



Energy Tutorial: Energy Usage

Power cuts – causes, consequences and help available

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INTRODUCTION

Power cuts can have an impact on many daily activities that we take for granted – turning on the lights, charging your phone, refrigerating food, cooking a meal and heating your home. Just think about all the things you wouldn't be able to do without power!

Some people, such as new-born babies and people who are elderly, very ill or disabled, are particularly at risk if there is a power cut. For example, babies need warm milk made from hot water, elderly people find it harder to stay warm and some people rely on medical equipment or stair lifts at home that have to be plugged in.

Because of the impacts that power cuts can have, it is important that we are all prepared in case we are affected by one and know what to do if there is a power cut. This is especially important for people who may be vulnerable during a power cut, which is why there is extra support available from energy suppliers and network operators to help them.

CAUSES OF POWER CUTS

A power cut is when your electricity stops working and needs to be fixed. You may not have thought about this before, but some of the causes of power cuts are:

Weather

- Severe winds can cause damage to overhead power lines. Wind-borne debris or trees falling on power lines can pull them down.
- Water can get into underground electricity cables and damage the cable.
- Lightning can damage power lines and equipment.



Trees

- Trees brushing against an electricity line can damage it.



Accidental damage

- Occasionally people digging in the ground or working near overhead power lines can damage electricity cables. For example, someone could accidentally cut through electricity cables when digging.



Planned maintenance

- Sometimes your power needs to be switched off while work is done to maintain nearby electricity cables, for example when an underground cable needs to be repaired or

replaced. This is so that the work can be carried out safely. Don't worry – you will always be told in advance before the work takes place, unless it is an emergency situation!



WHO IS RESPONSIBLE FOR OUR POWER?

Power is transported to our homes through a network of thousands of miles of pipes and cables. If you stretched out all these pipes and cables it would be long enough to reach to the moon and back!

Distribution Network Operators (DNOs) are the companies who are responsible for transporting electricity. They own and operate the network of towers and cables that bring electricity from the high voltage transmission grid to local homes and businesses. They don't sell electricity or send your energy bills – this is done by the electricity suppliers.

If there is a power cut, you should contact your local DNO, as they are in charge of transporting electricity to your home. You can find your local DNO by [clicking here](#) and entering your postcode.

[Western Power Distribution](#) is the company that is responsible for electricity distribution in the Midlands, South West and Wales. They serve over 7.8 million customers and their network includes over 220,000 kilometres of lines and cables and 185,000 transformers which are used to step down voltages from the National Grid.

HOW TO BE PREPARED FOR A POWER CUT

Power cuts may happen at any time of day or night, so it is a good idea to be prepared in case you are affected by one. Here are some simple tips to make sure you can quickly and safely find the things you need, especially during the night, and to help you to keep safe in an emergency:

- ✓ Keep a wind-up, battery-powered or solar-powered torch ready.
- ✓ Keep a wind-up battery-powered or solar-powered radio ready.
- ✓ Don't use candles or paraffin heaters.
- ✓ Many modern telephones, especially digital or cordless ones, won't work in a power cut, so keep an ordinary one to use.
- ✓ Protect sensitive electrical equipment, such as computers, with a surge protector plug or an Uninterruptible Power Supply (UPS).
- ✓ If you have a mains operated stair lift, check to see if there is a manual release handle that can be used to return the stair lift safely to ground level if it stops working.
- ✓ Many stair lifts have battery back-up. If yours doesn't, it may be possible to get one fitted – contact the manufacturer for details.
- ✓ If you or a member of your family has a serious health problem,



make sure you have plans in place in the event of a long power cut and that they have signed up to the Priority Services Register (see below). Make sure any medical equipment has a battery back-up.

WHAT TO DO IF THERE IS A POWER CUT

Here are some useful tips for what to do if there is a power cut:

- ✓ Check with neighbours or look at street lights to see if the problem is affecting a wider area or if it might be an issue with fuses in your house.
- ✓ Check your trip switch is in the 'on' position. If your trip switch has operated, switch off all your appliances and try to reset the trip. The supply may then come back on.
- ✓ If the trip switch has not operated, and you can find no other reason, report the problem to your network operator.
- ✓ Turn off and unplug any electrical appliances that get hot, as you may forget they are switched on when the power comes back.
- ✓ Turn off and unplug any appliances that you are not using and any sensitive equipment, such as computers.
- ✓ Keep your freezer shut – depending on the type of freezer you have, the contents can stay frozen for up to 12 hours. You may be able to claim for spoilt freezer contents on your Home Insurance.
- ✓ During cold weather, dress warmly using several layers of clothing.
- ✓ During bad weather, for technical reasons power can't be restored to just your property. Your network operator will aim to restore supplies to everyone as quickly as they can, but if you are having difficulties, give them a call.
- ✓ If you have no gas for cooking, your neighbours may be able to help you with warm drinks and hot food.



WHO TO CONTACT IF THERE IS A POWER CUT

Many people don't know that they should contact their local Distribution Network Operator if they have a power cut. They often call their electricity supplier they pay their bills to instead.

