

TCP/11/16(184)

Planning Application 11/02012/FLL – Erection of a wind turbine on land 520 metres north east of Tay Forth Machinery Ring, Newhill, Glenfarg

**PAPERS SUBMITTED
BY THE
APPLICANT**



Pullar House 35 Kinnoull Street Perth PH1 5GD

Tel: 01738 475300

Fax: 01738 475310

Email: onlineapps@pkc.gov.uk

Planning Department

Applications cannot be validated until all necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 000038631-002

The online ref number is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the Planning Authority about this application.

Applicant or Agent Details

Are you an applicant, or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application)

☐ Applicant ☒ Agent

Agent Details

Please enter Agent details

Company/Organisation:

3R Energy Solutions Ltd

You must enter a Building Name or Number, or both:*

Ref. Number:

Building Name:

Uphall Business Park

First Name: *

Jennifer

Building Number:

Last Name: *

Chapman

Address 1 (Street): *

Loaninghill

Telephone Number: *

01506 865988

Address 2:

Uphall

Extension Number:

Town/City: *

West Lothian

Mobile Number:

Country: *

UK

Fax Number:

Postcode: *

EH52 5NT

Email Address: *

jennifer@3renergysolutions.co.uk

Is the applicant an individual or an organisation/corporate entity? *

☒ Individual ☐ Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title: *	<input type="text" value="Mr"/>
Other Title:	<input type="text"/>
First Name: *	<input type="text" value="B and J"/>
Last Name: *	<input type="text" value="Hamilton"/>
Company/Organisation:	<input type="text"/>
Telephone Number:	<input type="text"/>
Extension Number:	<input type="text"/>
Mobile Number:	<input type="text"/>
Fax Number:	<input type="text"/>
Email Address:	<input type="text"/>

You must enter a Building Name or Number, or both:*

Building Name:	<input type="text" value="Newhill Farm"/>
Building Number:	<input type="text" value="1"/>
Address 1 (Street): *	<input type="text" value="Glenfarg"/>
Address 2:	<input type="text"/>
Town/City: *	<input type="text" value="Perthshire"/>
Country: *	<input type="text" value="UK"/>
Postcode: *	<input type="text" value="PH2 9QN"/>

Site Address Details

Full postal address of the site (including postcode where available):

Address 1:	<input type="text" value="Newhill"/>	Address 5:	<input type="text"/>
Address 2:	<input type="text" value="Glenfarg"/>	Town/City/Settlement:	<input type="text" value="Perth"/>
Address 3:	<input type="text"/>	Post Code:	<input type="text" value="PH2 9QN"/>
Address 4:	<input type="text"/>		

Please identify/describe the location of the site or sites.

Northing	<input type="text" value="708263"/>	Easting	<input type="text" value="311788"/>
----------	-------------------------------------	---------	-------------------------------------

Description of the Proposal

Please provide a description of the proposal to which your review relates. The description should be the same as given in the application form, or as amended with the agreement of the planning authority: *
(Max 500 characters)

Proposal to erect single 100kW wind turbine

Type of Application

What type of application did you submit to the planning authority? *

- ☒ Application for planning permission (including householder application but excluding application to work minerals).
- ☐ Application for planning permission in principle.
- ☐ Further application.
- ☐ Application for approval of matters specified in conditions.

What does your review relate to? *

- ☒ Refusal Notice.
- ☐ Grant of permission with Conditions imposed.
- ☐ No decision reached within the prescribed period (two months after validation date) – deemed refusal.

Statement of reasons for seeking review

You must state in full, why you are seeking a review of the planning authority's decision (or failure to make a decision). Your statement must set out all matters you consider require to be taken into account in determining your review. If necessary this can be provided as a separate document in the 'Supporting Documents' section: * (Max 500 characters)

Note: you are unlikely to have a further opportunity to add to your statement of appeal at a later date, so it is essential that you produce all of the information you want the decision-maker to take into account.

You should not however raise any new matter which was not before the planning authority at the time it decided your application (or at the time of expiry of the period of determination), unless you can demonstrate that the new matter could not have been raised before that time or that it not being raised before that time is a consequence of exceptional circumstances.

Please refer to separate Statement of Case document

Have you raised any matters which were not before the appointed officer at the time the determination on your application was made? *

☐ Yes ☒ No

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review. You can attach these documents electronically later in the process: * (Max 500 characters)

Doc 1 - Council Decision Notice
Doc 2 - Location Plan 25000
Doc 3 - Landscape and Visual Impact Assessment
Doc 4 - Council Delegated Report
Doc 5 - Zone of Theoretical Visibility
Newhills Statement of Case
Notice of Review Form
Original Planning Application Form

Application Details

Please provide details of the application and decision.

What is the application reference number? *

11/02012/FLL

What date was the application submitted to the planning authority? *

19/12/11

Has a decision been made by the planning authority? *

☒ Yes ☐ No

What date was the decision issued by the planning authority? *

12/03/12

Review Procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Can this review continue to a conclusion, in your opinion, based on a review of the relevant information provided by yourself and other parties only, without any further procedures? For example, written submission, hearing session, site inspection. *

☒ Yes ☐ No

In the event that the Local Review Body appointed to consider your application decides to inspect the site, in your opinion:

Can the site be clearly seen from a road or public land? *

☒ Yes ☐ No

Is it possible for the site to be accessed safely and without barriers to entry? *

☒ Yes ☐ No

Checklist - Application for Notice of Review

Please complete the following checklist to make sure you have provided all the necessary information in support of your appeal. Failure to submit all this information may result in your appeal being deemed invalid.

Have you provided the name and address of the applicant? *

☒ Yes ☐ No

Have you provided the date and reference number of the application which is the subject of this review? *

☒ Yes ☐ No

If you are the agent, acting on behalf of the applicant, have you provided details of your name and address and indicated whether any notice or correspondence required in connection with the review should be sent to you or the applicant? *

☒ Yes ☐ No ☐ N/A

Have you provided a statement setting out your reasons for requiring a review and by what procedure (or combination of procedures) you wish the review to be conducted? *

☒ Yes ☐ No

Note: You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. You may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

Please attach a copy of all documents, material and evidence which you intend to rely on (e.g. plans and drawings) which are now the subject of this review *

☒ Yes ☐ No

Note: Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice (if any) from the earlier consent.

Declare - Notice of Review

I/We the applicant/agent certify that this is an application for review on the grounds stated.

Declaration Name: Jennifer Chapman

Declaration Date: 26/04/2012

Submission Date: 26/04/2012

ERECTION OF SINGLE WIND TURBINE AT NEWHILL, GLENFARG, PH2 9QN

PLANNING APPLICATION REF: 11/02012/FLL

NOTICE OF REVIEW – ONLINE REF: 000038631

STATEMENT

On behalf of the Applicant, B and J Hamilton, 3R Energy Solutions Ltd is seeking a review of the decision to refuse planning permission for the installation of a single turbine at Newhill Farm, Glenfarg, Perth.

The application is for a turbine with a height to the nacelle hub of 36.7m and a rotor diameter of 20.7m, making the overall height to blade tip at 47.1m. The introduction of a turbine at Newhill Farm will measurably reduce the carbon footprint of the farming operation. Predominantly a beef and sheep production unit together with rented office accommodation, Newhill Farm makes significant use of electricity, diesel and inorganic fertilisers. The wind regime has been assessed at the site confirming the viability of the site for wind energy generation. The turbine will help reduce and offset greenhouse gas emissions, reduce the exposure of the farming business to rising energy costs and provide a degree of independency in terms of energy production at a local level. The turbine will be connected to the local grid network with some of the energy produced being used on the property and any excess being exported to the grid.

Newhill Farm is also the base for the Tayforth Machinery Ring, a non-profit making member owned Co-Operative. Its primary objective is to encourage more efficient joint use of agricultural equipment and labour between its farming and non farming members. There are over 840 members . There are six members of staff based at the offices of the Machinery Ring at Newhill and the farm receives a number of visitors per year associated with the work of the Machinery Ring from the Perth, Tayside and Fife area.

Reasons for refusal are as stated in the Decision Notice dated 12th March 2012 (Doc 1):

- 1. As the proposed turbine will have an adverse impact on the visual amenity of the area, which is presently enjoyed by a host of receptors including (but not exclusively) existing residential properties and visiting recreational users, the proposal is contrary to Environment and*

Resource Policy 14 of the Perth and Kinross Structure Plan 2003 which seeks to protect existing local environmental quality from inappropriate renewable energy developments.

