

factsheet

How National Grid develops major projects

National Grid does not generate electricity, but it is our role to connect power stations and wind farms to our transmission network, and to ensure that the system has enough capacity to transport the electricity to consumers.

An unprecedented level of new power generation is planned over the next decade to meet the demand for electricity and to meet the Government's 2020 targets for reduction of CO₂. This will be achieved by replacing older power stations that are at the end of their useful lives or cannot meet the requirements of European emissions legislation, with new nuclear stations and renewable generation, including wind farms.

The cost of transmitting electricity ultimately passes through to consumers in their electricity bills, so it is important for National Grid to find the best way of connecting new sources of generation consistent with our Electricity Act duty to maintain 'an efficient, co-ordinated and economical' system of electricity transmission.



“An unprecedented level of new power generation is planned over the next decade to meet the demand for electricity”

Assessing the need for new power lines

National Grid only seeks to build new power lines or above ground installations such as substations in new locations where:

- ◆ Existing infrastructure cannot be upgraded technically or economically to meet system security standards and regulatory obligations;
- ◆ Forecasted increases in demand for electricity will not be met by other means; or
- ◆ New connections to generators are needed.

Evaluating options

Once our engineers know a new power line is needed, they will identify and assess the different options that meet the needs of the electricity system and present the findings and conclusions in a 'strategic options report'. This report establishes the start and end points of any new power line that may be required. Reports for specific projects are available on our website: www.nationalgrid.com/uk/electricity/majorprojects/

Route Corridor Study (RCS)

Having identified the start and end points of a new power line, the RCS identifies potential route corridors – broad swathes of land between these points, within which the line route could be located.

The methodology of the RCS is discussed with and commented on by local planning authorities and other key statutory bodies.



Route corridor study

“In identifying the route corridors, we will seek to avoid towns and villages and high-level environmental constraints such as National Parks and Areas of Outstanding Natural Beauty.”



In identifying the route corridors, we will seek to avoid towns and villages and high-level environmental constraints such as National Parks and Areas of Outstanding Natural Beauty. We will also identify other areas (such as woodlands) and take account of topography and landscape, following National Grid’s guidelines and policies on the siting and routing of infrastructure.

We also look at existing overhead power lines (including those of a lower voltage), where all or part of their routes could be used for the new line route. We call such routes ‘opportunity corridors’.

Once the RCS is complete, we will carry out the first stage of detailed consultation with the local community and statutory consultees on the route corridor options. We will explain why we have identified these corridors for consultation, and why other potential options are not being taken forward.

The RCS and other project documents for public consultation are placed in local libraries and council offices, as well as being available on our website <http://www.nationalgrid.com/uk/electricity/majorprojects/>.

Following public consultation, we then look to identify a ‘preferred route corridor’.

Preferred Route Corridor

We will need to balance issues raised during the consultation exercise with technical, cost and environmental aspects to arrive at our preferred option.

Following the RCS consultation, we will announce our preferred route corridor in a statement to local communities and stakeholders, accompanied by a report detailing the consultation responses received and how these responses have influenced the project development.

Once a preferred route corridor is identified, work will begin to define a more precise route for the new line route within the route corridor. This is known as a ‘route alignment’. An Environmental Impact Assessment helps to inform the design of the scheme including, for example, the positions of pylons.



“We undertake Environmental Impact Assessment for certain types of project, though even where a full EIA is not required, National Grid will carry out environmental impact studies and produce an Environmental Report.”

Environmental Impact Assessment (EIA)

EIA is important because it ensures that the likely effects of a proposed development on the environment are understood and fully taken into account before decisions are made on whether the development can go ahead.

We undertake EIA for certain types of project, though even where a full EIA is not required, National Grid will carry out environmental impact studies and produce an Environmental Report.

National Grid is committed to minimising, so far as practicable, the impact of its proposals on the environment and communities.

We propose to identify the scope of the EIA and the assessments it will cover through a series of ‘thematic groups’ established with statutory and local environmental groups and individuals from the local community.

The aspects of the environment likely to be considered as part of the EIA include:

- ◆ Population;
- ◆ Flora and Fauna;
- ◆ Soil;
- ◆ Water;
- ◆ Air;
- ◆ Climatic factors;
- ◆ Architectural and archaeological heritage;
- ◆ Landscape; and
- ◆ The inter-relationship between the above factors.

During the EIA we will work closely with statutory consultees as well as a wide range of local environmental groups, landowners and communities through community forums, to discuss any project issues raised.

