

So, what are the causes of power cuts?

Customers often ask us why there has been a power cut. Until we have found the cause of the problems, we often can't tell you why the power is off. This factsheet looks at the possible causes of power cuts.

The area we serve covers 29,165 sq km. We deliver electricity to 7.8 million customers in an area extending from The Wash in the East to the River Arun on the South Coast. By far the greatest number of power cuts are due to faults on our high voltage system which brings power from main substations to your local substation. A separate factsheet, 'Our Networks' gives more information about how our system works.

Regardless of how much we protect, maintain and improve our network, faults will still occur. A high voltage fault can affect from a few hundred to more than 3,000 customers.

Insulation failure or breakdown

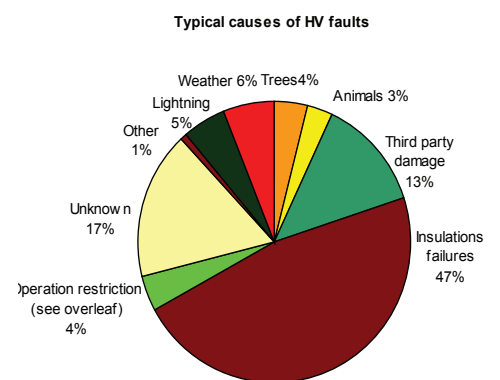
The majority of our high voltage network is underground. Most cables are in urban areas and supply more customers than the rural overhead network. Once a cable has been buried there isn't any maintenance we can do. It's a little bit like a light bulb - it's difficult to predict when it will fail, and when it does, replacement is the only option. If a particular cable section fails twice in two years, we'll replace it.

Third party damage

Each year, other companies damage our cable and lines. We work hard to prevent damage to our network by providing plans, locating cables and training other companies' staff but instances of damage still occur. The costs are considerable but, where we can, we bill those responsible.

Severe weather

Strong winds, heavy rain floods and lightning can all damage equipment and cause power cuts. Although the weather is beyond our control, we use equipment that has been designed to withstand most of what our climate can throw at it. When we refurbish circuits we use designs and equipment that take advantage of new technology and techniques.



Trees

We cover some of the most heavily wooded parts of the UK. Falling trees and branches can bring wires down, while trees brushing against a line can cause intermittent or temporary loss of supply. We minimise these problems with an extensive tree-trimming programme, employing specialist tree surgeons. We work with householders and landowners to balance our needs with environmental and aesthetic requirements.

Unknown

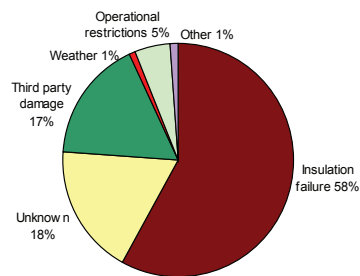
Sometimes the cause of a power cut isn't obvious because there's no damage. On these occasions we can usually restore power without repair.

Operational restriction

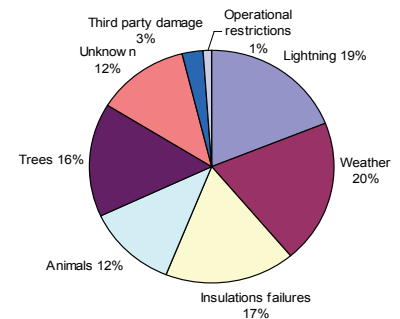
Some types of fault may only affect some of the customers on a circuit, leaving the others unaffected, if this happens, we have to cut the power off for safety reasons while we repair the fault. Because high voltage problems usually affect lots of customers it isn't possible for us to warn you in advance.

The South East network covers an area of 8,200 sq. km, containing 45,000 km of overhead lines and underground cables.

Faults on the underground network



Faults on the overhead network



The East of England network covers an area of 23,300 sq. km containing 92,120 km overhead lines and underground cables.

Our network would stretch several times around the circumference of our planet. And that's not counting the service cable to each property!

Of course, if we need to switch the power off to do planned work on our network, we will always give you time to prepare by telling you at least five days in advance.

How to get in touch with us
You can contact our
Customer Relations team at:
Tel: 0800 028 4587

Email:
customer.relations@ukpowernetworks.co.uk

Write to:
UK Power Networks,
Customer Relations,
Fore Hamlet, Ipswich,
Suffolk IP3 8AA