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**Balancing and Settlement Code**

**BSC Procedure**

**BSCP128 - Appendix 1**

**Methodology Self Assessment Document (MSAD) for Host LDSOs and  
Embedded LDSOs that do not Mirror**

**Version 2.0**

**Effective Date: 24 June 2010**

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**BSCP128 - Appendix 1****Relating to****Methodology Self Assessment Document (MSAD) for Host LDSOs and Embedded LDSOs that do not Mirror**

1. Reference is made to the Balancing and Settlement Code (the Code) for the Electricity Industry in Great Britain and, in particular, to the definition of "BSC Procedure".
2. This is BSCP128 Appendix 1, Version 2.0 relating to the Methodology Self Assessment Document (MSAD) for Host LDSOs and Embedded LDSOs that do not Mirror.
3. This BSC Procedure Appendix is effective from 24 June 2010.
4. This BSC Procedure has been approved by the Panel.

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**AMENDMENT RECORD**

| Version | Date     | Description of Changes | Changes Included | Mods/ Panel/ Committee Refs |
|---------|----------|------------------------|------------------|-----------------------------|
| 1.0     | 20/04/09 | First Published        | P216             | 153/04                      |
| 2.0     | 24/06/10 | June 10 Release        | CP1326           | ISG111/03<br>SVG111/01      |

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## CONTENTS

|     |                           |   |
|-----|---------------------------|---|
| 1.  | INTRODUCTION              | 5 |
| 1.1 | General Information       | 6 |
| 1.2 | Methodology Applicability | 7 |
| 1.3 | Principles Review         | 8 |

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**1. INTRODUCTION****Objectives of the MSAD**

The Audit of Line Loss Factors seeks to provide additional transparency and consistency regarding the calculation and application of Line Loss Factors (LLFs) used in Settlement by creating a set of high level principles, which all LLF methodologies (created by Licensed Distribution System Operators (LDSOs)) must adhere to. The principles are detailed in BSCP128 'Production, Submission, Audit and Approval of Line Loss Factors'.

Licensed Distribution System Operators require a review of the methodologies used to calculate LLFs to ensure that they are consistent with the principles. This Methodology Self Assessment Document (MSAD) is designed to gather factual information about the LLF Methodology and the Principles (as detailed in section 3.1 of BSCP128) that it complies with.

For any defined terms see BSCP128. All defined terms are initially capitalised. Any other terms please refer to the Balancing Settlement Code.

**Guidance for completing the MSAD**

The MSAD has been split into three sections as follows:

**1.1 General Information**

This section should be completed in full in respect of all questions.

**1.2 Methodology Applicability Section.**

LDSOs should provide information to which GSP Groups the Methodology applies to.

**1.3 Principles Assessment Section.**

This section contains a series of questions, for each of which guidance is provided in order to either provide clarification or to set out the areas the response should address. It is only required to be completed where a new methodology is submitted or there has been a change to an existing methodology.

The LDSO should also indicate what evidence is available to support the responses given. This evidence will need to be available to BSCCo for the review take place.

References to 'systems' within the MSAD do not relate solely to the functionality of computer hardware and software, but extend to the supporting business and operational processes (including manual processes). The term 'development' in relation to a system refers to either the development of a new system or to any significant changes or upgrades in respect of an existing system.

The final question in this section is not mandatory and is provided so that Applicants can provide any additional information that they consider to be relevant to their methodology and MSAD submission.

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**1.1 General Information****Distribution Company Name**

We confirm that:

- the Line Loss Factor Methodology Self-Assessment Document (MSAD) is true, complete and accurate and not misleading because of any omission or ambiguity or for any other reason; and
- in our opinion, the arrangements as documented are adequate and appropriate for the provisions under the Balancing and Settlement Code Section K and BSCP128 'Production, Submission, Audit and Approval of Line Loss Factors.