2. *As the proposed turbine will have an adverse impact on the landscape character of the area, the proposal is contrary to Policy 1 of the Perth Area Local Plan 1995 and Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003.*
3. *The approval of this proposal would establish an undesirable precedent for similar sized developments within the local area, which would be to the detriment of the overall visual character of the area, and which in turn could potentially undermine (and weaken) the established Development Plan relevant policies.*

Newhill Farm is located approximately 2.7 km to the southwest of Glenfarg and is accessed from minor roads from the M90. The M90 motorway runs in a north south direction 2.3km to the east of the turbine position. There are relatively few properties in the area, the nearest privately owned property lies at approx 380m to the northwest of the proposed turbine site. An 11kV overhead power line, essential to transport the power from the turbine, is located around the west and north boundary of the field at approx 350m from the site. A major 33kV power line lies approx 960m west of the turbine location and runs in a north south direction across the area.

The grid reference for the proposed turbine is E 312296, N 708349 (Doc 2). The site sits at 255m AOD and benefits from an open aspect to the prevailing south-westerly wind, essential for efficient energy production. The position was selected following a detailed site survey of the farm which considered a number of factors such as:

- Elevation and exposure to prevailing wind direction
- Proximity of trees / buildings which can create a turbulence effect
- Proximity of residential dwellings
- National and local policy
- Local landscape designations
- Nature designations
- Proximity to airports which may present radar visibility issues
- Ease of access to the site for scale of components turbine parts
- Proximity of connection to the local grid network and
- potential landscape and visual impacts.

A landscape and visual impact assessment LVIA (Doc 3) was carried out by chartered landscape architects, David Jenkins Architects Ltd, to support this application and some seven viewpoints were analysed as part of the assessment.

The proposed turbine would not involve any permanent development.

In Perth and Kinross Council's Delegated Report dated 18 Jan 2012 (Doc 4) the Planning Officer acknowledges that the area is not specifically protected by any formal landscape designation.

The Delegated Report dated 18 Jan 2012 confirms the following:

- PKCs Environmental Health have raised no concerns regarding noise related issues,
- The proposal is consistent with the relevant Development Plan policies which relate to protected species / habitats, insofar as the proposal would not have an adverse impact on either element,
- No concerns over shadow flicker
- No concerns over aviation lighting
- There are no issues with the turbine position regarding road safety
- MOD has raised no objection

Taking each of the reasons for refusal in turn:

Reason for refusal no. 1

1. *As the proposed turbine will have an adverse impact on the visual amenity of the area, which is presently enjoyed by a host of receptors including (but not exclusively) existing residential properties and visiting recreational users, the proposal is contrary to Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003 which seeks to protect existing local environmental quality from inappropriate renewable energy developments.*

A Zone of Theoretical Visibility (ZTV) map was prepared which extended to a 15km radius from the turbine site (Doc 5) The ZTV displays theoretical visibility of the turbine and assumes bare earth i.e. it does not take account of intervening screening provided by buildings and vegetation. It is therefore worst case scenario. The ZTV confirms there would be theoretical visibility over approx 40% of the 15km radius study area and most of that theoretical visibility occurs to the east and south due to the

topography of the area. Actual visibility from these areas will be substantially less given the screening provided by vegetation and buildings.

The Planning Officer acknowledges “...the surrounding area to the north around Milnathort is not specifically protected by any formal landscape designation, nevertheless the local area, in my opinion, does have a degree of high amenity value for both its residents and users...”. The Delegated Report states that the introduction of a 47.1m high turbine will potentially adversely affect the visual amenity and appearance of the local area. It does not acknowledge the presence of major overhead power lines in the same area. Both sets of overhead powerlines, pylons and pole mounted transformers are visible to road and recreational users in the immediate vicinity of the turbine location.

The LVIA submitted to support the application considered the potential effects from a number of viewpoints within the 15km study area ranging from 890m in close proximity to the turbine to 10.3km from the turbine. The summary of the visual assessment concluded:

It is fairly obvious that magnitude of change decreases with distance and major and moderate significance only occurs less than 4Km from the site and is restricted to high sensitivity receptors. The impact of change is mitigated somewhat by the fact that there is a major power line which has 3 pylons located in this LCA of Newhill Slopes, which predominates the view at certain locations, especially when seen on the skyline.

We therefore disagree that the turbine will have an adverse impact on the visual amenity of the area as the area already contains major overhead power lines. The turbine would be removed after 20 years and is not permanent development.

It is stated that the proposal is contrary to Environment and Resource Policy 14. This policy states:

Proposals for the development of renewable energy schemes will be supported where they are considered environmentally acceptable and where their energy contribution and benefits in reducing pollution outweigh any significant adverse effects on local environmental quality. Community based renewable energy developments in particular will be encouraged. Proposals for renewable energy schemes will be assessed against the following criteria:

3R Energy Solutions Ltd
Uphall Business Park Loaninghill Uphall West Lothian EH52 5NT
T: 01506 8659884

- *The immediate and wider impact of the proposed development on the landscape and wildlife resource.*
- *The need to protect features and areas of natural, cultural, historical and archaeological interest.*
- *The specific benefits that the proposal would bring to the local community and/or Perth and Kinross.*
- *The cumulative effects of similar developments on the local area.*

An environmental assessment will normally be required for large-scale schemes and Local Plans will provide more detailed locational guidance particularly for windfarm developments and other renewable energy technologies

Comment

- The Delegated Report states that the surrounding area to the North around Milnathort is not specifically protected by any formal landscape designation. The immediate and wider impact of the proposed development on the landscape has been assessed by chartered landscape architects, David Jenkins Architects Ltd. It concludes that *“Residual landscape effects arising from the proposed development of a single turbine are therefore considered to be generally localised and minimal”*. In relation to wildlife the planning officer has confirmed the proposal is consistent with the relevant Development Plan policies which relate to protected species / habitats, insofar as the proposal would not have an adverse impact on either element.
- During the preparation of the Scoping Report Historic Scotland and Scottish Natural Heritage (SNH) were consulted as part of the Scoping study. Historic Scotland confirmed that *“there are no scheduled monuments, A listed buildings, or designed landscapes within the footprint of the proposed development. There is the possibility, given that it may affect the setting of a few scheduled monuments, although the distance is such that significant adverse impacts are unlikely”*. A Landscape and Visual Impact Assessment has been included as part of this planning application containing a viewpoint from Burleigh Castle as part of the assessment. The LVIA reports that *“the magnitude of change is considered to be low due to the distance and the mitigating effect of tree groups and woodland in the middle ground”*.
- The turbine would benefit the local business in a number of ways such as providing a source of green energy to the business and help towards lowering the carbon footprint of the farming

business. This is a local generation project promoted by a local farming business. The erection of a single wind turbine at Newhill has the potential to generate in the region of 300,000 kWh/year representing a CO₂ saving of 191 tonnes per annum (*Source; RenewablesUK*).

- Cumulative issues arising from other similar developments have not been raised by PKC as an issue in relation to this project.

We therefore disagree that the proposal is contrary to Environment and Resource Policy 14.

Reason for refusal no. 2

2. *As the proposed turbine will have an adverse impact on the landscape character of the area, the proposal is contrary to Policy 1 of the Perth Area Local Plan 1995 and Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003.*

Policy 1 of the Perth Area Local Plan 1995 states:

Developments in the landward area, as shown in Proposals Map A on land which is not identified for a specific policy, proposal or opportunity will generally be restricted to agriculture, forestry or recreational and tourism projects and operational developments including telecommunications development for which a countryside location is essential. Developments will also be judged against the following criteria:

- *The site should have a good landscape framework within which the development can be set and, if necessary, screened completely.*
- *In the case of built development the scale, form, colour and design of development should accord with the existing pattern of building.*
- *The development should be compatible with its surroundings in land use terms and should not cause unacceptable environmental impact.*
- *The local road network should be capable of absorbing the development and a satisfactory access onto that network provided.*
- *Where applicable, there should be sufficient spare capacity in local services to cater for the new development.*
- *The site should be large enough to accommodate the development satisfactorily in site planning terms.*

- *The need to accommodate development as part of the ongoing requirements of existing commercial land uses in the countryside.*

Comment:

- The development has taken into account this Policy and in particular the turbine chosen for this development is considered the best for the site. An assessment of the potential environmental impacts has been undertaken and a Landscape and Visual Impact Assessment has been prepared. It should be noted that in order to operate wind turbines efficiently they must be sited in open areas and it is not always possible or feasible, to mitigate by moving the site or providing visual screening as this will decrease the wind flow. The LVIA has assessed the landscape and visual impacts from a number of key viewpoints within the 15km study area.
- To mitigate any potential visual impacts, the turbines will be coloured off white to light grey to blend with the usual Scottish sky colour.
- A scoping study was undertaken prior to submission of the application. There has been no issues raised by any statutory consultee consulted as part of the scoping exercise or as part of the planning application consultation process. In addition, there will be no impacts on the drainage or water tables and the site is located outside the Loch Leven catchment area.
- PKC Transport Planning have commented on the planning application and have raised no concerns. Transport Scotland, in its response to scoping, confirmed that *“The proposed development represents an intensification of the use of the site, however the percentage increase in traffic on the trunk road is such that the proposed development is likely to have no impact on the trunk road network.”*
- PKC encourages diversification in the agricultural community. The turbine is of a scale suitable for its location and for the business. A full landscape and visual impact assessment was undertaken by chartered landscape architects to fully assess its impacts.

