



**DRAFT MODIFICATION REPORT for Modification Proposal P216  
Audit of LLF Production**

Prepared by ELEXON

|   |                      |  |  |            |
|---|----------------------|--|--|------------|
| <b>For Decision</b>   | <b>Date of Issue</b> | <b>07 March 2008</b>   | <b>Version Number</b>  | <b>1.0</b> |
| <b>For Attention Of</b>   | <b>The BSC Panel</b> |  |  |            |
| <b>Overview or Purpose of Document:</b>   |                      |  |  |            |
| <p><b>Proposed Modification P216</b> seeks to provide additional assurance to the industry and the BSC Panel that the Line Loss Factors (LLFs) being approved, are accurate and consistent with the methodologies published. P216 proposes that this assurance is achieved by creating a set of high level principles, which LLF methodologies must be consistent with, and auditing the methodologies to check that they are compliant with the principles. In addition P216 requires that LLF calculations are audited to confirm that they follow the approved methodology and that spot checks are undertaken to confirm that the correct Line Loss Factor Class (LLFC) is applied at a Metering System level. P216 further seeks to ensure that Line Loss Factors are not changed part way through a year.</p> <p><b>Alternative Modification P216</b> seeks to allow mid year changes to site specific LLFs when there has been a material change to the site and the Panel is in agreement with the proposed change.</p> |                      |  |  |            |
| <b>BSC Panel's Recommendations</b>  |                      |  |  |            |
| Having considered and taken into due account the contents of the P216 draft Modification Report, the BSC Panel recommends:  |                      |  |  |            |
| <ul style="list-style-type: none"><li>• <b>that Proposed Modification P216 SHOULD NOT be made;</b></li><li>• <b>that Alternative Modification P216 SHOULD be made;</b></li><li>• <b>an Implementation Date for Proposed or Alternative P216 Modification of 20 April 2009 if an Authority decision is received on or before 30 September 2008, or 19 April 2010 if the Authority decision is received after 1 October 2008 but on or before 30 September 2009; and</b></li><li>• <b>the proposed text for modifying the Code, as set out in the Modification Report.</b></li></ul>  |                      |  |  |            |
| <b>Contact</b>  | <b>Ysanne Hills</b>  |  <b>ysanne.hills@elexon.co.uk</b> |  <b>0207 380 4213</b> |            |

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## Summary of Impacted Parties And Documents

As far as the Modification Group has been able to assess, the following parties/documents would be impacted by P216.

Please note that this table represents a summary of the full impact assessment results contained in Appendix 4.

| Parties                           |                                     | BSC Sections |                                     | Code Subsidiary Documents  |                                     |
|-----------------------------------|-------------------------------------|--------------|-------------------------------------|--|-------------------------------------|
| Distribution System Operators     | <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"/>            |
| Interconnectors                   | <input type="checkbox"/>            | C            | <input type="checkbox"/>            | BSC Service Descriptions   | <input type="checkbox"/>            |
| Licence Exemptable Generators     | <input checked="" type="checkbox"/> | D            | <input type="checkbox"/>            | Party Service Lines  | <input type="checkbox"/>            |
| Non-Physical Traders              | <input type="checkbox"/>            | E            | <input type="checkbox"/>            | Data Catalogues  | <input type="checkbox"/>            |
| Suppliers                         | <input checked="" type="checkbox"/> | F            | <input type="checkbox"/>            | Communication Requirements Document                              | <input type="checkbox"/>            |
| Transmission Company              | <input type="checkbox"/>            | G            | <input type="checkbox"/>            | Reporting Catalogue  | <input type="checkbox"/>            |
| Party Agents                      |                                     | H            | <input type="checkbox"/>            | Core Industry Documents  |                                     |
| Data Aggregators                  | <input type="checkbox"/>            | I            | <input type="checkbox"/>            | Ancillary Services Agreement                                     | <input type="checkbox"/>            |
| Data Collectors                   | <input type="checkbox"/>            | J            | <input type="checkbox"/>            | Data Transfer Services Agreement                                 | <input type="checkbox"/>            |
| Meter Administrators              | <input type="checkbox"/>            | K            | <input checked="" type="checkbox"/> | Distribution Code  | <input checked="" type="checkbox"/> |
| Meter Operator Agents             | <input type="checkbox"/>            | L            | <input type="checkbox"/>            | Distribution Connection and Use of System Agreement <sup>1</sup> | <input checked="" type="checkbox"/> |
| ECVNA                             | <input type="checkbox"/>            | M            | <input type="checkbox"/>            | Grid Code  | <input type="checkbox"/>            |
| MVRNA                             | <input type="checkbox"/>            | N            | <input type="checkbox"/>            | Master Registration Agreement                                    | <input type="checkbox"/>            |
| BSC Agents                        |                                     | O            | <input type="checkbox"/>            | Supplemental Agreements  | <input type="checkbox"/>            |
| SAA                               | <input type="checkbox"/>            | P            | <input type="checkbox"/>            | Use of Interconnector Agreement                                  | <input type="checkbox"/>            |
| FAA                               | <input type="checkbox"/>            | Q            | <input type="checkbox"/>            | ELEXON   |                                     |
| BMRA                              | <input type="checkbox"/>            | R            | <input type="checkbox"/>            | Internal Working Procedures                                      | <input checked="" type="checkbox"/> |
| ECVAA                             | <input type="checkbox"/>            | S            | <input type="checkbox"/>            | BSC Panel/Panel Committees                                       |                                     |
| CDCA                              | <input type="checkbox"/>            | T            | <input type="checkbox"/>            | Working Practices  | <input checked="" type="checkbox"/> |
| TAA                               | <input type="checkbox"/>            | U            | <input type="checkbox"/>            | Other  |                                     |
| CRA                               | <input type="checkbox"/>            | V            | <input type="checkbox"/>            | Market Index Data Provider                                       | <input type="checkbox"/>            |
| SVAA                              | <input type="checkbox"/>            | W            | <input type="checkbox"/>            | Market Index Definition Statement                                | <input type="checkbox"/>            |
| Teleswitch Agent                  | <input type="checkbox"/>            | X            | <input checked="" type="checkbox"/> | Connection and Use of System Code                                | <input type="checkbox"/>            |
| BSC Auditor                       | <input type="checkbox"/>            | Z            | <input type="checkbox"/>            | System Operator-Transmission Owner Code                          | <input type="checkbox"/>            |
| Profile Administrator             | <input type="checkbox"/>            |              |                                     | Transmission Licence   | <input type="checkbox"/>            |
| Certification Agent               | <input type="checkbox"/>            |              |                                     |  |                                     |
| Other Agents                      |                                     |              |                                     |  |                                     |
| Supplier Meter Registration Agent | <input type="checkbox"/>            |              |                                     |  |                                     |
| Unmetered Supplies Operator       | <input type="checkbox"/>            |              |                                     |  |                                     |
| Data Transfer Service Provider    | <input type="checkbox"/>            |              |                                     |  |                                     |

<sup>1</sup> The Group considered if there was any interaction between P216 and the Distribution Code and/or the Distribution Connection and Use of System Agreement (DCUSA). However, no actual changes to these Codes were identified.

# 1 Description of Modification

This section outlines the solution for the Proposed Modification and Alternative Modification, as developed by the P216 Modification Group ('the Group') during the Assessment Procedure.

For a full description of the original Modification Proposal as submitted by Smartest Energy ('the Proposer'), and the background to the proposal, please refer to the P216 Initial Written Assessment (IWA).

The background to the raising of P216 and details of the current BSC arrangements for approving LLFs are included in section 2 of the Assessment Report.

## 1.1 *Proposed Modification*

Throughout this section where the Panel is required to set a parameter or approve a value, the Group anticipate that the Panel will choose to delegate these tasks to the Imbalance Settlement Group (ISG) or the Supplier Volume Allocation Group (SVG).

### 1.1.1 High Level Principles

All LLF methodologies would be required to comply with the Principles described below. These Principles will form the basis of the methodology audit and will be included in a new Code Subsidiary Document (BSCP128).

