

**From:** [Tiffany Bate](#)  
**To:** [Connahs Quay](#)  
**Subject:** Connah's Quay Low Carbon Power Project\_ NGET Scoping Response  
**Date:** 14 March 2024 17:26:39  
**Attachments:** [image001.png](#)  
[NGET Assets\\_Connah's Quay LCPP\\_Scoping Response\\_final.pdf](#)

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Dear Sir/ Madam,

Please will you accept a late response from NGET? Please see attached.

Please let me know if this is a problem.

Thank you.

Kind regards

Tiffany

## **Tiffany Bate**

Development Liaison Officer  
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SUBMITTED ELECTRONICALLY:  
[connahsquay@planninginspectorate.gov.uk](mailto:connahsquay@planninginspectorate.gov.uk)

14 March 2024

Dear Sir/Madam

**APPLICATION BY UNIPER UK LIMITED (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE CONNAH'S QUAY LOW CARBON POWER PROJECT (THE PROPOSED DEVELOPMENT)**

**SCOPING CONSULTATION RESPONSE**

I refer to your letter dated 9<sup>th</sup> February 2024 in relation to the above proposed application. This is a response on behalf of National Grid Electricity Transmission PLC (NGET).

Having reviewed the scoping report, I would like to make the following comments regarding NGET existing or future infrastructure within or in close proximity to the current red line boundary.

NGET has high voltage electricity overhead transmission lines, underground cables and a high voltage substation within the scoping area. The overhead lines and substation forms an essential part of the electricity transmission network in England and Wales.

Substation

- DEESIDE 400 kV Substation
- CONNAHS QUAY 400 kV Substation
- CONNAHS QUAY 132 kV Substation
- Associated overhead and underground apparatus including cables

Overhead Lines

4ZB 400 kV OHL	BODELWYDDAN - DEESIDE - PENTIR 1 BODELWYDDAN - DEESIDE - PENTIR 2
ZK 400 kV OHL	DEESIDE - LEGACY - TRAWSFYNYDD 1 DEESIDE - LEGACY - TRAWSFYNYDD 2
ZO 400 kV OHL	DAINES - DEESIDE 1 DAINES - DEESIDE 2

4ZD 400 kV OHL      CAPENHURST - DEESIDE 1  
CAPENHURST - DEESIDE 2

## Cable Apparatus

- 400 kV cable: CONNAHS QUAY - FLINTSHIRE BRIDGE 1: CONQ4 FLIB4 1 K1 01
- 400 kV cable: CONNAHS QUAY - FLINTSHIRE BRIDGE 2. CONQ4 FLIB4 2 K1 01

## **New infrastructure**

Please refer to the Holistic Network Design (HND) and the National Grid ESO website to view the strategic vision for the UK's ever growing electricity transmission network. <https://www.nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design/hnd>

NGET requests that all existing and future assets are given due consideration given their criticality to distribution of energy across the UK. We remain committed to working with the promoter in a proactive manner, enabling both parties to deliver successful projects wherever reasonably possible. As such we encourage that ongoing discussion and consultation between both parties is maintained on interactions with existing or future assets, land interests, connections or consents and any other NGET interests which have the potential to be impacted prior to submission of the Proposed DCO.

The Great Grid Upgrade is the largest overhaul of the electricity grid in generations, we are in the middle of a transformation, with the energy we use increasingly coming from cleaner greener sources. Our infrastructure projects across England and Wales are helping to connect more renewable energy to homes and businesses. To find out more about our current projects please refer to our network and infrastructure webpage. <https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects>. Where it has been identified that your project interacts with or is in close proximity to one of NGET's infrastructure projects, we would welcome further discussion at the earliest opportunity.

These projects are all essential to increase the overall network capability to connect the numerous new offshore wind farms that are being developed, and transport new clean green energy to the homes and businesses where it is needed.

I enclose a plan showing the location of NGET's apparatus in the scoping area.

## Specific Comments – Electricity Infrastructure:

- NGET's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset
- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. NGET recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for “overhead line clearances Issue 3 (2004)”.
- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.
- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's ([www.hse.gov.uk](http://www.hse.gov.uk)) Guidance Note GS 6 “Avoidance of Danger from Overhead Electric Lines” and all relevant site staff should make sure that they are both aware of and understand this guidance.
- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum “sag” and “swing” and overhead line profile (maximum “sag” and “swing”) drawings should be obtained using the contact details above.
- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.
- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or “pillars of support” of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation (“pillar of support”) drawings can be obtained using the contact details above.
- NGET high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide NGET full right of access to retain, maintain, repair and inspect our assets. Hence we require that no permanent / temporary structures are to be built over our cables or within the easement strip. Any such proposals should be discussed and agreed with NGET prior to any works taking place.
- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.

To download a copy of the HSE Guidance HS(G)47, please use the following link:  
<http://www.hse.gov.uk/pubns/books/hsg47.htm>

## **Further Advice**

**We would request that the potential impact of the proposed scheme on NGET's existing and future assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.**

**Where any diversion of apparatus may be required to facilitate a scheme, NGET is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by NGET. Further information relating to this can be obtained by contacting the email address below.**

**Where the promoter intends to acquire land, extinguish rights, or interfere with any of NGET apparatus, protective provisions will be required in a form acceptable to it to be included within the DCO.**

NGET requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All consultations should be sent to the following email address: [box.landandacquisitions@nationalgrid.com](mailto:box.landandacquisitions@nationalgrid.com)

I hope the above information is useful. If you require any further information, please do not hesitate to contact me.

