DISTRIBUTION LOSS FACTORS FOR THE 2020/21 FINANCIAL YEAR

PREPARED BY:	Markets
PREPARED FOR:	National Electricity Market
DOCUMENT NO:	N/A
VERSION NO:	7.0
EFFECTIVE DATE:	1 July 2020

Version control

Version	Date	Details
1.1	27/03/2020	Initial version for 2020/21
2.0	23/06/2020	New DLF code - KAT - for PowerCor's NMI 6203824333
3.0	03/08/2020	New DLF code - LG11 - SPA - Site Specific 6306034976
4.0	17/08/2020	Ausgrid DLF factors for NCCCNRNP406, NCCCNRNP505 and NCCCWRNP604
5.0	29/09/2020	Essential NMI 4001297032 (BS61) – DLF correction due to an administrative error. Previous DLF: 0.9958 Correct DLF: 1.0008
6.0	26/10/2020	Addition of DLF for Warwick Solar Farm 1 (Allora Feeder) GA09 and Warwick Solar Farm 2 (Killarney Feeder) GA10 due to a revision of DLF calculations. New DLF for Winton Solar Farm (WISF) LG12
7.0	11/12/2020	New DLF code – BS65 - Essential DLF factor for Jemalong Solar Farm NMI 4001322845.

Contents

Tables

Rules requirements

As specified in the National Electricity Rules, distribution loss factors (DLFs):

- Notionally describe the average electrical energy losses for electricity transmitted on a distribution network between a distribution network connection point and a transmission network connection point or virtual transmission node for the financial year in which they apply;
- Will either be a site-specific distribution loss factor, as defined in clause 3.6.3(b)(2)(i), or derived from the volume weighted average of the average electrical energy loss in the distribution network, as defined in clause 3.6.3(b)(2)(ii); and
- Are to be used in the settlement process as a notional adjustment to the electrical energy flowing at a distribution network connection point in a trading interval to determine the adjusted gross energy amount for that connection point in that trading interval, in accordance with clause 3.15.4.

Clause 3.6.3(i) requires that each year the Distribution Network Service Provider (DNSP) must determine the distribution loss factors to apply in the next financial year in accordance with clause 3.6.3(g) and provide these to AEMO for publication by 1 April. Before providing the distribution loss factors to AEMO for publication, the DNSP must obtain the approval of the Australian Energy Regulator (AER) for the distribution loss factors it has determined for the next financial year.

Distribution loss factors for 2020/21

The Queensland DLFs for the 2020/21 financial year are tabulated in Appendix A.

The Victorian DLFs for the 2020/21 financial year are tabulated in Appendix B.

The NSW DLFs for the 2020/21 financial year are tabulated in Appendix C.

The ACT DLFs for the 2020/21 financial year are tabulated in Appendix D.

The South Australian DLFs for the 2020/21 financial year are tabulated in Appendix E.

The Tasmanian DLFs for the 2020/21 financial year are tabulated in Appendix F.

Appendix G contains a contact for each DNSP. Any questions regarding distribution connection points and DLFs should be referred to the relevant DNSP and their listed contact.

Appendix A:
Queensland distribution loss factors for 2020/21

Table 1 Energex's average DLFs

Network level	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
110 kV connected	FSSS	1.00463	1.00390
33 kV connected	F3CL	1.01085	1.00844
11 kV bus connected	F1ZH	1.01537	1.01228
11 kV line connected	F1CH	1.02311	1.01960
LV bus connected	F1CL	1.04218	1.03815
LV line connected	FLCL	1.05592	1.05200

Table 2 Energex's DLFs for individually calculated customers/generators

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
3120081063	FALK	1.01082	1.00940
QB13708848	FBEP	1.01067	1.01138
QB13786415	FBOC	1.01264	1.01012
QB03188493	FBRR	1.00841	1.04952
QB07156049	FBAC	1.01382	1.01359
3116941403	FAPB	1.01354	1.01338
3120007259	FLMD	1.01377	1.01060
QB03674681	FCAL	1.00959	1.00884
QB03187888	FQCL	1.04186	1.04763
3120032960	FCLT	1.00528	1.00510
3120033076	FCST	1.00340	1.00331
QB00011835	FCRL	1.02581	1.01527
3120167431	FEAN	1.00721	1.00693
3120167432	FEAS	1.00752	1.00732
3117267111	FTD	1.00720	1.00659
3120001083	FRAF	1.01806	1.01718
QB03017958	FQUE	1.00725	1.00799
3117524016	FGBI	1.00479	1.00413
3120048897	FGHP	1.00795	1.00810