- 1 All LLFs shall be calculated using a generic (non site specific) method except for:
  - a sites that are connected at Extra High Voltage (EHV)<sup>2</sup>; or
  - b where the customer has requested a site specific LLF, and the DSO is in agreement.
- 2 All LLFs shall be calculated to 3 decimal places.
- 3 All site specific LLFs shall account for technical losses only.
- 4 All generic LLFs shall account for all losses (technical and non technical<sup>3</sup>).
- 5 Site specific LLF values and the total Grid Supply Point Group (GSPG) losses shall be considered in the calculation of generic LLFs.
- 6 Generic LLFCs for Import and Export at the same site where the voltage level is the same shall have the same values.
- 7 There shall be no more than 2 Low Voltage (LV) and 2 High Voltage (HV) generic LLFC Groups<sup>4</sup> in each GSPG, and at least 1 generic EHV LLFC Group.
- 8 As a minimum, generic LLFs shall be calculated separately for day and night.
- 9 DSOs shall utilise Settlement data from a Settlement Run at R2 or greater and from a complete 12-month period, for calculating LLFs. The 12-month period to be used shall be determined by the Panel after the first year<sup>5</sup>.

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<sup>2</sup> Where EHV is as defined in the Distribution Licence.

<sup>3</sup> Where technical losses and non-technical losses will be defined during the implementation of P216.

<sup>4</sup> An 'LLFC Group' means a set of LLFCs that have the same LLFs (and will be defined as part of P216 implementation).

<sup>5</sup> For the first year's LLF submissions, after P216 is implemented the data year 1 May to 30 April will be used.

- 10 Adjustments to LLFs, to take into account historic market wide issues noted in the BSC Auditor's latest Report, can only be made if agreed to be appropriate by the Panel.
- 11 Robust error detection and correction processes shall be in place throughout the calculation of LLFs.
- 12 All generic LLFs shall be re-calculated at least every 2 years<sup>6</sup>.
- 13 All site specific LLFs shall be re-calculated when there has been a relevant change<sup>7</sup> to the site or network, and at least every 5 years<sup>8</sup>.
- 14 No changes shall be made to approved LLFs for site specific or generic LLFCs mid year. Annual updates will have an effective from date of 1 April. Where default LLFs have been applied due to an audit failure, these may be updated to the approved LLFs on a prospective basis as determined from time to time by the Panel.
- 15 No retrospective changes shall be made to approved site specific or generic LLFs other than to correct material manifest errors.

### 1.1.2 Setting Parameters

In line with Principle 9, after the first year, the Panel will approve the date range for which data should be used. The Group agreed a default date range of 1 April to 31 March (a BSC Year). The Panel will determine these dates prior to 1 June for the next BSC Year's LLFs.

For the first year, the date range would be set automatically as 1 May to 30 April for the year 1 May (year = Y-1) to 1 April (year = Y) where P216 is approved before October in year=Y. More detail on P216 implementation timescales is included in section 5.5.3 of the Assessment Report.

For Principle 10, the Panel shall approve the extent to which any historic market wide issues noted in the BSC Auditor's Report may be taken into account at the same time as determining the date range. The Group noted that the type of issues that may be picked up here are issues affecting the Settlement data that will be used in the LLF calculations, but that no longer affect the market.

### 1.1.3 Audit of LLF Methodologies

An audit of LLF methodologies will be conducted by ELEXON<sup>9</sup> and will seek to confirm that the written methodologies are consistent with the Principles set out in section 1.1.1.

There will be a larger volume of methodologies to be audited in the first year and an increased chance of audit failures. To take this into account, methodologies will be submitted to ELEXON by DSOs by 1 May and the audit process will be completed for all methodologies by 1 August in the first year.

<sup>6</sup> For the avoidance of doubt generic LLFs must be recalculated for the first LLF submission, following the implementation of P216.

<sup>7</sup> Where a relevant change (defined as part of P216) is a change that will, or is likely to, change the losses attributable to the site. Examples of these types of change include, but are not limited to: changes in the Voltage level or in site use.

<sup>8</sup> For the avoidance of doubt:

- site specific LLFs which have been recalculated in the last 5 years, would only need to be recalculated when this 5 years is up, even in if the last recalculation was completed before the implementation of P216;
- site specific LLFs which have not been recalculated in the last 5 years, would need to be recalculated for the second LLF submission following the implementation of P216; and
- new site specific LLFs (for new sites, or sites that have moved to site specific LLFs as a result of Principle 1) must be calculated for the first LLF submission following the implementation of P216.

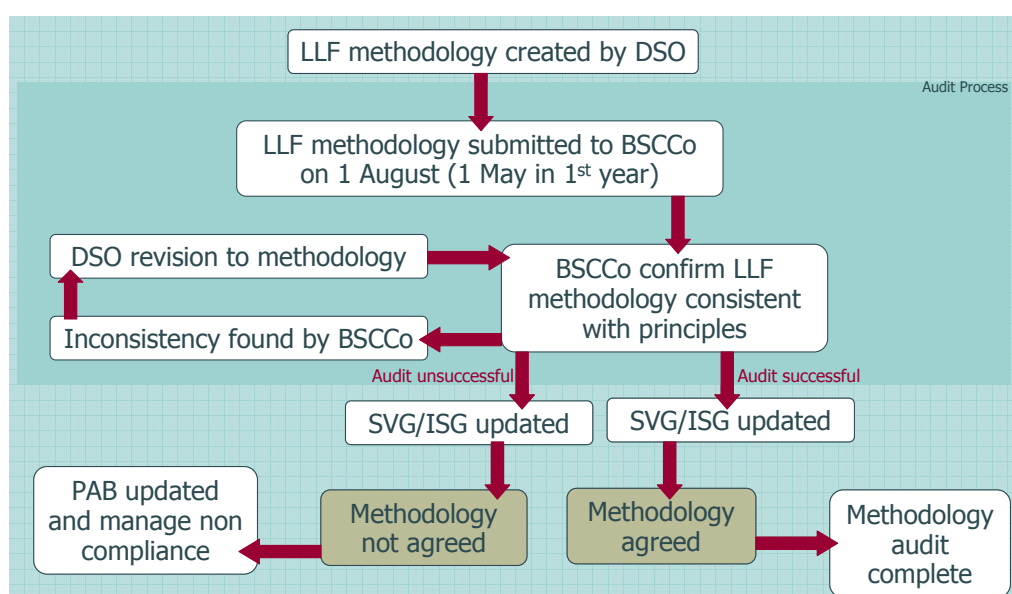
<sup>9</sup> It is noted that ELEXON may choose to sub-contract the audit process to a third party.

In subsequent audit years, only methodologies that have been revised since the previous approval will be submitted to ELEXON. DSOs would submit their methodologies before 1 August. If a methodology has not been updated, written confirmation should be sent instead of the revised methodology. Any methodology which has been changed but which has not been sent to ELEXON by 1 August (or 1 May in the first year) will be considered inconsistent with the BSC.

Once the audit process is complete, ELEXON will issue a final audit report to the DSO by 1 September (or 1 August in the first year) to either confirm that the methodology is compliant, or highlight the areas of non-compliance. The Performance Assurance Board (PAB) will be informed of the audit results and continued non-compliance would be managed through the normal PAB processes.

It is noted that the audit process itself may involve the correction and re-auditing of non-compliances, before the final audit report is issued.

The diagram below shows the high level LLF methodology audit process:



#### 1.1.4 Audit of LLF Calculations

Where it has been confirmed that an LLF methodology is consistent with the Principles (or that no methodology audit is needed), the DSO would complete the calculations for the next year's LLFs.

The LLFs would be submitted to ELEXON by 30 September (except for IDSOs who are mirroring<sup>10</sup> the host-DSOs LLFs, who would submit their LLFs on 30 October). Host-DSOs will be required to provide IDSOs the information they need to mirror LLF values, if requested.

The LLF calculations audit is carried out by ELEXON on site at DSOs. This audit seeks to ensure that LLF calculations are compliant with the BSC and consistent with the audited LLF methodology for that DSO. This audit is only required when generic LLFs have been recalculated (which will be a maximum of every 2 years for generic LLFs and 5 years for site specific LLFs).

In addition, the LLF calculations audit will include spot checks on LLFCs already applied to Metering Systems during the year to confirm that an LLFC assigned can reasonably be considered to be the correct LLFC (given the usage of that Metering System).

For clarity:

<sup>10</sup> It is noted that IDSO 'mirroring' will be defined within the BSCP.

- The audit of LLF calculations will combine the current validation checks undertaken by ELEXON and the new audit requirements in P216;
- The audit of LLF calculations is undertaken for CVA and SVA LLFs;
- The audit of LLF calculations must take place after 1 October and before 30 November;
- ELEXON will agree site visit dates with DSOs by 10 September, where a date cannot be agreed ELEXON will set a site visit date and advise the DSO of this date;
- Following the audit of LLF calculations, LLFs may be resubmitted only as a result of issues noted during the audit. Resubmissions and confirmations must be received by 31 December;
- Non compliances in LLF calculation will be reported to PAB to manage the non compliance;
- All LLFs are taken to the Panel in January for approval; and
- Following approval, CVA LLFs would be sent by ELEXON to the Central Data Collection Agent (CDCA) and SVA LLFs (in D0265 format) sent to the Supplier Volume Allocation Agent (SVAA). LLFs would then be published on the BSC Website.

