Contact: Leigh Mayne
Phone: (03) 6271 6544
Our Ref: NWM-04/0313/005
Your Ref: M2008/112

17 March 2009

Mr Chris Pattas
General Manager
Australian Energy Regulator
GPO Box 520

Melbourne VIC 3001

Attention: Nick Innes

Dear Mr Pattas,

DISTRIBUTION LOSS FACTORS

We refer to your letter dated 26 November 2008, regarding Distribution Loss Factors (DLFs) and Aurora Energy Pty Ltd's (Aurora) obligations pursuant to the National Electricity Rules (NER) to have approved and submitted DLFs to NEMMCO for publication by 1 April each year.

In accordance with the provisions of the NER, Aurora's published methodology, and your correspondence, Aurora submits its proposed DLFs for approval and subsequent provision to NEMMCO.

Aurora engaged ACIL Tasman (ACIL) to assist in the preparation of our proposed DLFs and I have enclosed the ACIL report for your information, as Attachment 1.

DLFs have been calculated for the Tasmanian jurisdiction comprising seven regions. This is consistent with the previous number of regions utilised by Aurora. The seven regions are Hobart, Tamar, East Coast, Derwent, Southern, West Coast, and North West.

Aurora Energy Pty Ltd
GPO Box 191
Hobart Tasmania 7001
Network Division
177 Main Road
MOONAH TAS 7009
www.auroraenergy.com.au
ABN 85 082 464 622

These areas have been chosen to account for the variations in the distribution network and the interconnectability of the transmission and distribution systems within greater Hobart and Launceston.

The choice of a Hobart and Launceston (Tamar) regions will require the application of a virtual transmission node for both areas, as agreed in 2005 with the Office of the Tasmanian Energy Regulator (OTTER).

Aurora's forecast DLFs for 2009-2010 for each of the seven regions are shown in the following tables:

Table 1 – Hobart Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	Hobart	PHST	1.0059	1.0059
Zone Substation	Hobart	PHZN	1.0026	1.0085
HV Distribution Network	Hobart	PHHV	1.0113	1.0199
Distribution Substation	Hobart	PHDS	1.0181	1.0383
LV Distribution Network	Hobart	PHLV	1.0384	1.0783

Table 2 – Tamar Region (incorporating Launceston) DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	Tamar	PTST	1.0000	1.0000
Zone Substation	Tamar	PTZN	1.0000	1.0000
HV Distribution Network	Tamar	PTHV	1.0133	1.0133
Distribution Substation	Tamar	PTDS	1.0216	1.0352
LV Distribution Network	Tamar	PTLV	1.0384	1.0750

Table 3 – East Coast Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	East Coast	PEST	1.0000	1.0000
Zone Substation	East Coast	PEZN	1.0000	1.0000
HV Distribution Network	East Coast	PEHV	1.0184	1.0184
Distribution Substation	East Coast	PEDS	1.0303	1.0492
LV Distribution Network	East Coast	PELV	1.0384	1.0895

Table 4 – North West Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	North West	PNST	1.0000	1.0000
Zone Substation	North West	PNZN	1.0000	1.0000
HV Distribution Network	North West	PNHV	1.0137	1.0137
Distribution Substation	North West	PNDS	1.0233	1.0373
LV Distribution Network	North West	PNLV	1.0384	1.0771

Table 5 – Derwent Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	Derwent	PDST	1.0000	1.0000
Zone Substation	Derwent	PDZN	1.0000	1.0000
HV Distribution Network	Derwent	PDHV	1.0165	1.0165
Distribution Substation	Derwent	PDDS	1.0270	1.0439
LV Distribution Network	Derwent	PDLV	1.0384	1.0840

Table 6 – Southern Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	Southern	PSST	1.0000	1.0000
Zone Substation	Southern	PSZN	1.0000	1.0000
HV Distribution Network	Southern	PSHV	1.0160	1.0160
Distribution Substation	Southern	PSDS	1.0263	1.0428
LV Distribution Network	Southern	PSLV	1.0384	1.0829

Table 7 – West Coast Region DLFs

Distribution Network Level	Region	DLF Code	Section DLF (including non-technical losses)	Cumulative DLF (including non-technical losses)
Subtransmission Network	West Coast	PWST	1.0039	1.0039
Zone Substation	West Coast	PWZN	1.0000	1.0039
HV Distribution Network	West Coast	PWHV	1.0082	1.0122
Distribution Substation	West Coast	PWDS	1.0342	1.0467
LV Distribution Network	West Coast	PWLV	1.0384	1.0870

The DLFs have been calculated in accordance with the methodology developed for Aurora by BES (Aust) Pty Ltd in 2004. This methodology is attached for your information, as attachment 2.

