

Offsite grid connection

In order to provide a link between the control building/ substation of the wind farm and the existing local electricity distribution network it will be necessary to install 33kV cables from the site to an appropriate substation.

The grid connection would be the subject of a separate application under Section 37 of the Electricity Act 1989. Consequently, the grid connection for the wind farm will not form part of the assessment in the EIA.

Access Tracks

Access tracks, will be required for the development, to allow for the delivery of the turbine components and continued access throughout the operation of the development. Where possible the layout of the site will make use of the existing tracks within the site.

It is intended that the access tracks will be constructed of Type 1 unbound granular material, usually clean compacted stone. Where possible the stone will be sourced from the local area. The tracks will have a fill depth of 0.6m and a track width of 4.5m. The track will also require three layers of reinforcing 'geogrid' material.

Following construction and commissioning of the turbines the access tracks will remain on site to permit access for future maintenance and/or repair.

There are no 'borrow pits' proposed to provide material for the access tracks or turbine foundations. Where possible the required granular material will be sourced from appropriate recycled material.

Site Access

An abnormal load traffic site access assessment will be carried out as part of the transport assessment of the EIA to investigate the feasibility of potential routes to the site. The study will also identify the preferred access point into the site.

Anemometer Mast

An anemometer mast will be constructed on site in order to measure the wind speed conditions of the site. The anemometer mast will be a temporary structure as measurements will commence post planning and will not last more than a year before the mast is taken down.

The anemometer mast will be constructed of lightweight galvanised steel tubes, supported with cable guy wires in four directions and be up to a height of 70m. The guy wires will be anchored approximately 24m from the anemometer mast with standard screw-in anchors, such that no cranes or concrete foundations are required. As such the anemometer mast will cover an area of 48m².

Construction Compound

A temporary site construction compound area is required to accommodate deliveries of equipment and machinery at the onset of the works and also to accommodate contractors' site accommodation, welfare facilities and site parking. The compound will consist of an area of stone hardstanding of approximately 2500m³ (100m x 50m x 0.5m).

4. Environmental Impact Assessment (EIA) Process

4.1 EIA Overview

The proposed development may give rise to environmental effects. As such an Environmental Impact Assessment (EIA) will be undertaken and an Environmental Statement will be produced.

The EIA will be conducted in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, commonly referred to as the EIA Regulations.

The EIA will also be undertaken in line with published best practice guidelines including: *The Guidelines for Environmental Impact Assessment*, Institute of Environmental Management and Assessment (IEMA), 2004.

The EIA process for this proposal can be considered as having the following stages:

- Initial Site Selection and Feasibility Studies (already undertaken and ongoing);
- Scoping (as initiated by this document);
- Baseline studies;
- Design Iteration and identification of mitigation;
- Assessment of environmental effects and evaluation of significance;
- Public Consultation; and
- Production of the Environmental Statement.

4.2 Initial Site Selection and Feasibility Studies

The initial site selection stage is a crucial part of wind energy development. Volkswind UK Ltd only considers sites where wind turbine development is technically feasible. Volkswind UK Ltd therefore considers many potential sites across the country before selecting one which appears to be both technically feasible and environmentally acceptable.

The main technical requirements for a wind farm site are as follows:

- An appropriate wind resource;
- Proximity to a National Grid connection;
- Accessibility for abnormal loads;
- Suitable foundation conditions; and
- An agreement with a landowner.

Volkswind UK Ltd initial studies have indicated that the site meets all of these technical requirements. Initial searches also indicated that there are no statutory environmental designations covering the site.

4.3 Baseline Studies

The baseline conditions will be established within each of the individual environmental assessments through the use of a number of sources including:

- Consultations;
- Desk top review of existing available data; and
- Site specific survey work.

The process will identify sensitive receptors, particularly those that are the subject of statutory designations.

Constraints will be identified through this process and used to inform the development of the turbine and infrastructure layout.