#### **1.1.4.1 Audit Scope**

The audit of LLF calculations will be carried out for each DSO and will include the following checks (it is noted that some of these checks may be performed before the site visit, if appropriate):

- 1 Confirm all LLFs submitted have effective from dates of 1 April;
- 2 Confirm that SVA LLFs were submitted by a Category X Signatory
- 3 Confirm that CVA LLFs were submitted by a Category P Signatory;
- 4 Confirm all LLFs submitted are calculated to 3 decimal places;
- 5 For SVA LLFs, confirm that the D0265 file is in accordance with the format defined in the Data Transfer Catalogue (DTC);
- 6 Confirm that the number of Settlement Periods for each Settlement Date matches the number of LLFs submitted for that date;
- 7 Confirm that all SVA LLFC IDs submitted are entered in MDD or an application has been made to do so and that LLFs have been submitted for all LLFCs contained in MDD;
- 8 Conduct a validation check, which will pick out:
  - a all SVA LLFs which are  $<0.000$  or  $>1.250$ ;
  - b all CVA LLFs which are  $<0.000$  or  $>1.999$
  - c all revised SVA LLFs which are  $>\pm 20\%$  of last years value<sup>11</sup>;
  - d all revised CVA LLFs which are not within  $-50\%$  to  $+100\%$  of the last years value; and
  - e all new sites with new LLFs (that were not included in last year's submission).

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<sup>11</sup>It is noted that there may be an increased number of LLFs picked up in the first year due to potential changes in LLF methodologies resulting from P216.

The auditor (ELEXON) may request that LLFs that fail validation be highlighted to the DSO for comment.

- 9 Check a representative sample (which is determined by Panel, based on risk assessments and will include LV, HV, EHV and site specific LLFs) of LLFs to confirm that they have been calculated in accordance with the audited methodology. This check will be performed at the DSOs offices, and will include discussions with the DSO and consideration of the audit trail.
- 10 Check a representative sample of Metering Systems (which is determined by Panel, based on risk assessments and will include LV, HV, EHV and site specific LLFs) to confirm that the correct LLFC has been applied. This check will be performed at the DSOs offices. For clarity, this check will look at the application of an LLFC to Metering Systems during the last year.

#### **1.1.4.2 Following the Site Visit**

Within 5WDs of the site visit, ELEXON will provide the DSO a site visit report detailing any non-compliance identified during the audit, or confirming that no issues were identified.

It is noted that the audit process itself may involve the correction and re-auditing of non-compliances, before the final audit report is issued.

By 31 December the DSO will either confirm that the original LLFs should be used or send the revised LLFs, confirming that the non-compliances identified in the audit have been corrected and that no other changes have been made.

Following receipt of the revised submissions/confirmations ELEXON will draft papers for the Panel recommending that:

- all LLFs that have passed the methodology and calculation audits are approved;
- all LLFs that have failed one aspect of the audit are not approved (no detail is provided as to which aspect was failed);
- for all non approved LLFs a default value is used. This default is the last LLF which has been approved. Where no LLF has been approved, the default should be the generic LLFs for that voltage level (from the relevant GSPG)<sup>12</sup>. A default value of 1.000 may be used if there are no previous values and no generic LLFs available.

Following receipt of the revised submissions/confirmations, ELEXON will draft a paper for the PAB. This paper will identify the details of all non-compliances noted during the audit. PAB will manage the non-compliances under the P207 risk based error correction processes.

ELEXON will submit the approved LLFs to CDCA and SVAA as appropriate, and then will publish the LLFs on the ELEXON website and issue a Circular.

#### **1.1.4.3 Resolved Non-Compliances**

All non-compliances should be corrected by 1 April (or before the effective from date). Where an audit failure is confirmed as corrected by the PAB after 1 April, the Panel may choose to approve the revised data and confirm that it may be used prospectively for the rest of the year.

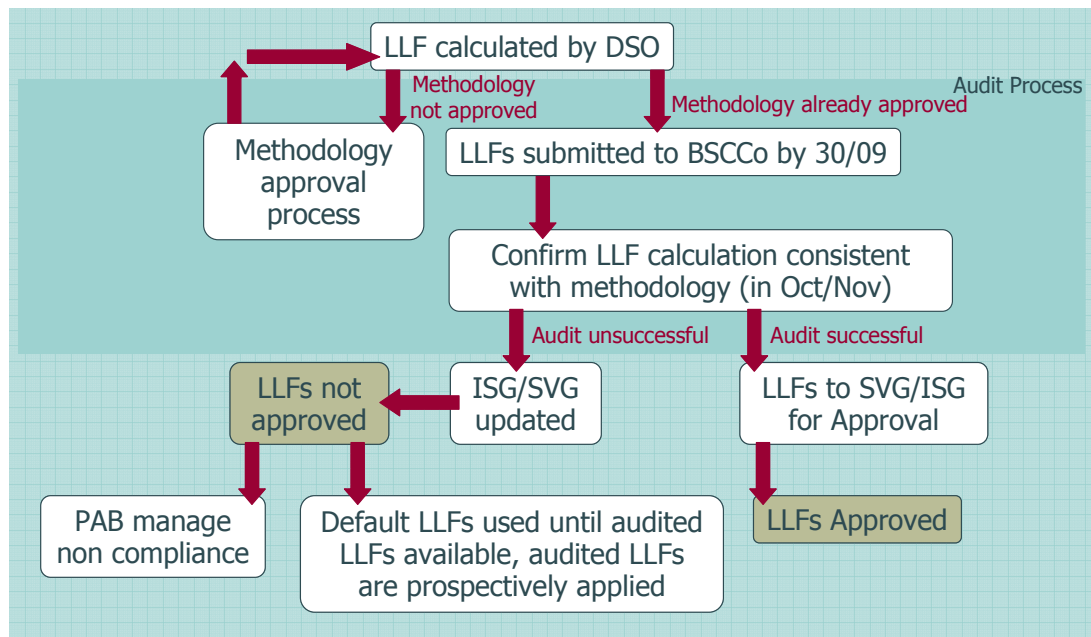
#### **1.1.4.4 Process Diagram**

The diagram below shows the high level LLF calculation audit process:

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<sup>12</sup> It is noted that this represents a change to the default rules for both SVA and CVA.





#### 1.1.4.5 New LLFs for New Sites

**SVA:** When a new Metering System is created during the year, this site will need to have LLFs assigned to it, these LLFs must be calculated using the latest approved and audited methodology.

For new Metering Systems that are assigned to an existing LLFC no submission or audit is required. However, where a new Metering System is assigned entirely new LLFs (e.g. a new site specific set of LLFs), the LLFs must then be audited before they are approved by the Panel.

The new LLFs audit process is the same as the process described in section 1.1.4, except for checks 9 and 10, which are excluded. In normal circumstances a site visit would not be required.

The timings for this audit will be shifted, depending on when the LLFs are needed in Settlement. Each new set of LLFs that does need to be audited would have to be submitted at least 50WDs before the effective from date of the LLFs.

Changes would not be made to LLFs for existing Metering Systems during the year.

**CVA:** For CVA, all new LLFs will need to be submitted and audited (whether the site is being assigned LLFs equivalent to the generic LLFC for that Voltage or site specific LLFs) before they are approved by the Panel.

The new LLFs audit process is the same as the process described in section 1.1.4, except for checks 9 and 10, which are excluded. In normal circumstances a site visit would not be required.

The timings for this audit will be shifted, depending on when the LLFs are needed in Settlement. Each new set of LLFs that does need to be audited would have to be submitted at least 50WDs before the effective from date of the LLFs.

Changes would not be made to LLFs for existing Metering Systems during the year.

