier in that GSP Group was eliminated from the analysis.

Results:

	Average SP08a	Average SP08b,c
Dates and Settlement Runs used	May/June 2001 and Oct/Nov 2001 (SF-DF)	February to June 2003 inclusive (SF-R3)
SF-DF volume change / % change in estimates	3.02%	86.4%
SF-DF volume change / % change in estimates *P	£ 0.112/MWh	£3.210/MWh

Appendix 4 Central Incremental Costs

Central Costs – incremental costs

The methodology to calculate central incremental costs in £/MWh (CI) to be used as part of a genuine pre-estimate of loss as follows:

ELEXON would estimate the cost savings that would be associated with performance improvement (PRC) in a calendar year “y”

The central costs used could include:

- Audit costs
- Technical Assurance of Metering Systems
- Certification
- BSCCO, PAB, TA (Supplier & Supplier Agents), Education, Monitoring, Disputes etc
- OSM costs

The central costs used initially are approximated below:

Technique	Annual Costs £m	Suggested Savings £m
Audit ¹⁵	2.6	0.50
Technical Assurance of Metering Systems	0.8	0
Certification	0.03	0
BSCCO, PAB, TA (Supplier & Supplier Agents), Education, Monitoring, Disputes etc ¹⁶	0.75	0.01
Total	4.18	0.51

Additional effort spent on performance issues including OSMs:

No of man days a year	211
Cost of time in 1 year	£0.04m

¹⁵ This is based on Parties compliance with BSC Processes and subsequent attainment of the relevant Standards without the creation of settlement error.

¹⁶ The majority of cost savings that would be made would be via a reduction in the amount of support that ELEXON would provide to participants. This support comes via education provided at workshops, seminars, publication of guidance notes etc. and also a reduction in the number of required internal escalations and escalations to the Panel and its committees.

The suggested savings of the PAF costs are added to the incremental time¹⁷ spent by BSCCo as part of its added value service for dealing with Suppliers under-performance related issues and costed at £200 per man day:

Total incremental central costs is £0.51m+£0.04m = £0.55m

The central incremental costs in £/MWh are the central costs savings in a calendar year divided by the market size of the estimates in the HH and NHH in MWh.

The estimated market size is approximated below:

	TWh
Total market	271.7
NHH market	143.3
HH market	128.5

£/MWh	NHH	HH
Total	0.002	0.002

Appendix 5 SP04 – Genuine Pre Estimate of Loss

A mathematical description of the calculation of the genuine pre estimate of loss for SP04 is included in the draft legal text for both the Proposed and Alternative Modifications in Annex 1.

Charge for uncertainty between HH and NHH metering (i.e. use of profiles) – SP04

Take some HH actual data close to the 100kW consumption – customers with consumption only just over 100kW were chosen since it was assumed that there is a natural incentive, for very large customers to have HH Metering installed and those who breach SP04 are likely to be close to the 100kW cut off. This is because the large customer is likely to request more accurate Metering in order to obtain better electricity rates and/or the Supplier would require the larger Supplier to install HH Metering to charge for energy more accurately. Data was used for customers in Profile Classes 5, 6, 7 and 8 since sites that have high consumption tend to use maximum demand Meters and hence are likely to be Profile Classes 5, 6, 7 or 8.

1) For each MSID:

- Sum the yearly demand - A
- Use the latest data for the relevant Profile Class and apply this year demand to it. The result is a year of data by Settlement Period and Settlement Day with the same yearly demand as the MSID – B
- Subtract B from A such that the error between the MSID data and amended Profile remains by Settlement Period and Settlement Day for a year

2) For the same year that the MSID data spans (see Appendix 6 below for the rationale behind the price used)

- Take System Sell Price by Settlement Period and Settlement Day - C
- Take System Buy Price by Settlement Period - D
- Take C from D and divide by 2 – this is called the imbalance price differential (£)

3) Take the error between the MSID data and amended Profile and multiply it by the imbalance price differential to get the cost of the error in Settlement by Settlement Period and Settlement Day.

¹⁷ This is calculated using the BSCCo timesheet system.

- 4) Sum all these individual errors up to get an overall cost for the MSID (£ per MSID per year).
- 5) Divide this value by the number of Settlement Days to get a £ per MSID per day value for the genuine pre estimate of loss.

Note: if it is inappropriate to use data for the whole year to get a £ per day value. Sum up the appropriate period £ per MSID value in step 4 and then divide it by the appropriate period in step 5 to get a correct £ per MSID per day value for the genuine pre estimate of loss. For example this could be necessary if there has been a major pricing change in the time period.