Reason for Refusal No 3

3. *The approval of this proposal would establish an undesirable precedent for similar sized developments within the local area, which would be to the detriment of the overall visual character of the area, and which in turn could potentially undermine (and weaken) the established Development Plan relevant policies.*

3R Energy Solutions Ltd
 Uphall Business Park Loaninghill Uphall West Lothian EH52 5NT
 T: 01506 8659887

We are not aware of any Perth and Kinross Council policy that applies a presumption against single wind turbine proposals of this scale in this area. A landscape and Visual assessment has been carried out, a full copy of which is included with this submission. It states *“there has already been change in the landscape character brought about by the electrical transmission cables and pylons. The introduction of the proposed single turbine in this context is seen as having a low impact given the scale of the landscape, its undulating nature and its woodland groups, which together mitigate against impact of change.”*

We therefore disagree that the proposal would be to the detriment of the overall visual character of the area.

Conclusion

The applicant is seeking consent for the installation of a 100kW wind turbine at Newhill Farm. The introduction of a turbine at Newhill will help the business on a number of fronts and contribute towards meeting national climate change targets. The location for the turbine was considered in detail and a full landscape and visual impact assessment was undertaken to confirm the turbine would not present unacceptable landscape and visual impacts.

The position identified for the turbine is rural and takes advantage of prevailing south-westerly winds. The site assessment concluded that there were no alternative, better sites available. The alternative of not developing the turbine, which will amount to a CO₂ saving of approximately 191 tonnes per annum, is to continue to utilise non-renewable sources for electricity generation. This is in direct conflict with the Scottish Government which is committed to promoting the increased use of renewable energy sources to help combat climate change. The Government wants targets to be exceeded rather than merely met, and not to be viewed as a cap on what renewables can deliver. Perth and Kinross Council has an obligation to contribute to these targets. Furthermore, the Scottish Planning Policy 2010 advises that planning authorities should support wind farms in places where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed.

This locally owned wind turbine will generate an extra source of income for Newhill Farm which is particularly significant in rural areas as stated in the Perth and Kinross Council's Supplementary Planning Guidance for Wind Energy Proposals. This guidance supports community based renewable energy schemes (*single turbines typically more than 20m to hub height and blade diameter more than 20m*), such as this proposal, that are locally owned that will in turn stimulate the local economy.

The Landscape and Visual Impact Assessment concluded that the *"Potential impacts upon landscape character of the 10 landscape types in the study area were assessed as, negligible to none, and not significant. Residual landscape effects arising from the proposed development of a single turbine are therefore considered to be generally localised and minimal. It is therefore considered that significant and adverse visual effects will be restricted to the immediate vicinity of the proposed wind turbine as described."*

It is therefore considered that this is an appropriate location for a wind turbine of this scale and that any small impacts this development may have are greatly outweighed by the economic and environmental benefits detailed.

This development is a local development. The company investing in the project is locally based and the applicant resides and works in the area. It is hoped that the proposed turbine can be viewed as a positive symbol and a proactive approach to tackling climate change on a local level, utilising an infinite source with no detriment to the environment. This development does not prevent the current land use from continuing and provides diversification to the current business which will benefit the local community.

We respectfully request that the Local Review Body considers the benefits small scale renewable energy generation brings to local businesses in the Perth and Kinross area and move to consent this application.

PERTH AND KINROSS COUNCIL

B And J Hamilton
c/o 3R Energy Solutions Limited
FAO Cole Burmester
3R Energy Solutions Limited
West Wing Suites
Uphall
Broxburn
EH52 5NT

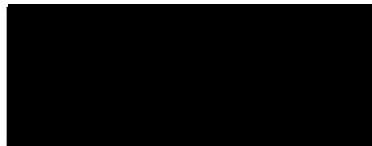
Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Date 12th March 2012

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT

Application Number: **11/02012/FLL**

I am directed by the Planning Authority under the Town and Country Planning (Scotland) Acts currently in force, to refuse your application registered on 19th December 2011 for permission for **Erection of a wind turbine Land 520 Metres North East Of Tay Forth Machinery Ring Newhill Glenfarg** for the reasons undernoted.



P.P.

Development Quality Manager

Reasons for Refusal

1. As the proposed turbine will have an adverse impact on the visual amenity of the area, which is presently enjoyed by a host of receptors including (but not exclusively) existing residential properties and visiting recreational users, the proposal is contrary to Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003 which seeks to protect existing local environmental quality from inappropriate renewable energy developments.
2. As the proposed turbine will have an adverse impact on the landscape character of the area, the proposal is contrary to Policy 1 of the Perth Area Local Plan 1995 and Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003.

3. The approval of this proposal would establish an undesirable precedent for similar sized developments within the local area, which would be to the detriment of the overall visual character of the area, and which in turn could potentially undermine (and weaken) the established Development Plan relevant policies.

Justification

The proposal is not in accordance with the Development Plan and there are no material reasons which justify departing from the Development Plan

Notes

The plans relating to this decision are listed below and are displayed on Perth and Kinross Council's website at www.pkc.gov.uk "Online Planning Applications" page

Plan Reference

11/02012/1

11/02012/2

11/02012/3

11/02012/4

11/02012/5

11/02012/6

11/02012/7

11/02012/8

11/02012/9

11/02012/10

11/02012/11

REPORT OF HANDLING

DELEGATED REPORT

Ref No	11/02012/FLL
Ward No	N8

PROPOSAL: Erection of a wind turbine

LOCATION: Land 520 Metres North East Of Tay Forth Machinery Ring
Newhill Glenfarg

APPLICANT: B And J Hamilton

RECOMMENDATION: refuse the application

SITE INSPECTION: 18 January 2012



South looking north, turbine will be skylined



North looking south, turbine will be skylined

OFFICERS REPORT:

Sections 25 and 37(2) of the TCP (S) Act 1997 (as amended by the 2006 Act) requires the determination of the planning application to be made in accordance with the provisions of the Development Plan, unless other material considerations indicate otherwise. The Development Plan for the area comprises the approved Perth & Kinross Structure Plan 2003 and the adopted Kinross Area Local Plan 2004.

In terms of the Structure Plan, Policies SEP3, ERP2, ERP4 and ERP 14 are all directly applicable to the proposal, as are Policies 1, 2, 5, 17, 20 and 23 of the Local Plan.

SEP 3 of the Structure Plan offers support in principle for rural proposals which encompass social and environmental considerations, whilst ERP 4 of the Structure Plan states that the TLCA will be a material consideration in the determination of planning applications.

ERP 2 of the Structure Plan and Policies 20 and 23 of the Local plan, all seek to protect protected species and preserve local nature conservation from inappropriate development.

Policy 1 of the Local Plan seeks to ensure that all new developments within the landward area have a suitable landscape framework and will not have an adverse impact on the character of the existing landscape. Policy ERP 14 of the Structure Plan offers encouragement (in principle) for renewable projects, providing that

designated sites or the local environment are not adversely affected by the development which is proposed.

In terms of other material considerations, this principally includes an assessment of the proposal against national planning guidance in the form of the Scottish Planning Policy, and consideration of the guidance offered in the Tayside Landscape Character Assessment.

Accordingly, based on the above, I consider the key determining issues for this proposal to be a) whether or not the proposal (by virtue of its siting and height) will have an unacceptable impact on the landscape/visual amenity of the area, b) whether or not the proposal is compatible with the surrounding land uses and c) whether or not there will be an adverse impact on any protected species and / or habitats bearing in mind the provisions of the Development Plan and other material considerations.

I shall assess these issues in turn starting with the landscape and visual impact issues.

Landscape and Visual impact

In terms of renewable developments, ERP 14 of the Structure Plan seeks (amongst other things) to ensure that the amenity of existing areas are not adversely affected by new developments. I consider visual amenity as a valuable amenity which these policies seek to protect.

The proposed turbine will introduce a new landscape feature into the local landscape, and based on the ZTV submitted with the planning application; both long and short views of the turbine will be theoretically achievable in practically all directions. Nevertheless, the fact that the turbine is visible should not necessarily automatically render it unacceptable.

I consider a more reasonable assessment of the acceptability of the turbine (in visual terms) to be whether or not the introduction of the turbine would have a detrimental impact on the visual amenity of the area, as enjoyed by those affected (i.e. residents and visitors), particularly with a 15km radius of the site. Historically, the M90 corridor has been sensitive to wind turbines (and other tall structures), and the Council has in the past been hesitant in offering support for new wind energy developments which are larger than the domestic scaled turbines (around 15m high). I appreciate that the surrounding area to the north around Milnathort is not specifically protected by any formal landscape designation, nevertheless the local area, in my opinion, does have a degree of high amenity value for both its residents and users (whether that be recreational walkers or commuters) and after visiting a number of viewpoints I am of the opinion that the introduction of a 47.1m high turbine will potentially adversely affect the visual amenity and appearance of the localised area.

Turning to landscape impact, in terms of renewable developments, Policy ERP 14 of the Structure Plan has key objectives with regard to protecting the landscape, i.e. restrict renewable developments within the landward area if the proposal would have an adverse, negative impact on the landscape of the area concerned. In considering the impact on the landscape character, a high weighting is given to the contents of the TLCA. Within the TLCA, the development site is described as being within an area of Igneous Hills. In reference to existing (and proposed) structures impacting on the area, the TLCA recommends the restriction of 'development of tall structures to those absolutely essential for operational reasons'. Furthermore, in paragraph

5.15.14, in relation to the Loch Level Basin which sits to the south east of the application site, the TLCA states 'more serious would be the development of tall structures on the hills that enclose the basins'. I consider that this single turbine at its elevated location which will probably result in it sitting above the skyline when viewed from the Loch Leven Basin will have a significant, detrimental impact on the character of the landscape.

Compatibility with Existing land uses

Turning to second issue, the compatibility with existing land uses, Policy 1 of the Local Plan seeks to ensure that all new developments are compatible with existing land uses. I have no concerns regarding the impact that the turbine will have on the commercial activities of the land, and in terms of the impact on any existing residential properties, it is noted that that the closest residential properties are approx 0.2km from the site. My Environmental Health colleagues have commented on the proposal and have raised no concerns regarding noise related issues. The principle conflict with the existing neighbouring properties would be the impact on their residential amenity. I appreciate that no one person has a right to a view, however the presence of this turbine relevantly close (0.2km to 0.4km) from residential properties will, in my view have a negative impact on the private visual amenity enjoyed by the existing residents.

Protected Species / Habitats

In terms of the impact on protected species/habitats, I have no immediate concerns regarding this development which could not be adequately addressed or mitigated via appropriate planning conditions. I therefore consider the proposal to be consistent with the relevant Development Plan policies which relate to protected species / habitats, insofar as the proposal would not have an adverse impact on either element.

Other Material Issues

Shadow Flicker

I note that my EHO colleagues have not raised any concerns on this topic, and I therefore have no concerns.

Aviation Lighting

Any lighting of the turbines, as may be required by the MOD will only be visible from the air, however considering the height of the turbine, it is highly unlikely that any aviation lighting will be required, and I do not consider there to be any need for ground based lighting. I therefore have no concerns regarding lighting.

Noise

Within the representations, noise has been raised as an issue. I note there are a number of residential properties within the vicinity of the site (the closest one approx 0.2km away), however my EHO colleagues have raised no concerns regarding this proposal. I therefore do not consider noise to be an issue.

TV reception

In the event that a review to the LRB is successful, an appropriately worded condition could be attached to the consent which would provide mitigation measures for any person(s) affected directly by this proposal.

Road Access Issues

My road colleagues have commented on the proposal and have raised no objection. If the LRB were to support a review of this refusal, a number of conditions could be attached to the consent that would mitigate any potential impact on road and pedestrian safety.

LRB / Conditions

In the event that this planning application is presented to the LRB for review, it is requested that the Planning Service have an opportunity to recommend draft conditions. The Council now has a number of standard conditions which it would consider appropriate, and it is envisaged that a number of site specific conditions may also be necessary.

Health & Safety

Following recent national press coverage of turbine failures and explosions, there is greater concerns amongst the public regarding the safety of wind turbines, and I note concerns have been raised within the representations. Nevertheless, I do not consider this to be a valid planning consideration.

National Guidance

Although the proposal is of a relevantly small scale, the principle of renewable energy developments is supported by the Scottish Government through its planning policies and guidance. However, the Scottish Government also suggests that renewable projects should be sited in appropriate locations which have the ability to absorb the development that is proposed.

Based on the above, I therefore recommend the planning application for a refusal, based on the likely visual impact on the area and the potential for an undesirable precedent to be set.

DEVELOPMENT PLAN

The Development Plan for the area comprises the approved Perth & Kinross Structure Plan 2003 and the adopted Perth Area Local Plan 1995.

Perth & Kinross Structure Plan 2003

Sustainable Economy Policy 3 states that support will be given to measures which promote an integrated flexible and innovative approach to rural development which encompass economic, social and environmental considerations and which:

- maintain or enhance local employment opportunities.
- promote diversification.
- help sustain viable rural communities and services.

Environment and Resources Policy 2 states that the protection and conservation of wildlife, habitats and other natural features will be supported.

Environment and Resource Policy 4 states that the TLCA will be a material consideration in the assessment of planning applications.

Environment and Resources Policy 14 states that proposals for the development of renewable energy schemes will be supported where they are considered environmentally acceptable and where their energy contribution and benefits in reducing pollution outweigh any significant adverse effects on local environmental quality. Community based renewable energy developments in particular will be

encouraged. Proposals for renewable energy schemes will be assessed against the following criteria:

- The immediate and wider impact of the proposed development on the landscape and wildlife resource.
- The need to protect features and areas of natural, cultural, historical and archaeological interest.
- The specific benefits that the proposal would bring to the local community and/or Perth and Kinross.
- The cumulative effects of similar developments on the local area.

An environmental assessment will normally be required for large-scale schemes and Local Plans will provide more detailed locational guidance particularly for windfarm developments and other renewable energy technologies.

Perth Area Local Plan 1995

Within the Local Plan, the site lies within the landward area, where the following policy is directly relevant.

Policy 1 Landward Area General Policy

Developments in the landward area, as shown in Proposals Map A on land which is not identified for a specific policy, proposal or opportunity will generally be restricted to agriculture, forestry or recreational and tourism projects and operational developments including telecommunications development for which a countryside location is essential. Developments will also be judged against the following criteria:-

- The site should have a good landscape framework within which the development can be set and, if necessary, screened completely.
- In the case of built development the scale, form, colour and design of development should accord with the existing pattern of building.
- The development should be compatible with its surroundings in land use terms and should not cause unacceptable environmental impact.
- The local road network should be capable of absorbing the development and a satisfactory access onto that network provided.
- Where applicable, there should be sufficient spare capacity in local services to cater for the new development.
- The site should be large enough to accommodate the development satisfactorily in site planning terms.
- The need to accommodate development as part of the ongoing requirements of existing commercial land uses in the countryside.

OTHER COUNCIL POLICIES

Supplementary Planning Guidance for Wind Energy Proposals in Perth & Kinross, 2005

Within the Guidance Wind Energy Policy 2, strategically sensitive areas are identified. Within these areas there is a presumption against wind energy developments unless it has been demonstrated that they utilise turbines of a size and scale appropriate to their location, are in locations which will have a slight or no significant impact on settlements, landscape, character, visual amenity, habitats, will not have unacceptable cumulative impacts and would be consistent with the Council's detailed Policy Guidelines. Although the diagram is not OS based it is clear that the application site either lies within the sensitive area or lies very close to it.

It is accepted that the Council is currently reviewing the Guidance with the intention of updating it in the near future.

OTHER GUIDANCE

Structure Plan Policy ERP 4 makes specific reference to the **Tayside Landscape Character Assessment 1999 (TLCA)** being a material consideration in the assessment of development proposals. The application site lies within the Igneous Hills classification. The key characteristics are:

- Ochil hills, comprising hard volcanic rock s
- short burns and rivers flowing from short steep glens
- a few large glens through the hills
- often distinctive scarp and dipslopes
- generally open landscapes of almost conical summits dominated by grass moorland
- some areas of extensive forestry
- many modern influences

OTHER POLICIES

NATIONAL PLANNING GUIDANCE / POLICIES

The Scottish Government expresses its planning policies through The National Planning Framework 1 & 2, the Scottish Planning Policy (SPP), Planning Advice Notes (PAN), Designing Places, Designing Streets, and a series of Circulars.

The Scottish Planning Policy 2010

This SPP is a statement of Scottish Government policy on land use planning and contains:

- the Scottish Government's view of the purpose of planning,
- the core principles for the operation of the system and the objectives for key parts of the system,
- statutory guidance on sustainable development and planning under Section 3E of the Planning etc. (Scotland) Act 2006,
- concise subject planning policies, including the implications for development planning and development management, and
- the Scottish Government's expectations of the intended outcomes of the planning system.

Of relevance to this application are,

- Paragraphs 182-186 which relate to renewable energy
- Paragraphs 92-97 which relates to rural development

PAN - 1/2011 : Planning & Noise

This Planning Advice Note (PAN) provides advice on the role of the planning system in helping to prevent and limit the adverse effects of noise. It supersedes Circular 10/1999 Planning and Noise and PAN 56 Planning and Noise. Information and advice on noise impact assessment (NIA) methods is provided in the associated Technical Advice Note. It includes details of the legislation, technical standards and codes of practice for specific noise issues.

SITE HISTORY

None.

CONSULTATIONS/COMMENTS

Ministry Of Defence	MOD have commented on the proposal and raised no objection.
Environmental Health	The Environmental Health Manager has commented on the planning application and raised no objections subject to appropriate noise conditions being attached to the consent.
Transport Planning	Transport Planning have commented on the planning application and have raised no concerns.

TARGET DATE: 19 February 2012

REPRESENTATIONS RECEIVED:

Number Received: 11

Summary of issues raised by objectors:

At the time of writing, eleven letters of representations had been received. The main issues raised by the objectors are,

- Noise concerns
- Visual Impact
- Proximity to residential properties
- Cumulative impact
- Potential impact on bird flight paths
- Loss of TV reception
- Shadow flicker affecting local businesses
- Heath and Safety issues
- Precedent set by Public Inquiry P/PPA/340/575 Tillyrie Farm

Response to issues raised by objectors:

These issues are addressed in elsewhere in this report.

Additional Statements Received:

Environment Statement	Not required
Screening Opinion	A screening exercise has been undertaken by the Council which concluded the proposal was not an EIA development.
Environmental Impact Assessment	Not required
Appropriate Assessment	Not required

Design Statement / Design and Access Statement	Not required
Report on Impact or Potential Impact	Limited LVIA has been submitted in the form of photomontages and ZTV base maps.

Legal Agreement Required:

None required.

Direction by Scottish Ministers

None applicable to this proposal.

Reasons:-

- 1 As the proposed turbine will have an adverse impact on the visual amenity of the area, which is presently enjoyed by a host of receptors including (but not exclusively) existing residential properties and visiting recreational users, the proposal is contrary to Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003 which seeks to protect existing local environmental quality from inappropriate renewable energy developments.
- 2 As the proposed turbine will have an adverse impact on the landscape character of the area, the proposal is contrary to Policy 1 of the Perth Area Local Plan 1995 and Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003.
- 3 The approval of this proposal would establish an undesirable precedent for similar sized developments within the local area, which would be to the detriment of the overall visual character of the area, and which in turn could potentially undermine (and weaken) the established Development Plan relevant policies.

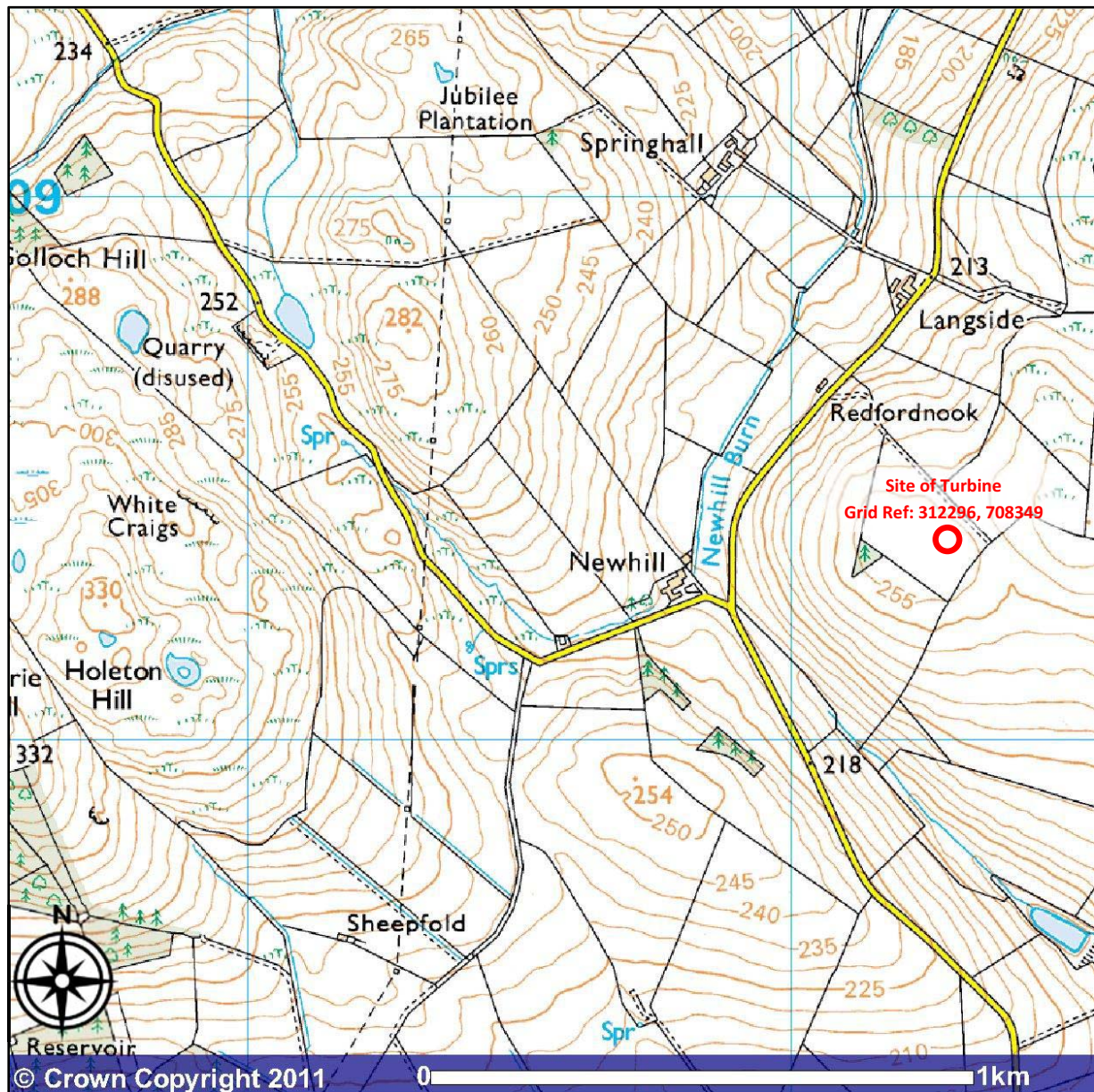
Justification


- 1 The proposal is not in accordance with the Development Plan and there are no material reasons which justify departing from the Development Plan

Notes

None.

Site Location Plan – Newhill Farm



 <p>Hoodhill Fossoyway Kinross KY13 0PW Tel: 01506 865988 planning@3renergysolutions.co.uk</p>	<p>PROPOSED WIND TURBINE</p> <p>NEWHILL FARM, PERTH</p>	<p>Scale: 1:25,000</p> <p>Drawing Ref: 364/001</p> <p>Drawn: CB / 19.10.11</p>
---	---	--

Landscape and Visual Impact Assessment

David Jenkins Architects Ltd

Newhill Farm: Kinross Proposed Wind Turbine Installation

3R Energy Solutions Ltd

CONTENTS

1.0 Introduction

2.0 The Proposed Development

3.0 Assessment Methodology

4.0 The Study Area

5.0 Landscape Assessment

6.0 Visual Assessment

7.0 Cumulative Impact Assessment

8.0 Summary

1.0 Introduction

David Jenkins Associates Ltd, Chartered Landscape Architects have been commissioned by 3R Energy Solutions Ltd on behalf of their client to carry out a Landscape and Visual Appraisal of a proposed wind turbine development on land at Newhill Farm in Perth and Kinross. See Appendix 3 of the Planning Application for Site location Plan.

This report looks at the likely impact of change on the landscape character and visibility of the proposed development within a 15km radius study area as suggested by the guidelines. It provides an evaluation of the potential implications of the proposed turbines in terms of effect on key landscape components and effects upon visual receptors.

The report has been organised into the following sections:

- **The Proposed Development** - a description of the proposed development site and the nature of the development;
- **Assessment Methodology** - a summary of the recognised assessment methodology;
- **Description of the study area** - comprising a review of the key characteristics of the study area and discussion of the Zone of Theoretical Visibility (ZTV) to ascertain from where the development could be visible and identify potential landscape or visual receptors that could be affected by the development;
- **Landscape Assessment** - to identify/ confirm the fabric, character and quality of the landscape, which would be affected by the proposal, including a review of the extent, purposes and special characteristics of landscape planning designations within the study area and a summary of the aspects of the proposed wind turbine which have the potential to cause landscape effects;
- **Visual Impact Assessment** - a viewpoint analysis to determine the magnitude and significance of the changes in the view from a selection of representative viewpoint locations within the study area;
- **Cumulative Impact Assessment**, a short analysis of potential cumulative interactions between the Gairdyhead wind turbine and other consented, operational or in planning single wind turbine projects; and
- **Summary and Conclusions** - a summary of the assessment results and concluding discussion on the acceptability of the proposed development in landscape and visual terms.

2.0 The Proposed Development Project

Description

The applicant seeks to gain permission to erect a locally owned single small scale Northern Power 100kW wind turbine at Newhill Farm. This will include the construction of the electrical generation and associated components, the supporting infrastructure including foundations, tracks and the electricity transmission system. Each of these aspects of the proposal is outlined further below.