#### 1.1.5 Summary of the Timetable For LLF Approval

The timetable below pulls together the timescales for each of the audit processes described above, in sections 1.1.2 to 1.1.4.5.

| Date   | Action  |
|--|---|
| <b>Methodologies Audit</b>   |   |
| Year 1: by 1 May   | Methodologies submitted to ELEXON   |
| Year 1: by 1 August  | Methodologies audit complete  |
| Year >1: by 1 August   | Any amended methodologies submitted to ELEXON   |
| Year >1: by 1 September  | Amended methodologies audit complete  |
| <b>Calculations Audit</b>  |   |
| By 30 September  | LLFs submitted to ELEXON for calculations audit                                       |
| By 30 October  | All IDSO 'mirroring' LLFs submitted   |
| Between 1 October and 30 November  | Calculations audits conducted by ELEXON on site at DSOs                               |
| Within 5WDs of the end of the site visit                                 | Final audit calculation report sent to DSO by ELEXON                                  |
| By 31 December   | Revised LLFs submitted, or confirmation that original LLFs should be used sent by DSO |
| In January   | Paper taken to the Panel to approve LLFs or the use of defaults                       |
| <b>New Sites</b>   |   |
| At any time during the year and $\geq 50$ WDs before effective from date | LLFs for a new Metering System submitted (where the LLFC doesn't exist)               |
| $\geq 50$ WDs before effective from date                                 | Calculations audits conducted by ELEXON   |
| $\geq 45$ WDs before effective from date                                 | Final audit calculation report sent to DSO by ELEXON                                  |
| $\geq 40$ WDs before effective from date                                 | Revised LLFs submitted, or confirmation that original LLFs should be used sent by DSO |
| $>40$ WDs before effective from date                                     | Paper taken to the Panel to approve LLFs or the use of defaults                       |

## 1.2 *Alternative Modification*

The P216 Alternative is identical to the Proposed solution except for rewording Principle 14, and the addition of Principle 16. Principle 14 would read:

- 14 No changes shall be made to approved generic LLFCs mid year. Annual updates will have an effective from date of 1 April. Where default LLFs have been applied due to an audit failure, these may be updated to the approved LLFs on a prospective basis as determined from time to time by the Panel.

The new Principle 16 would read:

- 16 Changes shall only be made to approved site specific LLFs mid year if:

- a there has been a material change affecting the site; and
- b the revised LLFs have been approved by the Panel.

Annual updates will have an effective from date of 1 April. Where default LLFs have been applied due to an audit failure, these may be updated to the approved LLFs on a prospective basis as determined from time to time by the Panel.

In effect this would mean that site specific LLFs can be changed mid year. Any mid year changes to site specific LLFs would not be subject to a full audit prior to their use, but would be approved by the Panel; and would be subject to the next full annual audit processes.

## **2 Areas Raised By the Terms Of Reference**

### **2.1 *Definition Procedure***

The following areas were considered by the Modification Group during the Definition Procedure for P216:

- the scope and aims of each of the audits suggested;
- how inaccurate LLFs might impact on GSP Group Correction Factor, how significant any impact is for Settlement and the appropriateness of assessing this issue under P216;
- whether the rules for LLF methodologies should be Code defined (and constructed by the Modification Group as part of the Modification) or approved and amended from time to time by, for example, a Panel Committee; and
- confirm that the audits proposed are within the scope of the BSC, as opposed to any other governance arrangements.

These issues are discussed in the Definition Report, which is available to download from the [P216 page of the ELEXON website](#), and are not covered further here.

### **2.2 *Assessment Procedure***

The following areas were considered by the Modification Group during the Definition and Assessment Procedures for P216:

- who should conduct each of the audits and checks described in P216 (e.g. an existing or new BSC Agent/service provider or ELEXON) and to whom reports should be provided to;
- the detailed scope, approach and timing for each of the checks described in P216 and how these could be changed in the future;
- the procedure to be followed if an LLF fails one or more audits, including any default rules;
- the rules/principles to be included in the BSC which LLF methodologies must comply with, and the level of detail that these rules should go into (what LLFs represent (i.e. the actual or technical losses on a line) should be defined, potentially as part of these rules);
- any changes needed to the process for new LLFs being approved during the course of the year;
- the differences between SVA and CVA LLFs and whether the differences identified lead to variances in audit approach;
- analyse the number and types of Metering Systems in the existing LLFC groupings;
- any interaction with approved Modifications, such as P197 ('SVA Qualification Processes Review') and P207 ('Introduction of a new governance regime to allow a risk based Performance Assurance Framework (PAF) to be utilised and reinforce the effectiveness of the current PAF');
- costs-benefits analysis - whether the perceived risk to Settlement justifies the impact/cost of providing each of the suggested audits, and the level of detail of the LLF Principles) (including

undertaking analysis to see how changes in the LLF values impact Settlement (volumes and GSPGCF) and Parties);

- conclude whether a common LLF methodology should be determined;
- consider the impact of P216 on Independent Distributor Networks ; and
- Confirmation that there is not a conflict between the P216 solution and the Licence requirement 4A.2B on Distributors

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

### 3 Implementation Approach and Costs (Proposed And Alternative)

| PROPOSED MODIFICATION IMPLEMENTATION COSTS  |                                 |
|---|---------------------------------|
| <b>ELEXON Implementation Cost</b>   | <b>176 man days<br/>£38,720</b> |
| It is noted that ELEXON has looked at automating LLF validation processes as part of an operational systems upgrade. ELEXON believe that the cost of building a system to create the D0265 file (which would be in addition to the above costs) is not substantive. |                                 |
| PROPOSED MODIFICATION ONGOING SUPPORT AND MAINTENANCE COSTS   |                                 |
| <b>Total ELEXON Annual Operational Cost</b>   | <b>£ 25,960 per annum</b>       |
| It is noted that this cost will vary from year to year, based on how many DSOs submit new methodologies to be audited and how large the audit sample sizes are (which will be determined by the Panel each year).   |                                 |

#### a BSC Agent Impact

No impact identified.

#### b BSC Party and Party Agent Impact

**Distributors:** Where costs were provided, these ranged from £100,000 to £120,000 per DSO, to implement P216 and an ongoing annual cost of £50,000 to £60,000 per DSO to support the audit processes introduced by P216.

DSOs requested between 1 and 2+ years to implement P216 (unless there is a dispensation from Principle 1 for the first year).

**Suppliers:** No costs were provided in the Impact Assessment. Suppliers requested between 6 and 12 months to implement P216.

#### c Transmission Company Impact

No impact identified.

#### d BSCCo Impact

**Implementation:** New BSCP drafting, walk through, process testing/definition.

**Ongoing:** undertaking the new audits (including: site visits, validation processes, drafting papers, resolving discrepancies).

## 4 Rationale For Modification Group's Recommendations to The Panel

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

### 4.1 *Summary of the Potential Benefits and Aims of P216*

The Group noted that the key aims of P216 are to:

- increase the transparency in the way that LLFs are calculated and assigned; and
- introduce the consistency in LLFs across GSPGs, both in terms of the calculation and the type of LLF assigned to a given type of Metering System.

It was noted that these benefits are not easily quantified in terms of cost savings.

Site specific LLFs are calculated using analysis for a specific site. The type of load flow analysis will vary between GSPGs, with no one type of analysis considered to be particularly more accurate than others.

Generic LLFs are calculated by ascertaining the overall losses for an entire GSPG (after taking into account the site specific LLFs applied) and then assigning these losses to Metering Systems based on their Voltage level and usage type. The assumptions made will vary between GSPGs, due to differences in the physical network, the types of customer connected and the overall losses.

The way that LLFs are calculated means that it is impossible to work out the 'correct' LLF value for each site for a half hour across a GSPG. This means it is not possible to quantify the current error in LLFs. As a result, the Group noted that the analysis undertaken does not demonstrate that there are currently material inaccuracies in the way that LLFs are calculated. In addition, this analysis does not demonstrate that there are no material inaccuracies either.

The Group looked instead to calculate the size of the potential impact of changes to LLFs on GSPGCF and Supplier volumes. The results of this analysis are described in section 5.1 of the Assessment Report, along with the views of those who responded to the Assessment Consultation. It is noted that the view of participants were split as to whether this analysis indicates that realistic differences exist between the way the LLFs are assigned and whether this is materially significant (both between GSPGs and between years).

The Group noted a view that the Annual Demand Ratio (ADR) trends do not suggest an issue with the current LLFs. It was further noted that the ADR trend would not identify any individual LLF inaccuracies, where the overall level of losses was unchanged.

P216 seeks to reduce the volatility of LLFs by:

- increasing the similarity of the LLF methodologies used by DSOs (by requiring that the LLF methodology Principles are used, and auditing to confirm that they have been);
- requiring that any changes to LLF methodology Principles is completed through the BSC Change Proposal process;
- removing the ability to change LLFs mid year (generic LLFs only for the Alternative solution);
- using more realistic default LLF values, where the calculated value is not available;
- checking a sample of Metering Systems to ensure that the correct LLFC has been applied.

LLF methodologies are already required to be published. P216 would increase the transparency of LLF calculations by requiring the calculations be audited to confirm that they are consistent with the published methodology.

