Review of ETSA Utilities proposed Distribution Loss Factors for 2010-2011

Prepared by Energeia

for

ETSA Utilities

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Final

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1 Executive Summary

ETSA Utilities has commissioned Energeia Pty. Ltd. to carry out an independent review of its proposed distribution loss factors for the 2010-11 year, for the purpose of certifying to the Australian Energy Regulator (AER) that they have been prepared in conformity with the relevant provisions of the National Electricity Rules (the Rules).

In prior years, the Essential Services Commission of South Australia (the Commission) has reviewed ETSA Utilities' distribution loss factor calculations. The Commission has provided the AER with an independent assurance that the methodology used by ETSA Utilities for calculating distribution loss factors is consistent with the historical approach for South Australia.

In March 2009, following changes to the jurisdictional regulatory responsibilities in South Australia, the Commission indicated to the AER that it would not carry out the review of ETSA Utilities' proposed distribution loss factors in future.

The AER has not established a distribution loss factor methodology for South Australia. Accordingly, ETSA Utilities has prepared a draft distribution loss factor methodology (draft methodology) describing the processes it has historically followed. This draft methodology was made available to Energeia during the course of the independent review.

Energeia has reviewed ETSA Utilities' 2010-11 distribution loss factors and the associated draft methodology. On the basis of the material supplied to Energeia and discussions with ETSA Utilities personnel during the course of this review, Energeia is of the opinion that:

- The process employed by ETSA Utilities in preparing the proposed 2010-11 distribution loss factors is consistent with its historical approach;
- The draft methodology prepared by ETSA Utilities meets the relevant requirements of clause 3.6.3 of the Rules;
- ETSA Utilities has followed its draft methodology in preparing the proposed 2010-11 distribution loss factors; and
- The distribution loss factors proposed by ETSA Utilities for 2010-11 are reasonable.

This review of ETSA Utilities' distribution loss factor methodology and proposed distribution loss factors for 2010-11 was carried out by Mr. Harry Colebourn, Energeia's Senior Regulatory and Engineering Advisor. Mr. Colebourn has over 40 years experience in the electricity industry.

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2 Introduction

Clause 3.6.3 of the Rules sets out the requirements for the determination and approval of distribution loss factors.

ETSA Utilities commissioned Energeia Pty. Ltd. to carry out an independent review of its distribution loss factor methodology and proposed distribution loss factors for the 2010-11 year, for the purpose of certifying to the Australian Energy Regulator (AER) that they have been prepared in conformity with the relevant provisions of the Rules.

Since 2002, the Essential Services Commission of South Australia (the Commission) has reviewed ETSA Utilities' distribution loss factor calculations. The Commission has provided the AER with an independent assurance that the methodology used by ETSA Utilities for calculating distribution loss factors is consistent with the historical approach for South Australia.

In March 2009, following changes to the jurisdictional regulatory responsibilities in South Australia, the Commission advised the AER that it would not carry out the review of ETSA Utilities' proposed distribution loss factors in future.

The AER has not established a distribution loss factor methodology for South Australia. Accordingly, ETSA Utilities has prepared a draft distribution loss factor methodology (draft methodology), describing the processes it has historically followed. This draft methodology was made available to Energeia during the course of the independent review.

The following sections of this report:

- Review ETSA Utilities draft methodology for consistency with the historical approach to the determination of distribution loss factors in South Australia and for compliance with the relevant provisions of clause 3.6.3 of the Rules; and
- Review ETSA Utilities' distribution loss factor calculations for conformity with ETSA Utilities' draft methodology and to provide an assurance that the resulting distribution loss factors are reasonable.

3 ETSA Utilities' distribution loss factor methodology

ETSA Utilities provided Energeia with its draft methodology during the course of the independent review[1]. In this section, Energeia has reviewed the adequacy and compliance aspects of ETSA Utilities' draft methodology.

Clauses 3.6.3(b) and 3.6.3(g) of the Rules impose a requirement that distribution loss factors must be determined by a DNSP, in accordance with a methodology that is required to be developed, published and maintained either by the AER or by the DNSP.

[1] ETSA Utilities, Distribution loss factor methodology (draft), March 2010.

