

Whitton Wind Farm: Non-Technical Summary of the Environmental Statement

This document forms part of the information being presented in an Environmental Statement by Vattenfall Wind Power Ltd in support of its proposal to construct, operate and decommission a wind farm at Whitton Farm in the Scottish Borders.

OBTAINING COPIES OF THE ENVIRONMENTAL STATEMENT

A copy of the Environmental Statement may be obtained on a data CD or a copy of this Non-Technical Summary may be obtained free of charge by writing to Vattenfall Wind Power Ltd at the address below or alternatively they will be made available free of charge in The Village Shop, Morebattle.

The Planning Statement and the Non-Technical Summary may also be downloaded from the Vattenfall website www.vattenfall.co.uk.

WHERE TO VIEW THE ENVIRONMENTAL STATEMENT

The completed Environmental Statement may be viewed at the following locations during normal office hours:

Vattenfall Wind Power Ltd Bridge End Hexham Northumberland NE46 4NU	Scottish Borders Council Council Headquarters Newtown St Boswells Melrose TD6 0SA
Jedburgh Library Castlegate Jedburgh TD8 6AS	Kelso Library Bowmont Street Kelso TD5 7JH

The purpose of this document is to present information which is contained in the full Environmental Statement in non-technical language. It includes a description of the proposal and a summary of the expected environmental impacts.

The document is divided into four sections:

- Section 1 provides a summary of the proposal
- Section 2 summarises the revised impact assessments
- Section 3 provides a conclusion
- Section 4 gives details of how to register your view

SECTION 1 – SUMMARY OF THE PROPOSAL

Background to the Proposal

Vattenfall Wind Power Ltd is applying to Scottish Borders Council to construct, operate and decommission the Whitton Wind Farm in the Scottish Borders.

In January 2005 a Request for a Scoping Opinion was submitted to Scottish Borders Council for the proposed Whitton Wind Farm. Given the time that had elapsed since the original Scoping Opinion was issued, it was considered appropriate to update the relevant consultees with respect to the proposal to determine whether any material changes had arisen in the interim period. A second Request for a Scoping Opinion was submitted to Scottish Borders Council in February 2008.

As the proposed scheme is under 50 MW, the application will be determined by Scottish Borders Council under the terms of the Town and Country Planning (Scotland) Act 1997 (as amended).

The Proposal

The proposed Whitton Wind Farm lies approximately 8 km east of Jedburgh in the Scottish Borders. It is located on privately owned land that is entirely under permanent pasture and is mostly improved or semi-improved grassland.

The development is made up of the components in the following table:

Infrastructure	Summary Description
Six Wind Turbines	Wind turbines with a power output of up to 3 megawatts, with a maximum height to blade tip of up to 110 metres (350 feet)
Six Wind Turbine Hardstandings	An area at each wind turbine, needed for the crane and wind turbine delivery. Each area would be a maximum of 20 metres (65 feet) x 45 metres (146 feet)
Six Wind Turbine Foundations	Reinforced concrete foundations, either square or circular each measuring up to 19 metres (62 feet) diameter, and 2.6 m (8.5 feet) deep buried beneath the ground
One Permanent Wind Monitoring Mast	A 70 metre (230 feet) free standing monitoring mast fitted with anemometry and monitoring equipment at various intervals
8.1 km of Site Roads (4.9 km new, 3.2 km upgrade existing)	Site roads would be on average 5 metres (16 feet) in width
One Temporary Site Compound	A compound measuring 60 metres (197 feet) x 60 metres (197 feet) comprising temporary site accommodation, welfare facilities, parking and bunded storage area for use during construction
One Control Building / Switchroom	A compound measuring 14 metres (46 feet) x 5 metres (16 feet) which contains a store/workshop, control room, switchroom and welfare provisions
One Borrow Pit	On-site source of stone for the construction of roads and wind turbine foundations

Operation of the Wind Farm

The electricity produced by each wind turbine would feed through an underground cable and into a switchroom on-site. The wind farm would be connected to the Scottish Power Distribution network via the on-site switchroom.

Construction Activities

Construction of the wind farm would take approximately eight months.

Stone would be required for the construction of roads, hardstanding and foundations. Using stone from within the site would reduce the construction traffic on public roads.

The proposal is based on a 20 year operational lifetime for the wind farm, followed by decommissioning. Any further use of the site for wind energy generation would be the subject of a further planning application.

Development Context

There is growing concern about the rise in levels of greenhouse gases and the changes they cause to the global climate. Burning fossil fuels is a major contributor to global greenhouse gas emissions, and reducing their use and increasing the amount of electricity generated from renewable energy sources is seen as a vital part of reducing these emissions.