The Group noted that the burden of recalculating LLFs as a result of P216 will fall mainly on DSOs, without there being clear benefits of the P216 solution for DSOs. DSOs could choose to pass these costs on, through the price control process.

The Group noted that the Ofgem Codes Review is currently ongoing, and confirmed that P216 has been assessed against the current Codes baseline.

## **4.2 *Assessment of Proposed Modification against Applicable BSC Objectives***

### **4.2.1 Modification Group's Initial Discussions**

The initial **MAJORITY** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared to the current Code baseline, for the following reasons:

#### **Applicable BSC Objective (c)**

- effective competition would not be improved, as there is already a level playing field in the way that methodologies are published and LLFs approved;
- the potential materiality of any error associated with inaccurate LLFs has not been proven and stable ADR values imply that any issues are not of significance; and
- generation sites could be unfairly and negatively impacted as a result of Principle 6 (where generic LLFCs for Import and Export at the same site are required to have the same LLF values), and Principle 15 (where no retrospective changes to LLFs would be allowed).

#### **Applicable BSC Objective (d)**

- the administration of the balancing and settlement arrangements would be less efficient due to the increased costs of the audit processes.

The **MINORITY** view, that Applicable Objectives (c) and (d) **WOULD** be better facilitated by the Proposed Modification, was supported for the following reasons:

#### **Applicable BSC Objective (c)**

- analysis shows that Suppliers will be impacted in different ways by changing LLF values. While the extent of the impact is open to debate, the variance between different types of Supplier is significant and will negatively affect competition;
- audits will provide Suppliers with assurance that the originally applied LLF values are correct; and disallowing retrospective changes will give Suppliers increased confidence in their expected imbalance position.

#### **Applicable BSC Objective (d)**

- high level principles will provide increased transparency in the way that LLFs are derived for use in Settlement.

The Group unanimously agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b). Some Group members also felt that there would be a neutral impact on Applicable BSC Objective (d).

The Group noted that the Proposer was unable to be present at the meeting when views on the Applicable BSC Objectives were discussed; and that he continued to support the P216 Proposed Modification.

#### **4.2.2 Views of Respondents to Assessment Procedure Consultation**

The **SLIGHT MAJORITY** view of respondents to the Assessment Procedure consultation was that the Proposed Modification **WOULD NOT** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared with the existing Code baseline.

The **SLIGHT MINORITY** view of respondents to the Assessment Procedure consultation was that the Proposed Modification **WOULD** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared with the existing Code baseline.

The arguments expressed in the consultation responses (both for P216 and against) were the same as those expressed by the Group in their initial discussions described in section 4.2.1.

#### **4.2.3 Modification Group's Conclusions**

The Modification Group was **SPLIT** over whether the Proposed Modification would better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared with the existing Code baseline.

Those Group members who did not support the Proposed Modification reiterated the arguments previously expressed against P216.

Those Group members who supported the Proposed Modification reiterated the arguments previously expressed in support of P216, and added the following argument:

##### **Applicable BSC Objective (c)**

- the relatively low implementation costs of P216 mean that the benefits of increased transparency and consistency are justified.

The Group unanimously agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

### ***4.3 Assessment of Alternative Modification against Applicable BSC Objectives***

#### **4.3.1 Alternative Modification compared with Proposed Modification**

##### ***4.3.1.1 Views of the Modification Group***

The Modification Group was **SPLIT** over whether the Alternative Modification would better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared with the Proposed Modification.

Those Group members who did support the Alternative Modification over the Proposed Modification did so for the following reasons:

##### **Applicable BSC Objective (c)**

- errors in site specific LLFs can be corrected more quickly than for the Proposed Modification. This increases the accuracy of Settlement.

Those Group members who did not support the Alternative Modification over the Proposed Modification did so for the following reasons:

#### **Applicable BSC Objective (c)**

- there is increased uncertainty for Suppliers in LLF values. If an LLF changes unexpectedly mid-year the Supplier will be unable to update their contracts in time to reflect the change. This means that individual Suppliers will be advantaged or disadvantaged during the year, and there will not be a level playing field.

The Group unanimously agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

### **4.3.2 Alternative Modification compared with Existing Code Baseline**

#### **4.3.2.1 Modification Group's Views**

The Modification Group was **SPLIT** over whether the Alternative Modification would better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared with the existing Code baseline.

Those Group members who did support the Alternative Modification over the existing Code baseline did so for the same reasons as they supported the Proposed Modification.

Those Group members who did not support the Alternative Modification existing Code baseline did so for the same reasons as they did not support the Proposed Modification.

The Group unanimously agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

### **4.4 Final Recommendation to the Panel**

On the basis of the above assessment, the Modification Group were:

- **SPLIT** on whether the Proposed Modification should or should not be made;
- **SPLIT** on whether the Alternative Modification better facilitates the Applicable BSC Objectives when compared to the Proposed Modification; and
- **SPLIT** on whether the Alternative Modification should or should not be made;

Anonymised details of how the Group voted are included below.

|                          | Proposed     | Alternative vs. Proposed | Alternative vs. Baseline |
|--------------------------|--------------|--------------------------|--------------------------|
| Group Member 1           | ✓            | ✗                        | ✓                        |
| Group Member 2           | ✓            | ✗                        | ✓                        |
| Group Member 3           | ✓            | ✗                        | ✓                        |
| Group Member 4           | ✗            | ✓                        | ✗                        |
| Group Member 5           | ✗            | ✓                        | ✗                        |
| Group Member 6           | ✗            | ✓                        | ✗                        |
| <b>Overall View</b>      | <b>SPLIT</b> | <b>SPLIT</b>             | <b>SPLIT</b>             |
| Attendee 1 <sup>13</sup> | ✓            | ✗                        | ✓                        |

<sup>13</sup> The attendee expressed the same arguments as the Group in terms of the Applicable BSC Objectives.



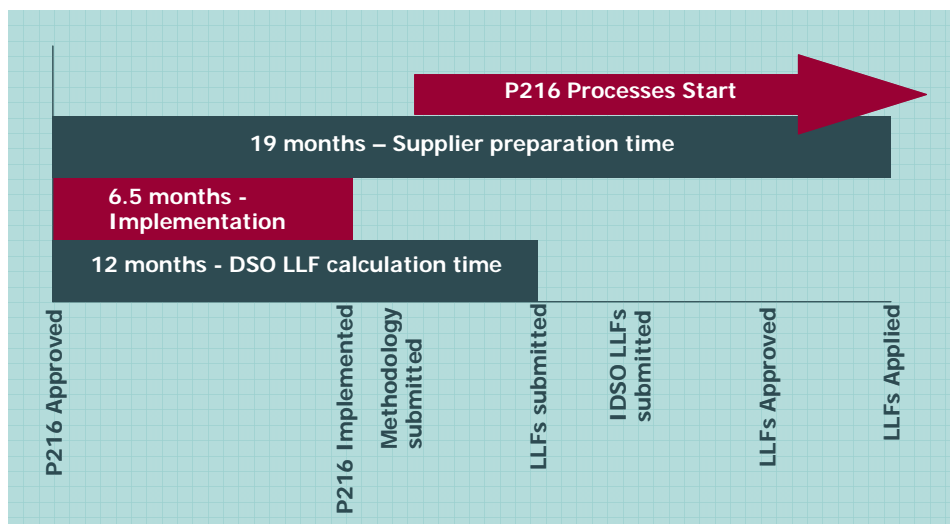
## 4.5 Implementation Date

The Modification Group agreed the following recommended implementation approach for P216:

- An Implementation Date for the Proposed and Alternative Modification of 20 April 2009 if an Authority decision is received on or before 30 September 2008; or
- An Implementation Date for the Proposed and Alternative Modification of 19 April 2010 if an Authority decision is received on or before 30 September 2009.

The Group noted that DSOs will need some time to calculate site specific LLFs for all those sites required to have them by Principle 1. The Group noted that some of these calculations could be undertaken before P216 has been implemented, but after it has been approved.

The Group noted the range of 1-2 year's implementation time was requested by DSOs. The Group agreed that DSOs should have at least 12 months' notice, before they are required to submit LLFs which are compliant with the Principles.



The Group agreed that if P216 were approved, ELEXON would, at the start of the implementation period issue a letter to all DSOs, highlighting the implementation timescales, and hold an education seminar for DSOs to explain how the P216 implementation process will work.

The Group noted that the implementation of P216 is highly unusual, as DSOs are recommended to start calculating LLFs for the new processes before they have been implemented. The Group agreed that this approach is justified, as it significantly reduces the implementation timescales (as the P216 processes start in May each year).