The AER has not developed a distribution loss factor methodology for South Australia. Accordingly, ETSA Utilities has developed and will publish and maintain a distribution loss factor methodology. The draft methodology has been prepared pursuant to Clause 3.6.3(h) of the Rules, having regard to the principles set out in that clause.

The draft methodology describes the approach that ETSA Utilities employs in the determination of distribution loss factors for its network. The draft methodology has been structured to describe the following main stages of the process of determining distribution loss factors:

- The assignment of distribution connection points to transmission connection points and the virtual transmission node.
- Calculation of the actual system losses historically taking place on the distribution network.
- Calculation of the system losses and distribution loss factors for site-specific distribution connection points.
- Allocation of the losses and distribution loss factors associated with non site-specific distribution connection points.
- Reconciliation of actual system losses, any balance of past over/under recovery of losses and those arising from the application of proposed distribution loss factors.

Each of these stages of the determination process is outlined in the following sub sections. The requirements of clause 3.6.3 of the Rules and notes in summary form describing the compliance of the methodology with those Rule provisions is included as an Appendix to this report.

Assignment of distribution connection points

Clauses 3.6.3(c) to 3.6.3(f) of the Rules outline the requirements for assigning distribution connection points to either a transmission connection point or a virtual transmission node, for the purpose of determining the losses associated with each distribution connection point.

There is a single virtual transmission node in South Australia. Its establishment was approved by the AER prior to the commencement of Full Retail Contestability in South Australia in 2003. The virtual transmission node applies to all transmission connection points in South Australia with the exception of those at Snuggery and Whyalla, which service industrial facilities in their respective areas.

The approach used by ETSA Utilities for the assignment of transmission connection points to its distribution connection points has been summarised in Table 1.

Table 1 - Assignment of transmission connection points

Distribution connection type		Transmission connection point	Virtual transmission node
Subtransmission (66 kV or 33 kV)	End user	All	
High Voltage (11 kV)	Embedded generator	Export >160 MWh p.a.	Export ≤160 MWh p.a.
	End user	Consumption >160 MWh p.a.	Consumption ≤160 MWh p.a.
	Distribution network	All	
Low voltage	Embedded generator	Export >160 MWh p.a.	Export ≤160 MWh p.a.
	End user	Consumption >160 MWh p.a.	Consumption ≤160 MWh p.a.

The approach followed by ETSA Utilities is compliant with clause 3.6.3(d)(1) the Rules. It is practicable to assign generators and end use customers with export or consumption greater than 160 MWh to the relevant transmission connection point, rather than the virtual transmission node, and ETSA Utilities has done this.

Calculation of actual losses in the distribution network

The actual losses taking place in the distribution network are required to be calculated to permit the determination of distribution loss factors under clause 3.6.3(h)(1) and to permit the reconciliation of distribution loss factors under clause 3.6.3(h)(2).

ETSA Utilities' methodology describes how the actual losses are determined on a historic basis from the balance of input and output energy quantities:

- Energy inputs to the network at the points of connection to the Electranet transmission network, plus distribution loss-adjusted embedded generation; less
- Energy outputs from the network, at end-use customer connections.

The methodology also describes the process of accounting for some of the smaller energy inputs and outputs to the network, which are metered with accumulation meters or are unmetered.

Calculation of distribution loss factors for major customers and embedded generators

Rules clause 3.6.3(b)(2)(i) requires the distribution loss factor methodology to contain the process by which the distribution loss factors for site-specific generator and end user connections are determined.

ETSA Utilities' methodology describes the process by which site-specific calculations are carried out, using the most recent 12 months of energy data and the calculation process that is commonly used for engineering analysis of the subtransmission network.

The site-specific distribution loss factors were reviewed in 2006-07 and no material change to the distribution connections or network configuration or loading has required their recalculation since.

Calculation of distribution loss factors for smaller customers and embedded generators

The distribution loss factor methodology is required to describe the process for the calculation of distribution loss factors for non site-specific generator and end user connections, under clause 3.6.3(b)(2)(ii).

ETSA Utilities' draft methodology describes its approach to determining non site-specific distribution loss factors. These non site-specific distribution loss factors have been developed by reference to the loss factors of equivalent organisations.

Reconciliation of actual and forecast losses

Clause 3.6.3(h)(2) of the Rules requires a reconciliation of the actual distribution losses with those arising from the application of distribution loss factors.