For this reason the electricity network operators have introduced the single phone number 105 to give customers an easy-to-remember number to call that will put you through to the local people who can help. Check out the 105 website for more information: www.powercut105.com

In the Midlands, South West or Wales, your network operator is Western Power Distribution. You can call 105 or 0800 6783 105 in the event of a power cut to let them know that you are

without power. If you are deaf or hard of hearing, you can speak to Western Power Distribution on 0800 6783 105 using Text Relay by dialling 18001 first using your textphone.

THE PRIORITY SERVICES REGISTER

Thinking ahead and being prepared for an emergency is vital, particularly for the elderly, very ill or disabled or for those who rely on electricity for medical equipment. These groups of people may need extra help during a power cut, and can sign up to the Priority Services Register to receive extra assistance.



The Priority Services Register is free to join. It helps energy companies and network operators to look after customers who have extra communication, access or safety needs and to tailor services to support households who need extra help.

Who is eligible?

- People with medical dependencies on electricity – like kidney dialysis, ventilator or oxygen concentrator users;
- The elderly, disabled or chronically sick;
- People who depend on electrical equipment like stair lifts or bath hoists;
- People who have a communication need because they are blind, deaf, partially sighted, hearing impaired or unable to communicate in English;
- People with temporary vulnerabilities, like recent hospital leavers or households with new-born babies.

What support is provided?

People who are on the Priority Services Register benefit from:

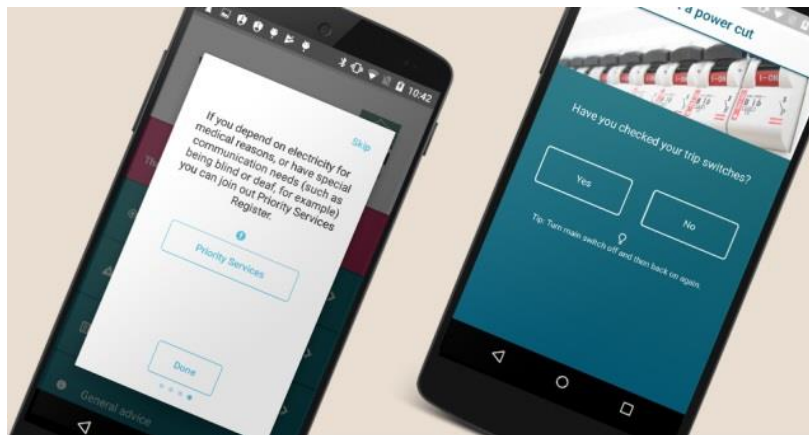
- A special telephone number to call in the event of a power cut so they can get straight through to the right person at their energy company or network operator;
- Advance notice about planned interruptions to their electricity supply;
- Extra information and support in the event of an unplanned power cut;
- Agreeing a password with their energy company or network operator before a visit to verify that they are a legitimate employee;
- Contact from their energy company during prolonged outages and major incidents: For example, during exceptional weather conditions, registered customers will be contacted to ensure they are not experiencing any difficulties and to offer extra support;
- For those who rely on oxygen for medical reasons, an oxygen provider will be contacted to provide assistance during longer power cuts;
- Usually all medically dependent registered customers are contacted within three hours of an unplanned power cut between the hours of 9am-8pm;
- Access to special help, if needed, through the British Red Cross, such as hot food or drinks during longer power cuts;

- In the event of an emergency, information about registered customers may be shared with other responding agencies, such as the local water company;
- Referrals to partner agencies, such as the Energy Saving Trust or Citizens Advice, where other needs are identified, such as managing fuel debt, getting a cheaper energy deal or applying for relevant benefits.

How to sign up

In the Midlands, South West or Wales, your network operator is Western Power Distribution. People who may be vulnerable during a power cut living in these areas can sign up to the Priority Services Register by:

1. filling in this online form: www.westernpower.co.uk/About-us/Priority-Services/Priority-Services-Register.aspx (make sure you select “Energy Envoy DofE” from the drop down list when asked where you heard about this Priority Services Registration);
2. filling in a freepost leaflet from Western Power Distribution (email energyenvoys@nef.org.uk to ask for some leaflets and make sure you write “Energy Envoy DofE” in the ‘where did you hear about us’ section of the form);
3. downloading the “WPD Power Cut Reporter” mobile app; or
4. using the contact details listed here: www.westernpower.co.uk/About-us/Priority-Services.aspx





How can you help?

A lot of people don't know that they can access this support, so it is worth checking that your elderly, ill or disabled relatives, family friends or neighbours have signed up. If they haven't already signed up, you can help them to register their details.

You can make a big difference for people who may be vulnerable during a power cut in your community by choosing the Power Cut Advice project [here](#) for your volunteering project.

Informed consent

If you help someone to sign up to the Priority Services Register, you must make sure they know who their details are being sent to and that they give permission for their details to be registered. You will need to explain that it is a free and confidential service, and that their details may be sent to partner agencies, such as their electricity supplier, local water company or the British Red Cross to ensure they get all the help they may need if there is a power cut. Their details will never be shared with third parties or used for marketing purposes.

This is called "informed consent" because the person has consented to their details being registered based on all the information about how their details will be used.