

## Modification Proposal

**MP No: 82**  
(mandatory by BSCCo)

**Title of Modification Proposal** (mandatory by proposer):

Introduction Of Zonal Transmission Losses On An Average Basis

**Submission Date** (mandatory by proposer): 03 May 2002

**Description of Proposed Modification** (mandatory by proposer):

In accordance with Section T of the BSC, losses incurred on the transmission system are allocated to BSC parties in proportion to the energy they meter, whether production or consumption. There is no geographical differentiation in this allocation. Transmission Loss Factors for all BMUs in all Settlement Periods are set to zero.

It is proposed that the BSC be modified to give effect to a zonal differentiation in the allocation of the volume of transmission losses, similar to that set out for the Pool in 1997. A change to Section T of the BSC is proposed to give effect to this whilst adhering to the following principles:

1. the allocation is a simple and cost effective process;
2. the allocation does not introduce unnecessary or untoward risks on parties; and
3. the process should be simple to audit.

Within these principles, losses should be allocated, to a first approximation, according to the manner in which they are incurred, and the degree to which they are due to the energy produced or consumed by each BMU, and give rise to stable economic signals.

It is proposed that the zonal transmission loss allocation is introduced as follows:

For each GSP Group a single Transmission Loss Factor (TLF) would be derived ex ante for application to generation and supply throughout the coming year April to March. The manner in which these would be calculated would be under the governance of the BSC. In principle, nodal marginal TLFs would be derived for a representative collection of historic power system conditions during the previous year January to December. Zonal marginal TLFs would be derived from these nodal figures by demand-weighted averaging, and then annual zonal marginal TLFs would be derived by time-weighted averaging.

The resulting average annual zonal TLFs would be submitted to BSCCo at least two months prior to the implementation of this modification and thereafter by the February prior to their application in the following April to March period. The BSC Panel would be invited to endorse the TLFs prior to their application.

The volume of transmission losses in each Settlement Period would then be allocated amongst individual BMUs by substituting these zonal TLFs, modified by a fixed scaling factor, for the parameters  $TLF_{ij}$  in Schedule T, Section T2.3.1 of the BSC.

The value of this scaling factor would be fixed from time to time (typically every few years) under the governance of the BSC at a level that, to a first approximation, (a) allocated the heating element of the transmission system losses on an average basis, with little under or over recovery, and (b) resulted in other transmission losses being allocated on a uniform basis through the parameters  $TLM_{0+j}$  and  $TLM_{0-j}$ . To this extent the value of the scaling factor would be around 0.5. Any inaccuracy in (a) would be compensated for in (b).

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Whilst the calculation of the annual TLFs would be under the governance of the BSC, this task would be undertaken by a TLF Agent. The BSC Panel may choose to allocate this task to NGC.

**Description of Issue or Defect that Modification Proposal Seeks to Address** (mandatory by proposer):

Currently the volume of transmission losses is allocated amongst BSC Parties regardless of the extent to which they give rise to them. To the extent that long term locational signals are to be introduced into the energy market, this Modification seeks to address this perceived defect. The Modification does not seek to introduce strong short term economic signals as it is felt that these would have a detrimental effect on overall efficiency.

**Impact on Code** (optional by proposer):

**Impact on Core Industry Documents** (optional by proposer):

**Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties** (optional by proposer):

**Impact on other Configurable Items** (optional by proposer):

**Justification for Proposed Modification with Reference to Applicable BSC Objectives** (mandatory by proposer):

This proposal will contribute to the better achievement of the BSC objective of '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' by introducing long term economic signals for siting of generation and demand. This proposal achieves this by allocating losses in such a manner that does not unduly penalise individual BMUs. It allocates only according to the degree to which individual BMs give rise to losses.

Transmission losses are an integral part of the energy market and should remain so. For this reason the proposal places the governance of all aspects of their allocation under the BSC. This will allow for implementation in a way that is consistent with BSC objectives.

The proposal introduces zonal transmission losses through annually fixed TLFs so as to avoid unwarranted administrative burden and to provide greater certainty about the costs to be incurred. It is therefore consistent with "promoting efficiency in the implementation and administration of the balancing and settlement arrangements" and will also contribute to the development of competition.

**Details of Proposer:**

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**Attachments: NO**

**If Yes, Title and No. of Pages of Each Attachment:**