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
QB08899177	FHYS	1.05012	1.05051
QB03675327	FICT	1.00972	1.01251
QB00702307	FSFT	1.01161	1.01025
QB08144664	FACI	1.08215	1.09561
3120085619	FLWH	1.00636	1.00608
3120085617	FLWT	1.00090	1.00071
3117238161	FLGP	1.01225	1.01109
3120081891	FNBW	1.12115	1.13761
QB03674177	FQG	1.01622	1.01320
QB05747155	FPCF	1.01342	1.01313
QB09709916	FQBH	1.00030	1.00026
QB09750568	FQB	1.00170	1.00244
QB05850851	FQBW	1.01047	1.00151
QB07417373	FQCB	1.00969	1.01024
QB03187390	FQC	1.00003	1.00004
QB07480580	FQL	1.00069	1.00072
3120253094	FQP	1.01004	1.00738
QB12757888	FQR	1.00035	1.00051
3120090363	FQRS	1.00027	1.00034
3120253056	FQRW	1.00524	1.00580
QB08485399	FQT	1.00703	1.00481
3117476607	FQW	1.00080	1.00169
QB03675025	FPAH	1.01767	1.01054
3120134803	FQCH	1.00655	1.00295
QB03674151	FRBH	1.00895	1.00620
QB08051828	FHDU	1.04421	1.01361
QB06480217	FHDL	1.00543	1.00174
QB08045917	FMRP	1.05928	1.05755
QB00703630	FBCC	1.01116	1.01073
QB02572559	FNPD	1.02607	1.02164
QMRGW00156	FSWP	1.00730	1.00882
QB00547778	FSBB	1.03191	1.03771

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
3120152640	FSUH	1.01358	1.01010
QB07047011	FSTC	1.01123	1.01076
3116852575	FUQ1	1.00526	1.00480
3120301348	FUQC	1.03233	1.03562
QB12021814	FVP	1.00827	1.00910
QB09455507	FSC	1.00700	1.00633
QB03188523	FWGC	1.00509	1.00488
3116578384	FEIB	1.01623	1.01326
3120349332	FLEA	1.01954	N/A
3120660775	FLEM	1.04057	N/A
QB14097800	FRPT	1.00249	1.00065
3120309278	FSHG	1.15806	1.16209
3117546923	FTTB	1.04307	1.03718
3120301290	FVSF	1.06110	1.05123
3114538695	FWHG	1.09170	1.05895
3120707488	FQNG	NEW	1.00556

Table 3 Ergon Energy's tariff class DLFs

NETWORK LEVEL	DLF applied in 2019/20			DLF to apply in 2020/21		
	East	West	MI	East	West	MI
Sub-Trans. Bus	1.006	1.037	1.000	1.005	1.029	1.001
Sub-Trans. Line	1.012	1.062	1.004	1.008	1.040	1.007
22/11 kV Bus	1.016	1.063	1.007	1.011	1.044	1.010
22/11 kV Line	1.036	1.095	1.035	1.031	1.078	1.037
LV Bus	1.071	1.144	1.065	1.075	1.118	1.092
LV Line	1.075	1.161	1.076	1.093	1.233	1.036

NETWORK LEVEL	DLF codes		
	East	West	MI
Sub-Trans. Bus	GESB	GWSB	GMSB
Sub-Trans. Line	GESL	GWSL	GMSL
22/11 kV Bus	GEHB	GWHB	GMHB
22/11 kV Line	GEHL	GWHL	GMHL
LV Bus	GELB	GWLB	GMLB
LV Line	GELL	GWLL	GMLL

Table 4 Ergon Energy's site-specific DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
QAAALV0001	GBSB	1.000	1.000
QAAABW0000	GBSB	1.000	1.000
QAAABW0002	GS02	1.009	1.004
3051526859	GBSB	1.000	1.000
3051526841	GBSB	1.000	1.000
3051526883	GBSB	1.000	1.000
3051526891	GBSB	1.000	1.000
QDDD003345	GS77	1.009	1.004
QCCC000004	GS19	1.069	1.046
QCCC000002	GS18	1.000	1.001
QAAABW0001	GS51	1.000	0.999
QDDD000003	GS21	1.001	1.002
QAAALV0000	GBSB	1.000	1.000
QGGG000394	GS40	1.095	1.086
QWAGW00066	GS65	1.005	1.008
QAAABX0014	GS69	1.001	1.002
QEMS000001	GS64	1.008	1.008
QAAALV0002	GBSB	1.000	1.000
QCCC000003	GBSB	1.000	1.000
QCCC000012	GS85	1.096	1.082
QAAALV0004	GBSB	1.000	1.000
QAAABX0012	GS70	1.000	1.000

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
3051111985	GS06	1.003	1.005
QAAARG0000	GS14	1.004	1.006
QAAAMR0001	GS13	1.000	1.000
QAAABW0041	GS62	1.013	1.008
QAAALX0000	GS12	1.014	0.981
3051844184	GS84	1.001	0.998
3051467399	GS86	1.013	1.006
QCCC000020	GS82	1.009	1.008
QDDD000028	GS87	1.007	1.004
3051745071	GS22	1.000	1.004
3051492237	GS89	1.000	0.999
3051988348	GS90	1.001	1.006
QDDD003342	GS88	1.017	1.008
QCCC000018	GS83	1.001	1.002
3052303675	GBSB	1.000	1.000
3052261476	GBSB	1.000	1.000
QGGG000000	GA07	1.001	1.001
QAAAMR0000	GBSB	1.000	1.000
QDDD000005	GBSB	1.000	1.000