The Scottish Government is committed to increasing the amount of electricity generated from renewable energy sources. In June 2008, they published a consultation paper entitled 'Adapting our Ways: Managing Scotland's Climate Risk'. The paper acknowledges that 'climate change is one of the most serious threats facing Scotland and the world today' and that 'It has the potential to impact significantly upon everyone living and working in Scotland'.

The Scottish Government has embarked on an ambitious programme to exploit renewable energy as a sustainable solution. An initial target of 18 per cent renewable energy by 2010 is set to be achieved and has been superseded by a new target to supply 50 per cent of Scotland's energy demand from renewable sources by 2020.

In December 2008, the Scottish Government introduced the Climate Change Bill. The Bill, which was passed in June 2009, will create a long-term framework that will:

- introduce a statutory target to reduce Scotland's greenhouse gas emissions by at least 80 per cent by 2050
- establish an interim target of at least 42 per cent emissions reductions by 2020, with a power for this to be varied based on expert advice from the UK Committee on Climate Change
- establish a framework of annual targets; and
- include emissions from international aviation and international shipping

SECTION 2 – SUMMARIES OF ENVIRONMENTAL IMPACT ASSESSMENTS

Landscape and Visual Amenity

The Landscape and Visual Impact Assessment has assessed the potential effects of the proposed Whitton Wind Farm within a 35 km radius study area on landscape and visual receptors.

The proposed Whitton Wind Farm has been designed to be a strong and positive statement within the landscape, but respectful of the scale of the receiving landscape and key locations where it would be viewed.

The proposed wind farm does not significantly impact any important landscapes and is sited in landscape character types/areas that have been identified as having scope for wind energy development. Furthermore, although prominent from some locations, it would be viewed in a wider context and in such a way that it would not be viewed as a dominant and over bearing development.

In review of Scottish Border's Planning Policy D4, the proposed wind farm is a small scale wind farm development located in a medium sensitivity farmland landscape with limited significant effects. Visibility mapping and viewpoint analysis indicate that the wind farm would not be significantly visible from either major tourist routes or important landscape viewpoints, and that views from settlements other than the village of Morebattle are limited. Furthermore, the effects on prominent skylines are also limited.

A residential assessment has been carried out for dwellings within 5 km of the proposed Whitton Wind Farm. Of the 108 properties / clusters visited, one property only would experience a direct view, this being the cottage at Shielstockbraes with a direct and open view to the wind farm in the south-west.

Cultural Heritage and Archaeology

Potential construction, operation, decommissioning and post-operational impacts of the proposed Whitton Wind Farm upon cultural heritage features have been considered and assessed. It is concluded that, following the implementation of a programme of archaeological works, there would be no significant effects.

Ornithology

An assessment has been made of the likely effects of the wind farm on birds during the construction, operation and decommissioning stages. It is concluded that, provided best practice is followed to avoid disturbance to breeding birds, including buffer zones around nests, avoiding damage or destruction to occupied nests, there would be no significant impacts on any bird species present on-site. An Ecological Clerk of Works would be present on-site to ensure that best practice is followed.

In 2004 and 2005, a large number of geese were identified using Whitton Loch as a roost / staging location. Since then the numbers have decreased greatly and the possible impacts on greylag and pink-footed geese are considered to be not significant. Goose activity would be monitored and mitigation put in place if numbers rise again.

Ecology

The ecological impact assessment has considered the potential impacts of Whitton Wind Farm on ecological receptors during all phases of the development. Most of the application area is occupied by agricultural grassland and none of the habitats are considered to be of any more than local value.

There are three Local Biodiversity Action Plan plant species on-site, but the population of only one of these (lesser water parsnip) is considered to be of local value and potential impacts on this species have been mitigated.

Surveys were carried out for the presence of protected species such as badgers, bats, otters, water voles and red squirrels and no impacts are predicted for these species.

There is an area 3.7 kilometres from the site which is protected by law, called the River Tweed Special Area of Conservation. One of the reasons it is protected is for its otter population. There is at least one otter present on-site but no impacts are predicted, as long as mitigation measures such as standard pollution prevention techniques are adopted.

Ecological enhancements are proposed through a Habitat Management Plan (HMP), a draft of which is presented as part of this Environmental Statement.

Carbon Savings

The carbon emissions savings created by the wind farm are significantly larger than the potential emissions caused by its construction. Carbon emission savings would compensate for the development within a few months of wind farm operation assuming the energy produced displaces fossil fuel generated energy.

Hydrology

An assessment has been carried out of the likely impacts of the proposed Whitton Wind Farm on the soil and water environments. The assessment has considered all phases of the development of the wind farm. There are two watercourses that drain the application site, these are the Fawlaws Burn and the Cessford Burn.