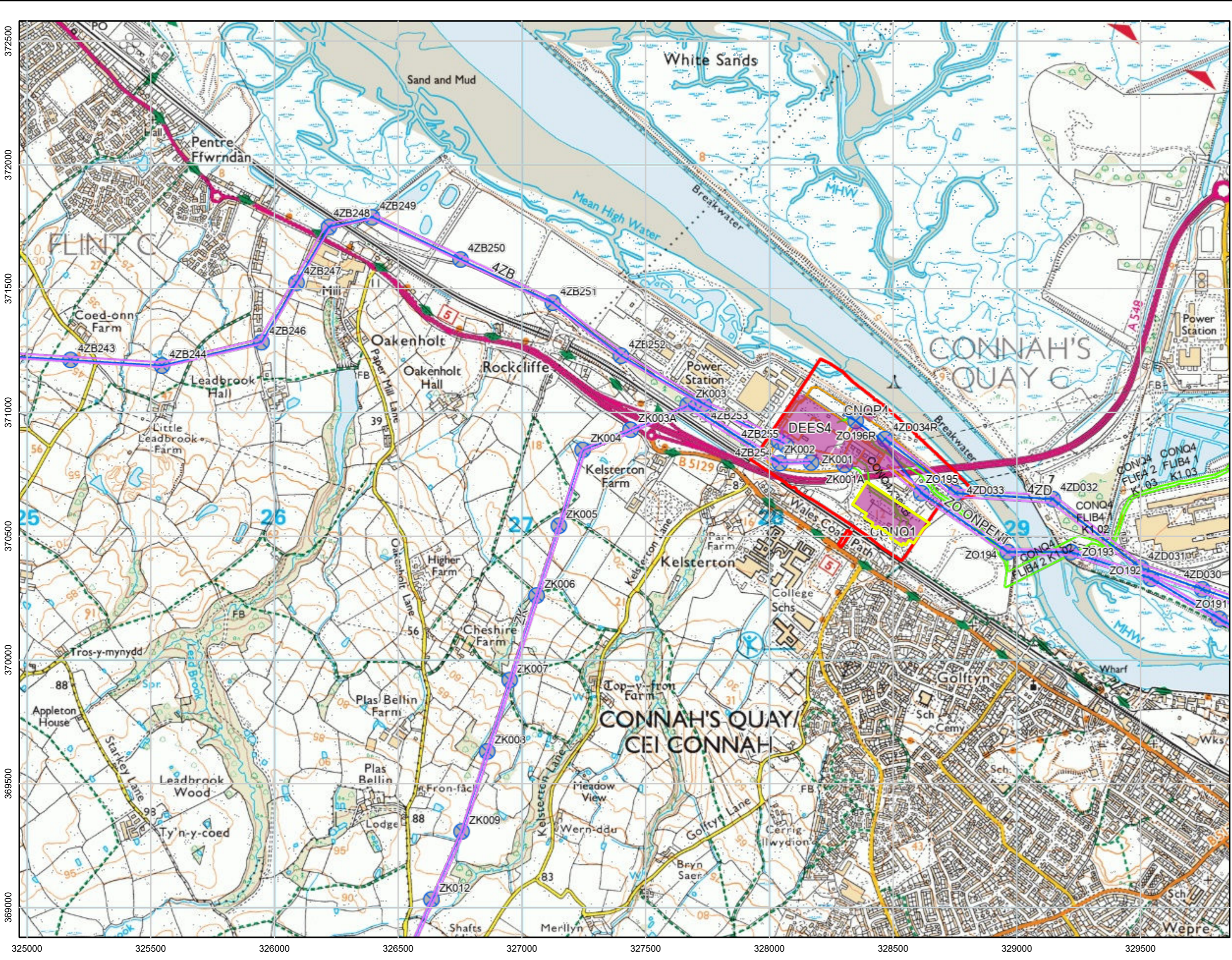
The information in this letter is provided notwithstanding any discussions taking place in relation to connections with electricity customer services.

Yours faithfully



**Tiffany Bate  
Development Liaison Officer  
Commercial and Customer Connections  
Electricity Transmission Property Land and Property**





**Legend**

Electric Land Ownership

- Electric Land Ownership - Freehold

Fibre Cable

- Fibre Cable Commissioned
- Buried Cable Commissioned

Towers

- Towers Commissioned

OHL 400kV

- OHL 400kV Commissioned

OHL Circuits

- OHL Circuits Commissioned

Substations

- Substations Commissioned

**Notes**

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NG Disclaimer: National Grid UK Transmission. The asset position information represented on this map is the intellectual property of National Grid PLC (Warwick Technology Park, Warwick, CV346DA) and should not be used without prior authority of National Grid.  
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Technical Guidance Note 287

# Third-party guidance for working near National Grid Electricity Transmission equipment

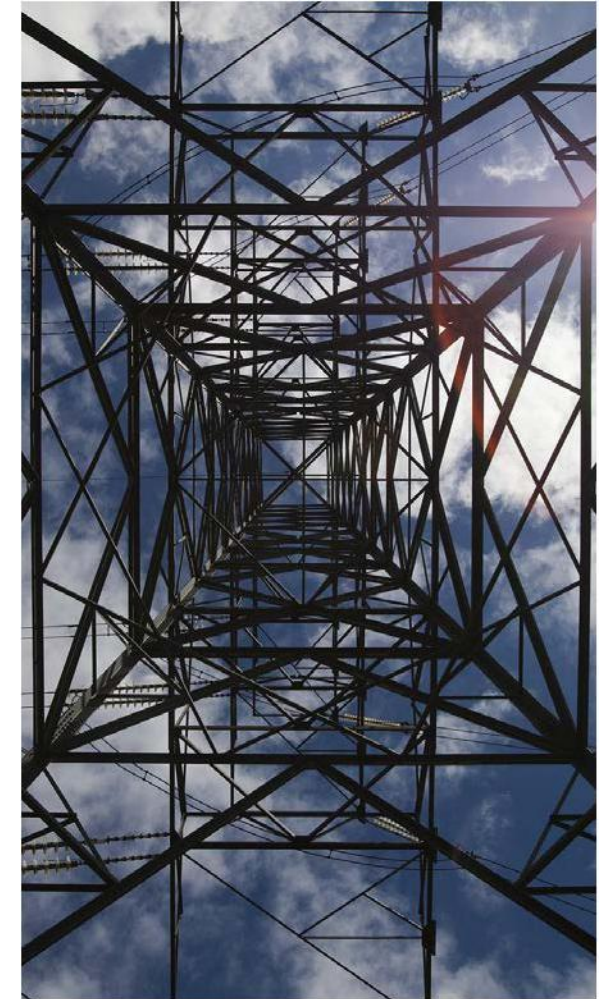
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# Purpose and scope

The purpose of this document is to give guidance and information to third parties who are proposing, scheduling or designing developments close to National Grid Electricity Transmission assets.