The Group noted that implementing P216 in late April also makes the implementation simpler, as it means that the previous submission will have already been made.

## 4.6 Legal Text

The P216 Group has reviewed and agreed the draft legal text, which can be found in Attachments 1 and 2.

The Group noted that Principles 10 and 14 have been included in the legal text, and included in the BSC. Initially the Group intended that none of the Principles would be included in the BSC. However, Principles 10 and 14 have been included for the following reasons.

Principle 10 has been included because it represents a new requirement on the BSC Panel, in authorising DSOs to make adjustments to their LLF methodologies, due to market wide issues.

Principle 14 has been included because it formed part of the original Modification Proposal. The legal text for the Alternative Modification is slightly different within this section, to allow site specific LLFs to change mid year.

## **5 Rationale for Panel's Recommendations to the Authority**

### **5.1 *Panel's Consideration of Assessment Report***

The Panel considered the P216 Assessment Report at its meeting on 14 February 2008. This section summarises the Panel's discussions in formulating its provisional recommendation for inclusion in the draft Modification Report.

#### **5.1.1 Assessment Procedure Consultation Responses**

The Panel considered the P216 report and noted a number of observations from the Panel Distribution representative. It was acknowledged that the Modification had been borne of concerns that had been raised by some Suppliers' regarding the inconsistent way LLFs are applied by different DSOs and experience of LLFs changing mid year, which results in an impact on Settlement volumes (and costs) but cannot be recovered through Supplier contracts. It was recognised that P216 was intending to introduce consistency and assurance through the use of audits and Principles.

The Panel welcomed the development of the Principles and noted this was good progress by the Modification Group. The Distribution representative reiterated these comments and observed that these Principles would be a useful starting point for any further work on LLFs should P216 not be approved. The Distribution representative indicated he did not believe the Applicable BSC Objectives were better met by this change and drew the Panel to the comments from respondents, and some Group members, that indicated that no material error has been proven in the calculation of LLFs. He further noted that there is no incentive on Distributors to apply LLFs in a particular way and that all Suppliers would be impacted by shifts in the way LLFs are calculated. The Group had not sought to determine the potential impact on Group Correction Factors and Annual Demand Ratios recognising this was a significant task, with no guarantee of any firm conclusions given the range of 'errors' that contribute to GCF and ADRs.

The Panel acknowledged that P216 did not prove any materiality in the current LLFs and that there is no 'right' answer for LLFs, and that values are dependent upon the way that total losses are recovered within a network using the published methodology.

The Distribution representative noted that P216 would involve costs for all DSOs. Whilst DSOs may revise LLF methodologies in future (and therefore incur costs anyway) P216 had the additional audit elements that would require greater central resource as well as DSO involvement in audit activities. The Panel noted the costs to DSOs and the central costs but felt that the benefits of consistency and transparency outweighed these costs.

It was noted that there has been some historic concerns from the Panel and its committees that they were approving LLF values with little certainty that such values were appropriate and that other Settlement inputs normally have such validation processes. It was felt that the P216 processes would allow for the Panel to approve LLF submissions with the increased assurance that

the values were being calculated in a consistent manner and that they had been through an audit process.

The Panel discussed the benefit of the Alternative solution permitting some amendments to LLF values and, like the Group, were split on whether it was appropriate to allow changes to approved LLFs.

## **5.1.2 Applicable BSC Objectives**

The Panel provided similar views for both the Proposed and Alternative Modification Proposals (noting the only difference was the ability to prospectively amend site specific LLFs). The Panel unanimously agreed that both the Proposed and Alternative Modifications better facilitated Applicable Objectives (c) and (d) and differed only on their view of which was better. A slight majority felt the Alternative better facilitated as it permitted the revision of LLFs prospectively and therefore had more flexibility. For this reason the Panel recommends the Alternative Modification be made and not the Proposed.

### **5.1.2.1 Proposed Modification**

The **UNANIMOUS** provisional view of the Panel was that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared with the existing Code baseline, for the same reasons as set out in Section 4 by those who supported the Modification:

#### **Applicable BSC Objective (c)**

- analysis shows that Suppliers will be impacted in different ways by changing LLF values. While the extent of the impact is open to debate, the variance between different types of Supplier is significant and will negatively affect competition;
- audits will provide Suppliers with assurance that the originally applied LLF values are correct; and disallowing retrospective changes will give Suppliers increased confidence in their expected imbalance position.

#### **Applicable BSC Objective (d)**

- high level principles will provide increased transparency in the way that LLFs are derived for use in Settlement.

The Panel agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

### **5.1.2.2 Alternative Modification compared with Proposed Modification**

The **MAJORITY** provisional view of the Panel was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared with the existing Code baseline, for the same reasons as set out in Section 5.1.2.1 plus the following reason stated in the Assessment Report:

#### **Applicable BSC Objective (d)**

- errors in site specific LLFs can be corrected more quickly than for the Proposed Modification. This increases the accuracy of Settlement.

The Panel agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b) when compared with the Proposed Modification.

### 5.1.2.3 *Alternative Modification compared with Existing Code Baseline*

The **UNANIMOUS** provisional view of the Panel was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared with the existing Code baseline, for the same reasons as set out in Section 5.1.2.1 plus the following reason stated in the Assessment Report:

#### **Applicable BSC Objective (d)**

- errors in site specific LLFs can be corrected more quickly than for the Proposed Modification. This increases the accuracy of Settlement.

The Panel agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b) when compared with the Proposed Modification.

### 5.1.2.4 *Provisional recommendation to the Authority*

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

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

### 5.1.3 **Implementation Date**

The Panel asked to confirm if the Implementation approach considered the current processes for DSOs submitting LLFs and it was confirmed that the timetable had been build around those processes. The Panel had no further comment on the Implementation Date and agreed the proposed Implementation approach outlined in Section 4.5

### 5.1.4 **Legal Text**

The Panel reviewed the draft text and agreed that it delivers the changes identified by the Proposed and Alternative Modification Proposal.

## 5.2 *Results of Report Phase Consultation*

### 5.2.1 **Summary of Responses**

A summary of the 10 consultation responses received is provided in the table below. A more detailed summary of how each respondent responded to questions 1 and 2 is included in section 5.2.2.

| Q | Question  | Summary of Responses   |                             |                       |
|---|---|--|-----------------------------|-----------------------|
|   |   | Yes  | No                          | Neutral <sup>14</sup> |
| 1 | Do you agree with the Panel's provisional recommendation to | 7 respondents  | 3 respondents <sup>15</sup> | 0 respondents         |
|   |   | <b>Arguments for the Proposed - Respondents stated that:</b> <ul style="list-style-type: none"> <li>• Reducing retrospective changes is beneficial in reducing Suppliers'</li> </ul> |                             |                       |

<sup>14</sup> Views have been collated into this column when there was no comment, the view was neutral or the respondent was unsure.

<sup>15</sup> All 3 respondents had a preference for the Proposed over the Alternative.