Table 5 Ergon Energy's embedded generation DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
QEEE000547	GS26	0.999	0.999
QEEE000026	GS55	0.987	0.981
QCQPW00076	GS49	0.985	0.882
QFFF000010	GS29	0.950	0.987
QFFF00000Z	GS30	0.950	0.987
QCCC001041	GS67	0.984	0.992
QDDD003206	GS71	0.998	1.000
3052323901	GBSB	1.000	1.000
QCCC001036	GS56	0.981	0.986
QMKYW00147	GBSB	1.000	1.000

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
QGGG000418	GS74	0.998	1.009
3051393689	GS76	0.939	0.958
QEEE000050	GS79	0.974	0.966
3051745577	GS80	0.998	1.002
3051532166	GS81	0.991	0.991
3053000490	GS92	1.005	0.995
3052368025	GS96	0.890	0.890
3053005598	GS93	0.988	0.981
7105006000			
7105006001			
3052060420	GS95	1.000	1.001
3053006353	GS91	0.876	0.902
3053007186	GS98	0.954	0.956
3053010873	GA01	0.952	0.959
3053012323	GA04	0.993	1.005
3053012322	GA05	0.991	0.989
3053008220	GA03	0.940	0.940
3053007670	GA06	0.963	0.963
3053008146	GS99	0.964	0.964
3053011565	GA02	0.820	0.820
3053012527	GS97	0.991	1.007
3053008174	GA11	NEW	0.945
3053094725	GA09	0.987	0.987
3053129419	GA10	0.987	0.987

Table 6 Oaky Creek Coal Network's embedded generation DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
7102000028	XOCN	0.9800	0.9800
7102000029	XOC2	0.9764	0.9764

Table 7 Capcoal Network's embedded generation DLF

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
7102000033	XCCN	0.9992	1.0018

Table 8 Moranbah North Coal Mine Network's embedded generation DLF

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
7102000038	XMCN	0.9961	0.9888
7102000039	XMGR	0.9917	0.9882
7102000040	XMG2	0.9917	0.9882

Table 9 Brisbane Airport embedded network DLF

NETWORK LEVEL	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
LV Bus	XBAB	1.01370	N/A
LV Line	XBAL	1.05677	N/A

Appendix B:
Victoria distribution loss factors for 2020/21

Table 10 Approved network average DLFs

Distributors	Distribution loss factors					
	Type	DLF A	DLF B	DLF C	DLF D	DLF E
Jemena	Short Sub-transmission	1.0037	1.0077	1.0168	1.0344	1.0394
	Long Sub-transmission	1.0118	1.0158	1.0249	1.0425	1.0476
CitiPower	Short sub-transmission	1.0041	1.0122	1.0159	1.0418	1.0509
Powercor	Short sub-transmission	1.0035	1.0089	1.0330	1.0577	1.0653
	Long sub-transmission	1.0388	1.0442	1.0683	1.0930	1.1006
AusNet Services	Short sub-transmission	1.0018	1.0099	1.0293	1.0524	1.0602
	Long sub-transmission	1.0174	1.0254	1.0448	1.0679	1.0757
United Energy	Short sub-transmission	1.0038	1.0098	1.0151	1.0411	1.0563
	Long sub-transmission	1.0183	1.0243	1.0296	1.0557	1.0708

Distributors	Distribution loss factor codes					
	Type	DLF A	DLF B	DLF C	DLF D	DLF E
Jemena	Short sub-transmission	CSAS	CHBS	CHCS	CLDS	CLES
	Long sub-transmission	CSAL	CHBL	CHCL	CLDL	CLEL
CitiPower	Short sub-transmission	ESTA	EZSB	EHVC	EDSD	ELVE
Powercor	Short sub-transmission	KAS	KBS	KCS	KDS	KES
	Long sub-transmission	KAL	KBL	KCL	KDL	KEL
AusNet Services	Short sub-transmission	LASS	LBSS	LCHS	LDLS	LELS
	Long sub-transmission	LASL	LBSL	LCHL	LDLL	LELL
United Energy	Short sub-transmission	MSAS	MHBS	MHCS	MLDS	MLES
	Long sub-transmission	MSAL	MHBL	MHCL	MLDL	MLEL

Notes:

- DLF- A is the distribution loss factor to be applied to a second-tier customer or market customer connected to a sub-transmission line at 66 kV or 22 kV.
- DLF- B is the distribution loss factor to be applied to a second-tier customer or market customer connected to the lower voltage side of a zone substation at 22 kV, 11 kV or 6.6 kV.
- DLF- C is the distribution loss factor to be applied to a second-tier customer or market customer connected to a distribution line from a zone substation at voltage of 22 kV, 11 kV or 6.6 kV.
- DLF- D is the distribution loss factor to be applied to a second-tier customer or market customer connected to the lower voltage terminals of a distribution transformer at 240/415 V.
- DLF- E is the distribution loss factor to be applied to a second-tier customer or market customer connected to a low voltage line at 240/415 V.

