



**Proposed Redlined BSCP128 text for Issue 65 'Causes and treatment of large Line Loss factors'**

This Issue proposes changes to section 3. We have redlined these changes against Version 7.0.

*Amend section 3 as follows:*

## **SUPPORTING INFORMATION**

### **3.1 LLF Methodology Principles**

All LLF methodologies are required to comply with the Principles described below:

1. LLFs shall be calculated using a generic (non Site Specific) method except for:
  - (a) Sites that are connected at Extra High Voltage (EHV); or
  - (b) Where the customer has requested a Site Specific LLF, and the LDSO is in agreement.
2. All LLFs shall be calculated to at least 3 decimal places and submitted 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).
5. Site Specific losses and the total Grid Supply Point Group (GSPG) losses shall be considered in the calculation of Generic LLFs.<sup>1</sup>
6. Non-EHV Generic LLFs 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, in each GSPG, and at least 1 Generic EHV LLFC Group.
8. As a minimum, ~~all Generic~~ LLFs shall be calculated separately for Day and Night.
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>2</sup> 3 years prior to the BSC Year for which the LLFs are being calculated.
10. Adjustments to calculation or application of 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 and submission of LLFs.
12. All Generic LLFs shall be re-calculated at least every 2 years.

<sup>1</sup> This principle allows Site Specific Losses to be calculated individually or in aggregate and then used in the calculation of Generic LLFs.

<sup>2</sup> This principle only applies to the calculation of Generic LLFs. The BSC Year is 1 April to 31 March, LLFs for use in the BSC Year commencing 1 April 2011 should be calculated using the Settlement Data from the 2008 BSC Year, 1 April 2008 to 31 March 2009.

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.<sup>3</sup>
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.
15. No retrospective changes shall be made to approved Site Specific or Generic LLFs other than to correct material manifest errors.
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. 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.
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.

### **3.2 Guidelines for the approval of LLF Values**

The BSCCo will employ the following guidelines in its submission of LLFs to the Panel for approval:

- (a) The methodology employed by the LDSO has been approved;
- (b) The LLF values have been calculated in accordance with the approved methodology;
- (c) The LLF values have been audited and any outstanding non-compliance(s) have been resolved; and
- (d) Where appropriate, default LLF values are provided in accordance with Section 3.3 below.

LLF values that fail any part of the audit shall not be approved.

### **3.3 Use of Default Values**

For all non-approved Site Specific LLFs and Generic LLFs default values shall be applied in the order of precedence below:

- (a) The values shall be the last approved LLFs;

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<sup>3</sup> Appendix 3.4 provides clarification on how this should be implemented.

- (b) Where there are no previously approved Site Specific LLFs, the default values shall be the approved Generic LLFC Group LLFs for the equivalent voltage level;
- (c) Where there are no previously approved Generic LLFs, the default values shall be set to 1.000 (unity);

Default values shall continue to apply until such time as the LDSO submits a set of LLFs which are approved by the Panel, whereupon the new approved LLFs shall be applied on a prospective basis only;

For existing Site Specific LLFs or a Generic LLFC Group the previously approved LLFs shall continue to apply until such time as the LDSO submits a new set of LLFs which are approved by the Panel, whereupon the new approved LLFs shall be applied on a prospective basis only.

The default LLFs are applied on the equivalent Seasonal Time of Day (SToD)<sup>4</sup> basis, for example, the previously approved LLFs for a 'Night' SToD period will be the default LLFs for a Night SToD period in the next year.

If, after attempting to apply the rules in (b) to (c), there is no data available from the corresponding Settlement Period in the previous year, a default LLF of 1.000 shall be applied.

In each instance, the default LLFs shall only be replaced by approved LLFs notified in accordance with Section 2.3.21.

### **3.4 Recalculation of LLFs**

The LDSO shall employ the following guidelines when recalculating LLFs:

- (a) Site Specific LLFs which have been recalculated in the last 5 years, will only need to be recalculated when this 5 years is complete, even if the last recalculation was completed before 20 April 2009;
- (b) Site Specific LLFs which have not been recalculated in the last 5 years prior to 20 April 2009, will need to be recalculated for the second LLF submission following this date; and
- (c) 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 20 April 2009.

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<sup>4</sup> STOD (Seasonal Time of Day) Distribution losses vary according to the time the power is taken by the customer. Typically there will be different LLFs for Day, Night, Summer Day and Winter Day and Winter Peak times. The STOD periods are specified in the LDSO's methodology statement.

### 3.5 LLF Calculation Audit Scope

The LLF Calculation audit<sup>5</sup> covers the checks outlined below:

1. Confirm all LLFs submitted have effective from dates of 1 April;
2. Confirm that CVA and SVA LLFs were submitted by a Category X Signatory;
3. Confirm all LLFs submitted are calculated to at least 3 decimal places and submitted to 3 decimal places (as per Principle 2);
4. Confirm data files are in the correct formats:
  - (a) For CVA LLFs, confirm that the long and/or short format files are in accordance with the format defined in Appendix 6;
  - (b) For SVA LLFs, confirm that the D0265 file is in accordance with the format defined in the Data Transfer Catalogue (DTC) in Appendix 7.
5. Confirm that the number of Settlement Periods for each Settlement Date matches the number of LLFs submitted for that date;
6. 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;
7. Conduct a validation check, which will pick out<sup>6</sup>:
  - (a) All SVA LLFs which are  $<0.750$  or  $>1.250$ .
  - (b) All CVA LLFs which are  $<0.750$  or  $>1.250$ .
  - (c) All revised SVA LLFs which are outside a range specified as:  
 $\{\text{last year's LLF minus } 20\% \text{ of last year's loss}^7\}$  to  $\{\text{last year's LLF plus } 20\% \text{ of last year's loss}\}$ ;

Examples:

- (i) if last year's LLF was 1.050, the valid range for this year would be 1.040 – 1.060; and
- (ii) if last year's LLF was 0.950, the valid range for this year would be 0.940 – 0.960.
- (d) All revised CVA LLFs which are outside a range specified as:  
 $\{\text{last year's LLF minus } 50\% \text{ of last year's loss}^7\}$  to  $\{\text{last year's LLF plus } 100\% \text{ of last year's loss}\}$ ;

<sup>5</sup> BSCCo will use a LLF validation system to conduct a number of the validation checks as outlined in this section.

<sup>6</sup> For checks 7(a) to 7(e) BSCCo shall compare the value submitted by the LDSO with a previous factor for a similar time period.

<sup>7</sup> The loss refers to the proportion of energy lost as a result of electricity flowing through the Distribution System.

Examples:

- (i) if last year's LLF was 1.050, the valid range for this year would be 1.025 – 1.100; and
  - (ii) if last year's LLF was 0.950, the valid range for this year would be 0.900 – 0.975.
- (e) All sites with new CVA or SVA Site Specific LLFs (that were not included in last year's submission).

(f) All site specific SVA or CVA LLFs for which a default calculation, or default replacement had been applied;

Examples:

- (i) if for a given STOD period/periods instead of Settlement consumption or generation data, a set energy threshold was applied (e.g. 200 kVA); or
- (ii) if for a given STOD period/periods generic LLF values were applied.

8. Check a representative sample of LLFs to confirm that they have been calculated in accordance with the audited methodology. This check may be performed at the LDSO's offices, and will include discussions with the LDSO and consideration of the audit trail.