4.4 Design Iteration and Identification of Mitigation

In the EIA process, mitigation can be proposed to prevent, reduce or remedy any predicted significant adverse effects on the environment.

In the case of wind energy development, most mitigation measures are embedded within the overall design process which results in the final layout, rather than additional measures proposed to reduce identified environmental effects.

An iterative design approach will be adopted through the EIA process to determine a final layout for the turbines and associated infrastructure. Baseline environmental studies and consultation responses will inform iterations to the design of the site.

4.5 Assessment of Environmental Effects and Evaluation of Significance

The EIA Regulations require that the ES identifies likely significant environmental effects arising from the development. It is recognised in the EIA Regulations that not all environmental effects of a development are significant. However, those which are considered to be significant may constitute a material consideration in determination of the planning application.

The evaluation and determination of significant effects will be carried out using specific criteria defined within each of the technical chapters of the ES. Where available, published standards and guidelines will be used as the basis for the significance criteria.

The proposed methodologies for individual environmental topics are discussed in the subsequent section. However, the basic approach is the same for all environmental topics and is set out below:

- The sensitivity of the receiving environmental receptor is evaluated using defined criteria.
- The nature of the impact is established in terms of its duration, extent, frequency, likelihood of occurrence, reversibility, and compliance with recognised standards;
- The magnitude of the impact is determined. The magnitude of change is a consideration of how much the impact alters the baseline condition.
- The significance of the effect is determined by cross referencing the sensitivity of the receptor with the magnitude of change on the receptor.

It should be noted that environmental effects may be positive or negative and where relevant this will be noted in the ES.

4.6 Public Consultation

Volkswind UK Ltd. is committed to working together with local communities and aims to ensure that they are consulted with and informed of developments during the EIA process via newsletters, public exhibitions and consultation websites.

Volkswind UK Ltd. proposes to undertake a public exhibition once the initial baseline studies have been undertaken and prior to the final confirmation of the layout.

5. Content of the Environmental Statement

5.1 Environmental Statement Content Overview

Technical assessments for a number of potential environmental effects will be undertaken as part of the EIA process. Each of the technical assessments to be undertaken is outlined below. Information gathering to support these technical assessments has already commenced and the preliminary findings were used as the basis for the public exhibition display which introduced the proposals to the local community.

These assessments will be combined into an Environmental Statement which will include the following elements:

- Introductory Chapters
- Planning Policy Context
- Socio-economic Issues
- Climate Change Issues
- Landscape and Visual Impact Assessment
- Ecology
- Noise
- Cultural Heritage
- Transport
- Hydrology and Hydrogeology
- Telecommunications
- Aviation
- Shadow Flicker
- Cultural Heritage

Each of these elements is discussed in more detail in subsequent the sections of this Scoping Report.

6. Introductory Chapters

6.1 Overview

A series of introductory chapters will be included within the ES. These will include a full description of the proposals. A summary of the EIA process undertaken from Screening through to the production of the Environmental Statement will be provided. These chapters will also provide a discussion of the alternatives which were considered to the proposals.

7. Planning Policy Context

7.1 Overview

It is not the role of the Environmental Statement to analyse planning policy but instead to identify all the relevant policy against which the individual Environmental Assessments will be addressed. This chapter will provide the planning policy context to include national, regional and local policy and Supplementary Planning Guidance, along with any relevant supplementary or interim guidance.

8. Socio-economic Issues

8.1 Overview

This Chapter will consider the potential socio-economic effects of the proposed Wind Farm. There is no definitive methodology or guidance for assessing the socio-economic effects of a proposed development within an EIA. However, it is considered that the chapter should consider the following socio-economic issues related to the proposed development:

- *Community Benefits Package*
- *Effects on Employment*
- *Effects on Safety*
- *Effects on Land Use*
- *Effects on Agriculture*
- *Effects on Public Rights of Way*
- *Effects on Tourism and Recreation*
- *Effects on House Prices*