ETSA Utilities' methodology contains such a reconciliation of historic losses for the decade to 2008-09. It also contains a reconciliation of forecast quantities, including the distribution loss factors for the 2010-11 year, as required by clause 3.6.3(h)(1).

Observations concerning ETSA Utilities' distribution loss factor methodology

As outlined above and detailed in the Appendix, Energeia is of the opinion that ETSA Utilities' draft methodology reflects its historic approach used for the determination of losses. Energeia is also of the opinion that the distribution loss factor methodology complies with the relevant provisions of clause 3.6.3 of the Rules.

4 Review of ETSA Utilities' distribution loss factors

In this section, Energeia has reviewed aspects of ETSA Utilities' distribution loss factor calculations for conformity with ETSA Utilities' draft methodology and to provide an assurance that the resulting distribution loss factors are reasonable.

This section is also subdivided into the stages described in ETSA Utilities' draft methodology.

Calculation of actual losses in the distribution network

The sources of the energy data used to derive ETSA Utilities' actual distribution network losses were reviewed, as follows:

- The aggregate energy input to ETSA Utilities' distribution network from the Electranet transmission connection points were confirmed to align with Electranet's records;
- A sample of embedded generator energy inputs to the network derived from the "NESS" system (that part of ETSA Utilities' billing system for interval meters) were demonstrated to align with the calculations;
- The embedded generator energy inputs were confirmed to have been adjusted by the appropriate distribution loss factor;
- The energy sales were confirmed to be in accordance with the 2008-09 tariff return output from ETSA Utilities' billing system.

ETSA Utilities' average historic losses, expressed as a percentage of the sales, has averaged 6.43% over the decade to 2008-09, which is typical for network with the configuration of ETSA Utilities. For example, Integral Energy's more compact network had distribution losses for 2006-07 and 2007-08 averaging 5.20%[2].

Energeia believes that ETSA Utilities' calculation of actual losses within its distribution network is reasonable.

Calculation of distribution loss factors for major customers and embedded generators

The distribution loss factors calculated by ETSA Utilities for site-specific distribution connections were calculated in accordance with the draft methodology in 2006-07. The Commission has reviewed the approach and outcomes in earlier years and approved the distribution loss factors.

Energeia has confirmed that no change to site-specific distribution loss factors has been made from earlier years, other than the removal of a number of site-specific connections that are no longer in use.

Calculation of distribution loss factors for smaller customers and embedded generators

The distribution loss factors calculated by ETSA Utilities for non site-specific distribution connections were calculated in accordance with the draft distribution loss factor methodology. The Commission has also reviewed this approach and calculation in earlier years and approved the distribution loss factors. The associated comparison is confirmed to be reasonable.

Energeia has confirmed that no change to this approach has been made from earlier years.

[2] Integral Energy, Evaluation of Distribution Loss Factors, 30 January 2008. p.5.

Reconciliation of actual and forecast losses

ETSA Utilities' reconciliation of the losses occurring on the network with the losses arising from the application of distribution loss factors was reviewed. This calculation has been carried out in accordance with historical practice and the draft methodology. The calculation is verified to be reasonable.

Proposed distribution loss factors for 2010-11

The losses arising from the proposed distribution loss factors for 2010-11 have been reconciled with the forecast network losses in the same year. The proposed loss factors have been determined by ETSA Utilities to target a closing balance in 2010-11 that is within approximately 0.25% of the energy inputs to the network.

Energeia is of the view that this forecast reconciliation meets the requirements of clause 3.6.3(h)(1) of the Rules, which requires the quantities to be as closely as is reasonably practicable to equal, whilst avoiding year-on-year instability in the resulting distribution loss factors.

Observations concerning ETSA Utilities' distribution loss factor calculations

As outlined above, Energeia has reviewed ETSA Utilities distribution loss factor calculations. In Energeia's opinion, the calculations have been carried out using the historic approach and in accordance with the draft distribution loss factor methodology.

Energeia is also of the opinion that the distribution loss factors that have been determined by ETSA Utilities for 2010-11 are reasonable.

5 Conclusions and recommendations

As described in this document, Energeia has conducted an independent review of ETSA Utilities' 2010-11 distribution loss factors and the associated draft methodology.