**Authorised Signature****Name of Authorised Signatory****(Category X as per BSCP38 'Authorisations')****Password****Date****VERIFICATION OF DETAILS**      *To be completed by BSCCo*

DATE RECEIVED \_\_\_\_\_

NAME AND PASSWORD/SIGNATURE VALID (Y/N) \_\_\_\_\_

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**1.2 Methodology Applicability**

**Please attach a copy of the methodology statement and provide the following details:**

Methodology Statement Name

Publication Date

Version No.

**Distribution Area(s) (GSP Group(s)) to which methodology is applicable to:**

**Has the methodology changed from the previous submission? If yes please provide a description of the change.**

In the remainder of this document the methodology detailed above will be referred to as 'the methodology'.

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| <b>1.3 Principles Review</b>   |   |                          |   |
|--|---|--------------------------|---|
| Question   | Guidance  | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in methodology |
| 1a. Sites that are connected at EHV shall have Site Specific LLFs. How does the methodology comply with this principle?  | EHV – Extra High Voltage and Site Specific are defined in BSCP128 please refer to the defined terms.<br><br>Evidence should include how the LDSO determines sites to be connected at EHV.                     |                          |   |
| 1b. Where the customer has requested Site Specific LLFs and the LDSO is in agreement with this request the LDSO shall calculate and assign a Site Specific LLF. How does the methodology comply with this principle? | Evidence will be required to detail correspondence between the customer and the LDSO. The relevant MSIDs shall also be provided.  |                          |   |
| 2. All LLFs must be calculated to at least 3 decimal places (d.p.) and submitted to 3 d.p. How does the methodology comply with this principle?  | Evidence shall be provided to clearly state that the LLFs will be calculated to at least 3 decimal places.  |                          |   |
| 3. All Site Specific LLFs shall account for Technical Losses only. How does the methodology comply with this principle?  | ‘Technical Losses’ is defined in BSCP128 please refer to the defined terms.<br><br>The LDSO should include a high level description of the calculation method and model used to calculate Site Specific LLFs. |                          |   |

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| <b>1.3 Principles Review</b>   |   |                          |   |
|--|---|--------------------------|---|
| Question   | Guidance  | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in methodology |
| 4. Generic LLFs shall account for all Losses (Technical and Non Technical) in the distribution area. How does the methodology comply with this principle?                            | <p>'Technical' and 'Non Technical losses' are defined in BSCP128 please refer to the defined terms.</p> <p>The LDSO should include a high level description of the calculation method and model used to calculate Generic LLFs.</p> |                          |   |
| 5. Site Specific LLFs and the total GSP Group losses shall be considered in the calculation of Generic LLFs. How does the methodology comply with this principle?                    | Evidence shall be provided on how the calculation uses both losses associated with MSIDs with Site Specific LLFs and Settlement Data of the relevant GSP Group losses.  |                          |   |
| 6. Non-EHV Generic LLFCs for Import and Export at the same site where the voltage level is the same shall have the same values. How does the methodology comply with this principle? | Examples of evidence can include MSIDs for sites with Import and Export at the same voltage.  |                          |   |
| 7a. There shall be no more than 2 Low Voltage (LV) LLFC Groups, in each GSP Group. How does the methodology comply with this principle?  | <p>Low Voltage is defined in BSCP128, please refer to the defined terms.</p> <p>Evidence should include the LLFC Groups used.</p>   |                          |   |

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| 1.3 Principles Review  |   |                          |   |
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| Question   | Guidance  | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in methodology |
| 7b. There shall be no more than 2 High Voltage (HV) LLFC Groups, in each GSP Group. How does the methodology comply with this principle? | High Voltage is defined in BSCP128, please refer to the defined terms.<br><br>Evidence should include the LLFC Groups used.   |                          |   |
| 7c. There shall be at least 1 Generic EHV LLFC Group in each GSP Group. How does the methodology comply with this principle?             | EHV – Extra High Voltage is defined in BSCP128, please refer to the defined terms.<br><br>Evidence should include the LLFC Group(s) used.   |                          |   |
| 8. As a minimum, Generic LLFs shall be calculated separately for Day and Night. How does the methodology comply with this principle?     | ‘Day and Night’ is defined in BSCP128 please refer to the defined terms.<br><br>The methodology statement will be required to define ‘Day and Night’, LDSOs may also have greater granularity above ‘Day and Night’.<br><br>Evidence will require a specific statement from the methodology and its location. |                          |   |

