



Safety Matters



When working near underground cables

Introduction

This leaflet aims to help anyone who excavates or penetrates ground to stay safe.



Over the past 10 years in the UK, there have been over 1,000 recorded injuries as a result of contact with underground electricity cables.

Many of these incidents have been on construction or demolition sites, with the remainder on public highways, footpaths, domestic premises and gardens. Damage can result from excavation or penetration of the ground and can cause an explosion, leading to severe burns and even death.

Important Notes

- **Contact us** for free cable plans before work starts.
- **Houses, shops, offices, factories, street lighting** and other street furniture all have underground electric cables or overhead power lines supplying them.
- **Underground cables don't run in straight lines;** they're flexible and change direction and depth.
- **Supply cables associated with derelict buildings** should be treated as LIVE until confirmed otherwise by SP Energy Networks.
- **Not all cables** are shown on plans.
- **If a cable is buried in concrete,** don't attempt to break it out; contact SP Energy Networks to ensure the cable is de-energised.
- **Exercise extreme caution when using picks,** forks, pinch bars, pins or any other pointed instruments to free lumps of stone or break up compacted ground.
- **Never throw a pick** or sharp instrument into the ground.

Plan Ahead, Look Around

Carry out a risk assessment in accordance with HSE Guidance Note HS (G) 47, 'Avoiding Danger from Underground Services'.

Ensure you have up-to-date plans of underground services in the area (we can supply these if you don't have them).

Include our emergency telephone number on your farm map/site plans and in your list of telephone contacts; then ask your workers to save it in their mobiles.

Always scan the area you intend to excavate using a Cable Avoidance Tool (CAT) and Genny.

If emergency work is being carried out and plans aren't readily available, excavate as though there are buried LIVE cables in the vicinity.

Be aware that the actions of third parties could have altered cable depths or positions since the cables were laid.

Service connection cables may not be shown on plans, so look for indications of potential services, e.g. street furniture.

Mark cable positions using waterproof road paint or other permanent marker.



Excavate Trial Holes With Caution

- Ensure current cable records are on site. We provide them free of charge.
- Use a Cable Avoidance Tool (CAT) and a spade or shovel.
- Never use a pick, fork, pinch bar or power tool.
- Ensure current cable records are on site.
- Ensure staff are fully trained to excavate and use tools appropriately and safely.
- Hand-dig trial holes along the indicated cable route to confirm the position of services.
- Hand-dig as many holes as necessary, particularly if there are plastic pipes which can't always be found by a CAT.
- As you progress, look out for marker tape, ducts or cable covers which indicate the presence of underground services.
- Don't use exposed cables as convenient steps or handholds.
- Don't operate a bulldozer, scraper, dragline or excavator unless you're satisfied that all buried services have been identified in the working area.
- Backfill around services with a fine material; then cover the cable with stone-free soil or stone dust and replace any cable marker tiles, ducts and tape.



If You Damage an Underground Cable

If your machine is still in contact with a live underground cable:

- Stay inside the cab until SP Energy Networks or the Emergency Services arrive unless there's a real threat of fire.
- **Do NOT climb out or touch the ground** while still in contact with the machine.
- Keep others away even if you're in the cab; someone else touching your vehicle could result in them receiving fatal injuries.
- If possible, use your mobile to contact SP Energy Networks via 150, or get someone else to call them. If necessary, call the Emergency Services too. Ensure you give both an accurate location.
- 105 is the UK-wide number to call to report power cuts or electricity network emergencies.
- If you have to get out, do not step out of the vehicle. JUMP CLEAR and take leaping strides so that one foot is off the ground at all times or bunny hop until you're at least 5 metres away.

If your machine is not in contact with the live cable:

- You can exit the machine if it is safe to do so but you must maintain a safe distance and secure the area.
- Always report the damage via 105 to SP Energy Networks.

Further Information

- Comprehensive advice is available from the Health & Safety Executive (HSE) via www.hse.gov.uk/construction/safetytopics/underground.htm

Before starting work, we also strongly recommend you read:

- Health and Safety Executive (HSE) Guidance Note HS (G) 47, 'Avoiding Danger from Underground Services'. This can be downloaded free of charge from the HSE website.
- Energy Networks Association's free leaflets: www.energynetworks.org/campaigns/

**POWER CUT?
CALL 105**



A Clear Sign

Look up and look out for power lines. If you see this sign on any equipment keep well clear, it means what it says



Contact Us

We provide free safety advice to help you stay safe near power lines.

For free safety advice and general network enquiries:

www.spenergynetworks.co.uk
customercare@spenergynetworks.com
0330 10 10 444

For electricity network plans:

**Cheshire, Merseyside, North Wales
& North Shropshire**
0141 614 5666
requestforplansmanweb@spenergynetworks.co.uk

Central & Southern Scotland
0141 614 9903
requestforplansscotland@spenergynetworks.co.uk

**In an emergency: Call 105 or call the
location based emergency numbers:**

**Cheshire, Merseyside, North Wales
& North Shropshire**
0800 001 5400

Central & Southern Scotland
0800 092 9290