On the basis of the material supplied to Energeia and discussions with ETSA Utilities personnel, Energeia is of the opinion that:

- The process employed by ETSA Utilities in preparing the proposed 2010-11 distribution loss factors is consistent with its historical approach;
- The draft methodology prepared by ETSA Utilities meets the relevant requirements of clause 3.6.3 of the Rules;
- ETSA Utilities has followed its draft methodology in preparing the proposed 2010-11 distribution loss factors; and
- The distribution loss factors proposed by ETSA Utilities for 2010-11 are reasonable.

Appendix - Compliance with National Electricity Rules clause 3.6.3

The following table contains an extract from the National Electricity Rules (the Rules)[3]. The notes assess the compliance of ETSA Utilities' draft methodology and its proposed distribution loss factors for 2010-11 with the relevant Rule provisions.

Rules clause	Compliance notes
3.6.3 Distribution losses	
(a) *Distribution losses* are *electrical energy losses* incurred in the conveyance of electricity over a *distribution network*.	
(b) *Distribution loss factors*:	
(1) notionally describe the *average electrical energy losses* for electricity transmitted on a *distribution network* between a *distribution network connection point* and a *transmission network connection point* or *virtual transmission node* for the financial year in which they apply;	ETSA Utilities' distribution loss factors are based on an allocation of the average losses expected to take place in its distribution network in the year of their application.
(2) will be either:	
(i) a site-specific *distribution loss factor* derived in accordance with the methodology determined by the *AER* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), for each *distribution network connection point* of the following types:	ETSA Utilities has developed a distribution loss factor methodology, pursuant to clause 3.6.3(h).
(A) a *connection point* for an *embedded generating unit* with actual *generation* of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not available for a consecutive 12 month period as a *distribution network connection point* is newly	ETSA Utilities' methodology describes the process for deriving the distribution loss factors for site-specific distribution connections to embedded generators with a capacity of more than 10 MW. The methodology employs actual data, wherever this is available. Where data is not available, a projection is made, in accordance with the

[3] Australian Energy Market Commission, National Electricity Rules version 34, commencing date 12 March 2010

Rules clause		Compliance notes
	established or has been modified, a *Network Service Provider* may determine whether an *embedded generating unit* has *generation* of more than 10 MW, based on its best projection of *generation* in the *financial year* in which the *distribution loss factor* is to apply, taking into account the terms of the relevant *connection agreement*;	terms of the relevant connection agreement, at the time of determining the distribution loss factor.
(B)	a *connection point* for an end-user with actual or forecast *load* of more than 40 GWh or an electrical demand of more than 10 MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not available for a consecutive 12 month period as a *distribution network connection point* is newly established or has been modified, a *Network Service Provider* may determine whether an end-user has *load* of more than 40GWh or forecast *peak load* of more than 10MW, based on its best projection of *load* in the *financial year* in which the *distribution loss factor* is to apply, taking into account the terms of the relevant *connection agreement*;	ETSA Utilities' methodology describes the process for deriving the distribution loss factors for site-specific distribution connections to end-user connections with a demand of more than 10 MW or an energy consumption of more than 40 GWh. The methodology employs actual data, wherever this is available. Where data is not available, a projection is made, in accordance with the terms of the relevant connection agreement at the time of determining the distribution loss factors.
(C)	a *connection point* for a *market network service provider*; and	This clause does not apply, as there are no market network service providers connected to ETSA Utilities' distribution network.

Rules clause	Compliance notes
(D) a *connection point* between two or more *distribution networks*; or	There are two high voltage connections to the Powercor distribution network, on the eastern boundary of ETSA Utilities' network. ETSA Utilities' methodology describes the process by which the distribution loss factors for these connections were derived and approved by NEMMCo.
(ii) derived, in accordance with the methodology determined by the *AER* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), using the volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant *voltage* class (determined in accordance with clause 3.6.3(d)(2)) assigned to that *transmission network connection point* or *virtual transmission node*, for all *connection points* on a *distribution network* not of a type described in clause 3.6.3(b)(2)(i);	ETSA Utilities methodology describes the approach to determining the distribution loss factors for non-site-specific distribution connections. Non-site-specific distribution connections are grouped in voltage classes, in accordance with clause 3.6.3(d)(2).
(3) are to be used in the settlement process as a notional adjustment to the electrical *energy*, expressed in MWh, flowing at a *distribution network connection point* in a *trading interval* to determine the *adjusted gross energy* amount for that *connection point* in that *trading interval*, in accordance with clause 3.15.4.	ETSA Utilities' distribution loss factors are used by AEMO in market settlements, for the adjustment of metered energy quantities delivered through connections to its distribution network.
(b1) Where a *Generator* meets the reasonable cost of the *Distribution Network Service Provider* in performing the necessary calculation in respect of a *generating unit* of up to 10MW or 40GWh per annum capacity, the *Distribution Network Service Provider* must calculate a site-specific *distribution loss factor* that, notwithstanding any other provision of the *Rules* to the	This clause does not apply. No generator smaller than 10 MW or 40 GWh has requested ETSA Utilities to calculate a site-specific distribution loss factor.