Aurora wishes to apply these DLFs to the transmission connection points detailed in Appendix 1.

Site specific DLFs have been calculated for the following customers in accordance with the requirements of the NER.

Table 8 – Site Specific DLFs

NMI	Region	DLF Code	DLF
8000000656	North West	PSPU	1.0015
8000003578*	West Coast	PBSM	1.0020
8000003585	North West	PACH	1.0000
8000003691	Tamar	PBGM	1.0019
8000003868	West Coast	PHGM	1.0000

* Existing mining complex currently in maintenance / limited production

Within the Tasmanian jurisdiction the boundary between the transmission and distribution assets is recognised at the load side of the 44kV, 33kV, 22kV and 11kV feeder circuit breakers located within the Transmission Network Service Providers (TNSP), Transend Networks Pty Ltd's (Transend), terminal substations.

The DLFs have been calculated assuming a network boundary exists between the transmission and distribution assets at the 44kV, 33kV, 22kV and 11kV bus bar located within Transend's terminal substations. This methodology is consistent with the methodology utilised by Transend to calculate the Marginal Loss Factors (MLFs) for each of its terminal substations.

We would be happy to further discuss this methodology with you at any time.

Yours sincerely

Leigh Mayne
Network Regulation Manager

Appendix 1

Table 9 – Hobart Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Chapel Street	11kV	TCS3
Creek Road	33kV	TCR2
Lindisfarne	33kV	TLF2
North Hobart	11kV	TNH2
Risdon	33kV	TRI4
Rokeby	11kV	TRK2

The Hobart region transmission nodes (TCS3, TCR2, TLF2, TNH2, TRI4 & TRK2) are to be averaged as a single Virtual Transmission Node (VTN) in accordance with the provisions of the NER.

The TNI for this existing VTN is TVN1.

Table 10 – Tamar Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Hadspen	22kV	THA3
Mowbray	22kV	TMY2
Norwood	22kV	TNW2
Trevallyn	22kV	TTR2
George Town	22kV	TGT3

The Tamar region transmission nodes (THA3, TMY2, TNW2, TTR2 & TGT3) are to be averaged as a single VTN in accordance with the provisions of the NER.

The TNI for this existing VTN is TVN2.

Table 11 – Southern Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Electrona	11kV	TEL2
Kermandie	11kV	TKE2
Kingston	11kV	TKI2
Knights Road	11kV	TKR2

Table 12 – East Coast Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Avoca	22kV	TAV2
Derby	22kV	TDE2
Scottsdale	22kV	TSD2
Sorell	22kV	TSO2
St Marys	22kV	TSM2
Triabunna	22kV	TTB2

Table 13 – North West Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Burnie	22kV	TBU3
Devonport	22kV	TDP2
Emu Bay	11kV	TEB2
Palmerston	22kV	TPM3
Port Latta	22kV	TPL2
Railton	22kV	TRA2
Smithton	22kV	TST2
Ulverstone	22kV	TUL2
Wesley Vale	11kV	TWV2

Table 14 – West Coast Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Newton	22kV	TNT2
Queenstown	22kV	TQT2
Rosebery	44kV	TRB2
Savage River	22kV	TSR2

Table 15 – Derwent Region Transmission Nodes

Zone Substation	Distribution connection voltage	TNI
Arthurs Lake	22kV	TAL2
Bridgewater	11kV	TBW2
Derwent Bridge	22kV	TDB2
Meadowbank	22kV	TMB2
New Norfolk	22kV	TNN2
Tungatinah	22kV	TTU2
Waddamana	22kV	TWA2
Wayatinah	22kV	TWY2