

ACT Distribution Loss Factor Methodology

Pursuant to paragraph 3.6.3 (g)(2) of the National Electricity Rules (NER) ActewAGL Distribution publishes the following methodology for calculating all distribution loss factors to be applied to all connection points in the Australian Capital Territory (ACT). This methodology has been prepared having regard to the principles set out in section 3.6.3 (h) of the NER.

The load in the ACT is measured in terms of electricity delivered to the ACT customers or “sales”. The generation data to which the NER relates is taken to be the energy measured at the connection points between Transgrid’s transmission network and ActewAGL’s distribution network plus embedded generation in the ACT. These are referred to as “purchases”.

The loss factor for a financial year is calculated as follows:

A is the average loss factor forecast for the ACT for the next financial year and is equal to the difference between the sum of the purchases for the previous 5 financial years and the sum of the sales for the previous 5 financial years, divided by the sum of the purchases for the previous 5 financial years;

B is the forecast low voltage electricity sales for the next financial year in the ACT;

C is the forecast high voltage electricity sales for the next financial in the ACT;

D is the forecast total voltage electricity sales for the next financial year in the ACT and is equal to the sum of B and C;

E is the forecast energy purchases in the ACT for the next financial year and is given by the following formula, $E = D/(1-A)$;

F is the forecast electricity distribution losses in the ACT and is given by the following formula, $F = E - D$;

G is the average difference between high voltage and low voltage losses and has been calculated to be 2 per cent relative to electricity purchases. It relates to all types of low voltage customers regardless of size or configuration of the supply network beyond the distribution substation. It includes losses in the substations and the LV network.

H is the difference between the high voltage loss factor and the low voltage loss factor. These loss factors are applied to sales and the difference is given by the following formula, $H = 1/(1-G) - 1$, and is equal to 2.041 per cent;

J is the low voltage loss factor for the next financial year in the ACT and is given by the following formula, $J = (F + CH)/D + 1$;

K is the high voltage loss factor for the next financial year in the ACT and is given by the following formula, $K = J - H$