Rules clause	Compliance notes
contrary, for the purposes of the *Rules* is to apply in respect of that *generating unit* on the same basis as applies for a *generating unit* of more than 10MW or 40GWh per annum capacity as though the *generating unit* were a unit of more than 10MW or 40GWh per annum capacity.	
(c) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, of a type described in clause 3.6.3(b)(2)(i), to a single *transmission network connection point* taking into account normal *network* configurations and predominant *load* flows.	ETSA Utilities has assigned each site-specific connection point to a load or embedded generator on its network to a single transmission network connection point, using the normal network configuration and predominant load flow.
(d) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, not of a type described in clause 3.6.3(b)(2)(i):	ETSA Utilities has assigned each non site-specific connection point to a load or embedded generator on its network as follows:
(1) where practicable, to a single *transmission network connection point* or otherwise, to a *virtual transmission node*, taking into account normal network configurations and predominant *load* flows; and	• customer or generator connections with an energy consumption or export exceeding 160 MWh are assigned to a single transmission network connection point, using the normal network configuration and predominant load flow; and
(2) to a class of *distribution network connection points* based on the location of, *voltage* of and pattern of electrical *energy* flows at the *distribution network connection point*.	• customer or generator connections with an energy consumption or export not exceeding 160 MWh are assigned to the virtual transmission node (identified as SJP1), in accordance with arrangements approved by the AER.

Rules clause	Compliance notes
(e) So far as practicable, the assignment of *connection points* on the *distribution network* to: (1) *transmission network connection points* under clause 3.6.3(c); or (2) *transmission network connection points* or *virtual transmission nodes* and a class of *distribution network connection points* under clause 3.6.3(d), must be consistent with the geographic boundaries of the *pricing zones* for use in *distribution service* pricing, and the *voltage* levels incorporated within those *pricing zones*.	There is a single distribution network pricing zone in South Australia. Separate classes of distribution network connection points have been established by ETSA Utilities for high and low voltage non site-specific distribution connections. The assignment of distribution connection points is consistent with the pricing zone and voltage levels.
(f) The assignment of *connection points* on a *distribution network*: (1) to a single *transmission network connection point* under clause 3.6.3(c); or (2) to a *transmission network connection point* or *virtual transmission node* and a class of *distribution network connection points* under clause 3.6.3(d), is subject to the approval of the *AER* and the *Distribution Network Service Provider* must inform *AEMO* of such approved assignments.	The AER has approved ETSA Utilities' definition of a virtual transmission node for South Australia. The South Australian VTN (identified as SJP1) includes all load transmission connection points, with the exception of the following two transmission connection points: • Snuggery Industrial; and • Whyalla MLF. ETSA Utilities has assigned the connection points on its distribution network in accordance with the AER's approval.
(g) Distribution *loss factors* must be determined by a *Distribution Network Service Provider* for all *connection points* on its *distribution network* either individually, for all connection points assigned to a single *transmission network connection point* under clause 3.6.3(c), or collectively, for all *connection points* assigned to a *transmission network connection point* or a *virtual transmission node* and a particular *distribution network connection point* class under clause 3.6.3(d), in	