- Separate DLFs are also calculated for each DLF category A to E, depending on whether the length of the sub-transmission line supplying the customer upstream of the customer's connection point is 'short' or 'long'.
- A short sub-transmission line is defined as:
  - A radial sub-transmission line where the route length of the line is less than 20 km, or
  - A sub-transmission line in a loop where the total route length of all lines in the loop is less than 40 km.
- All other sub-transmission lines are defined as 'long sub-transmission'.

Table 11 Approved site-specific DLFs for large load customers

Distributor	Customer NMI	DLF codes	DLF to apply in 2020/21
Jemena	VDDD000495	CVPC	1.0068
	6001280255	CAPA	1.0024
	VDDD000213	CSPL	1.0081
	VDDD000134	CAGP	1.0097
	6001001784	CAHH	1.0120
CitiPower	VAAA000673	ESS4	1.0166
Powercor	VCCCAF0002	KAF1	1.0005
	VCCCAF0001	KAF	1.0069
	VCCCDA0031	KDA2	DLF A Short (KAS)
	VCCCGJ0001	KGJ	1.0022
	VCCCRD0007	KRD	1.0071
	6203803617	KBN	1.0083
	VCCCDA0025	KDA1	1.0118
	VCCCAD0001	KAD	1.0167
	VCCCSE0004	KSE	1.0469
	VCCCBC0025	KBC	1.0444
	VCCCTE0002	KTE	DLF 'C' Long (KCL)
	VCCCSB0012	KSB	1.0555
	VCCCLD0024	KLD	DLF 'C' Short (KCS)
	6203824333	KAT	1.0109
AusNet Services	VBBB000073	LL02	1.0009
	VBBB000161	LL05	1.0042
	VBBB000058	LL01	1.0383
	VBBB000287	LL06	1.0410
United Energy	VEEE0PD8AD	MC05	1.0108
	VEEE0TF39Q	MC06	1.0125
	VEEE0BG4Q3	MC02	1.0144
	VEEE0NDNEX	MC04	1.0276
	6407799056	MC08	1.0196
	VEEE08KH3V	MC01	1.0095
	VEEE0C8AW1	MC03	1.0057

Distributor	Customer NMI	DLF codes	DLF to apply in 2020/21
	VEEE0ATYTH	MC07	1.0179

Table 12 Approved DLFs for large embedded generators

Distributor	NMI	DLF codes	DLF to apply in 2020/21
Jemena	6001264751	CSOG	0.9917
Powercor	6203661632	KCH	0.9920
	6203008782	KCF	1.0788
	6203690629	KYW	1.0788
	6203811032	KOH	0.8919
	6203829699	KML	0.9087
	6203879058	KCB	0.9624
	6203921151	KKW	0.9155
	6203921132	KYS	1.0536
	6203934859	KMG	1.0010
	6203934861	KMG	1.0010
	6203935735	KGS	0.9901
	6203937431	KBP	0.9846
	6203949352		
	6203937741	KKS	0.9852
	6203946314	KWS	0.9986
	6203964878	KYD	0.9845
	6203962945	KNS	0.9875
	6203962946		
	6203960144	KYP	0.9818
	6203990753	KCO	0.9811
	6203990754		
AusNet Services	6305656070	LG02	1.0361
	6305010110	LG03	1.0262
	6305651897	LG03	1.0262
	6305721689	LG07	1.0354

Distributor	NMI	DLF codes	DLF to apply in 2020/21
	VBBB002342	LG04	1.0279
	VMBTWZCLPS	LG05	0.9965
	VTTSWZRUBX	LG06	0.9982
	6305908426	LG08	1.0063
	6305940506	LG09	1.0219
	6305941257	LG09	1.0219
	6306018714	LG10	1.0139
	6306034976	LG11	0.9992
	6306042131	LG12	0.9998
United Energy	6407649172	MG01	1.0111

Table 13 Gannawarra generation network DLF

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
7102000055	XGW1	0.9951	0.9901
7102000056			
7102000057			
7102000058			
7102000059			

Appendix C:
New South Wales distribution loss factors for 2020/21

Table 14 Endeavour Energy's DLFs for tariff classes

Tariff class	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
132 kV Network	HNVL	1.0022	1.0026
Transmission substation	HSTS	1.0057	1.0062
Subtransmission network	HSTL	1.0090	1.0107
Zone substation	HHVT	1.0101	1.0116
High voltage distribution network	HHVL	1.0148	1.0170
Distribution substation	HLVT	1.0416	1.0477
Low voltage network	HLVL	1.0628	1.0687

Table 15 Endeavour Energy's DLFs for embedded generators

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
NEEE000748	HTX2	0.9837	1.0655
NEEE000749	HTX3	1.0065	1.0257
NEEE000750	HTX4	1.0100	1.0294
4310951391	HNC1	0.9998	1.0005