Newhill Farm is located in a rural environment approximately 2.7 km to the southwest of Glenfarg and is accessed from minor roads from the M90. The grid reference for the proposed turbine is E 312296, N 708349. The site sits at 255m AOD and benefits from an

open aspect to the prevailing south-westerly wind. The nearest privately owned property lies over 380m to the northwest of the proposed turbine site. An overhead power line runs over 960m to the west of the site. A scaled site plan is included in Appendix 3 of the Planning Application for Site location Plan.

The construction period is predicted to last, at most, a week. The 100kW turbine components are delivered in standard 40 ft containers on vehicles of the same size as those regularly received at the farm and the crane used to install the wind turbine is a road running vehicle, again of similar size. No unusual vehicle movements will be generated. The construction of the proposed wind turbine is therefore not considered to give rise to any significant landscape and visual effects and is therefore not considered further.

The wind turbine will be designed for an operational life of approximately 25 years. At the end of the 25 year period, the turbine will either be decommissioned and the site reinstated or a new application may be submitted to retain or modify the existing turbine.

The proposed development site lies to the east of Newhill Farmstead and is located in an area of permanent improved pasture that is currently grazed by sheep and cattle. In general the field containing the development site is bounded by post and wire fences and is open and windswept. To the west are located visually prominent pylons and power lines.

3.0 Assessment Methodology

This report has been prepared with reference to and using the terminology and assessment criteria of:

- The Guidelines for Landscape and Visual Impact Assessment (GLVIA) (Landscape Institute / IEMA, 2002 2nd Edition);
- Landscape Character Assessment: Guidance for England and Scotland (Scottish Natural Heritage / Countryside Agency 2002); and
- Natural heritage assessment of small scale wind energy projects which do not require formal Environmental Impact Assessment (EIA) (SNH, 2008).

As the proposed wind turbine development is less than 50m to blade tip the SNH Guidance states;

'A basic level of Landscape and Visual Impact Assessment is likely to be required. This should include, as a minimum, a Zone of Theoretical Visibility map covering an area up to 15km (radius) from the turbine and wireline drawings and/ or photomontages from a limited number of key viewpoints. Where the turbine(s) are located in a National Scenic Area the Local Planning Authority should consult SNH on the level of assessment required for a specific proposal. We would not normally wish to be consulted on applications at this scale in Zones 1 and 2 of our Strategic Locational Guidance.'

With reference to this guidance and as the proposed wind turbine does not lie within a designated landscape, the assessment comprises:

- A 15km radius bareground ZTV and viewpoint location plan;

- Photomontage and/or wireframe illustrations of the development from key locations within the ZTV; and
- A short assessment of the likely effects of the proposed development upon the landscape and visual resource of the study area.

The site photographs, ZTV figure and wireframe and /or photomontage visualisations used to inform the assessment have been based upon the guidance and best practice methodologies as described in:

- 'Visual Assessment of Windfarms: Best Practice', by the University of Newcastle (2002); and
- 'Visual Representation of Windfarms, Good Practice Guidance' 29 March 2006, Horner +McLellan and Envision for SNH.

The following methodology is used for assessing the significance of predicted effects;

- Magnitude = high, medium, low, negligible;
- Sensitivity / Importance = high, medium, low, negligible; and
- Impact = major, moderate, minor, negligible, none.

The inter-relationship between the magnitude, sensitivity and impact is indicated in Table 1 below.

Table 1: Matrix for Determining Landscape and Visual Impact

		Sensitivity of Receptor/Receiving Environment to Change			
		High	Medium	Low	Negligible
Magnitude of Change	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Moderate / Minor	Negligible
	Low	Moderate	Moderate / Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	None

In the context of this assessment residual major, moderate and moderate/minor landscape and visual effects are considered to be significant. Due to the short duration of the construction and decommissioning works associated with single turbine installations it is considered that landscape and visual effects associated with these phases of work will be not be significant.

There are a number of ways in which the proposed development might impact on existing landscape or visual amenity. Effects are likely to be either temporary and relate specifically to the construction stage of works whilst others would be permanent and incurred once the development has been completed. Some likely key factors are listed below:

- The scale and form of the proposals may prove intrusive in the context of the existing landscape elements and overall character;
- The construction and final form of the proposals may involve the loss or fragmentation

of landscape elements (buildings, urban form, open space, woodland and trees);

- The extent to which the proposals may intrude into existing views experienced by residents and day to day users of the area; and
- The extent to which current users of the landscape such as local residents, tourists and visitors may be subject to new effects.

4.0 The Study Area

The study area for the most part covers the area previously assessed for the Kinross Local Plan Area by David Tyldesley Associates and is cited as 'The Landscape of Kinross-shire, A Landscape Assessment of the Kinross Local Plan Area' and was carried out in 1995. The Theoretical Zone of Visual Influence or ZTV as it shall be referred to occur mostly to the south and east due to the topography of the area, which is explained in some detail in the Tyldesley Report.

Traversing north through the study area are the main communication routes such as the M90 and the Rail line to Perth, Dundee and Aberdeen. Most other roads tend to run east west, based upon the topography of the area.

The physical structure of the study area has been influenced by the basin in which sits Loch Leven and the landscape character emanates out from this basin into Uplands which are the Ochil Hills to the north and north west, the Cleish Hills to the south, the Benarty Hills to the south east and the Lomond Hills to the west.

Main settlements are Kinross, which sits fairly central to the study area. To the eastern extremity lies Glenrothes and Perth to the north. The area is significantly agricultural with associated moorland and forestry on higher ground.

4.2 The Zone of Theoretical Visibility

A computer generated ZTV map has been generated to assist in the assessment of the proposed development. See Appendix 7 of the Planning Application.

The ZTV indicates areas from where it may be possible to view part of proposed development, shown as visibility of the hub and visibility of the blade tip. The map has been generated from bare ground model (Ordnance Survey (OS) Landform Panorama data) based on a 50m grid terrain model derived from 1:50,000 scale mapping.

Zones are shown which suggest there is theoretical visibility from these locations, but as these areas can comprise woodland, hedgerows and built urban form the likelihood of views being experienced is consequently much lower. The ZTV maps also do not take account of the attenuation of visibility with distance, weather or light.

As a ZTV map does not allow for screening caused by micro-topography, vegetation and buildings the actual visibility of the development on the ground will be substantially less than

the bare ground ZTV predicts. Fieldwork analysis has refined the limits of visibility and has identified representative receptors within the visual envelope which have the potential to be affected by the development. This selection of viewpoints has been a collaborative exercise between the client's consultants and the Planning officer and they are located on the graphic Figure 1, which locates them in respect of their theoretical visibility.

The bare ground ZTV pattern shows that the theoretical visibility of the proposed wind turbine covers an extensive component of the study area and as previously mentioned is mostly to the east as influenced by the Loch Leven basin. Theoretical visibility is more limited to the west, and north extremities of the study area.

5.0 Landscape Assessment

Consideration of the impact on landscape character has involved:

- An overview of implications for designated landscapes, recreational sites and other sites of local value;
- The evaluation of both direct and indirect impacts on local landscape character in terms of loss or modification to existing landscape elements (typically tree removal, changes to ground cover, land use or existing landform) and the implications for the balance of components that frame local character; and
- An evaluation of the implications for the broader landscape types and areas identified in the relevant the David Tyldesley, SNH Landscape Character Assessment.

The extent to which the proposed wind turbine development has the potential to appear intrusive and detrimental to landscape character varies significantly in light of a range of factors. These include; sensitivity of the site layout, relationship of the turbine to existing infrastructure, complexity and intimacy of landform and land cover, turbine profile related to skylines, lighting, background texture and colour, climatic conditions and simple visibility.

5.1 Landscape Character

Landscape Character is a composite of physical, biological and cultural elements. Landform, hydrology, vegetation, land use pattern, cultural and historic features and associations all combine to create a 'sense of place' and identity which can be used to categorise the landscape into definable units (character zones). The level of detail and size of unit can be varied to reflect the scale of definition required. It can be applied at national, regional and local levels.

All of these factors are explained in some detail in the Tyldesley document and are not repeated here

5.3 Landscape Sensitivity to Change

The methodology used in this assessment refers to current best practice of assessing

"Sensitivity to Change" (GLVIA). The extent to which landscape components and landscape types would accommodate the type of change which could be caused by the development during construction and operational phases is assessed by consideration of the following factors:

- The ability of the landscape components which are physically affected to accommodate the change proposed; and
- The ability of the wider landscape and its components to accommodate the change proposed.

The landscape sensitivity has been evaluated on a relative basis within the study area and is described by a 3-point scale, using the following criteria:

- **High Sensitivity:** A landscape of particularly distinctive character susceptible to relatively small changes of the type proposed;
- **Medium Sensitivity:** A landscape of moderately valued characteristics reasonably tolerant of change of the type proposed; and
- **Low Sensitivity:** A relatively unimportant landscape that is potentially tolerant of substantial change of the type proposed.

