ETSA Utilities

a partnership of:
Spark Infinstructure SA (No. 1) Pty Ltd
ABN 54-091-142-580
Spark Infinstructure SA (No. 2) Pty Ltd
ABN 54-091-142-580
Spark Infinstructure SA (No. 3) Pty Ltd
ABN 19-091-143-038
Spark Infinstructure SA (No. 3) Pty Ltd
ABN 50-091-142-562
each incorporated in Australia
CKI Utilities Development Lamited
ABN 65-090-718-880
HEI Utilities Development Limited
ABN 82-090-718-951
cach incorporated in The Bahamas

24 March 2010

Paul Dunn Network Regulation South Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Dear Paul,

REVIEW OF DISTRIBUTION LOSS FACTORS FOR 2009/10

As required by clause 3.6.3 (i) of the National Electricity Rules (NER), ETSA Utilities seeks approval from the AER for the distribution loss factors (DLFs) described below to apply in the financial year 2010/11. ETSA Utilities understands that, following the AER's approval, the AER will notify AEMO of the distribution loss factors to apply in 2010/11.

The methodology applied to calculate the DLFs for 2010/11 is the same as that applied in previous DLF submissions to both the AER and ESCOSA. In departure from previous year's, ESCOSA no longer approve ETSA Utilities' DLF calculations (refer last year's DLF submission). ETSA Utilities has engaged Energeia to provide an independent review of ETSA Utilities' DLF calculation. Energeia's report is attached. Harry Colebourn is the principal Energeia consultant involved in this review.

As part of this review, the historic ETSA Utilities' Distribution Loss Factor Methodology was comprehensively documented. That document, including the calculations involved in preparing the 2010-11 DLFs, is attached for the AER's information. The Energeia audit review is also attached.

Energeia has reviewed ETSA Utilities' 2010-11 distribution loss factors and associated 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 methodology prepared by ETSA Utilities meets the relevant requirements of clause 3.6.3 of the Rules;
- ETSA Utilities has followed its methodology in preparing the proposed 2010-11 distribution loss factors; and
- The distribution loss factors proposed by ETSA Utilities for 2010-11 are reasonable.

Distribution Losses Outcome to 2008/09 and Forecasts to 2010/11

The table below details the actual losses over the past ten years. The net over recovery over this ten year period to 30 June 2009 was 14 GWh. Higher losses were recorded in 2008-09, due in part to the extreme high demands throughout the distribution system during the January-February 2009 heat wave.

Year	Energy	Energy outputs			Balances		
	inputs	Customer	DLF	Total	Annual	Opening	Closing
	(A)	loads	Losses	(B)	(A-B)		
Historical							
1999-00	10,539	9,910	670	10,580	-41	-2	-43
2000-01	11,011	10,291	699	10,989	22	-43	-21
2001-02	10,737	10,153	650	10,803	-66	-21	-87
2002-03	11,073	10,431	679	11,110	-37	-87	-124
2003-04	11,177	10,485	637	11,123	55	-124	-69
2004-05	11,165	10,499	641	11,140	25	-69	-44
2005-06	11,677	10,958	706	11,664	13	-44	-31
2006-07	11,978	11,262	727	11,989	-11	-31	-42
2007-08	12,053	11,347	737	12,084	-31	-42	-73
2008-09	12,051	11,265	726	11,991	60	-73	-14

DLFs were reduced for 2009-10 because of the account balance at June 2008 and recent history of lower losses. An under-recovery of losses is forecast for 2009-10, and DLFs have been proposed for 2010-11 to slightly over-recover forecast losses of 6.1% of energy inputs (purchases). These forecasts are set out below.

Year	Energy	Energy outputs			Balances		
	inputs	Customer DLF Total		Annual	Opening	Closing	
	(A)	loads	Losses	(B)	(A-B)		
Estimated (using 2008-09 customer load data, average historical losses, actual DLFs for 2009-10 and							
forecast DLF's 2010-11)							
2009-10	11.997	11,265	676	11,941	56	-14	42
2010-11	11.997	11,265	742	12,008	-11	42	31

Site Specific Loss Factors 2010/11

ETSA Utilities reviews the customer and generator site specific distribution loss factors for application each year. We propose the same site specific loss factors apply in 2010/11 as in 2009-10 as there has been negligible change. Detailed calculations are set out in the DLF methodology (attached)

<u>Distribution Loss Factors 2010/11</u>

Site specific distribution loss factors have been tabled below.

The distribution loss factors for 2010/11 for each of the distribution connection point classes were calculated with reference to maintaining a trend towards a zero net over/(under) recovery of losses. The historic differential in loss factors between voltage levels has been retained from previous loss factor calculations, reflecting the average level of losses typically incurred on each voltage segment in a state-wide distribution system.

The tables below contain the distribution loss factors to be applied in the 2010/11 financial year.

Distribution Connection Point Class DLFs

Class	Tariff	MSATS DLF Code	2010/11 DLF	2009/10 DLF
	Unmetered	NLV2	1.0814	1.0740
	Residential	NLV2	1.0814	1.0740
Low Voltage	Controlled Load	NLV2	1.0814	1.0740
Voltage	Business Single Rate	NLV2	1.0814	1.0740
	Business Two Rate	NLV2	1.0814	1.0740
Low Voltage T/F	Medium LV	NLV1	1.0650	1.0591
	LV Demand	NLV1	1.0650	1.0591
	Large LV Demand	NLV1	1.0650	1.0591
HV	HV	NHV1	1.0388	1.0353
Substatio	Substation	NZS1	1.0180	1.0164

Site Specific DLF - Customers

NMI	MSATS DLF Code	2010/11 DLF	2009/10 DLF
2001000378	NBA1	1.0000	1.0000
2001000608	NAC2	1.0135	1.0135
2002112609	NKC4	1.0057	1.0057
2002133131	NGM2	1.0115	1.0115
SAAAAAA018	NPS1	1.0000	1.0000
SAAAAAA019	NPS2	1.0069	1.0069
SAAAAAA021	NPS3	1.0069	1.0069
SAAAAAA022	NGM1	1.0107	1.0107
SAAAAAA024	NAB1	1.0077	1.0077
SAAAAAA026	NAC1	1.0218	1.0218
SAAAAAA029	NMM1	1.0145	1.0145
SAAAAAA035	NGT1	1.0048	1.0048
SAAAAAA084	NOS1	1.0000	1.0000
SAAAAAA438	NIF1	1.0091	1.0091
SAAAAAB557	NOS2	1.0000	1.0000

Site Specific DLF - Embedded Generators

NMI	MSATS DLF Code	2010/11 DLF	2009/10 DLF
2001000647	NCL1	1.0226	1.0226
2001000734	NSHW	1.0092	1.0092
2002108658	NCDW	0.9721	0.9721
2002108660	NAS1	0.9900	0.9900
2002108661	NAS2	0.9900	0.9900

If you have any queries on this subject, please call James Bennett on (08) 8404 5261.

Yours sincerely,

er Lindon

Eric Lindner
GENERAL MANAGER REGULATION

Attachments

ETSA Utilities' Distribution Loss Factor Methodology, March 2010 Review of ETSA Utilities proposed Distribution Loss Factors for 2010-11