Table 16 Endeavour Energy's DLFs for CRNP Customers

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
4310857952	HTYA	1.0090	1.0149
4310866743	HTXA	1.0086	1.0083
4310942441	HTXB	1.0099	1.0049
4311159207	HTYB	1.0060	1.0054
4311168207	HTYC	1.0048	1.0044
4311275493	HTV8	1.0013	1.0027
4311028276 4311028297 4311246109 4311246110	HHY3	1.0128	1.0136
4311061116 4311061119	HTY3	1.0073	1.0067
4311179347 4311179743	HSTL	1.0033	1.0107

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
4311206443 4311173727	HTX9	1.0046	1.0041
4311251697 4311297310	HTV7	1.0011	1.0012
4311265997 4311265950	HTYE	1.0060	1.0062
4311271253 4311271260	HTV6	1.0007	1.0012
NEEE000003	HTX6	1.0106	1.0103
NEEE000005	HHY1	1.0137	1.0135
NEEE000006	HTY5	1.0408	1.0497
NEEE000014	HTY7	1.0134	1.0087
NEEE000046	HTV2	1.0028	1.0026
NEEE000049	HHV1	1.0148	1.0134
NEEE000066	HTY4	1.0288	1.0266
NEEE000506	HHY4	1.0145	1.0153
NEEE000758 NEEE000759	HIC1	1.0140	1.0148
NEEE000760 NEEE000762 NEEE000764 NEEE000766 NEEE000768	HTV4	1.0078	1.0071
NEEE000881	HTY9	1.0090	1.0032
NEEE001591	HTX5	1.0169	1.0055
NEEE001656	HTV1	1.0033	1.0035
NEEE001892	HTX1	1.0190	1.0136
NEEE004639	HHVT	1.0125	1.0116
NEEE005219	HTX8	1.0077	1.0074
NEEEW00001 NEEEW00002	HTF1	1.0036	1.0031
NEEEW04150 NEEEW04151 NEEEW04152 NEEEW04153 NEEEW04154	HTF2	1.0073	1.0073

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
NEEEW04511 NEEEW04512 NEEEW04513 NEEEW04514	HTF3	1.0031	1.0024

Table 17 Essential Energy's site-specific DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
4001193201	BS02	0.9381	0.9375
4001185251	BS03	0.9991	0.9963
4001161869	BS32	1.1057	1.0989
NAAA00AC11	BS33	1.0634	1.0563
4001224331	BS35	1.0121	1.0135
NTTTW0RU20	BS37	1.0000	1.0000
NAAANRAB50	BS38	1.0192	1.0085
NAAA00AC21	BS39	1.0444	1.0339
NAAA00AB64	BS40	1.0610	1.0555
NAAANRAA01	BS41	1.1039	1.0848
4001151659	BS43	0.9882	0.9949
4001231299	BS43	0.9882	0.9949
NFFFNRKU39	BS44	0.9942	0.9969
4001175717	BS45	1.0514	1.0443
4508034707	BS46	1.0578	1.0256
4001210762	BS48	0.9905	0.9852
4001231908	BS50	0.9788	0.9831
NAAANRAA02	BS51	1.0100	1.0046
4001223403	BS52	1.0449	1.0450
4001242173	BS53	1.0099	1.0100
4001251721	BS54	0.9820	0.9820
4001246761	BS55	0.9913	0.9917
4001227465	BS56	1.0121	1.0135
4001258249	BS57	0.9805	0.9591
4001241798	BS58	0.9751	0.9850
4001202550	BS60	1.0123	1.0153

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
4001297032	BS61	1.0033	1.0008
4001297033	BS62	1.0013	0.9956
4001298855	BS63	0.9960	0.9938
4001298870	BS63	0.9960	0.9938
NTTTW0W110	UNIT	1.0000	1.0000
4001301126	BS64	0.9781	0.9597
4001322845	BS65	-	0.9800

Table 18 Essential Energy's general DLFs

Class	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
Low voltage	BL0A, DLDL, DLD2, DLD6, DLGB, DLGD	1.0691	1.0664
LV & metered at CE substation	BL5A	1.0554	1.0544
High voltage line	BH0A	1.0320	1.0301
High voltage substation	BH5A	1.0191	1.0185
Sub-transmission	BS0A	1.0099	1.0110

Table 19 Ausgrid's DLFs for tariff classes

Tariff code	Tariff class	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
EA010	Residential Non ToU (Closed)	LV system	1.0532	1.0514	JLDL
EA011	Residential Transitional ToU (Closed)	LV system	1.0532	1.0514	JLDL
EA025	Residential ToU	LV system	1.0500	1.0479	JL40
EA111	Residential demand (introductory)	LV system	1.0500	1.0479	JL40
EA115	Residential TOU demand	LV system	1.0500	1.0479	JL40
EA116	Residential demand	LV system	1.0500	1.0479	JL40
EA030	Controlled Load 1	LV system	1.0532	1.0514	JL1L

