

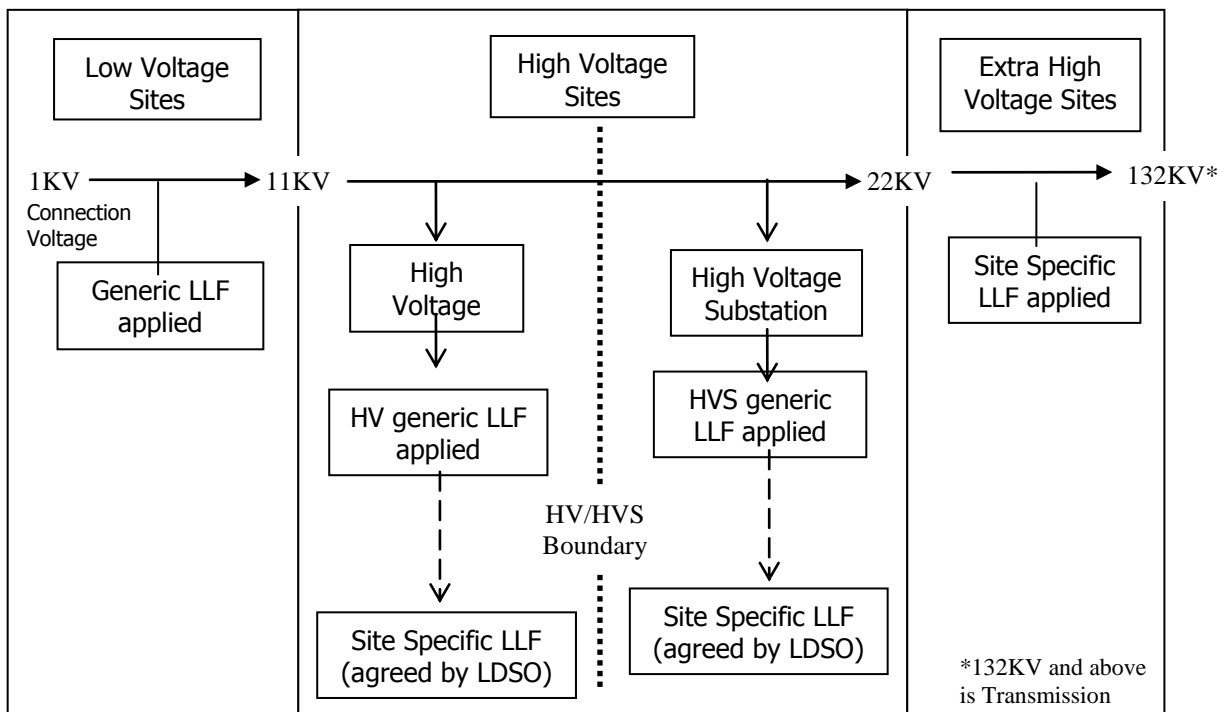
**Title:** Appropriate Line Loss Factors for High Voltage Customers metered at primary substations

**Description of Problem/Issue**

The type of Line Loss Factor (LLF) applied to a customer depends on the metering voltage and connection point to the Distribution Network.

Under the current rules, a High Voltage Customer metered at a primary substation (HVS Customer) is allocated a HVS generic LLF. A High Voltage Customer metered lower down the Distribution Network (i.e. not at a primary substation) is allocated a HV generic LLF. Both HV and HVS customers can request a Site Specific LLF from the LDSO.

The diagram below provides an overview of how LLFs are applied.



This allocation of LLFs is in accordance with BSCP128<sup>1</sup> section 3.1 ‘LLF Methodology Principles’ Principle 1:

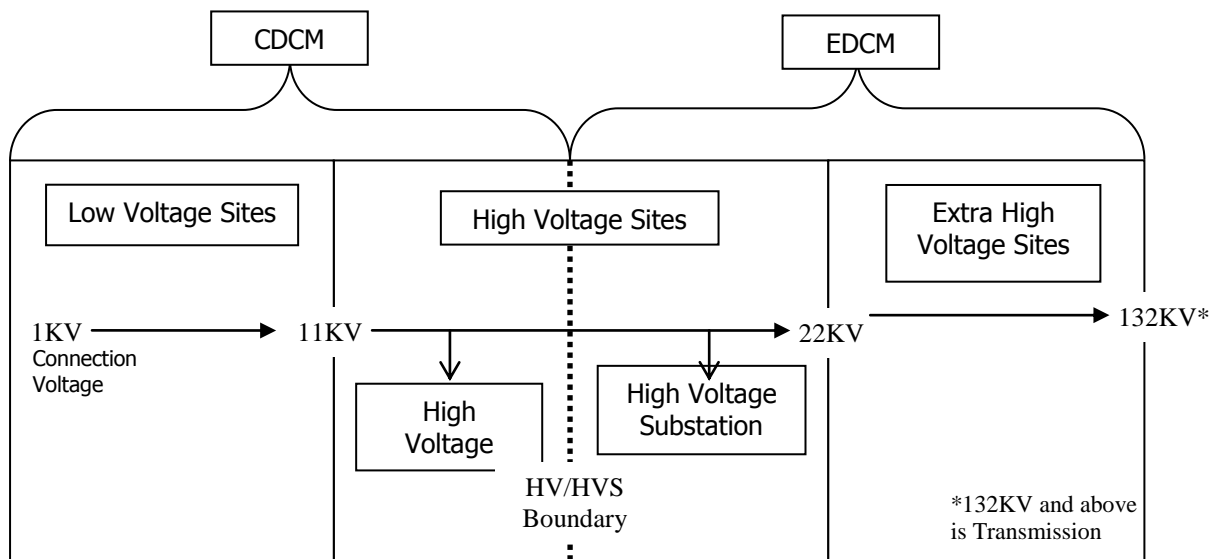
- “1. LLFs shall be calculated using a generic (non Site Specific) method except for:
- (a) Sites that are connected at Extra High Voltage (EHV); or
  - (b) Where the customer has requested a Site Specific LLF, and the LDSO is in agreement.”

On the 17 December 2010, the Authority directed changes to the Standard Licence Conditions (SLC) 13A<sup>2</sup>.5 50<sup>3</sup>.10, 50A<sup>4</sup>.11 and 13B<sup>5</sup>.6 bringing in to effect changes to the definition of what voltages and distribution setups are covered by the DCUSA’s Common Distribution Charging Methodology (CDCM) and Extra High Voltage Distribution charging Methodology (EDCM).

<sup>1</sup> BSCP128 – ‘Production, Submission, Audit and Approval of Line Loss Factors’  
<sup>2</sup> Common Distribution Charging Methodology  
<sup>3</sup> Development and implementation of a Common Distribution Charging Methodology  
<sup>4</sup> Development and implementation of an EHV Distribution Charging Methodology  
<sup>5</sup> EHV Distribution Charging Methodology

As a result of the changes to the Standard Licence Condition, the EDCM will group HVS customers with EHV customers and will treat them the same for DUoS purposes. Other HV Customers will be grouped with Low Voltage Customers and covered by the CDCM.

The diagram below shows how the treatment of sites under the CDCM and EDCM overlap with their treatment under the BSC.



Currently DUoS charges (under the DCUSA) are not linked with Line Loss Factors (under the BSC). If the application of LLFs for Settlement were linked to the definitions on voltage used in the DCUSA's CDCM and EDCM, then the treatment of High Voltage sites under the BSC would change. HV Customers would continue to be able to have generic LLFs applied, however all HVS customers would have to have Site Specific LLFs applied.

This would impact all HVS sites where generic LLFs are currently applied. This would create disturbance in the form of changes to how losses are applied resulting in some customers being placed in an adverse losses positions, which we consider could be unnecessary and inappropriate. Furthermore the LDSO Parties would face additional costs of calculating Site Specific LLF values for an increased number of SVA customers.

Furthermore, if HVS customers were treated as Extra High Voltage (EHV) customers, the allocation of an EHV generic LLF value, for example in the absence of complete consumption data, may be inappropriate. This is because the EHV generic value would not allocate transformation losses from EHV to HV associated with the primary substations they are connected to. Therefore the allocation of EHV generic LLFs to such customers is likely to reduce the accuracy of settlements.

Given the significant changes being faced by such HVS customers and their Suppliers under the EDCM<sup>6</sup>, it is important that an appropriate allocation of LLF (in the BSC) is applied from 01 April 2012. Therefore, it is important to ensure the definitions, LLF methodology principles and other features in BSCP128 are reviewed and amended for implementation before August 2011 to ensure continued appropriate treatment of distribution losses. It is also important to minimise unnecessary administration and reduce unnecessary disturbance for HVS customers and their Suppliers where possible.

