Change Proposal – BSCP40/02	CP No: 1189 *Version No:* 1.0 *(mandatory by BSCCo)*

Title *(mandatory by originator)*

Change to allow SVA Line Loss Factors less than one

Description of Problem/Issue *(mandatory by originator)*

When a new generator or demand customer enters the market they must be given a Line Loss Factor (LLF) by the host Licensed Distribution System Operator (LDSO) for use in Settlement. This is defined as:

Volumes in Settlement = Metered Data x LLF

If the generator chooses to be treated under the Supplier Volume Allocation (SVA) rules (as opposed to Central Volume Allocation (CVA)), this LLF must take a value of unity or greater (as required by BSCP528 'SVA Line Loss Factors for Half Hourly and Non-Half Hourly Metering Systems registered in SMRS').

It is understood that this restriction was included in BSCP528 on the assumption that the connection of a generator to the network would always reduce losses on the network and indeed this is often the case. However, in a situation where there is a large amount of generation and only a small amount of demand (e.g. a rural area such as the Lake District) the converse is true and the additional generation actually increases distribution network losses.

In order to reflect this, a LLF of less than one would be necessary. However, under the present system, the only option available to the network operator is to assign a LLF of unity. The effect of this is to distort the data entering Settlements, in that the metered data is overstated at the Settlement boundary, which will ultimately provide an inaccurate cost message to both Generators and Suppliers.

Proposed Solution *(mandatory by originator)*

BSCP528 should be amended to allow SVA LLFs to take any positive value (rather than a value of unity or greater) specified to 3 decimal places, i.e. to allow SVA LLFs of less than one.

Elexon has previously considered the issue of SVA LLFs less than one in SVG paper SVG62/09 (Attachment A) where it was stated that "no changes would be required to central systems to allow LLF values less than one to be used in SVA". There may be an impact on the systems of Suppliers, Half Hourly Data Aggregators (HHDA) and LDSOs; this will be assessed as part of the Impact Assessment (IA) for this CP. Depending on the results of the IA, testing requirements and associated costs would be considered.

Justification for Change *(mandatory by originator)*

The present situation does not allow an accurate representation of the effect users have on network losses. The proposed change would allow a more correct treatment of how additional generation, in particular, would affect network losses and would offer a fairer and more transparent allocation of losses to all users.

This aligns with the Applicable BSC Objectives (Condition C3 (3) of the Transmission Licence), particularly Objective c) "promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity". At present, such competition is being adversely affected by an inability to

accurately allocate losses to users. The proposed amendment would promote effective competition through the accurate interpretation of factors that drive costs; in this case network losses. Not implementing this proposal would lead to an adverse effect on LDSOs insofar as the way in which the losses incentive scheme operates means that the LDSO would lose potential allowed revenue on an artificial basis. A further consequence of not implementing this change is that a true reflection of the impact that some users have on losses will not be obtained and this will distort their competitive position. An internal assessment has revealed no major impacts and the cost of implementing this change to internal systems and processes would be minimal.
To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code? *(mandatory by originator)* Section S: Supplier Volume Allocation
Estimated Implementation Costs *(mandatory by BSCCo)* 6 Man Days effort (£1,320) (Testing; CSD document changes and review; internal documentation amendment). The SVA Agent (SVAA) may incur testing costs, depending on the results of the participant impact assessment. As LLFC values less than unity have not previously been used in Settlement it may prove beneficial to carry out end-to-end testing to ensure data is processed correctly by participants and successfully loaded into SVAA for volume allocation. The SVAA would incur costs for its aspects of testing. These costs can be estimated once impact assessments have been received from those participants identified as potentially impacted (i.e. Suppliers, HHDAs and LDSOs) and ELEXON has determined whether end-to-end testing is justified, and if so has defined the scope of such testing.
Configurable Items Affected by Proposed Solution(s) *(mandatory by originator)* BSCP528, section 1.3 'Use of the Procedure' (page 8) – wording would be changed to reflect that SVA LLFs must be greater than zero rather than greater than unity, and to explain the situation where LLFs of less than one may be appropriate (as described in SVG62/09), as described below. **<u>BSCP528: 1.3 Use of the Procedure</u>** iv SVA LLFs must always be submitted as positive scaling factors to three decimal places with a value ~~of Unity or~~ greater than zero (e.g. +1.005, +0.997 etc). It is envisaged that SVA LLFs less than unity would be applied either: • to a generation customer, where its introduction onto the system causes an increase in the total electrical losses on the distribution network; or • to a demand customer, where its introduction onto the system causes a reduction in the total electrical losses on the distribution network. In either case, these circumstances could arise in areas of the distribution network where the total quantity of local generation exceeds the local demand. Aggregated Supplier Line Loss is calculated by multiplying consumption by (LLF – 1); an LLF value less than one would therefore result in a negative Aggregated Supplier Line Loss Value. The SVA Data Catalogue Volume 2: Data Catalogue Appendix A, 'Aggregated Supplier Line Loss', would therefore need to be amended as follows, to permit negative Aggregated Supplier Line Loss values: **Valid Set:** Any within the constraints of the format ~~greater than or equal to zero~~

(Line Loss Factor is defined in both the SVA Data Catalogue and the MRA Data Transfer Catalogue as 'zero or positive number within the constraints of the format', so no change is required to this definition in either document)

Impact on Core Industry Documents or System Operator-Transmission Owner Code *(mandatory by originator)*
The MRA Data Transfer Catalogue (DTC), Annex D, Data Item J0186, would need to be amended in a similar manner to the SVA Data Catalogue, in order to permit negative Aggregated Supplier Line Loss values.

(The DCUSA (Distribution Connection & Use of System Agreement) has been consulted and is too high level to be affected by this CP. Likewise, the MRA (Master Registration Agreement) itself should not be affected)

Related Changes and/or Projects *(mandatory by BSCCo)*
CP1181 'Removal of duplication between the SVA Data Catalogue and the DTC'. Implementation of CP1181 as part of the June 2007 Release means that no specific changes will be required to the SVA Data Catalogue as part of CP1189. The detailed definitions of data items also defined in the MRA DTC will be removed from the SVA Data Catalogue and replaced with a reference to the DTC. The relevant part of the DTC, Data Item J0186, would need to be updated in any case, as noted above.

Requested Implementation Date ***(mandatory by originator)***
November 2007.

Reason:

Version History ***(mandatory by BSCCo)***
N/A

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Attachments: Y – Attachment A (SVG paper SVG62/09)   (If Yes, No. of Pages attached: 3)