| Q | Question   | Summary of Responses   |                             |                       |
|---|--|--|-----------------------------|-----------------------|
|   |  | Yes  | No                          | Neutral <sup>14</sup> |
|   | the Authority contained in the draft Modification Report that Proposed Modification P216 <b>SHOULD NOT</b> be made?  | contractual risk; and <ul style="list-style-type: none"> <li>Increased transparency in LLF calculations and more accurate determination of LLFs would facilitate accurate customer pricing and more accurate allocation of settlement volumes, promoting competition.</li> </ul> <b>Arguments against the Proposed - Respondents stated that:</b> <ul style="list-style-type: none"> <li>Existing processes are fit for purpose and there is no strong case for justifying P216, as the potential materiality of any LLF inaccuracy has not been proven; and</li> <li>More certainty in LLF values is provided, but this reduces LDSOs flexibility to deal with events as they arrive (no mid year changes).</li> </ul>  |                             |                       |
| 2 | Do you agree with the Panel's provisional recommendation to the Authority contained in the draft Modification Report that Alternative Modification P216 <b>SHOULD</b> be made? | 2 respondents  | 8 respondents <sup>16</sup> | 0 respondents         |
|   |  | <b>Arguments for the Alternative - Respondents stated that:</b> <ul style="list-style-type: none"> <li>We prefer the Alternative, as LLFs can be changed mid year and so are more accurate; and</li> <li>Enough assurance is provided within P216 Alternative to allow site specific LLFs to change in the circumstances set out.</li> </ul> <b>Arguments against the Alternative - Respondents stated that:</b> <ul style="list-style-type: none"> <li>There is not sufficient evidence of the need for P216 and no issue with LLFs is indicated by ADR/GSPGCF. Furthermore the ability of LLFs to distort competition is very weak;</li> <li>The Principles may reduce future innovation (e.g. requiring Import and Export to have the same LLF may prevent the losses being reflected accurately);</li> <li>Further work is required on the Principles before they are fit for purpose. Additionally more consideration should be given to the perceived benefits before a conclusion can be reached. It is noted that no costs resulting from the defect were provided by Suppliers;</li> <li>P216 places additional burdens on LDSOs without any evidence that it will improve competition. Additional work will be needed to revise site specific LLFs, and to provide support to the auditor. The process of assigning LLFs will also be lengthier, due to the audit processes;</li> <li>The Principles do not achieve any benefit - LDSOs have no incentive to produce inaccurate LLFs;</li> <li>Principle 6 distorts competition and will force the use of inaccurate LLFs; and</li> <li>The analysis undertaken during P216 assessment was inconclusive, and any distortions attributable to LLFs are likely to be far less than other issues (e.g. profiling).</li> </ul> |                             |                       |
| 3 | Do you agree with the Panel's provisional recommendation concerning the Implementation Date for P216?  | 6 respondents  | 2 respondents               | 2 respondents         |
|   |  | <b>Support for an early implementation - Respondents stated that:</b> <ul style="list-style-type: none"> <li>The earliest possible implementation is preferred (April 2009); and</li> <li>It is unfortunate that 2009 is the earliest implementation date, although we agree that it does appear realistic.</li> </ul> <b>Concerns that the timescale is too tight - Respondents stated that:</b>  |                             |                       |

<sup>16</sup> 6 respondents felt that neither Proposed nor Alternative should be made and 2 felt that the Proposed was preferable, but that the Alternative is better than the Baseline. Further detail is provided in section 5.2.2. below.

| Q | Question  | Summary of Responses   |               |                       |
|---|---|--|---------------|-----------------------|
|   |   | Yes  | No            | Neutral <sup>14</sup> |
|   |   | <ul style="list-style-type: none"> <li>The implementation dates are probably achievable, but will be tight for LDSOs particularly in relation to the recalculation of site specific LLFs;</li> <li>Recalculating all of our SVA EHV LLFs would not be achievable by year 1; and</li> <li>Given the scale of the change involved for LDSOs we believe an April 2010 implementation date would be more realistic.</li> </ul>   |               |                       |
| 4 | Do you agree with the Panel's view that the legal text provided in the draft Modification Report delivers the solution for P216 Proposed and Alternative? | 6 respondents  | 1 respondent  | 3 respondents         |
|   |   | <p><b>Neutral Comment:</b> One respondent stated that they would have preferred to see the High Level Principles in the BSC itself.</p> <p><b>Disagree Comment:</b> One respondent stated that a draft of BSCP128 is needed before we can provide an informed response.</p>  |               |                       |
| 5 | Are there any further comments on P216 that you wish to make?   | 6 respondents  | 4 respondents | 0 respondents         |
|   |   | <p><b>Arguments for P216 - Respondents stated that:</b></p> <ul style="list-style-type: none"> <li>P216 provides greater assurance, which is needed because LLFs represent a significant risk to settlements (financial effects of LLFs are felt under the BSC).</li> <li>P216 is consistent with Ofgem's desire to bring about greater equitability for the treatment of distributed energy.</li> <li>Increased transparency, consistency, auditability and improved accuracy would be provided by either Proposed or Alternative.</li> <li>ISG have raised this issue to the Panel and Ofgem on numerous occasions. As an ISG member I believe P216 is vital.</li> <li>P216 provides a set methodology that will result in correct LLFs; this will increase transparency, enhance competition and therefore benefit customers.</li> <li>It is unfortunate that P216 has been needed, as LDSOs have had the opportunity to work on the basis of an agreed methodology and have not pursued it. Further Modification(s) could look at charging LDSOs specifically for administering the audit processes.</li> </ul> <p><b>Arguments against P216 - Respondents stated that:</b></p> <ul style="list-style-type: none"> <li>The burden of implementing P216 will fall mainly on LDSOs, but there is no detail showing how LDSOs could pass these costs on.</li> <li>As a LDSO we would be significantly impacted by P216, with significant cost arising from the recalculation of SVA EHV LLFs.</li> <li>Both proposals would result in significant costs being incurred by LDSOs, without any visible benefit.</li> <li>The Modification reduces LDSOs ability to act when losses change.</li> <li>Principle 6 is flawed (the same LLFs for Import and Export) and unjustified and may conflict with CP1189 ('Changes to allow LLFs less than 1').</li> </ul> <p><b>Issue Group:</b></p> <ul style="list-style-type: none"> <li>3 respondents supported the setting up of an Issue Group to consider: <ul style="list-style-type: none"> <li>The High Level Principles;</li> <li>Cost and benefits of the High Level Principles; and</li> <li>Other ways to address the defect.</li> </ul> </li> </ul> <p><b>Other Comments:</b></p> |               |                       |

| Q | Question | Summary of Responses  |    |                       |
|---|----------|---|----|-----------------------|
|   |          | Yes   | No | Neutral <sup>14</sup> |
|   |          | <ul style="list-style-type: none"> <li>4 decimal places would be preferable for CVA sites.</li> <li>When default values are set BSCP128 should recognise the offset of Working Days to non-Working Days and the desirability of choosing accurate values to be used.</li> <li>It is noted that the rejection of the Proposed by the Panel, would disenfranchise Parties from an appeal if the Authority rejects the Proposed Modification; despite the unanimous agreement of the Panel that the Proposed is better than the Baseline.</li> <li>Some terms in the High Level Principles will need to be defined; including these in the BSC would add clarity.</li> </ul> |    |                       |

Full copies of the consultation responses can be found in Attachment 3.

### 5.2.2 Detailed Summary of Respondents Views on Question 1 and 2

This table seeks to provide additional clarity to the summaries for Questions 1 and 2 in the above table. Where a dash is used, this indicates that the respondent did not state a preference within their response.

- a Is the Proposed Modification better than the current baseline?
- b Is the Alternative Modification better than the current baseline?
- c Is the Alternative better than the Proposed Modification?

| Respondent                         | a                             | b  | c  |
|------------------------------------|-------------------------------|--|--|
|                                    | Proposed vs. Baseline         | Alternative vs. Baseline                       | Alternative vs. Proposed                       |
| Smartest Energy                    | ✓                             | ✓  | ✗  |
| Central Networks                   | ✗                             | ✗  | -  |
| Scottish and Southern              | ✗                             | ✗  | -  |
| CE Electric                        | ✗                             | ✗  | -  |
| British Energy                     | ✓                             | -  | ✗  |
| SAIC (on behalf of Scottish Power) | ✗                             | ✗  | -  |
| Western Power Distribution         | ✗                             | ✗  | -  |
| Waters Wye Associates              | ✓                             | ✓  | ✓  |
| Electricity North West             | ✗                             | ✗ <sup>17</sup>                                | ✓ <sup>17</sup>                                |
| TMA                                | ✗                             | ✓  | ✓  |
| <b>Totals</b>                      | <b>3 Agree<br/>7 Disagree</b> | <b>3 Agree<br/>6 Disagree<br/>1 No Comment</b> | <b>3 Agree<br/>2 Disagree<br/>5 No Comment</b> |

### 5.3 Results of a Final Review of the P216 Legal Text

After further internal review of the legal text, the Legal Team have advised that the term "Distribution System Operator" (DSO) should be replaced with "Licensed Distribution System Operator" (LDSO) in the draft legal text for both the Proposed and Alternative solutions.

This is because P216 does not seek to shift the obligation to submit the Line Loss Factors from LDSOs (as currently) to DSOs. Therefore the correct term which must be used in the draft legal text is LDSO. Both legal texts have therefore been amended to reflect this. Essentially this has

<sup>17</sup> This response has been updated following clarification from Electricity North West.

required the word "Licensed" to be inserted before the term "Distribution System Operator" throughout both documents.

#### **5.4 *Panel's Consideration of Draft Modification Report***

This section will be updated following the Panel's consideration of the Draft Modification Report.

#### **5.5 *Panel's Final Recommendation to the Authority***

This section will be updated following the Panel's consideration of the Draft Modification Report.

