



*Top Energy Limited*

Level 2, John Butler Centre  
 60 Kerikeri Road  
 P O Box 43  
 Kerikeri 0245  
 New Zealand  
 PH +64 (0)9 401 5440  
 FAX +64 (0)9 407 0611

## Top Energy Loss Factors

In accordance with the Electricity Industry Participation Code, Top Energy has reviewed the Loss Factors applicable to ICP's on the Top Energy Electricity Distribution Network.

Top Energy's customers are metered at low and medium voltage. For each of these voltages a Loss Factor Code is calculated. Table 1 below indicates the Loss Factor values applicable to each Loss Factor Code from 1 April 2021. These have been derived from load-flow modelling of the distribution network including power transformers, sub-transmission circuits, high voltage feeders, distribution transformers and low voltage distribution reconciliation losses.

**Table 1 Loss Factor Codes and Loss Factors for Top Energy's Network April 2021 to March 2022**

Loss Factor Code	Registry Loss Code	Applied to Customer Connected to	Loss Factor
RLF D	GLV	LV Network 230/400V	1.1234
RLF I1 (JNL)	IND1	JNL	1.0273
RLF I2 (AFFCO)	IND2	AFFCO	1.0464
RLF G1 (NGA)	GEN1	Ngawha Generation A (25 MW)	1.0000
RLF G2 (NGB)	GEN2	Ngawha Generation B (31MW)	1.0000

*Table 2 Losses on Top Energy Network 2021-2022 Forecast*

	ACTUAL 24 Month to Aug 20	Less IND 24 months	Network for 24 months	CURRENT 12 mths to Aug 20	Less IND Aug-20	NETWORK 12 mths to Aug 20	BUDGET 12 mths to Aug 21
<b>Total Energy Injected into Network</b>	717,929,914	96,978,899	620,951,015	357,409,374	45,283,623	312,125,751	312,590,044
<b>Total Energy Sold to Customers</b>	645,035,287	93,972,095	551,063,191	318,523,574	43,820,756	274,702,818	278,253,556
<b>Total Losses (kWh)</b>	72,894,628	3,006,804	69,887,824	38,885,800	1,462,867	37,422,933	34,336,489
<b>Loss percentage</b>	10.15%	3.10%	11.25%	10.88%	3.23%	11.99%	10.98%
<b>TLF for Entire Network  (Reconciliation) Including ICC</b>	1.1130	1.0320	1.1268	1.1221	1.0334	1.1362	1.1234