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| 1.3 Principles Review   |   |                    |   |
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| Question  | Guidance  | LDSO Response: Y/N | Reference to supporting evidence in methodology |
| 9. LDSOs shall utilise Settlement data from a Settlement Run at R3 or greater and from a complete 12-month period, for calculating Generic LLFs. The 12-month period to be used shall be the BSC Year <sup>1</sup> 3 years prior to the BSC Year for which the LLFs are being calculated.<br><br>How does the methodology comply with this principle? | Evidence shall be provided on what data the methodology specifies the calculation to use  |                    |   |
| 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. How does the methodology comply with this principle?   | Evidence shall be provided on how the methodology takes into account any Panel decisions with regards to market issues and the calculation of LLFs. |                    |   |
| 11. Robust error detection and correction processes shall be in place throughout the calculation and submission of LLFs. How does the methodology comply with this principle?   | Evidence shall be provided on what quality management systems and control techniques the methodology describes in the calculation of LLFs           |                    |   |

<sup>1</sup> This principle only applies to the calculation of Generic LLFs. The BSC Year is 1 April to 31 March, for LLFs applying in April 2011 the Settlement Data will cover the 2008 BSC Year, 1 April 2008 to 31 March 2009.

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| <b>1.3 Principles Review</b>   |  |                          |   |
|--|--|--------------------------|---|
| Question   | Guidance   | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in methodology |
| 12. All Generic LLFs shall be re-calculated at least every 2 years? How does the methodology comply with this principle?   | Evidence shall be provided on the frequency of re-calculation or criteria used to determine how often the Generic LLFs are calculated.   |                          |   |
| 13. All Site Specific LLFs shall be re-calculated when there has been a relevant change to the site or network, and at least every 5 years? How does the methodology comply with this principle?   | Evidence shall be provided on the frequency of re-calculation or criteria used to determine how often Site Specific LLFs are calculated. |                          |   |
| 14. No changes shall be made to approved Generic LLFs 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 replaced with approved LLFs on a prospective basis as determined when the LLFs resubmitted by the LDSO have been approved by the Panel.<br><br>How does the methodology comply with this principle? | The principle must be included in the methodology statement.   |                          |   |

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| 1.3 Principles Review  |  |                          |   |
|--|--|--------------------------|---|
| Question   | Guidance   | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in methodology |
| 15. No retrospective changes shall be made to approved Site Specific LLFs or Generic LLFs.<br><br>How does the methodology comply with this principle?   | The principle must be included in the methodology statement.   |                          |   |
| 16. Changes shall only be made to approved Site Specific LLFs mid year if there has been a material change affecting the site; and the revised LLFs have been approved by the Panel.<br><br>How does the methodology comply with this principle?   | The principle must be included in the methodology statement.   |                          |   |
| <u>17. Where the usage profile for a given site contains insufficiently large consumption or generation volumes to enable calculation of realistic Site Specific LLFs then a default calculation, or default replacement process shall be undertaken.</u><br><br><u>How does the methodology comply with this principle?</u> | <u>An Audit trail of LLFCs where such a default has been undertaken, together with the rationale for defaulting, shall be maintained and be available to the BSCCo auditor upon request.</u> |                          |   |

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| <b>1.3 Principles Review</b>   |   |                          |  |
|--|---|--------------------------|--|
| Question   | Guidance  | LDSO<br>Response:<br>Y/N | Reference to supporting evidence in<br>methodology |
| Is there any additional detail you would like to add to your response? | Additional information that supports the review of the Methodology Statement can be added here or appended to the document. |                          |  |

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