

# Guidance for developing solar farms near to gas distribution and transmission pipelines



Plant Protection should be your first point of contact if you want to carry out work near to gas distribution and transmission assets.

Phone: 0800 688 588

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

Address: National Grid  
Plant Protection  
Block 1  
Brick Kiln Street  
Hinckley  
LE10 0NA

Website: [www.beforeyoudig.nationalgrid.com](http://www.beforeyoudig.nationalgrid.com)

## Timescales

Please be aware that we need a considerable amount of notice if you want to set up a solar-farm development. In previous cases, it has taken up to a year to allow work to start on-site. To avoid any unnecessary delays, please consider this when contacting Plant Protection.

## Rights of access

You need to keep our rights of access free from construction, to make sure that we can always gain access when we need to carry out maintenance. Please check the conditions which are outlined in National Grid document T/SP/SSW/22 relating to the width of access routes and other restriction details that apply when working near to our pipelines before designing the layout of the solar panels. T/SP/SSW/22 can be downloaded from : <http://www2.nationalgrid.com/uk/Safety/library/> Select “Download” next to “Working safely in the vicinity of above 7bar pipelines”.

## Before work starts

In the early stages of planning and before any work starts near our assets, you need to contact Plant Protection and follow our plant protection process.

We will need to work together to identify the following:-

### Information you will need to provide

- a. Information about any vehicles, plant or equipment that will need to cross the pipeline at any stage.
- b. Your proposals for routing the cables. We may be concerned about parallel cable runs that are within 50m of our pipeline.

### Support you need from us and checks we must carry out

- c. Our Plant Protection team should clearly mark any rights of access to our pipeline on-site.
- d. We will need to carry out pipeline coating checks to ensure the pipe is in good condition.

### Site design layout that you must keep to

- e. Vehicles, plant and equipment can only cross the pipeline at agreed locations.
- f. If any of the following need to cross our pipeline, they should be perpendicular (at 90 degrees) to the pipeline.
  - o Cables
  - o Drains
  - o Fences
  - o Boundaries
- g. Footings, panels and other equipment must not be on our rights of way.
- h. You may need to provide a deed of indemnity<sup>1</sup> for any cables and slabs that need to cross our pipeline.
- i. Long-term access must be agreed in order for us to be able to maintain the pipeline within the site.

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<sup>1</sup> A deed of indemnity is an agreement that specifies the actions and consequences which would result should damage to our assets occur.

## Electrical installations and pipeline cathodic protection (CP)

We apply cathodic protection<sup>2</sup> to our steel pipeline systems. Our policy and legislation is in line with the requirements of BS EN 12954 (please go to [www.bsigroup.co.uk](http://www.bsigroup.co.uk) for more information).

Stray currents from electrical installations such as solar farms, wind farms, cables (AC and DC), substations and overhead lines can have an adverse effect on the CP system and its ability to protect the buried steel pipeline.

To make sure the electrical design and any cables that cross our pipeline do not reduce the effectiveness of existing cathodic protection on our steel pipeline systems, please consider the following when designing the layout of the solar panels.

- AC or DC interference in our pipeline from cables running parallel to it.
- Grounding system - earth leakage studies should take into account the effects of earth leakage and fault currents on our pipeline.
- You should arrange for CP specialists to monitor the CP system by carrying out assessments both before and after constructing the solar farm to make sure its performance has not been affected. You will have to cover the cost of the monitoring and any work that is necessary to protect the pipeline.

## Contact details

For more information and to send us information before you start work, please contact our Plant Protection team.

Phone: 0800 688 588

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

Address: National Grid  
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Block 1  
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LE10 0NA

Website: National Grids Electricity And Gas Location Enquiry System (EAGLES)  
<https://www.beforeyoudig.nationalgrid.com>

## Further information

For more information about working near gas pipelines please visit our work safely library and download “Above 7bar Gas Guidance” <http://www2.nationalgrid.com/uk/Safety/library/>

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<sup>2</sup> Cathodic protection is an electrical system applied to the pipeline to control corrosion by reducing the pipelines electrical potential. This is achieved through a variety of system designs and will differ depending on the natural and built environment conditions.