Appendix 6 Pricing Discussion for genuine pre estimate of loss calculations for SP08 and SP04

The following have been queried:

- a) the formula termed "imbalance differential" that is described in the document and the methodology appears as $|SBP-SSP|/2$ rather than $((SBP-MP)+(MP-SSP))/2$ as appeared in previous documentation; and
- b) the use of the imbalance differential as the price for SP04 and SP08.

In answer firstly to a)

We looked at the average difference between SSP and market price and SBP and market price and the absolute value of that to price this energy in settlement.

$((SBP-MP)+(MP-SSP))/2$ - the market price cancels out leaving $|SBP-SSP|/2$

In answer to b)

If a Supplier has contracted and notified their demand accurately (the assumption of balance), the sign will make a difference since the Supplier will be pushed either long or short by the error and be exposed to SBP or SSP, Suppliers pay SBP (when the profiling error increases their deemed consumption), but only get paid SSP (when the profiling error reduces their consumption).

If we use the acronym E_j for the error in Suppliers' metered volumes arising from the failure to install a Meter or to enter AAs/actuals rather than EACs/estimates into Settlement.

A positive E_j means that Suppliers have to pay for extra energy in that period (i.e. their consumption is over-estimated);

A negative E_j means they have to pay for less energy (i.e. their consumption is under-estimated).

For SP04 note that by the nature of profiling (i.e. the fact that the volume is right and only the shape is wrong), the sum of the E_j values over the year will be zero.

The assumption of balance says that the total cost to Suppliers will be:

$$\text{Cost} = \sum_j^+ (|E_j| * SBP_j) - \sum_j^- (|E_j| * SSP_j) \quad (\text{equation. 1})$$

where \sum_j^+ means the sum over all periods where E_j is positive, and \sum_j^- means the sum over all periods where E_j is negative.

If we did not know which price the Supplier would be exposed to we can expose them to the average of both prices i.e. if we don't know whether the error is positive or negative in any given Settlement Period, we can assume there's a 50/50 chance of it being either

$$\text{So if we take equation 1 Cost} = \sum_j^+ (|E_j| * SBP_j) - \sum_j^- (|E_j| * SSP_j)$$

And make the assumption that each period has a 0.5 chance of being included in each of the two summations, the equation will become:

$$\begin{aligned}
 \text{Cost} &= \sum_j (0.5 * |E_j| * SBP_j) - \sum_j (0.5 * |E_j| * SSP_j) \\
 &= \sum_j (0.5 * |E_j| * (SBP_j - SSP_j)) \\
 &= \sum_j \{ (SBP_j - SSP_j) / 2 * |E_j| \} \quad (\text{equation. 2})
 \end{aligned}$$

where \sum_j means summation over all periods.

In other words, both equation 1 and equation 2 are equivalent to:

$$\text{Cost} = E * \{ \text{demand weighted average of SBP} - \text{demand weighted average of SSP} \}$$

(equation.3)

They differ only in the details of which periods the averaging is done over and the assumption made due to lack of knowledge as to whether the error is positive or negative

SP08 –

For this it was not possible given the data available to work out the £/MWh value using equation 1 since an average price was being applied to average volume changes and average estimate changes and the sign of the changes (i.e. positive or negative error) in each period was not known. It was therefore deemed appropriate to apply equation 2 to work out the charge using the extra assumption that the error was equally likely to be positive as negative.

SP04 –

For this, with the data used it was possible to work out whether the error was positive or negative and hence whether to apply SSP or SBP to it. The Group considered that for reasons of consistency with the price used in the SP08 methodology it was content to use the assumption that the error was equally as likely to be positive or negative for this calculation as it had done previously.

Appendix 7 Analysis of Supplier Charges now vs. P157

The Supplier Charge data used is for June 2002 and is for one month for one GSP. This is a typical GSP and therefore the total charges will be approximately 12 times this GSP each month.

The table below shows a breakdown of the Supplier Charges using current and P157 charges.

Breakdown of Charges origin								
Pre P99 Serial Name	Post P99 Serial Name	P157 Charge	Charge on		Current charges	% of Current Total SCs	P157 Charges	% of P157 Total SCs
Serial 1	SP08a	Y	NHH		£82,056.75	66.87	£10,617.92	32.52
Serial 2	n/a	N	HHSF		£1,878.39	1.53		
Serial 3	SP08b	N	HHSF		£438.19	0.36		
Serial 4	n/a	N	HHR1		£23,256.98	18.95		
Serial 5	SP08b	Y	HHR1		£7,435.73	6.06	£16,287.79	49.89
Serial 6	n/a	N	HHSF<100kW		£266.68	0.22		
Serial 7	SP08c	Y	HHRF<100kW		£132.70	0.11	£290.67	0.89
Serial 9	SP04	Y	NHH		£85.44	0.07	£53.12	0.16
Serial 10	SP01	Y	All		£7,163.10		£5,400.00	

					5.84		16.54
Total	£122,713.96					£32,649.50	

The table below shows a comparison between current cap and the Suppliers that breach it and the cap under P157. The P157 cap for this GSP Group is 2.8 times the size of the current cap.