Tariff code	Tariff class	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
EA040	Controlled Load 2	LV system	1.0532	1.0514	JL2L
EA050	Small Business Non ToU (Closed)	LV system	1.0460	1.0444	JLSL
EA051	Small Business Transitional ToU (Closed)	LV system	1.0460	1.0444	JLSL
EA225	Small Business ToU	LV system	1.0460	1.0444	JLSL
EA251	Small Business demand (introductory)	LV system	1.0460	1.0444	JLSL
EA255	Small Business TOU demand	LV system	1.0460	1.0444	JLSL
EA256	Small Business demand	LV system	1.0460	1.0444	JLSL
EA302	LV 40-160 MWh (System)	LV system	1.0460	1.0444	JLSL
EA305	LV 160-750 MWh (System)	LV system	1.0460	1.0444	JLSL
EA310	LV >750 MWh (System)	LV system	1.0460	1.0444	JLSL
EA316	Transitional 40-160 MWh (Closed)	LV system	1.0460	1.0444	JLSL
EA317	Transitional 160-750 MWh (Closed)	LV system	1.0460	1.0444	JLSL
EA325	LV Connection (Standby Tariff-closed)	LV system	1.0460	1.0444	JLSL
EA360	HV Connection (Standby Tariff - closed)	HV system	1.0127	1.0123	JHSH
EA370	HV Connection (System)	HV system	1.0127	1.0123	JHSH

Tariff code	Tariff class	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
EA380	HV Connection (Substation)	HV substation	1.0090	1.0088	JHBH
EA390	ST Connection	ST System	1.0048	1.0044	JSSS
EA391	ST Connection (Substation)	ST substation	1.0048	1.0044	JSBS
EA401	Public Lighting	LV system	1.0568	1.0546	JLSP
EA402	Constant Unmetered	LV system	1.0461	1.0445	JLSU
EA403	Energy Light	LV system	1.0568	1.0546	JLSP
EA501	Transmission Connection	Transmission	1.0000	1.0000	JTRN

Table 20 Ausgrid's DLFs for CRNP customers

NMI	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
4103736926	33 kV system	1.0023	1.0022	J550
4103736927	33 kV system	1.0023	1.0022	J550
NCCCNREA06	33/11 kV substations	1.0116	1.0105	J660
4103748279	132 kV system	1.0000	1.0000	J885
4103507254	33 kV system	1.0037	1.0028	JGLB
4103507266	33 kV system	1.0037	1.0028	JGLB
4103841748	33 kV system	1.0037	1.0028	JGLB
NCCCZ01251	33 kV system	1.0044	1.0047	J881
4102016227	33 kV transmission	1.0006	1.0004	JTOL
4102016252	33 kV transmission	1.0006	1.0004	JTOL
4103770084	132 kV system	1.0007	1.0006	J887
4103770085	132 kV system	1.0007	1.0006	J886
NCCCZ01381	33 kV transmission	1.0008	1.0000	J800
4103769153	33 kV system	1.0033	1.0033	J700
4103769154	33 kV system	1.0033	1.0033	J700
NCCCNRNP40	132 kV transmission	1.0000	1.0000	JCAP
NCCCNRNP50	132 kV transmission	1.0000	1.0000	JCAP

NMI	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
NCCCWRNP60	132 kV transmission	1.0000	1.0000	JCAP
NCCCNRZ1BK	132/33 kV substations	1.0026	1.0025	J635
4103686298	66 kV system	1.0048	1.0044	JSSS
NCCCX00745	33 kV transmission	1.0004	1.0000	J640
NCCCX00746	33 kV transmission	1.0004	1.0000	J640
NCCCX00747	33 kV transmission	1.0004	1.0000	J640
4103507347	132/33 kV substations	1.0076	1.0066	J601
NCCCNRZ1BM	132 kV system	1.0049	1.0035	J580
NCCCX00332	132/66 kV substations	1.0045	1.0049	J590
NCCCNRZZB0	132/33 kV substations	1.0087	1.0124	J610
NCCCX00750	33 kV transmission	1.0008	1.0009	J620
4104004610	33 kV transmission	1.0008	1.0009	J620
4104004602	33 kV transmission	1.0008	1.0009	J620
NCCCX00753	33 kV transmission	1.0008	1.0009	J620
NCCC007211	33 kV system	1.0056	1.0057	J605
NCCCNRZ1BQ	33 kV transmission	1.0046	1.0032	J655
41040364218	132/33 kV substations	1.0031	1.0031	J630
41040364240	132/33 kV substations	1.0031	1.0031	J630
41040364224	132/33 kV substations	1.0031	1.0031	J630
NCCCX00748	132/33 kV substations	1.0054	1.0046	J615
NCCCX00749	132/33 kV substations	1.0054	1.0046	J615
NCCCNRZ1BT	132/33 kV substations	1.0048	1.0045	J645
NCCCX00293	132/33 kV substations	1.0068	1.0049	J600
NCCCX00294	132/33 kV substations	1.0068	1.0049	J600
NCCC002902	66 kV system	1.0070	1.0069	JK23
NCCC002221	66 kV system	1.0160	1.0166	J500
NCCCZ01275	132/33 kV substations	1.0070	1.0059	J560
NCCCNREEK2	33 kV system	1.0123	1.0145	J541
4102030738	33 kV system	1.0012	1.0012	J543
4103628537	33 kV system	1.0012	1.0012	J543
NCCCNRCS90	HV system	1.0134	1.0123	J670