### **6 Terms Used In This Document**

Other acronyms and defined terms take the meanings defined in the Code.

| Acronym/Term        | Definition  |
|---------------------|---|
| ADR                 | Annual Demand Ratio: ADR is a measure of the variation between the total annual profiled Non Half Hourly (NHH) consumption and the total annual metered NHH consumption (as deduced from GSP Group Takes and HH consumption). |
| CVA                 | Central Volume Allocation   |
| DSO                 | Distribution System Operator (Independent or Licensed)  |
| DTC                 | Data Transfer Catalogue   |
| EATL                | EA Technology Limited   |
| EHV                 | Extra High Voltage - over 22kV or at a substation with a primary voltage of 66kV or above.  |
| Embedded Generation | Term used for any electricity generating plant that is connected to a distribution network. These networks are owned and operated by the DSOs.  |
| GSP                 | Grid Supply Point   |
| GSPGCF              | Grid Supply Point Group Correction Factor   |
| HV                  | High Voltage - a voltage typically exceeding 1000 Volts and less than 22kV.   |
| IDSO                | Independent Distribution System Operator  |
| ISG                 | Imbalance Settlement Group  |
| LDSO                | Licensed Distribution System Operator   |
| LLF                 | Line Loss Factor  |
| LLFC                | Line Loss Factor Class  |
| PAB                 | Performance Assurance Board   |
| SVA                 | Supplier Volume Allocation  |
| SVG                 | Supplier Volume Allocation Group  |
| TAA                 | Technical Assurance Agent   |

### **7 Document Control**

#### **7.1 *Authorities***

| Version | Date     | Author       | Reviewer                                 | Reason for review    |
|---------|----------|--------------|--|----------------------|
| 0.1     | 14/02/08 | Ysanne Hills | David Jones                              | For technical review |
| 0.3     | 19/02/08 | Ysanne Hills | BSC Parties and other interested parties | For consultation     |



| Version | Date     | Author          | Reviewer    | Reason for review    |
|---------|----------|-----------------|-------------|----------------------|
| 0.4     | 04/02/08 | Ysanne Hills    | David Jones | For quality review   |
| 0.5     | 06/03/08 | Ysanne Hills    | Sarah Jones | For technical review |
| 1.0     | 07/03/08 | Change Delivery | N/A         | For Panel decision   |

## 7.2 References

| Ref. | Document Title   | Owner                      | Issue Date    | Version       |
|------|--|----------------------------|---------------|---------------|
| 1    | <a href="#">Trading Operations Report (presented to the August 2007 Panel)</a>   | ELEXON                     | August 2007   | August 2007   |
| 2    | <a href="#">SVG Paper SVG/38/480</a>   | ELEXON                     | 22/03/04      | 22/03/04      |
| 3    | <a href="#">SVG Paper SVG/40/011</a>   | ELEXON                     | 21/05/04      | 21/05/04      |
| 4    | <a href="#">NEDL Use of System Charges Statements</a>  | CE Electric                | July 2007     | July 2007     |
| 5    | <a href="#">YEDL Use of System Charges Statements</a>  | CE Electric                | July 2007     | July 2007     |
| 6    | <a href="#">Central Networks East Charging Statement</a>   | Central Networks           | April 2007    | April 2007    |
| 7    | <a href="#">Central Networks West Charging Statement</a>   | Central Networks           | April 2007    | April 2007    |
| 8    | <a href="#">London Network Charging Statement</a>  | EDF Energy                 | October 2007  | October 2007  |
| 9    | <a href="#">East of England Network Charging Statement</a>   | EDF Energy                 | October 2007  | October 2007  |
| 10   | <a href="#">South East England Network Charging Statement</a>  | EDF Energy                 | October 2007  | October 2007  |
| 11   | <a href="#">Scottish Hydro Electric Power Distribution Charging Statement</a>  | Scottish & Southern Energy | July 2007     | July 2007     |
| 12   | <a href="#">Southern Electric Power Distribution Charging Statement</a>  | Scottish & Southern Energy | October 2007  | October 2007  |
| 13   | <a href="#">SP Distribution Charging Statement</a>   | Scottish Power             | August 2007   | August 2007   |
| 14   | <a href="#">SP Manweb Charging Statement</a>   | Scottish Power             | April 2007    | April 2007    |
| 15   | <a href="#">United Utilities' Use of System Charges Statements</a>   | United Utilities           | April 2006    | April 2006    |
| 16   | <a href="#">WPD South West Charging Statement</a>  | Western Power Distribution | April 2007    | April 2007    |
| 17   | <a href="#">WPD South Wales Charging Statement</a>   | Western Power Distribution | April 2007    | April 2007    |
| 18   | <a href="#">Distributed Energy – Initial Proposals for More Flexible Market and Licensing Arrangements Ofgem Reference: 295/07</a> | Ofgem                      | December 2007 | December 2007 |

## Appendix 1: Legal Text

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

Draft legal text for the Alternative Modification [if applicable] is attached as a separate document, Attachment 2.

## Appendix 2: Process Followed

Copies of all documents referred to in the table below can be found on the [P216 page of the BSC Website](#).

| Date     | Event   |
|----------|---|
| 30/07/07 | Modification Proposal raised by Smartest Energy                 |
| 09/08/07 | IWA presented to the Panel                                      |
| 03/09/07 | First Definition Procedure Modification Group meeting held      |
| 06/09/07 | Second Definition Procedure Modification Group meeting held     |
| 12/09/07 | Definition Procedure Consultation issued                        |
| 18/09/07 | Definition Procedure consultation responses returned            |
| 21/09/10 | Third Definition Procedure Modification Group meeting held      |
| 11/10/07 | Definition Report presented to the Panel                        |
| 22/10/07 | First Assessment Procedure Modification Group meeting held      |
| 13/11/07 | Second Assessment Procedure Modification Group meeting held     |
| 20/11/07 | Third Assessment Procedure Modification Group meeting held      |
| 05/12/07 | Fourth Assessment Procedure Modification Group meeting held     |
| 12/12/07 | Fifth Assessment Procedure Modification Group meeting held      |
| 13/12/07 | Interim Report presented to the Panel                           |
| 19/12/07 | Sixth Assessment Procedure Modification Group meeting held      |
| 20/12/07 | Consultation issued for industry consideration                  |
| 20/12/07 | Requirements Specification issued BSC Agent impact assessment   |
| 20/12/07 | Request for Party/Party Agent impact assessments request issued |
| 20/12/07 | Request for Transmission Company analysis issued                |
| 20/12/07 | Request for ELEXON impact assessment issued                     |
| 15/01/08 | Consultation responses returned                                 |
| 15/01/08 | BSC Agent impact assessment returned                            |
| 15/01/08 | Party/Party Agent impact assessments returned                   |
| 15/01/08 | Transmission Company analysis returned                          |
| 15/01/08 | ELEXON impact assessment returned                               |
| 18/01/08 | Seventh Assessment Procedure Modification Group Meeting         |
| 24/01/08 | Eighth Assessment Procedure Modification Group Meeting          |
| 14/02/08 | Assessment Report Presented to the Panel                        |

| ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL <sup>18</sup>  |                          |
|---|--------------------------|
| Please note: these costs are for the Assessment Procedure only. The estimated costs for the Definition Procedure were provided in the Initial Written Assessment and were approximately £16,000 in total. |                          |
| Meeting Cost  | £ 3,500                  |
| Legal/Expert Cost   | £ 8,000                  |
| Impact Assessment Cost  | £ 12,000                 |
| ELEXON Resource   | 130 man days<br>£ 40,000 |

The above costs are as highlighted in the Definition Report. It is noted that the actual costs of the P216 Assessment may be higher than these values due to an additional questionnaire which was used to better understand the current LLF methodologies, and the analysis undertaken being more time consuming than expected.

### Appendix 3: Assessment Report

The P216 Assessment Report is attached as a separate document, Attachment 4.

For the purposes of the Report Phase consultation and the Panel's consideration of the draft Modification Report, the P216 Assessment Report can be found on the [P216 page of the ELEXON website](#).

The Assessment Report includes:

- The conclusions of the Modification Group regarding the areas set out in the P216 Terms of Reference;
- Details of the Group's membership;
- The full results of the Assessment Procedure impact assessment; and
- Full copies of all responses to the Assessment Procedure consultation.

### Appendix 4: Report Phase Consultation Responses

The report phase consultation responses are attached separately in Attachment 3.

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<sup>18</sup> Clarification of the meanings of the cost terms in this appendix can be found on the BSC Website at the following link: [http://www.elexon.co.uk/documents/Change\\_and\\_Implementation/Modifications\\_Process\\_-\\_Related\\_Documents/Clarification\\_of\\_Costs\\_in\\_Modification\\_Procedure\\_Reports.pdf](http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf)