

August 2016

nationalgrid

Excavating safely

Avoiding injury at work

Measures to stay safe and avoid damage when working near high-voltage electricity cables



At National Grid, safety is our top priority, and that includes developing and operating safe, reliable and sustainable energy infrastructure. We want to make sure that anyone working on or near our infrastructure does so as safely as possible. This document describes the protective measures you must take when excavating near our high voltage electricity cables.

You must take the following protective measures when excavating near National Grid high voltage electricity cables.

In addition, we recommend you refer to the Health and Safety Executive (HSE) Guidance Note HSG 47 'Avoiding Danger from Underground Services' and to 'Utilities Guidelines on Positioning and Colour Coding of Apparatus'.

You must provide full colour copies of National Grid site plans to the workers carrying out the excavations. Contact us on **0800 688 588** for the latest versions of our site plans.

Before starting your works, check all the details provided on our site plans to avoid injury to workers.

- Use cable location equipment to trace all underground assets.
- Dig trial holes by hand to confirm the exact location of assets.
- Use suitable paint or markers on the surface to clearly indicate the position of pipes and cables.

During the works, take every precaution to avoid personal injury or damage to our assets.

We will divert any assets affected by your works at your cost. The cost of repairing assets damaged as a result of your works will also be your responsibility. Remember, if in doubt, ask.

Working near high voltage cables

Clearances

You must not dig within five metres of a high voltage electricity cable without contacting our Plant Protection team on **0800 688 588**. If you dig and find a cable protection slab, normally labelled 'Danger HV Cables', stop digging immediately and call the National Grid electrical emergency line on **0800 40 40 90**.

