

28 February 2012

Louise Dwyer
Group Manager Regulatory Affairs
Energex Limited
GPO Box 1461
QLD 4001

Dear Louise,

REVIEW OF ENERGEX DISTRIBUTION LOSS FACTORS FOR 2012/13

Intelligent Energy Systems Pty Ltd (IES) has undertaken a review (audit) of the Distribution Loss Factors (DLFs) for 2012/13 financial year calculated by Aurecon Australia Pty Ltd (Aurecon) for Energex. The IES audit examined the proposed DLFs with regard to their consistency with Energex's published methodology which is the published methodology operating in Queensland as at 31 December 2011.

For its 2012/13 DLF calculations, Energex commissioned engineering consultants Aurecon. Aurecon has followed the methodology implemented by Energex in previous DLF reviews. It makes use of a well structured set of spreadsheets that clearly show the application of the approved methodology, the inputs, intermediate values and final DLF numbers. Energex provided IES with a document titled "2012/13 Distribution Loss Factor Partial Review", dated 31 January 2012, outlining its proposed DLFs for 2012/13. The report also included the methodology for the calculation of DLFs, discussion of results and outcomes of its reconciliation of losses for 2010/11. Energex's submission was clear and concise, the calculations consistent with the published methodology and, DLF values correctly determined.

Energex has submitted proposed DLFs for 2012/13 that have changed slightly from those for 2011/12. The proposed DLFs for tariff class customers are shown in Table 1 and for Independently Calculated Customers (ICCs) in Table 2 along with the existing DLFs and the percentage changes based on the new calculated 2012/13 values.



The changes in the DLFs proposed for tariff class customers compared to the current DLFs vary from between 0.04% and -0.11% from the 2011/12 values. There are no significant variations in DLFs, with the largest variation of 0.11% being a decrease which will lower customer costs slightly. The proposed tariff class DLFs to apply in financial year 2012/13 should not have a significant impact on Energex's customer costs.

There were no significant increases or decreases in DLF values for ICCs (greater than 1%) from last year's DLFs. Any changes in the main related to decreases in forecast demand and energy resulting in a decrease in load factor for the particular ICC. Also reconfiguration of some ICC networks has resulted in a more direct path to the connection point, resulting in a reduction in losses.

IES has examined the data provided by Energex (in the form of spreadsheets) and are of the opinion that they have estimated their projections in accordance with the published methodology.

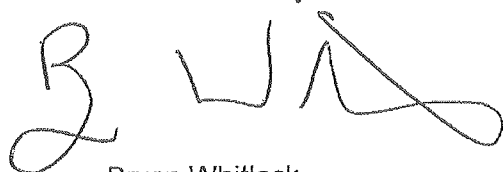
Energex uses a forward looking approach in the calculation of its DLFs. The forward looking approach uses projected loads and generation for the year the DLFs are to apply in, and these projections are based on the most recent historical and generation data available for a consecutive 12 month period, as specified by the Rules. For its current calculations, projections are based on historical data to the end of calendar year 2011.

Energex states that "sales are forecast using a 'bottom-up' approach, which is based on the application of econometric and time series analysis to forecast energy consumption by large individual customers and market segments", employing a range of macro-economic and demographic factors, and that "purchases are forecast using a 'top-down' approach, which is based on an analysis of energy purchases from Powerlink". It states that the "two approaches are reconciled to ensure they meet certain reasonableness criteria with respect to a range of variables and output measures".

Energex has carried out a reconciliation of losses for financial year 2010/11 in accordance with the National Electricity Rules' requirements. Energex found that when applying the 2010/11 DLFs to its actual sales figures for 2010/11, reconciled purchases overstated actual energy purchased by 0.83%. Considering a forward looking approach has been used, where forecasts of sales and purchase figures are utilised this is an acceptable result.

In summary IES are of the opinion that the DLFs calculated by Energex for 2012/13 as shown in Tables 1 and 2 are consistent with the published methodology and, thereby correctly determined.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'B. Whitlock', with a stylized flourish at the end.

Bryan Whitlock
Senior Energy Analyst

Non-ICC Connection Categories	DLF Code	Existing DLF	Proposed DLF	Change in DLF (%)
		2011/12	2012/13	
110 kV connected	FSSS	1.0060	1.0061	0.01%
33 kV connected	F3CL	1.0178	1.0181	0.03%
11 kV bus connected	F1ZH	1.0236	1.0239	0.03%
11 kV line connected	F1CH	1.0321	1.0325	0.04%
LV bus connected	F1CL	1.0466	1.0463	-0.03%
LV line connected	FLCL	1.0642	1.0630	-0.11%

Table 2 Energex proposed 2012/13 DLFs for ICCs and Embedded Generators

Individually Calculated Customer	DLF Code	NMI	DLF Applied In 2011/2012	DLF To Be Applied In 2012/13	Change In DLF (%)
	FAPM	QB02572591	1.01352	1.01460	0.11%
	FCAL	QB03674681	1.00788	1.00928	0.14%
	FICT	QB03675327	1.00797	1.00781	-0.02%
	FBCC	QB00703630	1.01300	1.01381	0.08%
	FBEP	QB13708848	1.01030	1.00521	-0.50%
	FBOC	QB13786415	1.01443	1.01474	0.03%
	FBAC	QB07156049	1.02223	1.01757	-0.46%
	FAPB	3116941403	1.01588	1.00685	-0.89%
	FLMD	3120007259	1.01637	1.01372	-0.26%
	FQCL	QB03187888	1.03437	1.03448	0.01%
	FCRL	QB00011835	1.04038	1.04175	0.13%
	FRBH	QB03674151	1.01300	1.00892	-0.40%
	FQG	QB03674177	1.01403	1.01473	0.07%
	FQBH	QB09709916	1.00026	1.00000	-0.03%
	FQB	QB09750568	1.00404	1.00202	-0.20%
	FQBW	QB05850851	1.00155	1.00042	-0.11%
	FQCB	QB07417373	1.00051	1.00075	0.02%
	FQC	QB03187390	1.00307	1.00005	-0.30%
	FQL	QB07480580	1.00087	1.00036	-0.05%
	FQR	QB12757888	1.00028	1.00022	-0.01%
	FQRS	31200903632	1.00024	1.00088	0.06%
	FQT	QB08485399	1.00137	1.00111	-0.03%
	FQW	3117476607	1.00055	1.00058	0.00%
	FPAH	QB03675025	1.00944	1.00881	-0.06%
	FRAF	3120001083	1.00235	1.00802	0.57%
	FSWP	QMRGW00156	1.00805	1.00939	0.13%
	FSC	QB09455507	1.01720	1.01098	-0.61%
	FSTC	QB07047011	1.01026	1.01157	0.13%
	FSFT	QB00702307	1.03596	1.03881	0.28%
	FACI	QB08144664	1.06611	1.06573	-0.04%
	FTD	3117267111	1.00937	1.00682	-0.25%
	FUQ1	3116852575	1.00766	1.00650	-0.12%
	FUQ2	3116852583	1.00716	1.00620	-0.10%
	FVP	QB12021814	1.00689	1.00996	0.30%
	FRPT	QB14097800	1.01002	1.01047	0.05%