NMI	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
NCCCNRZ1XJ	66 kV system	1.0311	1.0111	J680
NCCCNREA14	132/11 kV substations	1.0089	1.0130	J770
4103798233	66 kV system	1.0202	1.0172	J771
NCCCNREB57	33/11 kV substations	1.0094	1.0080	J772
NCCCNREB24	132/11 kV substations	1.0166	1.0096	J773
4103598315	132/66 kV substations	1.0148	1.0217	J774
NCCCNREE73	33 kV system	1.0472	1.0227	J775
4103974109	132/66 kV substations	1.0088	1.0123	J777
4103632682	33 kV system	1.0164	1.0068	J778
4103529698	66 kV system	1.0183	1.0203	J779
NCCCNRENB7	132/66 kV substations	1.0084	1.0113	J780
4103768912	132/33 kV substations	1.0032	1.0029	J781
4103768913	132/33 kV substations	1.0030	1.0030	J782
4103831536	132/11 kV substations	1.0028	1.0027	J783
4103828337	66 kV system		1.0197	J784
4103788882	66 kV system		1.0135	J785
NCCCNREA08	66 kV system		1.0148	J786
4103981057	33 kV system		1.0020	J787
4103526370	66 kV system		1.0244	J788
NCCCZ01111	HV system		1.0136	J789
NCCCNREB14	HV system		1.0192	J790

Table 21 Ausgrid's DLF's for embedded generators

NMI	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF code
NCCC007498	33 kV system	1.0043	1.0041	JGEN
NCCCNRGB10	HV system	1.0128	1.0123	JK24
NCCCNRME11	33 kV system	1.0043	1.0041	JGEN
NCCCNRME10	33 kV system	1.0043	1.0041	JGEN

Table 22 One Steel's embedded network DLFs

NMI	Location	DLF applied in 2019/20	DLF to apply in 2020/21	DLF Code
7102000008,7102000010	11 kV	1.0330	1.0278	XON2

Appendix D:
Australian Capital Territory distribution loss factors for 2020/21

Table 23 Evoenergy's distribution DLFs

Connection	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
High voltage	AH00	1.0136	1.0111
Low voltage	AL00	1.0471	1.0447

Table 24 Evoenergy's site-specific DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
NGGG000294	AS01	1.0062	1.0136
NGGG000269	AS02	1.0100	1.0152
7001197618	AS04	0.9997	0.9998
7001317224	AS06	0.9983	0.9985
7001319704	AS07	0.9990	0.9994

Appendix E:
South Australia distribution loss factors for 2020/21

Table 25 SA Power Network's distribution connection point class DLFs

Class	Tariff	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
Low voltage small customers	Unmetered	NLV2	1.1010	1.1070
	Residential	NLV2	1.1010	1.1070
	Controlled Load (HW)	NLV2	1.1010	1.1070
	Small Business Single Rate	NLV2	1.1010	1.1070
	Small Business Two Rate	NLV2	1.1010	1.1070
	Small Business Demand	NLV2	1.1010	1.1070
LV large business	Large LV Business Demand	NLV1	1.0800	1.0840
HV business	HV Demand Two Rate	NHV1	1.0480	1.0510
Major business	Substation Non Locational	NZS1	1.0220	1.0230
	Sub-transmission Non Locational	NZS1	1.0220	1.0230

Table 26 SA Power Network's site-specific DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
2001000378	NBA1	1.0010	1.0010
2001000608	NAC2	1.0080	1.0080
2002112609	NKC4	1.0100	1.0100
2002213788	NHN1	1.0030	1.0030
2002213796	NHN2	1.0030	N/A
2002216840	NDS1	1.0160	1.0080
2002276228	NRA1	1.0090	1.0100
2002276230	NRA2	1.0120	N/A
2002280161	NDS2	1.0160	1.0080
2002257162	NRT1	1.0020	1.0040
2002257164	NRT1	1.0020	N/A
SAAAAAA018	NPS1	1.0000	1.0000
SAAAAAA021	NPS3	1.0070	1.0070
SAAAAAA024	NAB1	1.0100	1.0100

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
SAAAAAA035	NGT1	1.0070	1.0070
SAAAAAA084	NOS1	1.0000	1.0010
SAAAAAA438	NIF1	1.0100	1.0100
SAAAAAB557	NOS2	1.0010	1.0000

Table 27 SA Power Network's embedded generator DLFs

NMI	DLF code	DLF applied in 2019/20	DLF to apply in 2020/21
2001000639	NCL1	1.0050	1.0020
2001000640	NCL1	1.0050	1.0020
2001000734	NSHW	0.9950	0.9950
2001830001	NTGN	1.0000	1.0000
2001830002	NTGS	1.0000	1.0030
2002108658	NCDW	0.9720	0.9720
2002108660	NAS1	0.9890	0.9890
2002108661	NAS2	0.9890	0.9890
2002220776	NSP1	1.0030	1.0040
2002221495	NSP2	1.0030	1.0040

Appendix F:
Tasmania distribution loss factors for 2020/21

The AER has approved the following distribution loss factors for Tasmania for the 2020/21 financial year.