Rules clause	Compliance notes
accordance with:	
(1) the methodology developed, *published* and maintained by the *AER* for the determination of *distribution loss factors*; or	The AER has not developed a distribution loss factor methodology for South Australia.
(2) where the *AER* has not *published* a methodology under clause 3.6.3(g)(1), the methodology developed, *published* and maintained by the *Distribution Network Service Provider* for the determination of *distribution loss factors*.	ETSA Utilities has published and will maintain a distribution loss factor methodology for its network and has established distribution loss factors for the connections to its network in accordance with the methodology.
(h) The methodology for the determination of *distribution loss factors* referred to in clause 3.6.3(g) must be developed having regard to the following principles:	
(1) The aggregate of the *adjusted gross energy* amounts for a *distribution network*, determined in accordance with clause 3.15.4 using the *distribution loss factors* for the *financial year* in which the *distribution loss factors* are to apply should equal, as closely as is reasonably practicable, the sum of:	ETSA Utilities employs an approach for its network which ensures that the adjusted gross energy amounts using proposed distribution loss factors are made, as close as reasonably practicable, equal to the sum of the energy flowing at each connection point to the distribution network and the losses incurred on the distribution network in the year for which the distribution loss factors are to apply.
A. the amount of electrical *energy*, expressed in MWh, flowing at all *connection points* in the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply; and	
B. the total *electrical energy losses* incurred on the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply.	
(2) The methodology used to determine *distribution loss factors* for a *financial year* should incorporate provisions requiring a *Distribution Network Service Provider* to undertake a reconciliation between the aggregate of the *adjusted gross energy* amounts for its *distribution*	ETSA Utilities carries out an annual reconciliation for its network, between the adjusted gross energy amounts using distribution loss factors and the sum of the energy flowing at each connection point to the distribution

Rules clause		Compliance notes
	network for the previous *financial year* determined in accordance with clause 3.15.4 using the *distribution loss factors* that applied for *connection points* in that *distribution network* in the previous *financial year* and the sum of: (i) the amount of electrical *energy*, expressed in MWh flowing, at all *connection points* in its *distribution network* in the previous *financial year*; and (ii) the total *electrical energy losses* incurred on its *distribution network* in the previous *financial year*.	network and the losses incurred on the distribution network in the year. The closing balance at June 30 in each year is carried forward to become the opening balance for the following year.
(3)	The *distribution loss factor* for a *distribution network connection point*, other than those described in clause 3.6.3(b)(2)(i), is determined using a volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant class of *distribution network connection points* assigned to that *transmission network connection point* or *virtual transmission node* for the *financial year* in which the *distribution loss factor* is to apply.	For non site-specific distribution connections, ETSA Utilities has determined distribution loss factors using the volume weighted average of average losses between the distribution connection point and: • The virtual transmission node, in the case of generator or end user connections with an energy consumption or export not exceeding 160 MWh; or • The relevant transmission connection point, in the case of generator or end user connections with an energy consumption or export exceeding 160 MWh.
(4)	The *distribution loss factor* for a *distribution network connection point* described in clause 3.6.3(b)(2)(i) is determined using the *average electrical energy loss* between the *distribution network connection point* and the *transmission network connection point* to which it is assigned in the *financial year* in which the *distribution loss factor* is to apply.	For site-specific distribution connections, ETSA Utilities has determined distribution loss factors using the average energy loss between the distribution connection point and the relevant transmission connection point.
(5)	In determining the *average electrical energy losses* referred to in clauses 3.6.3(h)(3) and (4), the *Distribution Network Service Provider* must use	ETSA Utilities determines the average energy losses using the most recent consecutive 12 months of load and

Rules clause			Compliance notes
		the most recent actual *load* and *generation* data available for a consecutive 12 month period but may adjust this *load* and *generation* data to take into account projected *load* and / or *generation* growth in the *financial year* in which the *distribution loss factors* are to apply.	generation data and makes adjustments to the data where appropriate to accommodate projected load and generation changes in the year in which the distribution loss factors are to apply. In determining the 2010-11 distribution loss factors, 2008-09 load and generation data was used.
	(6)	In determining *distribution loss factors*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.	This clause does not apply, as there are no market network service providers connected to ETSA Utilities' distribution network.
(i)		Each year the *Distribution Network Service Provider* must determine the *distribution loss factors* to apply in the next *financial year* in accordance with clause 3.6.3(g) and provide these to *AEMO* for *publication* by 1 April. Before providing the *distribution loss factors* to *AEMO* for *publication*, the *Distribution Network Service Provider* must obtain the approval of the *AER* for the *distribution loss factors* it has determined for the next *financial year*.	ETSA Utilities has determined draft distribution loss factors for 2010-11, for the approval of the AER and publication by AEMO.