Supplier	Current Cap	Cap Breach	P157 Cap	Cap Breach Proposed	Cap Breach Alternative
7	£339	NO	£948	NO	NO
24	£73	NO	£203	NO	NO
19	£1	NO	£4	NO	NO
2	£31	NO	£86	NO	NO
8	£11,826	YES	£33,075	NO	NO
17	£411	YES	£1,151	NO	NO
31	£442	YES	£1,237	NO	NO
26	£1,907	YES	£5,334	NO	NO
1	£5,735	NO	£16,038	NO	NO
5	£316	YES	£885	NO	NO
9	£2,074	NO	£5,799	NO	NO
22	£2,480	YES	£6,936	NO	NO
27	£11	NO	£29	NO	NO
14	£545	NO	£1,523	NO	NO
13	£503	NO	£1,408	NO	NO
23	£784	YES	£2,191	NO	NO
18	£391	NO	£1,095	NO	NO
3	£5,444	NO	£15,225	NO	NO
30	£1,606	NO	£4,492	NO	NO
4	£18	NO	£51	NO	NO
21	£0	NO	£1	NO	NO
33	£2,508	YES	£7,015	NO	NO
15	£10,686	NO	£29,885	NO	NO
39	£4,021	YES	£11,246	NO	NO
6	£12,070	NO	£33,756	NO	NO
38	£42,307	NO	£118,319	NO	NO
29	£4,046	NO	£11,315	NO	NO
10	£162	YES	£454	NO	NO
25	£8	NO	£24	NO	NO
37	£545	YES	£1,524	NO	NO
36	£3,176	NO	£8,883	NO	NO
12	£2,155	YES	£6,028	NO	NO
35	£50	YES	£139	NO	NO
11	£505	NO	£1,413	NO	NO
36	£16	NO	£44	NO	NO
16	£254	YES	£711	NO	NO
20	£468	NO	£1,308	NO	NO
28	£1,120	YES	£3,132	NO	NO

This table compares the summary net positions for Suppliers in the current, Proposed and Alternative Modifications:

Key:	above average
	Net Loss

Supplier	Current Net	Proposed Net	Alternative Net	Performance on SP08a
7	-£187.46	-£175.34	-£175.34	-
24	£86.85	£34.87	£9.87	97.44
19	£1.09	£0.56	-£0.06	87.24
2	£15.49	£11.87	£14.14	94.36
8	-£229.25	£3,180.32	-£2,470.04	88.51
17	-£275.26	-£305.06	-£360.00	-
31	£84.08	-£103.00	-£315.51	27.94
26	-£208.59	£170.99	-£527.90	83.67
1	-£4,770.35	-£2,943.27	-£3,322.43	83.69
5	£60.74	£106.30	-£45.73	90.46
9	£958.35	£803.06	£51.08	92.36
22	£241.74	£59.02	-£1,069.49	81.55
27	£5.44	£2.19	£0.00	-
14	-£270.53	-£644.37	-£659.90	94.78
13	£434.69	£232.83	-£9.00	80.39
23	£139.10	-£507.83	-£881.97	86.48
18	£0.00	£0.00	£0.00	-
3	-£1,442.81	-£165.29	-£434.72	65.85
30	£1,074.19	£656.40	£515.11	94.25
4	-£2.07	£3.59	-£1.30	-
21	£0.31	£0.13	£0.23	100.00
33	£390.58	£436.62	-£765.94	86.43
15	-£5,489.37	-£6,045.76	-£6,047.19	-
39	-£3,092.94	-£210.64	-£603.03	88.76
6	£11,310.15	-£3,153.92	-£3,153.92	-
38	£19,169.44	£10,581.06	£24,076.51	95.33
29	-£787.46	-£112.19	-£113.25	88.77
10	-£155.76	-£4,677.35	-£4,674.74	100.00
25	£0.00	£0.00	£0.00	-
37	-£194.25	£59.23	-£82.50	85.76
36	-£1,469.08	£74.07	-£310.43	85.53
12	-£305.13	£141.68	-£621.95	82.93
35	£9.72	£6.03	-£17.81	87.85
11	£4.83	£3.37	£2.86	100.00
36	£4.86	£1.95	£0.00	-
16	-£254.12	£0.00	£0.00	-
20	-£411.88	-£794.29	-£803.98	90.63
28	£43.64	£7.22	-£466.63	83.80