



a sense of place

Design Guidelines for development near high voltage overhead lines

design guidelines
for development
near high voltage
overhead lines



National Grid



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Statement of support

As organisations committed to best practice in urban design, regeneration and land use planning, we are pleased to offer our support for the Sense of Place initiative. We believe that these guidelines will be of value to many groups and individuals involved in the design and development process, offering innovative and practical guidance on the development of land near high voltage overhead lines.



NATIONAL PLAYING FIELDS



'A consequence of current policy is that significant urbanisation is being planned on the edges of towns where a common constraint is overhead power lines which typically converge to serve concentrations of urban consumers.

In situations where overhead lines cannot be diverted away from development and/ or placed underground, they should be accepted as an unavoidable feature of the landscape the impact of which is to be mitigated by skilled urban design.

The TCPA is pleased to endorse the urban design guidance prepared by National Grid for situations where overhead power lines may have to remain.'





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Design Guidelines for development near high voltage overhead lines

Introduction

The 'Sense of Place' Design Guidelines have been developed by National Grid in partnership with David Lock Associates to address the issues associated with developing sites crossed by, or in the vicinity of, pylons and high voltage overhead lines.

They specifically relate to the existing high voltage overhead lines (275kV and 400kV) operated by National Grid, but could in certain circumstances also apply to lower voltage overhead lines on steel pylons (132kV and below) operated by the local distribution companies.

Why do we need this guidance?

This work has been carried out in recognition of the increasing pressure for the sustainable development of land. A renewed focus on previously developed land is leading to the redevelopment of former industrial areas and the regeneration of our towns and cities. The sustainable urban extension of existing settlements is promoting a compact urban form that minimises the need to travel. Many of these potential development sites are crossed by overhead lines, some of which are high voltage overhead lines.

National Grid sometimes receives requests to move overhead lines, or put them underground, when development is proposed nearby. National Grid's approach is to seek to retain its assets in situ, though it recognises that there may be exceptional circumstances that would justify the request where, for example, the proposal is of regional or national importance. Leaving aside the cost and technical complexity of moving or undergrounding existing overhead lines, the National Grid network is a fundamental and permanent part of our national infrastructure and should be treated as such.

Nevertheless, National Grid recognises that the presence of high voltage overhead lines across a site presents a constraint on development. These guidelines look to promote the successful development of sites crossed by existing overhead lines and the creation of well-designed places. The guidelines demonstrate that a creative design approach can minimise the impact of overhead lines whilst promoting a quality environment.

Guidelines for residential and commercial development

The guidelines primarily address issues relating to residential development, as this is clearly one of the more sensitive forms of development in close proximity to overhead power lines. However, the design principles equally apply to other forms of development.

These guidelines also set out some of the technical issues faced by developers of such sites. The appendices contain useful information on possible technical considerations, including noise, interference, electric and magnetic fields (EMFs) and the operational and maintenance requirements of National Grid.

Produced in consultation with the development industry

The guidelines have been produced in consultation with a wide range of interest groups, organisations and individuals from the development industry. It is with thanks to the participation of these organisations and their most valuable comments that the guidelines have reached this final form.

This work and further information is available on the Sense of Place website at <http://www.nationalgrid.com/uk/senseofplace>

Feedback on the guidelines is welcome. If you have any queries or comments on this work, please contact National Grid.

Who is this guidance for?

Maintaining and enhancing the quality of the built and natural environment is increasingly important to all of us.

The aim of this design guidance is to meet these aspirations by promoting the highest possible quality in the design of development on land crossed by existing high voltage overhead lines and to suggest ways in which the environmental impact of high voltage overhead lines can be diminished.

These guidelines provide a practical tool-kit of design principles for all parties:

- **Developers, landowners and designers:** These guidelines will help provide greater clarity about the design constraints posed by high voltage overhead lines, along with greater awareness of the opportunities, through good design, to improve the environment and therefore the value of development.
- **Local authorities:** The guidelines will promote awareness of the potential to develop and improve the environmental quality of land close to high voltage overhead lines, and provide a suggested policy and supplementary planning guidance on the development of land crossed by high voltage overhead lines.
- **Communities:** The guidelines provide a useful additional resource for communities taking part in planning events in setting out the potential for the successful development of land close to high voltage overhead lines.



With careful design, a high quality environment is possible near high voltage overhead lines.