TasNetworks has grouped transmission connection sites into seven regions. The DLFs are grouped into each of these seven regions as follows:

Hobart (Table 28), Tamar (Table 29), East Coast (Table 30), North West (Table 31), Derwent (Table 32), Southern (Table 33), and West Coast (Table 34).

Table 28 TasNetworks' Hobart region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	Hobart	PHST	1.0034
Zone substation	Hobart	PHZN	1.0053
HV distribution network	Hobart	PHHV	1.0112
Distribution substation	Hobart	PHDS	1.0238
LV distribution network	Hobart	PHLV	1.0407

Table 29 TasNetworks' Tamar region (incorporating Launceston) DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	Tamar	PTST	1.0000
Zone substation	Tamar	PTZN	1.0000
HV distribution network	Tamar	PTHV	1.0077
Distribution substation	Tamar	PTDS	1.0244
LV distribution network	Tamar	PTLV	1.0439

Table 30 TasNetworks' East Coast region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	East Coast	PEST	1.0000
Zone substation	East Coast	PEZN	1.0000
HV distribution network	East Coast	PEHV	1.0181
Distribution substation	East Coast	PEDS	1.0478
LV distribution network	East Coast	PELV	1.0785

Table 31 TasNetworks' North West region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	North West	PNST	1.0000
Zone substation	North West	PNZN	1.0000
HV distribution network	North West	PNHV	1.0111
Distribution substation	North West	PNDS	1.0329
LV distribution network	North West	PNLV	1.0543

Table 32 TasNetworks' Derwent region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	Derwent	PDST	1.0000
Zone substation	Derwent	PDZN	1.0000
HV distribution network	Derwent	PDHV	1.0147
Distribution substation	Derwent	PDDS	1.0469
LV distribution network	Derwent	PDLV	1.0557

Table 33 TasNetworks' Southern region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	Southern	PSST	1.0002
Zone substation	Southern	PSZN	1.0004
HV distribution network	Southern	PSHV	1.0171
Distribution substation	Southern	PSDS	1.0395
LV distribution network	Southern	PSLV	1.0579

Table 34 TasNetworks' West Coast region DLFs

Distribution network Level	Region	DLF code	Cumulative DLF
Subtransmission network	West Coast	PWST	1.0017
Zone substation	West Coast	PWZN	1.0038
HV distribution network	West Coast	PWHV	1.0125
Distribution substation	West Coast	PWDS	1.0305
LV distribution network	West Coast	PWLV	1.0482

Table 35 TasNetworks' site-specific DLFs

NMI	Region	DLF code	DLF
8000000656	North West	PSPU	0.9915
8000003578	West Coast	PBSM	1.0110
8000003585	North West	PACH	1.0000
8000003868	West Coast	PHGM	1.0000
8000295294	East Coast	PEMW	0.9588
8000004181	East Coast	PEDE	1.0000
8000296059	East Coast	PEHE	1.0000
8000003493	Derwent	PDTC	0.9720

Appendix G: Distribution loss factor – Contacts

Questions regarding the distribution loss factors contained in this document should, in the first instance, be directed to the appropriate person listed below.

Distribution Network Service Provider

Ausgrid	Garry Foo, Senior Distribution Pricing Analyst	02 9269 2283
Endeavour Energy	Fiona Place, Compliance Analyst	02 9853 6302
Energex	Karen Stafford, General Manager Legal, Regulation and Pricing	07 3851 6793
Ergon Energy Corporation Limited	Karen Stafford, General Manager Legal, Regulation and Pricing	07 3851 6793
Essential Energy	Catherine Waddell, Network Pricing Manager	02 6338 3553
Evoenergy	Dennis Stanley, Branch Manager Asset Strategy	02 6270 7667
Jemena	Matthew Serpell, Regulatory Manager	03 9173 8231
Powercor Australia Ltd and CitiPower Pty Ltd	Adam Ryan, Network Optimisation Manager	03 9683 4380
SA Power Networks	James Bennett, Manager Regulation	08 8404 5261
AusNet Services	Kate Jdanova, Pricing Manager	03 9695 6630
TasNetworks	Chantal Hopwood, Leader Regulation	03 6271 6511
United Energy Distribution	Rodney Bray, Network Planning Manager	03 8846 9745