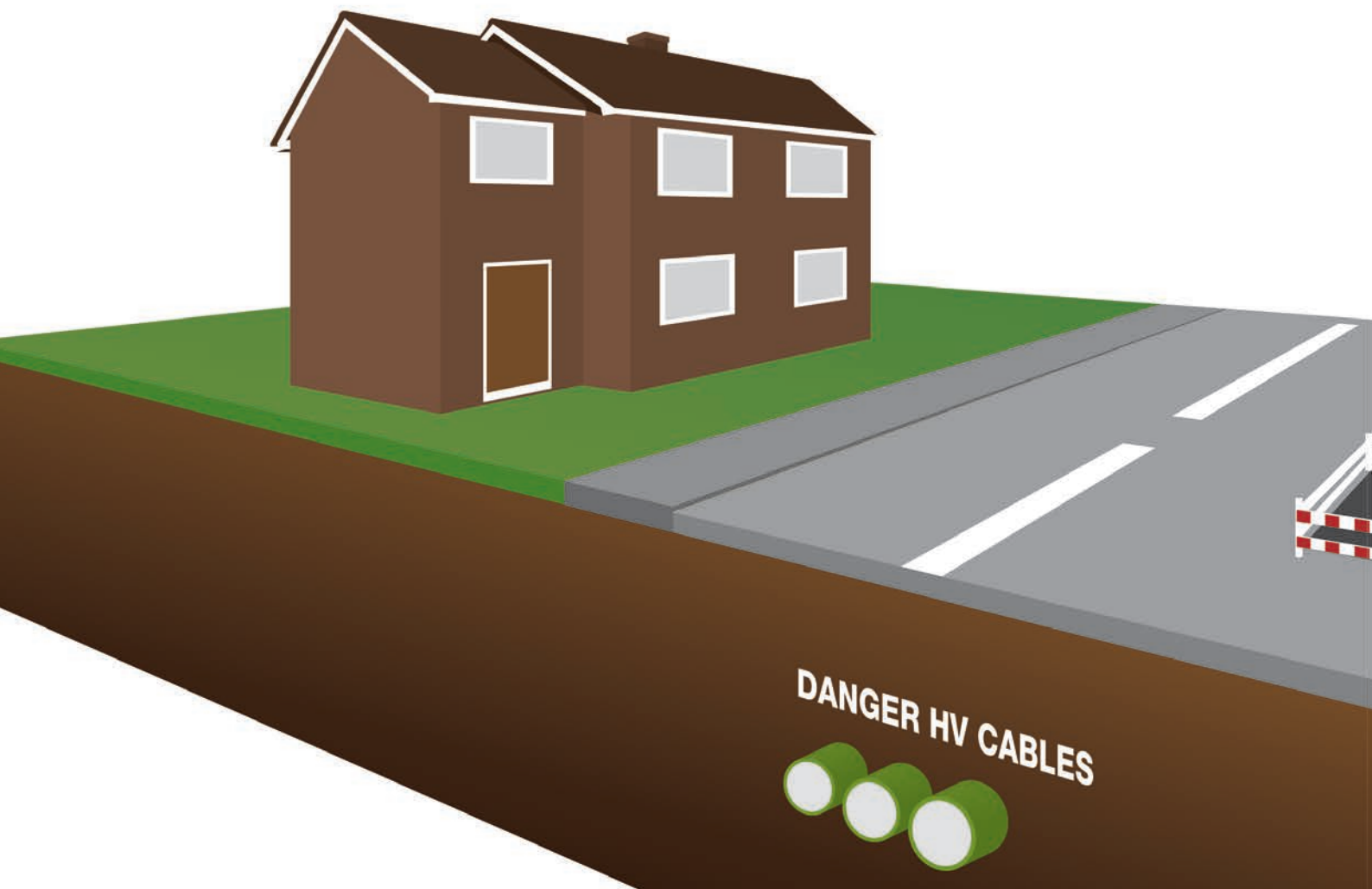
Minimum safe working distances

Always contact our Plant Protection team for electricity plans before carrying out any works.

Near National Grid electricity cables:

Before carrying out any work near to National Grid cables, contact our Plant Protection team on **0800 688 588**.

Dig trial holes by hand to work out the exact location of mains and services before carrying out any mechanical excavation or thrust boring.



Uncovering cables

If there is a risk that the work could uncover our cables or our cable protection tiles, we may need to meet you to agree additional control measures.

Where excavation near a cable could affect its support, the cable and any related assets must be adequately supported and protected to standards that meet our satisfaction. Do not expose National Grid high voltage cables and assets without written agreement. If you expose a high voltage cable or cable protection slab labelled 'Danger HV Cables', stop work immediately and call **0800 40 40 90**.

Tree planting

The roots of trees and shrubs planted near to our equipment can damage buried pipes and cables. Take this into consideration if you are planting greenery around our assets as part of your works. You must submit your planting schemes to us for approval by contacting the Plant Protection team. We reserve the right to remove any greenery at any time in the future.

Surface boxes and manholes

Do not bury or move National Grid surface boxes. We have to maintain access to them both during and after your works. We reserve the right to locate or realign any boxes at your expense if they are left inaccessible. Do not build over or around manhole covers or other structures, or under gas pipes or electricity cables. You must not carry out any work that reduces or increases cover or protection, without our agreement.

In case of an electrical emergency

If you expose or handle a high voltage cable or cable protection slab labelled 'Danger HV Cables' without written agreement from us, you must take the following actions immediately:

- Stop work and move everyone away from the work area;
- Make sure other parties such as the public cannot access the area;
- If the cable is damaged or leaks a fluid, do not attempt to repair or stop it;
- Report to your supervisor; and
- Assist National Grid, Police or Fire Services as requested.

Stop: do not start work without electricity plans.

Look: carry out a visual survey and use a cable locator.

Listen: follow our instructions.



Access

You must provide access to our sites and assets at all times. This includes temporary structures and spoil heaps over our electricity cables.

Crossing National Grid plant

Placing heavy construction plant, equipment and materials or directing heavy vehicles over National Grid assets is prohibited unless you have carried out agreed protective measures (for example, constructing reinforced crossing points). This is particularly important if you plan to reduce side support or ground cover.

Working in wayleaves or easements

Do not undertake any work within a National Grid way-leave or easement without our written agreement.



National Grid electricity contacts

Plant Protection team: 0800 688 588

Electricity emergency number: 0800 40 40 90

Regional DNO contact details

Details can be obtained via the Energy Networks Association: www.energynetworks.org