The potential effects on the surface waters, groundwater, soils and private water supplies that have been considered are:

- pollution incident
- erosion and sedimentation
- changes to water resources ie private water supplies
- modification of surface water and groundwater flows
- modification of natural drainage patterns
- impediments to flows and flood risk
- compaction of soils

A number of layout, design proposals and site management measures have been identified that would minimise, mitigate or offset these effects.

There are five Private Water Supplies in catchments where infrastructure is proposed. It is considered that none of these are at risk from the development of the wind farm.

It is concluded that with the proposed mitigation in place the residual impacts on the soil and water environment would be not significant.

Fisheries

The watercourses, fish populations and macroinvertebrate communities within the planning application area were recorded as being of low to medium nature conservation value, with the watercourses further downstream comprising more valuable habitats and species with greater nature conservation value, particularly the River Tweed Special Area of Conservation, of which Kale Water forms a part.

Provided that appropriate pollution control measures are implemented, no significant impacts are predicted.

Outline Construction Method Statements identify the construction techniques and the programme of works that would be implemented on-site. Specific temporary pollution control measures and permanent drainage systems would also be installed as part of the development, all of which would be agreed in advance with Scottish Environmental Protection Agency. Appropriate water licences would be obtained in advance of any works, to meet with the requirements of the Water Environment (Controlled Activities) (Scotland) Regulations 2006.

With the application of the identified mitigation and best practice, no significant impacts are predicted on fish populations and aquatic invertebrate communities.

Socioeconomics, Tourism and Recreation

An assessment has been carried out of the potential economic benefits from the proposed development to the local and regional economy, in terms of construction and operational employment. An overview is also provided of a Community Benefit Package linked to the development.

A business survey was carried out and 81 responses were received from local businesses, an excellent response rate. Eighty five per cent of respondents said they did not anticipate that the proposed wind farm would have any impact on their business performance.

The assessment concluded that the proposed Whitton Wind Farm would have little or no impact on tourists and visitors to the area.

Peat Stability

There is no peat present on the site and therefore there is no peatslide risk arising from the construction of the proposed Whitton Wind Farm.

Transport & Traffic

The transport and traffic assessment was carried out in line with relevant planning policy and guidance and looked at access routes to and from the site, existing traffic flows on local roads and the volume of traffic that would be generated by the proposal.

The main impacts of traffic associated with the wind farm construction would be experienced on the D144/4 from Morebattle to Whitton.

The route evaluation concluded that the effects of the increase in traffic along the D144/4 would be acceptable considering the temporary nature of the works, the low number of receptors and the low level of traffic.

Disturbance caused by construction would be limited through the implementation of a Traffic Management Plan, which would keep local residents informed of traffic movements.

During the operational phase of the wind farm, occasional access would be required by light vehicles.

Noise

Predicted noise levels are within acceptable limits and there should be no loss of amenity as a result of the wind farm.

Shadow Flicker

There would be no dwellings at which shadow flicker caused by the wind farm would be a problem.

Aviation, Ministry of Defence and Electromagnetic Interference

No detrimental effects on communications links or infrastructure services are anticipated as a result of the Whitton Wind Farm proposal.

Quality, Health, Safety and Environment

Vattenfall Wind Power Ltd is committed to effective Quality, Health, Safety and Environmental (QHSE) management as a core business principle. This commitment includes all work done in support of the Whitton Wind Farm proposal.

Vattenfall screens all contractors and sub-contractors on their attitude to, and performance in, QHSE management and carries out audits to ensure that those companies which pass this vetting process deliver to the required standard.

The wind turbine industry has a good safety record. The industry has prepared health and safety guidelines in conjunction with the Health and Safety Executive (HSE).

At no time during the construction or operation of the wind turbines would public safety be compromised. During construction public access to potentially hazardous areas would be restricted. However, once the wind farm was operational, normal access rights would be restored.

SECTION 3 – CONCLUSIONS

The design of the site has evolved over time as more information has been gathered. The end result is a site design that makes best use of local topography to screen views and a wind turbine layout that represents environmentally the best fit for the site.

There are a small number of significant predicted impacts remaining relating to landscape and visual effects but this is inevitable with this type of proposal. However, the wind turbine type, specification and number have been deliberately chosen to ensure effects are contained and localised. On balance, taking account of the landscape and visual setting of the wider area the overall landscape and visual amenity would not be affected and the wind farm would not dominate views.

Mitigation measures have been proposed including the implementation of relevant pollution prevention measures, the provision of a draft Environmental Management Plan (EMP), the use of appropriate construction techniques and the employment of an Ecological Clerk of Works.

Positive effects on the local economy and wider environmental and social considerations relating to climate change would be experienced as a result of the development.

SECTION 4 – HOW TO REGISTER YOUR VIEW

Written comments should be sent to:

Scottish Borders Council
Council Headquarters
Newtown St Boswells
Melrose
TD6 0SA