# SP AusNet Report on Distribution Loss Factors for Average and Qualified Customers for the FY2008/09

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P AusNet

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#### 1 Background

The Australian Energy Regulator (AER) performs economic regulation of the wholesale electricity market and electricity transmission networks in the National Electricity Market (NEM), and enforcement of the National Electricity Law and National Electricity Rules. It is responsible for the approval Distribution Loss Factors (DLFs) applicable to the Victorian jurisdiction pursuant to clause 3.6.3(i) of the National Electricity Rules (the Rules), which states that:

...Before providing the distribution loss factors to NEMMCO for publication, the Distribution Network Service Provider must obtain the approval of the relevant Jurisdictional Regulator for the distribution loss factors it has determined for the next financial year.

This document outlines the information required for the approval of DLFs for the FY2008/09.

#### 2 Base Case (with Qualified Customers)

The table below shows the summary of actual total energy purchased and sales for the FY 2006/07. The resulting top-down energy loss was then used to scale the calculated bottom-up energy loss to ensure that DLFs for each network levels are accurately derived and allocated.

28-Feb-08						
Base Case						
Company Name	SP AusNet	]				
Energy Procured (MWh)						
Energy obtained from transmis	sion connections			7,471,395	1	
Energy obtained from embedd		other distributors		288,692		
Total Energy Procured (pa)	0			7,760,088		
Note: Excludes Latrobe Valley ar	ea					
Energy Supplied (MWh)					_	
Total annual energy supplied				7,187,940		
Less supply to other distributo	rs					
Net Energy Supplied (pa)				7,187,940		
Note: Excludes Latrobe Valley ar Net Energy Supplied (MWh) - E						
3) - FF - ( ····) -		gregated using Ne	twork Tariffs			
	Subtransmission	Zone Sub	HV Lines	Dist Trans	LV Lines	Total
Financial Year 2005/06	302,069	0	682,654	1,232,097	4,971,120	7,187,94
Net Energy Supplied (MWh)	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short	162,223	-	366,613	661,687	2,669,697	3,860,22
Subtransmission						
Long	139,845	-	316,040	570,410	2,301,423	3,327,718
Subtransmission						
Total	302,069	0	682,654	1,232,097	4,971,120	7,187,94
Calculated Annual Losses (MW	/h)					
· · · · · ·	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short	22,308	28,827	94,996	75,914	21,196	243,241
Subtransmission						
Long	138,450	24,851	81,892	65,442	18,272	328,90
Subtransmission						
Total	160,758	53,678	176,888	141,356	39,468	572,14
DLF-Base Case						-
	DLF A	DLF B	DLF C	DLF D	DLF E	
Short	1.0058	1.0136	1.0393	1.0621	1.0700	1
		1	1			
Subtransmission						
Subtransmission Long Subtransmission	1.0416	1.0494	1.0751	1.0979	1.1058	

# 3 Base Case (without Qualified Customers)

The table below shows the resulting DLFs if Qualified Customers (QCs) are excluded. In this table, QC actual energy consumptions and their share of "scaled" bottom-up energy losses were taken out.

2008 / 2009 DLF Submission						
28-Feb-08						
Excluding Qualified Customers - E						
Company Name	SP AusNet					
Energy Procured (MWh)						
Energy obtained from transmissio	n connections			7,471,395	1	
Energy obtained from embedded of		r distributors		288,692		
Total Energy Procured (pa)	generation and othe	alotributoro		7,760,088		
Note: Excludes Latrobe Valley area				,,	4	
Energy Supplied (MWh)						
Total annual energy supplied				7,187,940	1	
Less supply to other distributors				, , , , , , , , , , , , , , , , , , , ,		
Less supply to qualified end users	3			332,992		
Net Energy Supplied (pa)				6,854,948		
Note: Excludes Latrobe Valley area					-	
Net Energy Supplied (MWh) - Base						
	Sales (MWh) - Age	pregated using Net	twork Tariffs			
	Subtransmission	Zone Sub	HV Lines	Dist Trans	LV Lines	Total
Financial Year 2006/07	302,069	0	682,654	1,232,097	4,971,120	7,187,940
Qualified end users	283,371				-	
Excluding Qualified end users	18,698	0	633,032	1,232,097	4,971,120	6,854,948
Net Energy Supplied (MWh)						
	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short	9,833		332,897	647,931	2,614,195	3,604,856
Subtransmission	9,033	-	332,097	047,931	2,014,195	3,004,030
Long	8,865	-	300,135	584,166	2,356,925	3,250,092
Subtransmission	0,005		300,135	504,100	2,350,925	3,230,092
Total	18.698	0	633,032	1,232,097	4,971,120	6,854,948
	10,000	0	000,002	1,202,037	4,071,120	0,004,040
Calculated Annual Losses (MWh)						
	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short	21,099	28,179	92,961	74,336	20,755	237,330
Subtransmission	21,500	_0,170	02,001	,500	20,700	201,000
Long	140,167	25,406	83,812	67,020	18,713	335,118
Subtransmission Total	161,266	53,585	176,773	141,356	39,468	572,448
lotai	101,200	53,585	170,773	141,330	39,408	572,448
DLF	-			-		
	DLF A	DLF B	DLF C	DLF D	DLF E	
Short	1.0059	1.0137	1.0395	1.0623	1.0703	1
Subtransmission	1.0059	1.0137	1.0395	1.0023	1.0703	
Long	1.0431	1.0510	1.0768	1.0996	1.1076	1
Subtransmission						
Castationio	1			8		

# 4 Forecast DLFs for Average Customers

The table below summarises the forecast energy sales, energy losses and DLFs applicable to second tier customers for FY2008/09.