<sup>6</sup> The Authority are due to make a decision on the EDCM by 01 April 2011.

**Proposed Solution** *(mandatory by originator)*

It is proposed to make necessary changes to BSCP128 so that HVS generic LLFs can continue to be applied to HVS customers unless the LDSO wishes to calculate Site Specific LLFs for such customers.

CP1343 proposes to change the definition of Extra High Voltage and High Voltage in BSCP128, section 1.8.2 as follows:

<b>Extra High Voltage (EHV)</b>	As defined in the <del>Special Conditions of a distribution licence granted pursuant to section 6(1)(e) of the Electricity Act 1989.</del> <u>LDSO's approved LLF methodology.</u>
<b>High Voltage (HV)</b>	As defined in the <del>Special Conditions of a distribution licence granted pursuant to section 6(1)(e) of the Electricity Act 1989.</del> <u>LDSO's approved LLF methodology excluding those high-voltage metered sites defined as EHV sites.</u>

LDSOs all have LLF methodologies; however all are slightly different. Even though the methodologies may be different the LDSO has to go through the BSCP128 section 2.1 Methodology review process, with the process they eventually use being approved by the Panel<sup>7</sup>. If the definition was more specific, it would remove the degree of flexibility LDSOs have with their LLF methodologies which they develop, review and approve for their respective Distribution systems.

**Note:**

If CP1343 is approved and implemented as proposed in the June 2011 Release, LDSOs will need to follow the Methodology review process as set out in BSCP128 section 2.1, to ensure their LLF methodology is in line with proposed revisions.

This in turn will allow sufficient time for the LDSO to be sure they have an approved LLF methodology in time for the annual submission and audit of LLFs in September as set out in BSCP128 Section 2.3. This is in order for the LDSO to have the appropriate Generic and Site Specific LLFs in place ready for 01 April 2012.

**Justification for Change** *(mandatory by originator)*

When the Authority directed the SLC changes to the definitions of CDCM and EDCM, there was no consequential intention to apply the definition changes to how LLFs are calculated under the BSC. Therefore the change to BSCP128 will ensure the appropriate treatment of losses for HVS customers continues irrespective of changes, in the DCUSA.

The proposed change would also be an administratively convenient way to minimise disruption to such customers and their Suppliers whilst maintaining the accuracy of settlement with respect to losses. It is important to note that although the DUoS charges for HVS customers are changing, their physical position in the network, and therefore the losses attributable to them, will not change.

**To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code?** *(mandatory by originator)*

The Proposed change will further align the BSCP128 requirements with Section K 'Classification and Registration of Metering Systems and BM Units', particularly K1.7.5:

"1.7.5 the LLF methodology principles shall seek to balance the requirements for accuracy and consistency of Line Loss Factors and transparency in the establishment of methodologies for calculating Line Loss Factors with the requirement for administrative convenience."

<sup>7</sup> The Imbalance Settlement Group (ISG) or Supplier Volume Allocation Group (SVG) as appropriate review the outcomes of the review and approve the methodologies on the Panel's delegated behalf.

**Estimated Implementation Costs** (mandatory by BSCCo)

Our implementation costs are 2.5 man days of effort (equating to £600). The effort includes applying the proposed changes to BSCP128 and updating internal LWIs.

**Configurable Items Affected by Proposed Solution(s)** (mandatory by originator)

BSCP128 “Production, Submission, Audit and Approval of Line Loss Factors”

**Impact on Core Industry Documents or System Operator-Transmission Owner Code** (mandatory by originator)

None

**Related Changes and/or Projects** (mandatory by BSCCo)

The Standard Licence Condition changes which the Authority directed by to take effect on 17 December 2010

The DCUSA’s EDCM, which the Authority plan to make a decision on by 01 April 2011.

**Requested Implementation Date** (mandatory by originator)

June 2011 Release

**Reason:** Next available release and by implementing in the June 2011 release allows time for LDSOs to make sure the LLF methodology is in line with the changes by following the procedure set out in BSCP128 section 2.1.

**Version History** (mandatory by BSCCo)

v1.0 for industry impact assessment.

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**Date**.....28 January 2011.....

Attachments: Y

BSCP128 redlined v0.8 (5 Pages)