



Unison's Response to Consultation Feedback on the System Loss Allocation Standard

Unison Networks Limited

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This document provides feedback on the issues raised by interested parties during the period of consultation on Unison's
CM2002 System Loss Allocation Standard

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1 PURPOSE

- 1.1 The purpose of this document is to:
- Summarise feedback from interested parties on Unison's draft Standard for System Loss Allocation, made available to the public on 17 April 2007 on Unison's website, and to
 - Indicate the decisions Unison has reached having taken the feedback into account.

2 INTRODUCTION

- 2.1 Unison has reviewed and standardised its methodologies for system loss calculation and allocation.
- 2.2 These methodologies are required to provide transparency and consistency as part of Unison's obligation, under rule 8.1 of the EGR part G section VI, to provide loss factors information to be used in the reconciliation process.
- 2.3 The outcome of the methodologies affects the Reconciliation Manager, electricity retailers operating on Unison's network, consumers and generators connected to Unison's network. Consultation was therefore sought with the affected parties.
- 2.4 This paper sets out the amended timeframe for the introduction of the new Standard on System loss allocation, including the calculation methodologies.
- 2.5 The feedback received from interested parties has been grouped by topic and is summarised below together with Unison's response.

3 TIMEFRAME AND CONSULTATION PROCESS

- 3.1 The timeframe for the consultation process has been amended as follows:

17 April - 30 April 2007	Consultation with retailers and interested parties
1 May – 20 May 2007	Analyse feedback and implement changes as required
21 May 2007	Implement the new Unison Standard.

4 SUMMARY OF FEEDBACK AND UNISON'S RESPONSE

- 4.1 Unison's Overall Response

The Company would like to thank all parties who submitted their views and comments on the draft Standard.

From the methodology perspective, we did not receive any objections to the system loss calculation or allocation.

Most feedback we received related to the implementation of the loss factors.

Unison will therefore adopt the methodologies and equations disclosed in the consultation document for the system loss calculation and allocation. These will stand until the next review of the standard is undertaken.

4.2 Incorrect Reference - EGR rule 8.1

We received the following feedback:

The EGR reference is incorrect – does Unison mean rule 8.1 of EGR part G section VI?

Unison's response:

The feedback is correct. The EGR rule should be referenced to rule 8.1 of EGR part G section VI. Unison apologises for this erratum and it has been corrected in the final version of the standard.

4.3 Inclusion of Non-Technical Losses in the Disclosed Loss Factors

We received the following feedback:

The differences between loss factors for different ICPs or group of ICPs should reflect technical loss difference, however whether the loss factors should reflect technical losses only, or both technical and non-technical losses, depends on whether there is reconciliation by difference for the incumbent Retailer or global reconciliation.

With the current reconciliation by difference where the incumbent Retailer is allocated 100% of unaccounted for electricity (UFE), loss factors should be set at a level which when applied to all ICP metered volumes is likely to result in minimal UFE (difference between injections and loss adjusted ICP metered quantities of all Retailers). Accordingly loss factors should be set at a level which reflects total losses (both technical and non technical).

With global reconciliation loss factors should be set to reflect technical losses only, as all other losses will be allocated across all Retailers on an equitable basis.

Unison's response:

As distribution losses are calculated based on engineering estimations and the load profiles are very diverse, the calculation of technical losses will always contain errors. Any difference between the sum of calculated technical losses and the total losses (as defined by section 6.3 of the consultation document) constitute miscellaneous losses. Therefore, the miscellaneous losses include the calculation errors as well as other non-technical components such as energy theft and metering error. Unfortunately, it is very difficult to separate the errors from the non-technical losses.

The disclosed loss factors as of 1 April 2007 include miscellaneous losses. The losses which are deemed miscellaneous by Unison, for the period from Jan 2006 to Dec 2006, totalled 5.6GWh (total losses = 48.84GWh) and 4.8GWh (total losses = 35.81GWh) for the Hawke's Bay and Rotorua/Taupo regions respectively. For the new reconciliation process, due to be implemented in 2008, Unison has not received any direction from either the Electricity Commission or the Reconciliation Manager on whether to exclude the miscellaneous losses.

4.4 Multiple Loss Factors and the Complexity of Loss Factors

We received the following feedback:

One retailer expressed a preference for one loss factor for each mass market load group therefore avoiding unnecessary reconciliation and retail pricing complexity.

Unison's response:

For the administrative convenience of mass market customers Unison supports this view. Furthermore, the methodologies Unison consulted on provide only one loss factor per load group. These load groups were determined by their connectivity to different asset types and in conjunction with Unison's tariff structure. Any further detailed calculations of loss factors require extensive field data collection, i.e. load profiling, accurate asset characteristics etc.

4.5 Application of the Methodologies and the Results of their Application

We received the following feedback:

One retailer would like to be able to analyse the results from the application of the loss calculation and allocation methodologies.

Unison's response:

As the consultation document was intended to serve as a methodology standard the values and configuration variations were not mentioned. The methodologies have been partly applied in Unison's pricing policy as at 1 April 2007. The loss factor tables disclosed in section 14 of CM0001v1.2-Pricing Policy are the direct result of this application. This policy is publicly available on Unison's website:

Go to: <http://www.unison.co.nz/?t=30>

Unison welcomes and values any comment on this policy and will take all such comments into consideration when the policy is next reviewed.

In addition the spreadsheet which records the data values used to calculate Unison's loss factors is available upon request.

4.6 Load Groups and their Connection Configuration

We received the following feedback:

One retailer wanted a breakdown of the customer groups based on their connection configuration and loads.

Unison's response:

The following load groups and connectivity configurations are used for Unison's loss factor disclosure as of 1 April 2007.

	Load kVA	Usage GWh	33Fe	33Line	11Line	11Fe	11Cu	LV	Serv	Misc
H2L	>0 <=300	599	1	1	1	1	1	1	1	1
H2M	>300	178	1	1	1	1	1	0	1	0
H2I	11kV meter	124	1	1	1	0	0	0	0	0
		901								

	Load kVA	Usage GWh	33Fe	33Line	11Line	11Fe	11Cu	LV	Serv	Misc
R2L	>0 <=300	457	1	1	1	1	1	1	1	1
R2M	>300	132	1	1	1	1	1	0	1	0
R2I	11kV meter	113	1	1	1	0	0	0	0	0
R2E	Export to Grid	93	0	0	0	0	0	0	0	0
		795								

33Fe: 33kV/11kV transformers iron losses;

33Line: 33kV feeders and 33/11kV transformer copper losses;

11Line: 11kV feeders copper losses and contact losses;

11Fe: 11kV/400V transformer iron losses;

11Cu: 11kV/400V transformer copper losses;

LV: 400V feeders copper losses and contact losses;

Serv: Service mains copper losses and contact losses;

Misc.: Miscellaneous losses.

The allocation of losses to each load group is performed based on the annual energy consumption of each load group using the method provided in Appendix A of the consultation document.