

# Electricity Distribution Services Loss Load Factors

From 1 June 2020

We have reviewed the loss factors applicable to ICPs on the Northpower electricity network in line with the Electricity Industry Participation Code. The factor changes outlined below result from the continued growth of the network, and replacement of assets over time.

The loss load code applicable to each ICP on our network is determined by the voltage and location of the metering for each ICP within the network, and have been derived from load-flow modelling of power transformers, sub-transmission circuits, high voltage meters, distribution transformers, and the low voltage distribution network.

Loss Category Code	Metering Voltage	Description	Loss Load Factor	
			1 April 2016	1 April 2020
L0	33kV	Metered at GXP	1.000	1.000
L1	33kV	ICP 0000546037NR9E6	1.015	1.017
L2	11kV	Metered at 11kV	1.050	1.025
L3	400V	150kVA and above, metered near the distribution transformer	1.058	1.036
L4	400v	Not currently used	1.073	1.050
L5	230/400v	Less than 150kVA, metered in the LV distribution network	1.073	1.050
L6	33kV	ICP 0000546038NR638	1.004	1.005
G1	33 kV	Wairua generation	1.025 Gen 1.016 Cons	1.025 Gen 1.016 Cons
G2	11 kV	Bream Bay generation	1.004 Gen 1.001 Cons	1.004 Gen 1.001 Cons

The Local Loss Factors are an approximation of the Technical Losses on the Network. Non-technical losses are derived by subtracting the total annual consumptions for all ICP's (with each multiplied by the appropriate Local Loss Factor) from the total annual inputs to the network (supplied from the grid and from embedded generation).