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12 March, 2009

Mr Chris Pattas General Manager Network Regulation South Australian Energy Regulator GPO Box 520 Melbourne VIC 3001

email: AERInquiry@aer.gov.au

Dear Mr Pattas

#### **Proposed 2009-10 Distribution Loss Factors**

Powercor Australia has completed a review of its proposed Distribution Loss Factors (DLF's) for 2009-10 taking into account clause 3.6.3 of the National Electricity Code including:-

- Site specific DLF's for end users with load of more than 40 GWh or a demand of more than 10MW;
- Site specific DLF's for generators over 10MW;

The 2009-10 loss factors are based on forecast sales and demand data with estimated losses derived from an average top down loss of 6.96% (average of last 5 years) of sales without adjustment for theft as agreed with the DLF working group in December 2007.

The proposed DLF's set out in the attached have been calculated in accordance with the Commission's guidance paper - Calculation Methodology for Distribution loss Factors (DLFs) for the Victorian Jurisdiction, 14 February 2007.

The actual top down losses for 2007-08 have been calculated to be 6.42% of sales. See attached reconciliation for 2007-08.

Powercor Australia has identified sixteen end use customers and three generators that qualify for site specific loss factors as set out in the attached submission. The site specific loss factors for these connection points have been calculated taking into account the characteristics of their specific supply arrangements and their electricity consumption characteristics. The information set out in relation to these customers should be treated confidentially as it provides sensitive information associated with identifiable customers.

In order to assist the AER in approving the DLF's, the Essential Services Commission (ESC) has reviewed the proposed DLF's and provided the attached report which states that

"the Commission is satisfied that the proposed DLFs are consistent with the DLF Calculation Methodology and meet the Rules' requirements."

Please give me a call on telephone 9683 4282 if you require further information or wish to discuss any aspect of this submission.

Yours Sincerely

Rolf Herrmann Manager Regulation

## 2009-2010 DLF Proposal

## 13 February 2009

Company Name: Powercor Australia Ltd

#### Forecast Energy Procured 2009/10 (MWh)

Energy obtained from transmission connections	11,406,268
Energy obtained from embedded generation	365,469
Energy obtained from ETSA	7,162
Energy provided to AGL	-42,485
Total Energy Procured 2009/10	11,736,413

Forecast Energy Supplied 2009/10 (MWh)	10,972,302
Forecast Losses 2009/10	764,111
Forecast Losses 2009/10 as % of Forecast Sales	6.96%

#### Forecast Energy Supplied 2009/10 (MWh)

	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short Subtrans.	1,174,874	37,909	1,041,166	1,077,049	2,948,820	6,279,817
Long Subtrans.	169,181	0	563,519	672,456	3,287,328	4,692,484

#### Forecast Annual Distribution Losses 2009/10 (MWh)

	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short Subtrans.	27,887	32,979	124,901	109,065	28,190	323,022
Long Subtrans.	168,465	30,463	115,375	100,746	26,040	441,089

## Network Average DLFs for General Customers

	DLF A	DLF B	DLF C	DLF D	DLF E
Approved 2008/09 DLFs					
Short Subtrans.	1.0047	1.0115	1.0375	1.0641	1.0728
Long Subtrans.	1.0331	1.0399	1.0659	1.0925	1.1012
Proposed 2009/10 DLFs					
Short Subtrans.	1.0048	1.0115	1.0371	1.0634	1.0721
Long Subtrans.	1.0369	1.0436	1.0692	1.0955	1.1042
% Difference					
Short Subtrans.	0.010%	0.000%	-0.039%	-0.066%	-0.065%
Long Subtrans.	0.368%	0.356%	0.310%	0.275%	0.272%

#### Powercor 2009-2010 DLF Proposal cont.

#### **Definitions:**

DLFA is the distribution loss factor to be applied to a second tier customer or pool customer connected to either a 66kV or a 22kV subtransmission line.

DLF B is the distribution loss factor to be applied to a second tier customer or pool customer connected to the lower voltage side of a zone substation

DLF C is the distribution loss factor to be applied to a second tier customer or pool customer connected to a distribution line at voltages of 22kV, 11kV or 6.6kV.

DLF D is the distribution loss factor to be applied to a second tier customer or pool customer connected to the lower voltage terminals of a distribution transformer.

DLF E  $\,$  is the distribution loss factor to be applied to a second tier customer or pool customer connected to low voltage lines of 240/415 V  $\,$ 

# Site-Specific Distribution Loss Factors (DLF) for Large Customers (Customers with demand > 10 MW or annual energy consumption > 40 GWh)

No	NMI Number	DLF 2008/09	Proposed DLF 2009/10	% Diff.	
1	VCCCAF0002	1.0011	1.0011	0.000%	
2	VCCCAF0001	1.0050	1.0062	0.119%	
3	VCCCDA0031	1.0006	1.0006	0.000%	
4	VCCCGD0001	1.0012	1.0012	0.000%	
5	VCCCGJ0001	1.0028	1.0029	0.010%	
6	VCCCDA0022	1.0015	1.0014	-0.010%	
7	VCCCRD0007	1.0133	1.0134	0.010%	
8	VCCCDA0025	1.0086	1.0087	0.010%	
9	VCCCAB0003	1.0167	1.0158	-0.089%	
10	VCCCAD0001	1.0109	1.0110	0.010%	
11	6203764760	1.0330	1.0134	-1.897%	
12	VCCCSE0004	1.0582	1.0582	0.000%	
13	VCCCGE0019	1.0097	1.0098	0.010%	
14	VCCCBC0025	1.0317	1.0313	-0.039%	
15	VCCCTE0002	1.0545	1.0593	0.455%	
16	VCCCSB0012	1.0375	1.0569	1.87%	
17	VCCCSG0063	1.0746		-0.54%	

Note 1:Previously on General "C" Short

Note 2: Reverts to General "C" Long

# Powercor 2009-20010 DLF Proposal cont.

## Site-Specific Distribution Loss Factors (DLF) for Large Embedded Generators (Generators with export power > 10 MW)

No	NMI Number	DLF 2008/09	Proposed DLF 2009/10	% Diff.
1	6203661632	1.0107	1.0100	-0.069%
2	6203008781	1.0287	1.0328	0.399%
3	6203690629	1.0287	1.0328	0.399%

# Actual Energy Procured 2007/08 (MWh)

	MWh		
Energy obtained from transmission connections	10,933,250		
Energy obtained from embedded generation	363,459		
Energy obtained from ETSA	6,908		
Energy provided to Jemena	-40,979		
Total Energy Procured 2007/08	11,262,637	X	

#### **RECONCILIATION -2007/08**

	MWh	
$\Sigma ME_i \times DLF_i$ for 2007/08	11,297,305	A
Actual Consumption or Sales for 2007/08	10,583,374	В
Losses recovered through application of DLFs to customers' actual consumption for 2007/08	713,931	C=A-B
Total Energy Procured 2007/08	11,262,637	X
Actual Measured Losses 2007/08	679,263	D=X-B
Actual Measured Losses 2007/08 as %age of Sales	6.42%	D/B
Allowance for theft & faulty metering energy (0.2% of sales)	21,167	E=B*0.2%
Actual Measured Losses 2007/08 adjusted for theft & faulty metering	658,096	F = D - E
Difference or error in overall losses	55,835	G = C - F
Difference or error in overall losses as % of total energy sales (Over-recovered)	0.53%	H = G/B