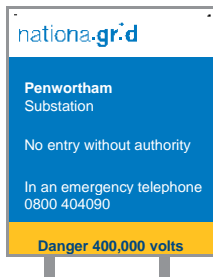
The scope of the report covers information on basic safety and the location of our assets – and also highlights key issues around particular types of development and risk areas.

In the case of electrical assets, National Grid does not authorise or agree safe systems of work with developers and contractors. However, we will advise on issues such as electrical safety clearances and the location of towers and cables. We also work with developers to minimise the impact of any National Grid assets that are nearby.

## How to identify specific National Grid sites

### Substations

The name of the Substation and emergency contact number will be on the site sign.



### Overhead Lines

The reference number of the tower and the emergency contact number will be on this type of sign.



## Contact National Grid

### Plant protection

For routine enquiries regarding planned or scheduled works, contact the Asset Protection team online, by email or phone.

**www.lsbud.co.uk**

**Email:** [assetprotection@nationalgrid.com](mailto:assetprotection@nationalgrid.com)

**Phone:** 0800 001 4282

### Emergencies

In the event of occurrences such as a cable strike, coming into contact with an overhead line conductor or identifying any hazards or problems with National Grid's equipment, phone our emergency number 0800 404 090 (option 1).

If you have apparatus within 30m of a National Grid asset, please ensure that the emergency number is included in your site's emergency procedures.

### Consider safety

Consider the hazards identified in this document when working near electrical equipment





## Part 1

# Electricity transmission infrastructure

National Grid owns and maintains the high-voltage electricity transmission network in England and Wales (Scotland has its own networks). It's responsible for balancing supply with demand on a minute-by-minute basis across the network.

### Overhead lines

Overhead lines consist of two main parts – pylons (also called towers) and conductors (or wires). Pylons are typically steel lattice structures mounted on concrete foundations. A pylon's design can vary due to factors such as voltage, conductor type and the strength of structure required.

Conductors, which are the 'live' part of the overhead line, hang from pylons on insulators. Conductors come in several different designs depending on the amount of power that is transmitted on the circuit.

In addition to the two main components, some Overhead Line Routes carry a Fibre Optic cable between the towers with an final underground connection to the Substations.

In most cases, National Grid's overhead lines operate at 275kV or 400kV.

### Underground cables

Underground cables are a growing feature of National Grid's network. They consist of a conducting core surrounded by layers of insulation and armour. Cables can be laid in the road, across open land or in tunnels. They operate at a range of voltages, up to 400kV.

### Substations

Substations are found at points on the network where circuits come together or where a rise or fall in voltage is required. Transmission substations tend to be large facilities containing equipment such as power transformers, circuit breakers, reactors and capacitors. In addition Diesel generators and compressed air systems can be located there.

## Part 2

# Statutory requirements for working near high-voltage electricity

The legal framework that regulates electrical safety in the UK is *The Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002*. This also details the minimum electrical safety clearances, which are used as a basis for the Energy Networks Association (ENA) TS 43-8. These standards have been agreed by CENELEC (European Committee for Electrotechnical Standardisation) and also form part of the *British Standard BS EN 50341-1:2012 Overhead Electrical Lines exceeding AC 1kV*. All electricity companies are bound by these rules, standards and technical specifications. They are required to uphold them by their operator's licence.

### Electrical safety clearances

It is essential that a safe distance is kept between the exposed conductors and people and objects when working near National Grid's electrical assets. A person does not have to touch an exposed conductor to get a life-threatening

electric shock. At the voltages National Grid operates at, it is possible for electricity to jump up to several metres from an exposed conductor and kill or cause serious injury to anyone who is nearby. For this reason, there are several legal requirements and safety standards that must be met.

Any breach of legal safety clearances will be enforced in the courts. This can and has resulted in the removal of an infringement, which is normally at the cost of the developer or whoever caused it to be there. Breaching safety clearances, even temporarily, risks a serious incident that could cause serious injury or death.

National Grid will, on request, advise planning authorities, developers or third parties on any safety clearances and associated issues. We can supply detailed drawings of all our overhead line assets marked up with relevant safe areas.



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### **Your Responsibilities - Overhead lines**

Work which takes place near overhead power lines carries a significant risk of coming into proximity with the wires. If any person, object or material gets too close to the wires, electricity could 'flashover' and be conducted to earth, causing death or serious injury. You do not need to touch the wires for this to happen. The law requires that work is carried out in close proximity to live overhead power lines only when there is no alternative, and only when the risks are acceptable and can be properly controlled. Statutory clearances exist which must be maintained, as prescribed by the Electricity Safety, Quality and Continuity Regulations 2002.

Under the Health and Safety at Work etc. Act 1974 and Management of Health and Safety at Work Regulations 1999, you are responsible for preparing a suitable and sufficient risk assessment and safe systems of work, to ensure that risks are managed properly and the safety of your workforce and others is maintained. Your risk assessment must consider and manage all of the significant risks and put in place suitable precautions/controls in order to manage the work safely. You are also responsible for ensuring that the precautions identified are properly implemented and stay in place throughout the work.

Work near overhead power lines must always be conducted in accordance with GS6, 'avoiding danger from overhead power lines', and any legislation which is relevant to the work you are completing.

### **What National Grid will provide**

National Grid can supply profile drawings in PDF and CAD format showing tower locations and relevant clearances to assist you in the risk assessment process.

### **What National Grid will not provide**

National Grid will not approve safe systems of work or approve design proposals





## Part 3

# What National Grid will do for you and your development

### Provision of information

National Grid should be notified during the planning stage of any works or developments taking place near our electrical assets, ideally a minimum notification period of 8 weeks to allow National Grid to provide the following services:

#### Drawings

National Grid will provide relevant drawings of overhead lines or underground cables to make sure the presence and location of our services are known. Once a third party or developer has contacted us, we will supply the drawings for free.

# 400kV

*The maximum nominal voltage of the underground cables in National Grid's network*

#### Risk or impact identification

National Grid can help identify any hazards or risks that the presence of our assets might bring to any works or developments. This includes both the risk to safety from high-voltage electricity and longer-term issues, such as induced currents, noise and maintenance access that may affect the outcome of the development. National Grid will not authorise specific working procedures, but we can provide advice on best practice.





## Risks or hazards to be aware of

This section includes a brief description of some of the hazards and issues that a third party or developer might face when working or developing close to our electrical infrastructure.

### Land and access

National Grid has land rights in place with landowners and occupiers, which cover our existing overhead lines and underground cable network. These agreements, together with legislation set out under the *Electricity Act 1989*, allow us to access our assets to maintain, repair and renew them. The agreements also lay down restrictions and covenants to protect the integrity of our assets and meet safety regulations. Anyone proposing a development close to our assets should carefully examine these agreements.

Our agreements often affect land both inside and outside the immediate vicinity of an asset. Rights will include the provision of access, along with restrictions that ban the development of land through building, changing levels, planting and other operations. Anyone looking to develop close to our assets must consult with National Grid first.

### For further information, contact Asset Protection:

Email: [assetprotection@nationalgrid.com](mailto:assetprotection@nationalgrid.com)  
Phone: 0800 001 4282

### Electrical clearance from overhead lines

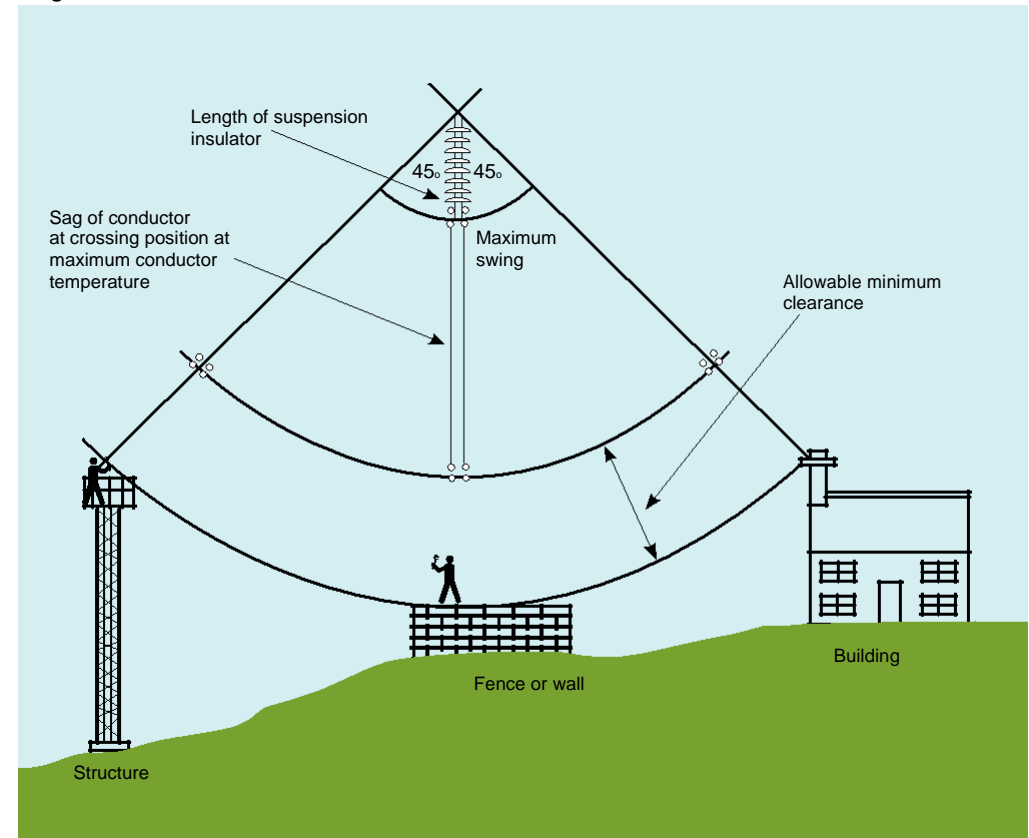
The clearance distances referred to in this section are specific to 400kV overhead lines. National Grid can advise on the distances required around different voltages i.e. 132kV and 275kV.

As we explained earlier, *Electrical Networks Association TS 43-8* details the legal clearances to our overhead lines. The minimum clearance between the conductors of an overhead line and the ground is 7.3m at maximum sag. The sag is the vertical distance between the wire's highest and lowest point. Certain conditions, such as power flow, wind speed and air temperature can cause conductors to move and allowances should be made for this.

The required clearance from the point where a person can stand to the conductors is 5.3m. To be clear, this means there should be at least 5.3m from where someone could stand on any structure (i.e. mobile and construction equipment) to the conductors. Available clearances will be assessed by National Grid on an individual basis.

National Grid expects third parties to implement a safe system of work whenever they are near Overhead Lines.

Diagram not to scale



There should be at least 5.3m between the conductors and any structure someone could stand on

We recommend that guidance such as *HSE Guidance Note GS6 (Avoiding Danger from Overhead Power Lines)* is followed, which provides advice on how to avoid danger from all overhead lines, at all voltages. If you are carrying out work near overhead lines you must contact National Grid, who will provide the relevant profile drawings.

# 7.3m

The required minimum clearance between the conductors of an overhead line, at maximum sag, and the ground

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The undergrounding of electricity cables at Ross-on-Wye

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**Underground cables** Underground cables operating at up to 400kV are a significant part of the National Grid Electricity Transmission network. When your works will involve any ground disturbance it is expected that a safe system of work is put in place and that you follow guidance such as *HSG 47 (Avoiding Danger from Underground Services)*.

You must contact National Grid to find out if there are any underground cables near your proposed works. If there are, we will provide cable profiles and location drawings and, if required, on-site supervision of the works. Cables can be laid under roads or across industrial or agricultural land. They can even be layed in canal towpaths and other areas that you would not expect.

Cables crossing any National Grid high-voltage (HV) cables directly buried in the ground are required to maintain a minimum separation that will be determined by National Grid on a case-by-case basis. National Grid will need to do a rating study on the existing cable to work out if there are any adverse effects on either cable rating. We will only allow a cable to cross such an area once we know the results of the re-rating. As a result, the clearance distance may need to be increased or alternative methods of crossing found.

For other cables and services crossing the path of our HV cables, National Grid will need confirmation that published standards and clearances are met.

### Impressed voltage

Any conducting materials installed near high-voltage equipment could be raised to an elevated voltage compared to the local earth, even when there is no direct contact with the high-voltage equipment. These impressed voltages are caused by inductive or capacitive coupling between the high-voltage equipment and nearby conducting materials and can occur at distances of several metres away from the

equipment. Impressed voltages may damage your equipment and could potentially injure people and animals, depending on their severity. Third parties should take impressed voltages into account during the early stages and initial design of any development, ensuring that all structures and equipment are adequately earthed at all times.

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### Earth potential rise

Under certain system fault conditions – and during lightning storms – a rise in the earth potential from the base of an overhead line tower or substation is possible. This is a rare phenomenon that occurs when large amounts of electricity enter the earth. This can pose a serious hazard to people or equipment that are close by.

We advise that developments and works are not carried out close to our tower bases, particularly during lightning storms.

### Noise

Noise is a by-product of National Grid's operations and is carefully assessed during the planning and construction of any of our equipment. Developers should consider the noise emitted from National Grid's sites or overhead lines when planning any developments, particularly housing. Low-frequency hum from substations can, in some circumstances, be heard up to 1km or more from the site, so it is essential that developers find adequate solutions for this in their design. Further information about likely noise levels can be provided by National Grid.

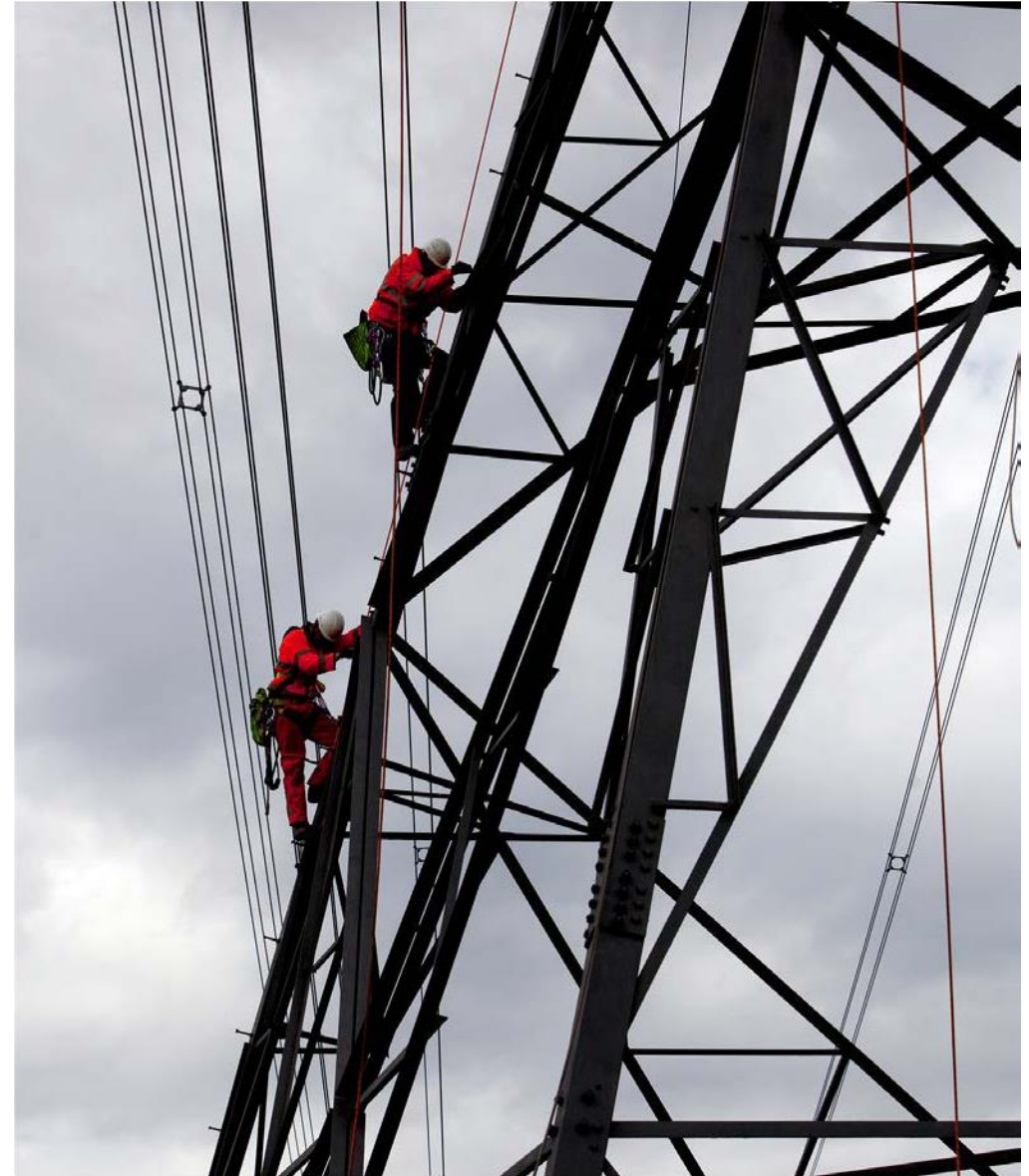
### Maintenance access

National Grid needs to have safe access for vehicles around its assets and work that restricts this will not be allowed. In terms of our overhead lines, we wouldn't want to see any excavations made, or permanent structures built, that might affect the foundations of our towers. The size of the foundations around a tower base depends on the type of tower that is built there. If you wish to carry out works within 30m of the tower base, contact National Grid for more information. Our business has to maintain access routes to tower bases with land owners. For that reason, a route wide enough for an HGV must be permanently available. We may need to access our sites, towers, conductors and underground cables at short notice.

# 30m

*If you wish to carry out work within this distance of the tower base, you must contact National Grid for more information*

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### Fires and firefighting

National Grid does not recommend that any type of flammable material is stored under overhead lines. Developers should be aware that in certain cases the local fire authority will not use water hoses to put out a fire if there are live, high-voltage conductors within 30m of the seat of the fire (as outlined in ENA TS 43-8).

In these situations, National Grid would have to be notified and reconfigure the system – to allow staff to switch out the overhead line – before any firefighting could take place. This could take several hours.

We recommend that any site which has a specific hazard relating to fire or flammable material should include National Grid's emergency contact details (found at the beginning and end of this document) in its fire plan information, so any incidents can be reported.

Developers should also make sure their insurance cover takes into account the challenge of putting out fires near our overhead lines.

### Excavations, piling or tunnelling

You must inform National Grid of any works that have the potential to disturb the foundations of our substations or overhead line towers. This will have to be assessed by National Grid engineers before any work begins.

*BS ISO 4866:2010* states that a minimum distance of 200m should be maintained when carrying out quarry blasting near our assets. However, this can be reduced with specific site surveys and changes to the maximum instantaneous charge (the amount of explosive detonated at a particular time).

All activities should observe guidance layed out in *BS 5228-2:2009*.

### Microshocks

High-voltage overhead power lines produce an electric field. Any person or object inside this field that isn't earthed picks up an electrical charge. When two conducting objects – one that is grounded and one that isn't – touch, the charge can equalise and cause a small shock, known as a microshock. While they are not harmful, they can be disturbing for the person or animal that suffers the shock.

For these reasons, metal-framed and metal-clad buildings which are close to existing overhead lines should be earthed to minimise the risk of microshocks. Anything that isn't earthed, is conductive and sits close to the lines is likely to pick up a charge. Items such as deer fences, metal palisade fencing, chain-link fences and metal gates underneath overhead lines all need to be earthed.

For further information on microshocks please visit [www.emfs.info](http://www.emfs.info).



# 200m

*The minimum distance that should be maintained from National Grid assets when quarry blasting*





## Specific development guidance

### Wind farms

National Grid's policy towards wind farm development is closely connected to the *Electricity Networks Association Engineering Recommendation L44 Separation between Wind Turbines and Overhead Lines, Principles of Good Practice*. The advice is based on national guidelines and global research. It may be adjusted to suit specific local applications.

There are two main criteria in the document:

(i) The turbine shall be far enough away to avoid the possibility of toppling onto the overhead line

(ii) The turbine shall be far enough away to avoid damage to the overhead line from downward wake effects, also known as turbulence

The toppling distance is the minimum horizontal distance between the worst-case pivot point of the wind turbine and the conductors hanging in still air. It is the greater of:

- the tip height of the turbine plus 10%
- or, the tip height of the turbine plus the electrical safety distance that applies to the voltage of the overhead line.

To minimise the downward wake effect on an overhead line, the wind turbine should be three times the rotor distance away from the centre of the overhead line.

Wake effects can prematurely age conductors and fittings, significantly reducing the life of the asset. For that reason, careful consideration should be taken if a wind turbine needs to be sited within the above limits. Agreement from National Grid will be required.

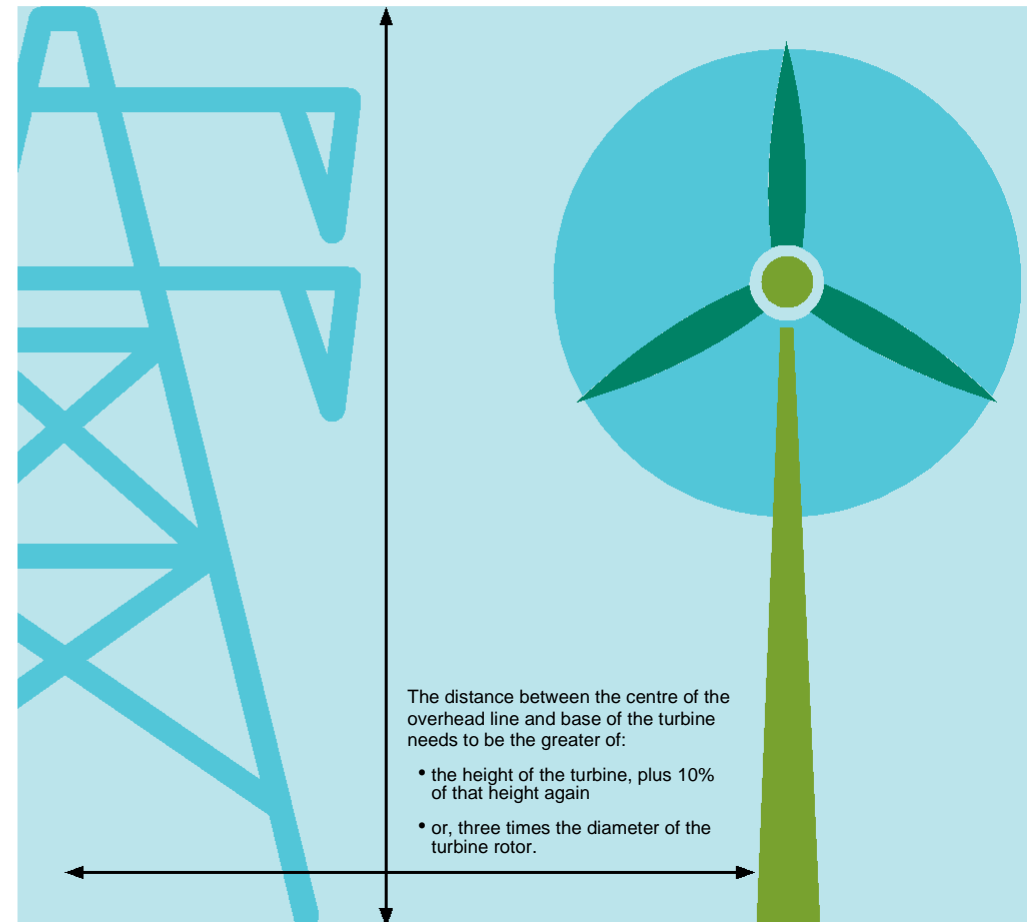
### Commercial and housing developments

National Grid has developed a document called *Design guidelines for development near pylons and HVO power lines*, which gives advice to anyone involved in planning or designing large-scale developments that are crossed by, or close to, overhead lines.

The document focuses on existing 275kV and 400kV overhead lines on steel lattice towers, but can equally apply to 132kV and below. The document explains how to design large-scale developments close to high-voltage lines, while respecting clearances and the development's visual and environmental impact.

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Diagram not to scale



Turbines should be far enough away to avoid the possibility of toppling onto the overhead line



« Section continued from previous page

The advice is intended for developers, designers, landowners, local authorities and communities, but is not limited to those organisations.

Overall, developers should be aware of all the hazards and issues relating to the electrical equipment that we have discussed when designing new housing.

As we explored earlier, National Grid's assets have the potential to create noise. This can be low frequency and tonal, which makes it quite noticeable. It is the responsibility of developers to take this into account during the design stage and find an appropriate solution.

### Solar farms

While there is limited research and recommendations available, there are several key factors to consider when designing Solar Farms in the vicinity of Overhead Power Lines.

Developers may be looking to build on arable land close to National Grid's assets. In keeping with the safety clearance limits that we outlined earlier for solar panels directly underneath overhead line conductors, the highest point on the solar panels must be no more than 5.3m from the lowest conductors.

This means that the maximum height of any structure will need to be determined to make sure safety clearance limits aren't breached. This could be as low as 2m. National Grid will supply profile drawings to aid the planning of solar farms and determine the maximum height of panels and equipment.

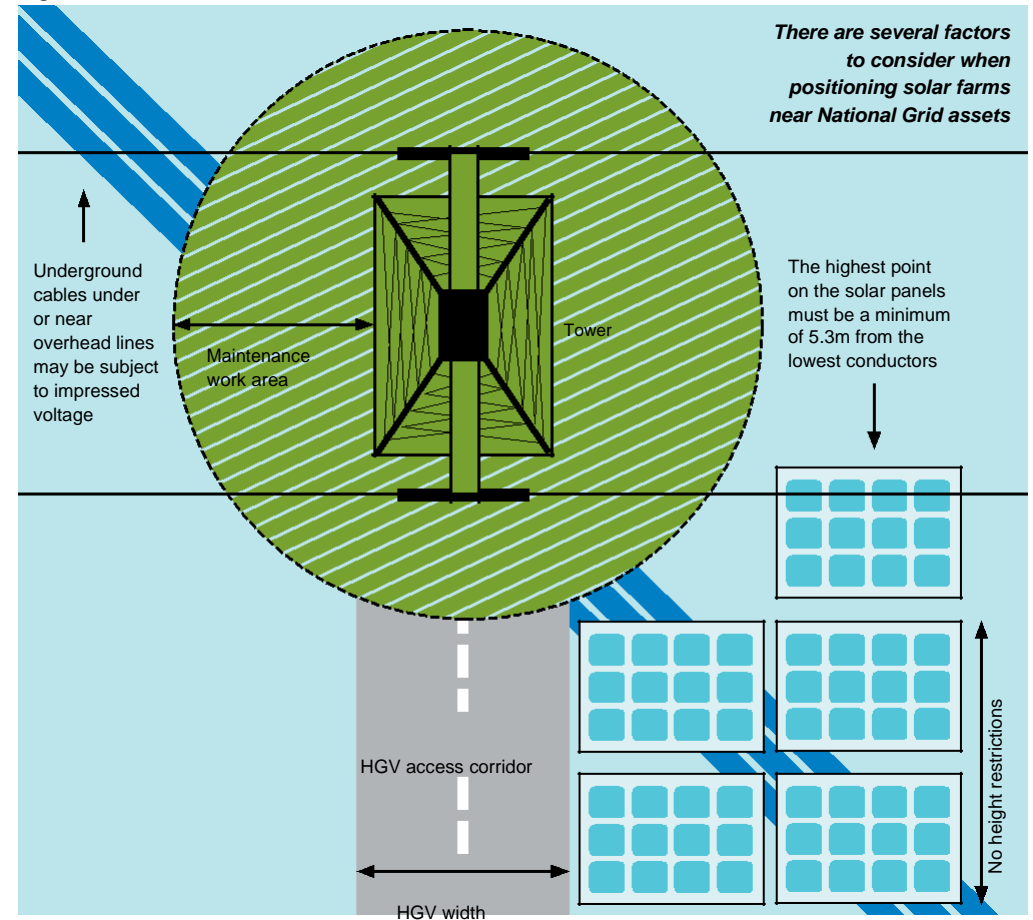
Solar panels that are directly underneath power lines risk being damaged on the rare occasion that a conductor or fitting falls to the ground. A more likely risk is ice falling from conductors or towers in winter and damaging solar panels.

There is also a risk of damage during adverse weather conditions, such as lightning storms, and system faults. As all our towers are earthed, a weather event such as lightning can cause a rise in the earth potential around the base of a tower. Solar panel support structures and supply cables should be adequately earthed and bonded together to minimise the effects of this temporary rise in earth potential.

Any metallic fencing that is located under an overhead line will pick up an electrical charge. For this reason, it will need to be adequately earthed to minimise microshocks to the public.

For normal, routine maintenance and in an emergency National Grid requires unrestricted access to its assets. So if a tower is enclosed in a solar farm compound, we will need full access for our vehicles,

Diagram not to scale



Including access through any compound gates. During maintenance – and especially re-conductoring – National Grid would need enough space near our towers for winches and cable drums. If enough space is not available, we would require solar panels to be temporarily removed.



## Asset protection agreements

In some cases, where there is a risk that development will impact on National Grid's assets, we will insist on an asset protection agreement being put in place. The cost of this will be the responsibility of the developer or third party.

## Contact details

### Emergency situations

If you spot a potential hazard on or near an overhead electricity line, do not approach it, even at ground level. Keep as far away as possible and follow the six steps below:

- Warn anyone close by to evacuate the area
- Call our 24-hour electricity emergency number: 0800 404 090 (Option 1)<sup>1</sup>
- Give your name and contact phone number
- Explain the nature of the issue or hazard
- Give as much information as possible so we can identify the location – i.e. the name of the town or village, numbers of nearby roads, postcode and (ONLY if it can be observed without putting you or others in danger) the tower number of an adjacent pylon
- Await further contact from a National Grid engineer

<sup>1</sup> It is critically important that you don't use this phone number for any other purpose. If you need to contact National Grid for another reason please use our Contact Centre at [www2.nationalgrid.com/contact-us](http://www2.nationalgrid.com/contact-us) to find the appropriate information or call 0800 0014282.

### Routine enquiries

Email:  
[assetprotection@nationalgrid.com](mailto:assetprotection@nationalgrid.com)

Call Asset Protection on:  
0800 0014282

Opening hours:  
Monday to Friday 08:00-16:00

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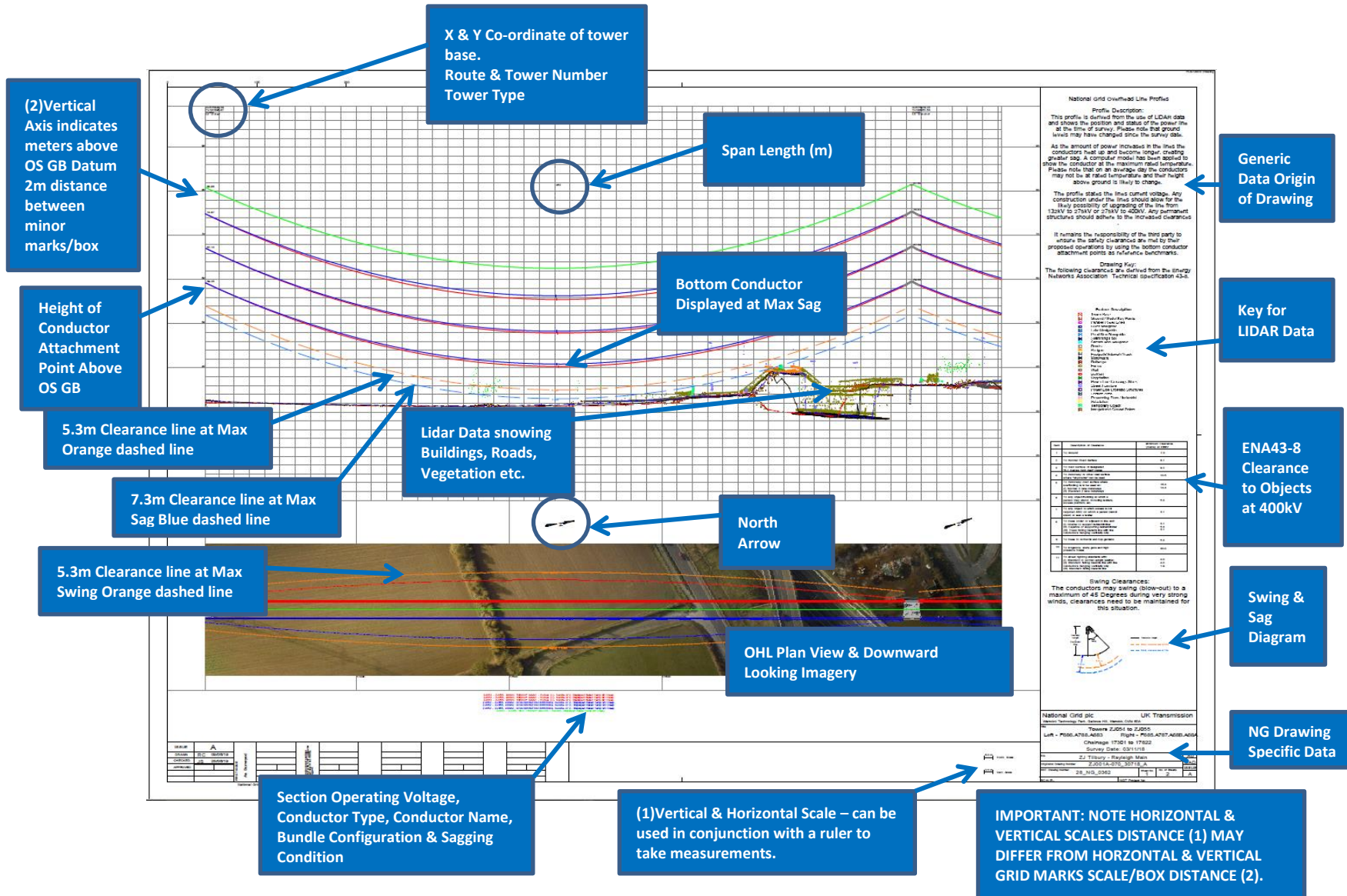
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# 14 APPENDIX A



## OHL Profile Drawing Guide





## OHL Tower Stand Off & Reconducting Area

