

TERMS OF REFERENCE

(Version 2.0)

ANNEX FOR MODIFICATION PROPOSALS P75 & P82

Modification Proposal P75 and Modification Proposal P82 will be considered by the Transmission Loss Factor Modification Group in accordance with the Transmission Loss Factor Modification Group Terms of Reference.

P75 – Introduction of Zonal Transmission Losses

P82 – Introduction of Zonal Transmission Losses on an Average Basis

1. DEFINITION PROCEDURE (P75 ONLY)

- 1.1 The Modification Group will carry out a Definition Procedure in respect of Modification Proposal P75 pursuant to section F2.5 of the BSC.
- 1.2 The Modification Group will produce a Definition Report for consideration at the BSC Panel Meeting on 16 May 2002.
- 1.3 The Modification Group shall consider and/or include in the Definition Report as appropriate:

Transmission Loss Factor (TLF) Production:

- The Modification suggests that demand and generation values be established, on an ex-post basis for all nodes on the System;
- The Modification suggests that a 'Load Flow Model' should be run to establish TLFs, based on increments of demand at a node being met by increments of generation spread over all nodes. The Group will need to consider this approach and the extent to which such a Load Flow Model would need to be specified (at the very least, the principal characteristics and requirements will need to be defined). In addition, the basis of the network configuration for such an approach would need to be established. Consideration would also need to be given as to how frequently the Load Flow analysis should be undertaken (i.e. for a given dataset and network configuration, what is the applicable timescale for calculation of the resultant TLFs?). If the same values of TLFs are to prevail for more than one settlement period, the averaging approach will need to be considered; and
- The Modification suggests that the resultant nodal marginal TLFs could be grouped together into current TNUoS zones for generation and into GSP Groups for demand. The Group will need to consider the most appropriate zonal groupings. Consideration will need to be given as to how such zones might need to change, in the future, and how to distinguish production from consumption BM Units, if generation zones are to differ from demand zones. There will also need to be some consideration as to how the averaging process should be undertaken, in terms of converting nodal to zonal values.

Transmission Loss Factor (TLF) Application:

- The Modification suggests that the resultant zonal, marginal TLFs should be submitted into the SAA calculations as soon as is practical, preferably in time for the Initial Settlement Run;
- The Group will need to consider whether there should be no scaling of the TLFs and whether the correct recovery of losses, in each settlement period, would be ensured through the use of the Transmission Loss Adjustments (ETLMO+j and ETLMO-j).

Reporting:

- The Group will need to consider the reporting of the proposed TLFA;
- The Group will also need to consider whether the use of Estimated Transmission Loss Factors (ETLFs) is required for use in producing Indicative prices on the BMRS. If so, the approach to producing these ETLFs will need to be considered.

2. ASSESSMENT PROCEDURE (P75 AND P82)

- 2.1 On 16 May 2002, the BSC Panel submitted Modification Proposal P75 and Modification Proposal P82 to the Assessment Procedure.
- 2.2 The Modification Group will carry out Assessment Procedures in respect of Modification Proposal P75 and Modification Proposal P82 pursuant to section F2.6 of the BSC.
- 2.3 The Modification Group will produce an Interim Report for each Modification Proposal for consideration at the BSC Panel Meeting on 18 July 2002.
- 2.4 The Modification Group will produce an Assessment Report for each Modification Proposal for consideration at the BSC Panel Meeting on 14 November 2002.
- 2.5 The Modification Group shall consider and/or include in the Assessment Reports as appropriate:

Information Necessary for Establishing End-to-End Descriptions of Modifications:

- consideration of how 'generation' and 'demand' would be distinguished for the purposes of applying TLFs;
- consideration of the treatment of Interconnector BM Units for the purpose of applying TLFs;
- the assumptions underpinning the proposed Transmission Loss Factor Methodology (TLFM);
- the availability and characteristics of the load flow model required to generate TLFs;
- the characteristics and availability of the generation and demand data for input into the load flow model; and
- the reporting requirements of the proposed Transmission Loss Factor Agent (TLFA).

Aid to Assessment Against Applicable BSC Objectives:

- a quantitative impact assessment of the Modification Proposal;
- the business case for the Modification Proposal (including implementation costs, impact on the risk faced by market participants, and the impact locational signals);
- consideration of the impact of the Modification Proposal on the market as a whole, including the likely effect on market length, and on market participants by location and type (including renewable and CHP generators);
- assessment of the trade-off between the accuracy of the locational signal provided by Transmission Loss Factors (TLFs) and increased cost/complexity/volatility/stability;
- assessment of the relative merits of 'fully marginal' and 'scaled marginal' methodologies for generating TLFs;
- assessment of the volatility in the Transmission Loss Adjustments (i.e. TLMO⁺ and TLMO⁻) introduced by the Modification Proposal and its impact;
- assessment of the risk introduced by the Modification Proposal and the potential for mitigating measures;
- assessment of the proposed zonal groupings for generation and demand TLFs;
- assessment of the 'appropriateness' of the allocation of losses resulting from the Modification Proposal;
- assessment of the extent to which, if any, different classes market participants (including domestic customers and embedded generation) would be able to respond to the locational signals provided by the TLFs;
- assessment of the impact of phasing in the Modification Proposal over time;
- consideration of whether or not demand should be excluded from the application of zonally differentiated transmission losses; and
- consideration of the impact of the Modification Proposal on the current 45:55 split between generation and demand.

Interactions with Wider Issues:

- assessment of the interaction of the Modification Proposal with other proposed modifications to the BSC;
- the factors affecting the siting decisions of generation and demand;

- the interaction, and its implications, between the Modification Proposal and any other relevant governance structures, including the TNUoS charging regime of the Transmission Licence;
- the interaction, and its implications, between the Modification Proposal and with any relevant major industry initiatives, including BETTA; and
- the experience of other markets with transmission loss schemes where relevant.

2.6 The Modification Group shall undertake the following activities in pursuit of the requirements listed under 2.4:

- establish how transmission losses are currently treated under the BSC;
- establish end-to-end descriptions of the processes suggested under Modification Proposal P75 and Modification Proposal P82;
- establish assessment criteria to enable Modification Proposal P75 and Modification Proposal P82 to be assessed against the Applicable BSC Objectives;
- assess the impact of procuring and managing the proposed TLFA;
- procurement (or identification of a suitable existing model) and use of a load flow model to model the proposed zonal differentiation of transmission losses;
- organise and run a seminar to raise industry awareness of Modification Proposal P75 and Modification Proposal P82 and their implications; and
- undertake consultation exercises where appropriate.

2.7 The Modification Group shall adopt the following internal working procedures (pursuant to BSC F2.4.19):

- inform all Modification Group members of the purpose of each meeting of the Modification Group;
- assign, where appropriate, elements of the work required under the Assessment Procedure to Modification Group members (pursuant to BSC F2.4.6(a))
- record the outcome of all analysis undertaken by the Modification Group in an appropriate document; and
- record all significant disagreements amongst the Modification Group.