The following SNH landscape types and designated landscapes have been identified within the 15km study area, as determined by Tyldesley.

5.4 Landscape Types

- 5.5 There are 10 landscape types identified in the document and they refer to some 30 landscape character areas (LCA) as identified by Tyldesley.

The landscape types are:

1. The Uplands

A series of high, open, exposed uplands with varying topography forming distinctive skylines around the basin dominated by hill pastures, wet grasslands and, in places, by coniferous afforestation. A peaceful, balanced, inspiring, quasi-natural landscape; the uplands also contribute to the identity and character of all other landscape types in the area.

2. The Ochil Glens

Dramatic, steep-sided, gorges with strongly flowing rivers cut into the uplands of the Ochils. The Glendey Burn has a patchwork of open hill pasture and softwood plantations on steep slopes. The South Queich Gorge is similar in its upper reaches but lower down is almost entirely open with rocky outcrops and semi natural upland / cliff vegetation in places.

3. **The Upland Slopes**

Extremely prominent steep slopes of grassland with some semi-natural vegetation. The slopes of the Ochils have some arable fields and plantations, the slopes of the Cleish Hills are extensively afforested but the slopes of Benarty and Lomond Hills are steeper and predominantly open and exposed. Around Newhill the slopes have open rolling, large, green fields of improved pasture.

4. **The Loch Leven Basin Low Hills**

A complex and variable series of low, generally rounded hills of mixed arable and grassland and locally either open or well wooded.

5. **The Loch Leven Basin**

A flat, low lying basin containing the large, islanded Loch Leven and otherwise consisting of relatively intensively farmed and settled arable land. The basin is dominated by the rising hills and uplands all around which form a distinctive skyline.

6. **Kinross House**

An outstanding designed landscape around an outstanding listed building. The area lies between the town and the Loch and forms an important part of the setting of both.

7. **The Crook of Devon**

A varied but generally flat and relatively narrow valley edged by low hills or woodlands on the edge of the valley floor. It is well wooded and contains the settlements of Crook of Devon, Back Crook and Drum, in a mixed farm landscape set at the foot of the Ochils.

8. **The Devon Gorge**

A dramatic, steep-sided, wooded gorge with river, cut into a complex landform of well-wooded rolling hills.

9. **Black Devon**

A distinctive rather pastoral, well wooded landscape of regular patterns with many characteristic roadside tree belts. It is set at the foot of the Cleish Hills with views across to the Ochils but is disturbed by large scale open cast coal working at Blairingone, (which is now completely reinstated to agricultural use)

10. **Blairadam**

A highly managed designed landscape severed by the motorway and modified by extensive plantations around the central core of the gardens it nevertheless has outstanding landscape design, cultural and historical value.

5.6.1 UPLAND SLOPES

This **landscape type** contains the **landscape character area (LCA), Newhill Slopes No 9** in which the proposed site is located.

The landscape type is distributed in Five localities in the Study Area and the Newhill Slopes

No 9 LCA is located on the south facing slopes of the Ochils, which illustrate the Natural Systems and Processes, which give rise to the Steeply sloping edges to the Uplands which contain burns with waterfalls flowing into the Loch Leven catchment.

The slopes of the Ochils are different than the other 4 localities but still more characteristic of uplands than lowlands. They are less steep and rise some 125m to 150m above the low hills. They comprise a series of generally south-east facing slopes with rounded hills and knolls rising to the distinctive peaks of the Ochils and Lendrick Hill. Around Newhill (sub-area 9) the landform changes to a smoother, sweeping series of high hillsides; the difference emphasised by changes in land cover.

All of the slopes have active erosion processes through weathering due to exposure and the cutting of the innumerable burns that indent the faces of the slopes. Many of the burns have waterfalls.

5.6.2 Land Cover

The slopes of the Ochils, being less steep, are a patchwork of semi-natural vegetation with occasional outcrops, hill pasture, semi-improved and improved grassland and occasional arable fields. The slopes around Newhill are almost entirely improved and semi-improved grasslands giving an even, lighter green, smooth textured cover to the smoother landform.

5.6.3 Settlement Pattern and Other Land Uses

The Ochil slopes have scattered steadings often located high on the slopes (eg. Ledlation and Touchie). Some are vacant (eg. Rintoul). Where gradients ease still further, to the east, small hamlets and groups of buildings occur (eg. Ledlanet and Craigow, between which is a small reservoir). The former hospital at Athron Hall is vacant but the building stands prominently, high on the hillside. In sub-area 9 settlements is restricted to steadings at Newhill, Longside, Springhall and the prominent white house at Birniehill.

5.6.4 Linear and Point Features

The most important linear features of the upland slopes are their tops, where the landform cuts back sharply to the uplands, like a cliff top. These form the skyline and visual horizons from extensive parts of the low hills and basin from which the tops of the uplands are not always visible. The high voltage power lines along the face of Benarty slope and over the Ochil slopes, west of Newhill, are visually conspicuous being in particularly open, sensitive landscapes and breaching important skylines. Field patterns on the Ochil slopes tend to be regular but not geometric.

5.6.5 Key Characteristics and Features

The most important characteristics and features of the upland slopes are:-

- *The high conspicuity on the slopes and skylines.*

- *The natural and dramatic landform.*
- *The burns and natural landform processes including weathering and erosion.*
- *The open semi-natural land cover (Lomond, Benarty and part Cleish and Ochils).*
- *The more regular land cover pattern of the Ochil slopes with woodland cover related to buildings and both buildings and tree cover related to landform.*
- *The general lack of built development and (except for afforestation and pylons) the lack of intrusive man-made features.*
- *The gentler, smoother, open, regular landform and land cover of the Newhill slopes.*
- *The balanced, harmonious, colourful, many-featured, vertical, open, quasi-natural upland characteristics of the slopes with the ruggedness of the Lomond, Benarty and Cleish slopes and the sweeping patchwork of regular but not geometric patterns of the Ochil's.*

5.6.6 Landscape Capacity

The slopes around Newhill are very open and conspicuous and their characteristics would be changed substantially by built development unrelated to existing steadings. Any form of large scale works or the introduction of softwood plantations would likewise be inappropriate. However, there is scope for broadleaved planting of bold scale, related to landform and of changes to agricultural practices for example the more extensive cultivation of arable land as has already occurred north of Middleton.

5.6.7 Landscape Management

The continuation of stock farming on the slopes is an important key to their future landscape character. Should this become vulnerable to significant change, measures should be considered to sustain the stock farming or a positive landscape management plan should be drawn up to guide resultant changes.

- 5.6.8** In Summary, the above, abstracted from the Tyldesley document, indicates that the LCA has not really changed very much over the ages and is fundamentally an open sloping agricultural landscape which is sensitive to change.

The document examines potential change in much more detail, which is not elaborated further here, but does emphasise that the established agricultural landscape should be assisted wherever possible to ensure that the farming patterns are supported. This is extremely important because of the backcloth that the Upland Slopes provide for most of the population in the Study area and illustrated clearly in Viewpoint 3 which will be discussed in the Visibility section.

In the introduction it was emphasised that the proposed single turbine would assist the farm business in its beef production and would also provide a much needed income stream to

ensure the continuing viability of the farm business. This continuing development process for the agricultural community, now includes their contribution to sustaining the occupation and appearance of this agricultural landscape with the considered introduction of wind turbines, which are associated with farm businesses

5.7 Assessment of Impact on Landscape Character

The receiving LCA Newhill Slopes of the Upland Slopes landscape type is described in some detail above as abstracted from the Tyldesley document and updated by field work and survey. As stated there has already been change in the landscape character brought about by electrical transmission cables and pylons. The introduction of the proposed single turbine in this context is assessed as having a low impact given the scale of the landscape, its undulating nature and its woodland groups, which together mitigate against impact of change.

Given such a rating the magnitude of change for the various categories of receptor and their sensitivity varies from Moderate to Negligible. In the context of the assessment criteria as set out, it is therefore summarised as having a significant impact, since the LCA has a high sensitivity to the impact of change. However given that the introduction of the turbine is to support the business of agriculture and the continuing maintenance of this important landscape character area, the significant rating is not necessarily adverse in this case.

Given the above, the implementation of a single turbine at this location is assessed as having a Negligible impact on the wider Study Area and its varying Landscape types. The large scale of the landscape, the small scale of the turbine and the distances involved all indicate that the magnitude of change will be negligible and therefore insignificant and therefore is not assessed in any greater detail.

6.0 Visual Assessment

6.1 Introduction

This section presents the assessment of the impacts of the proposed wind turbine on the visual amenity of the study area during both construction and the subsequent use of the development. Visual amenity is defined as the pleasantness of the view or outlook of an identified receptor or group of receptors.

