# The cost of power cuts to customers

# August 2019

## Who's who in the electricity industry?

There are many different types of companies and organisations involved in supplying you with electricity:

- **The National Grid** is responsible for operating the most powerful power lines in the UK and transmitting electricity from power stations around the country closer to homes and businesses. The National Grid is a little like the UK's motorway network.
- **Distribution network operators** (DNOs) maintain many of the UK's electricity power lines, cables and equipment up to 132,000 volts. There are 14 licensed DNOs in Britain and each is responsible for a regional distribution area. The 14 DNOs are owned by six different operators. Electricity North West is the DNO for North West England. The DNOs connect the National Grid's network to individual properties and private networks, a little like the UK's 'A' and 'B' roads.
- **Suppliers** are the final step in the process and send out bills for your electricity usage. These companies include EON, British Gas, EDF and Npower. A proportion of your bill is passed to DNOs to cover their distribution costs.

electricity north west
Bringing energy to your door

# What does Electricity North West do?

- Electricity North West manages and maintains the electricity distribution network in North West England.
- The network consists of overhead lines, underground cables, substations, transformers and other equipment.
- We are responsible for connecting homes and businesses to the electricity network, repairing the network when things go wrong and investing to replace worn out or old equipment.
- Electricity North West's network is 99.99% reliable. A property in the North West will typically experience a power cut once every three years and, on average, is without power for about an hour. These figures are averages – some properties will experience problems more often and others will never have problems with their power supply.
- Electricity North West was formerly part of United Utilities and before that we were known as Norweb.

**Investing in the North West**
Electricity North West owns and operates the network in the North West of England. Any money we invest goes right back into the North West region.

**We are responsible for planning for the future and making sure the network can cope with any changes in how electricity is used.**

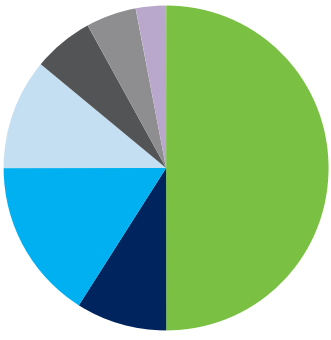
# Why have I never heard of Electricity North West?

In many ways, Electricity North West is a 'behind the scenes' company. We don't send you a bill for our services. Instead, your supplier passes on part of what you pay them to us.

**2.4 million**

We connect 2.4 million households (5 million people) to the National Grid.

**How a typical electricity bill is made up**



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|---|---|
| Cost of buying electricity | 50% |
| Transmitting electricity from National Grid | 9% |
| Delivering electricity to your home (Electricity North West charge) | 16% |
| Government environmental and social schemes | 11% |
| Billing, customer service and IT systems | 6% |
| VAT | 5% |
| Supply business profit | 3% |

# Understanding the cost of power cuts to customers

Electricity North West invests millions of pounds in advanced systems and innovative technologies every year. This ensures your homes and businesses receive a safe and reliable electricity supply now and in the future and helps keep power cuts to a minimum.

Despite this, power cuts can still happen, largely due to circumstances beyond our control, such as severe weather, damaged equipment and vandalism.

Power cuts can be extremely disruptive and can affect different customers in different ways. Loss of electricity supply is always inconvenient and can be costly for businesses and domestic customers. They can also be distressing, particularly for elderly and vulnerable customers who may need additional support during a power cut.

The impact of a power cut can differ, depending when it occurs. For example, loss of electricity on a summer afternoon is likely to be less disruptive to domestic customers than when it occurs on a cold, dark, winter evening. The same scenario might affect a small business very differently, disrupting production on a busy summer afternoon but having little or no impact during the evening when the business is closed.

A power cut generally becomes more disruptive and costly the longer it lasts and its effects can be intensified for customers with no gas supply, who are completely reliant on electricity for cooking and heating.

In the future, power cuts may have more of an impact as the way we use electricity continues to change. More customers are expected to take up low carbon technologies, such as solar panels and electric vehicles. Electric heat pumps will also replace conventional gas central heating in homes. This increased dependency on electricity is likely to raise customers' expectations and make the reliability of their supply even more critical than it is today.

# Understanding the cost of power cuts to customers

**The problem**

The electricity industry uses a financial model to calculate the financial cost and impact of power cuts which guides many important decisions. It is used by our regulator, Ofgem, to impose penalties and incentives on DNOs such as Electricity North West to minimise the frequency and duration of power cuts. It is also used by DNOs in their investment decisions to ensure funds are property targeted in the right areas.

Although the electricity industry understands that power cuts affect customers differently, the model values one customer's power cut the same as another. For example, the impact of a power cut affecting the home of a working couple is valued the same as a nursing home with 100 residents.

**What is Electricity North West doing?**

We have conducted an extensive piece of research which has provided greater insight into the unique impact of power cuts on a diverse range of domestic and business customers.

This research will help us develop a revised financial model that more accurately reflects specific customer segments. This will ensure that future investments are targeted at the areas of our network which will benefit our customers the most. The new model will be used by other DNOs to ensure that all GB networks meet the future needs of customers.

The findings may also influence changes in the way customers are compensated after a power cut and the penalties imposed on DNOs to improve the reliability of electricity supplies.

**How you can help?**

We're asking for your help as we want to understand your views on the value of your electricity supply and the impact of power cuts on your home or business.