The findings of the EIA will be presented in an Environmental Statement (ES). This will provide information on the aspects of the environment likely to be significantly affected by the proposed development and any measures which may be needed to minimise, mitigate and, where necessary, compensate for any significant adverse effects.

For more information see:

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009
http://www.opsi.gov.uk/si/si2009/uksi_20092263_en_1

Environmental Impact Assessment:

A guide to procedures

<http://www.communities.gov.uk/publications/planningandbuilding/environmentalimpactassessment>

Draft Route Alignment

During the EIA process we will carry out a second stage of consultation with local people, on the draft route alignment. This may include some detailed consideration of those constrained areas where achieving an overhead line route may be difficult and, therefore, underground cables may be considered.

The final route alignment is developed through consultation with the public and statutory stakeholders, the EIA process and technical and engineering assessments.

Final route alignment

The final route alignment will form the basis of our application to the Infrastructure Planning Commission (IPC), supported by the various reports produced during development of the project.

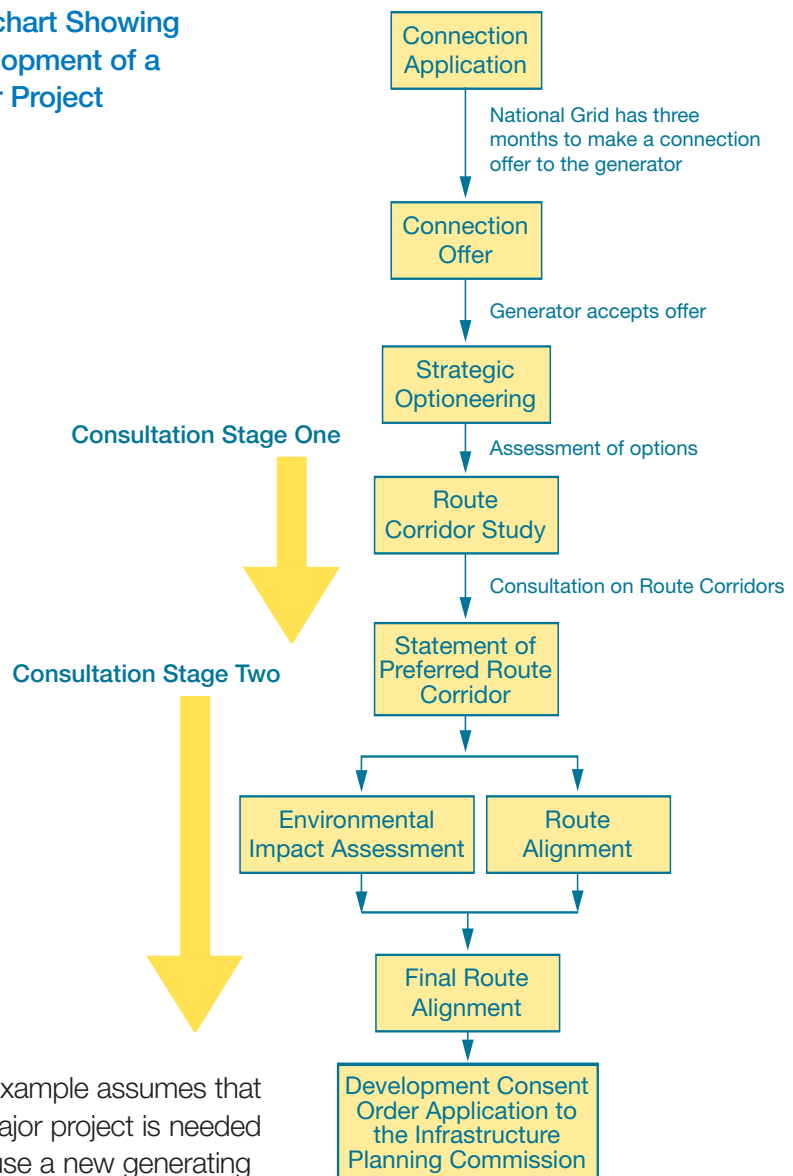
We will write a consultation report, which will demonstrate to the IPC how consultation with statutory stakeholders and local communities has influenced the development of the project.

The IPC must be satisfied that we have carried out adequate pre-application consultation before it accepts our application.

Development Consent Order applications submitted to the IPC

Once it has accepted a Development Consent Order application, the IPC will carry out a statutory period of consultation during which local communities and statutory consultees can comment on the application direct to the IPC.

Flowchart Showing Development of a Major Project



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This example assumes that the major project is needed because a new generating plant has applied to connect to the National Grid system