



Reliability (power cuts) and **availability (time without power)** are the two key industry measures of service performance.

Our network is generally very reliable with an **overall availability of 99.99%**

The main measures of our success in this area are the **number of supply interruptions** that last over **three minutes** and the **length of those interruptions.**

Example:



10 hour LV feeder fault occurring once every five years, over a period of 40 years



Two LV feeders, both supplying 50 homes

Old VoLL

New VoLL



Urban
X 30

Low use
X 20

£ 72,000

£ 66,000



Rural
X 15

Fuel Poor
X 20

X 15

£ 72,000

£ 106,000

Customers with higher VoLL (from previous research)



Domestic customers (average is £17,500/MWh)

Domestic segment	VoLL £/MWh	% variation of average domestic WTA (rounded to 0.05)
Fuel poor*	£32,500	+ 85%
Electric vehicles (EV)	£21,500	+ 25%
Rural	£21,500	+ 20%
Low income groups*	£20,500	+ 15%
Aged 30-44	£20,000	+ 15%
Vulnerable*	£19,500	+ 10%
Experienced no planned or unplanned power cuts	£19,000	+ 10%
Off gas network	£18,500	+ 5%

Small/Medium business customers (average is £47,500/MWh)

Domestic segment	VoLL £/MWh	% variation of average domestic WTA (rounded to 0.05)
Rural	£68,500	+ 45%
Experienced power cuts	£51,500	+ 10%
Off-gas	£50,000	+ 5%

The impact of more extreme weather events on power supplies



SHOWCARD D

Storm Emma caused power cuts to around **23,000** homes and businesses.



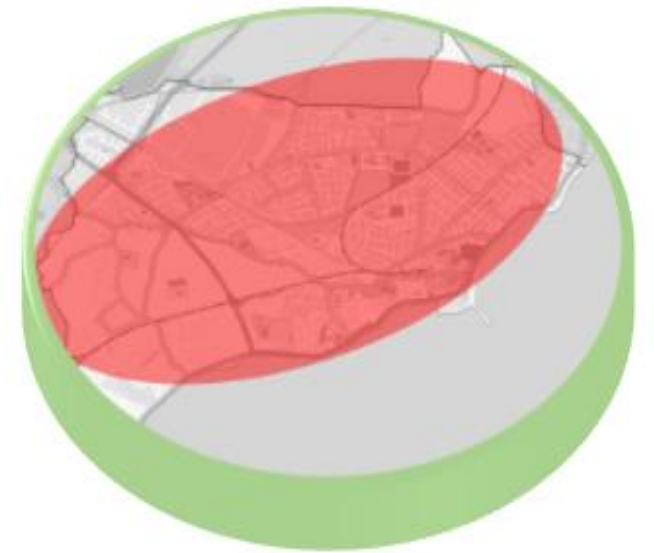
Scale of interruption



Your road



Your neighbourhood



Your whole town



The Climate Change Act 2008 asks the UK to reduce greenhouse gas emissions by 80% by 2050. This will mean that we have to burn fewer fossil fuels. Recently more mandates have been put into place to tackle this issue, namely the banning of the sale of new petrol and diesel cars by 2040.

At the same time significant increases in total energy distributed and in the peak demand for electricity is anticipated because:

- Homes are likely to be heated by electricity instead of gas; and
- Cars will be electric rather than petrol fuelled

Electric cars need re-charging regularly. An 80-mile drive uses about the same amount of electricity that an average house uses in one day.

Instead of petrol stations, charging points will be needed at homes, offices, supermarkets and other public areas.