2008 / 2009 DLF Submission	h					
28-Feb-07						
Excluding Qualified Custon	ners - After Forecast					
Company Name	SP AusNet					
		4				
Net Energy Supplied (MWh)	- Base Case					
	Sales (MWh) - Age	gregated using Net	work Tariffs			
	Subtransmission	Zone Sub	HV Lines	Dist Trans	LV Lines	Total
Total Forecast 2007/08 FY	320,163	0	723,545	1,305,900	5,268,891	7,618,499
Qualified end users	300,344				•	,
Excluding Qualified end users	s <b>19,818</b>	0	670,951	1,305,900	5,268,891	7,265,561
Net Energy Supplied (MWh)						
	DLF A	DLF B	DLF C	DLF D	DLF E	Total
Short	10,422	-	352,837	686,742	2,770,786	3,820,788
Subtransmission	- /		,	,	, .,	-,,
Long	9,396	-	318,114	619,158	2,498,105	3,444,773
Subtransmission						
Subtransmission Total	19,818	0	670,951	1,305,900	5,268,891	7,265,561
		O DLF B	670,951 DLF C	1,305,900	5,268,891 DLF E	7,265,561 Total
Total Calculated Annual Losses (	MWh) DLF A	DLF B	DLF C	DLF D	DLF E	Total
Total Calculated Annual Losses ( Short	MWh)	DLF B		DLF D	DLF E	, ,
Total Calculated Annual Losses ( Short Subtransmission	MWh) DLF A 22,391	DLF B 29,911	DLF C 98,676	DLF D 78,693	DLF E 21,947	Total 251,618
Total Calculated Annual Losses ( Short Subtransmission Long	MWh) DLF A	DLF B 29,911	DLF C	DLF D 78,693	DLF E 21,947	Total
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission	MWh) DLF A 22,391 148,751	DLF B 29,911 26,968	DLF C 98,676 88,965	DLF D 78,693 70,948	DLF E 21,947 19,787	Total 251,618 355,419
Total Calculated Annual Losses ( Short Subtransmission Long	MWh) DLF A 22,391	DLF B 29,911 26,968	DLF C 98,676 88,965	DLF D 78,693 70,948	DLF E 21,947 19,787	Total 251,618 355,419
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission	MWh) DLF A 22,391 148,751	DLF B 29,911 26,968	DLF C 98,676 88,965	DLF D 78,693 70,948	DLF E 21,947 19,787	Total 251,618 355,419
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission Total	MWh) DLF A 22,391 148,751	DLF B 29,911 26,968	DLF C 98,676 88,965	DLF D 78,693 70,948	DLF E 21,947 19,787	Total 251,618 355,419
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission	MWh) DLF A 22,391 148,751	DLF B 29,911 26,968	DLF C 98,676 88,965	DLF D 78,693 70,948	DLF E 21,947 19,787	Total 251,618 355,419
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission Total DLF	MWh) DLF A 22,391 148,751 171,143 DLF A	DLF B 29,911 26,968 56,879 DLF B	DLF C 98,676 88,965 187,641 DLF C	DLF D 78,693 70,948 149,641 DLF D	DLF E 21,947 19,787 41,734 DLF E	Total 251,618 355,419 607,037
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission Total	MWh) DLF A 22,391 148,751 171,143	DLF B 29,911 26,968 56,879 DLF B	DLF C 98,676 88,965 187,641	DLF D 78,693 70,948 149,641 DLF D	DLF E 21,947 19,787 41,734 DLF E	Total 251,618 355,419 607,037
Total Calculated Annual Losses ( Short Subtransmission Long Subtransmission Total DLF Short	MWh) DLF A 22,391 148,751 171,143 DLF A	DLF B 29,911 26,968 56,879 DLF B 1.0137	DLF C 98,676 88,965 187,641 DLF C 1.0396	DLF D 78,693 70,948 149,641 DLF D 1.0624	DLF E 21,947 19,787 41,734 DLF E 1.0703	Total 251,618 355,419 607,037

## 5 Forecast DLFs for Qualified Customers

Table below indicates the customers who are qualified for end-user DLF based on their actual energy sales and demand in FY2006/07 as specified in the Code.

#### Information withheld by the AER

The table below shows the forecast DLFs for these customers for FY2008/09.

Information withheld by the AER

# 6 Overall Forecast Energy Sales and Energy Losses for FY2008/09

The table below summarises the overall forecast values on energy sales and losses for the financial year 2008/09.

Information withheld by the AER