The assessment determines the degree of anticipated change to visual amenity, considering buildings, areas of public open space, roads and transport corridors that would occur as a result of the proposed development. The buildings, open spaces, roads and transport corridors that may experience views of the proposed development are collectively referred to as 'receptors'. Residual effects have been identified for each receptor.

6.2 Potential Effects

Development can change people's experience or perception of what is visible to them in the landscape. Wind turbine's visibility and impact is very much concerned with, distance from and the angle of view that the receptor has of the proposed development.

In this context the key concern relating to visual impact is the extent to which the proposed development would intrude into existing views experienced by the public and day-to-day users of the study area.

There are a number of ways in which the proposed development might impact on the existing landscape and visual amenity. Effects are likely to be either temporary and relate specifically to the construction stage of works whilst others would be permanent and incurred once the development has been completed. Listed below are some likely key factors:

- The scale and form of the proposals may prove intrusive in the context of the existing landscape elements and overall character;
- The construction and final form of the proposals may involve the loss or fragmentation of landscape elements (buildings, urban form, open space, woodland and trees);
- The extent to which the proposals may intrude into existing views of receptors;

6.3 Method of Assessment

The assessment has been prepared with reference to the Guidelines for Landscape and Visual Impact Assessment (GLVIA) published by the Landscape Institute and the Institute of Environmental Management and Assessment (2002).

The guidelines suggest that visual impacts are assessed from a clear understanding of the development proposed and any related landscape mitigation measures. It calls for an understanding of the visual form of the existing landscape, its quality and sensitivity to change taking into account the nature of the development. It further calls for an evaluation of the sensitivity of potential receptors (viewers) and of the magnitude of change likely to result from the implementation and use of the development. To this end the assessment has involved three key stages:

- Identification of the visibility pattern for the development;
- Identification and field assessment of potential receptors within the visual envelope; and
- Evaluation of the sensitivity of existing views and the magnitude of change that would result from implementation and use of the proposed development.

Based upon the pattern of visibility suggested by the ZTV, and upon site work to identify actual visibility on the ground the following viewpoint locations were identified and agreed with the Planning officer as being representative of key receptors with the potential to have visibility of the proposed development. (See Figure 1 for viewpoint locations).

Table 2: Location of Viewpoints

No	Location	Main Receptor Groups
Vp1	Rear car park at Kinross Services Junction 6 of the M90	Road users/Tourists
Vp2	Burleigh Castle by Millnathort	Road users/Residents/Tourists
0Vp3	B9097 at Loch Leven Lodges	Road users/Residents
Vp4	The B919 between Newlands and Pittendreich	Road users
Vp5	Bonnet Stane by Dow Craig West Lomond	Recreational users
Vp6	M90 Overbridge at Glenfarg	Road users
Vp7	Near Redfordneuk to the north east of Newhill	Road users/residents

6.4 Viewpoints

6.4.1 Viewpoint 1 - Rear lorry car park at Kinross Services Junction 6 off the M90 (See Photomontage 1 for visualisations)

The viewpoint is located at the Kinross Services and is to be obtained beyond the hardstanding to the lorry park. This is not the view that most users of this facility will be aware of, since they and the car park are located to the south of the main services building, which effectively screens the turbine from view. The turbine is 5.5 Km distance from the viewpoint.

The majority of the receptors will therefore be lorry drivers or road users. These receptors are considered to be of Medium sensitivity to the type of change proposed.

Existing View

The existing view shows the expansive upland slope pastures framed by woodland and hedges and is typical of the landscape character type of the south facing Ochil's Hill slopes forming the distant horizon. The Ochil's here and the other Upland Slopes at the other 4 localities in the study area form a very important backcloth to the Loch Leven Basin, which is the landscape character type that this viewpoint is located in.

Proposed View

The single turbine which is 5.5 Km away is just visible in the gap between the existing trees in the middle ground of the viewpoint but is not conspicuous from this viewpoint because of the distance and the tree groups and woodland in the middle distance.

Magnitude of Change

The magnitude of change is considered to be Low due to the distance and the mitigating effect of the landscape character of the Loch Leven Basin

Significance of Effect

A low magnitude of change on a medium sensitivity receptor represents a moderate/minor effect upon receptors at this viewpoint.

6.4.2 Viewpoint 2 - Burleigh Castle by Milnathort on the A911 (See Photomontage 2 for visualisations)

The viewpoint is located adjacent the A911 at the location of the Burleigh Castle and grounds and is some 3.9 Km from the location of the proposed turbine at Newhill. The castle is located in the Loch Leven Basin landscape type.

Existing View

The existing view at this distance is of agricultural land with trees in the Loch Leven Basin in the middleground with the horizon of the Upland Slopes as the skyline. Already on the skyline are power masts for the 33 KV supply which is located across the Newhill Slopes, although not that conspicuous when viewed from this location due to the distance involved.

Proposed View

The proposed development will add a wind turbine to the view, which at this location is somewhat obscured by middle ground tree groups. At this location the potential receptors are road users, tourists visiting the castle and there are residents opposite the castle. The sensitivity to change is therefore medium and high.

Magnitude of Change

The magnitude of change is considered to be low due to the distance and the mitigating effect of trees groups and woodland in the middle ground.

Significance of Effect

A low magnitude of change on high and medium sensitivity receptors represents a moderate and moderate/minor effect upon receptors at this viewpoint.

6.4.3 Viewpoint 3 - B9097 at Loch Leven Lodges (See Photomontage 3 for visualisations)

The viewpoint is located on the B9097 adjacent the tourist residential development at Loch Leven Lodges and is 10.3Km away from the proposed turbine.

Existing View

The existing view at this distance is of Loch Leven the fore and middle ground with the horizon of the Upland Slopes as the skyline. Already on the skyline are power masts for the 33 KV supply which is located across the Newhill Slopes, although inconspicuous when viewed from this location due to the distance involved. This receptor is of High and also Medium sensitivity to change since they are residents and road users.

Proposed View

The proposed development will add 1 wind turbine to the view, which at this distance is not discernable.

Magnitude of Change

The magnitude of change is considered to be Negligible due to the distance and the fact that, although inconspicuous there are pylons on the skyline near to the turbine location

Significance of Effect

A negligible magnitude of change on a high and medium sensitivity receptor represents a negligible effect upon receptors at this viewpoint.

6.4.4 Viewpoint 4 - The B919 between Newlands and Pittendreich (See Photomontage 4 for visualisations)

The viewpoint is located on the B919 between Newlands and Pittendreich and represents road users. This viewpoint is 5.2Km from the proposed turbine on this minor through route through the study area.

Existing View

The existing view is of agricultural land with trees in the Loch Leven Basin in the middleground with the horizon of the Upland Slopes as the skyline. Already on the skyline are power masts for the 33 KV supply which is located across the Newhill Slopes, and fairly conspicuous when viewed from this location. This receptor is of Medium sensitivity to change, since they are road users, although there are isolated residents in this area.

Proposed View

The proposed development will add 1 wind turbine to the view, which appears on the skyline as seen in the montage, although the other elements of infrastructure the 33Kv pylons predominate the view.

Magnitude of Change

The magnitude of change is considered to be Low due to the fact that the 33KV pylons dominate the view and road users will hardly perceive the impact of the turbine.

Significance of Effect

A Low magnitude of change on a Medium sensitivity receptor represents a Moderate/minor effect upon receptors at this viewpoint.

6.4.5 Viewpoint 5 - Bonnet Stane by Dow Craig West Lomond (See Wireframe 5 for visualisations)

This viewpoint is located by a rural track and leads to local high point in the Lomond Hills giving wide panoramic views of the area. The likely receptors in this case will be local hill walkers, since there is no promotion or provision for visitors. The proposed turbine is 6.8Km away in the Newhill Upland Slopes LCA.

Existing View point

This receptor is of High sensitivity to change, since they are recreation users.

Proposed wireframe

The proposed turbine will be seen against a backcloth of agricultural fields and woodland from this altitude. At a distance of 6.8Km the turbine will be perceived as a small element in the landscape and the viewer will have the benefit of a wide panoramic view.

Magnitude of Change

The magnitude of change is considered to be Negligible due to the fact that turbines are increasingly associated with farm buildings, and this is also at a considerable distance for the size of turbine proposed.

Significance of Effect

A Negligible magnitude of change on high sensitivity receptors (recreation) represents a negligible effect upon receptors at this viewpoint.

6.4.6 Viewpoint 6 - M90 Overbridge at Glenfarg (See Wireframe 6 for visualisations)

This viewpoint is located on the overbridge which crosses the M90 at Glenfarg. It leads to minor access roads to the farming community. The proposed turbine is 3.5Km away in the Newhill Upland Slopes LCA and as illustrated in the wireframe is out of sight and is not considered further.

6.4.7 Viewpoint 7 - Near Redfordneuk to the north east of Newhill (See Photomontage 7 for visualisations)

The viewpoint is located on the minor access road through the Newhills LCA and represents road users and a resident at this point. This viewpoint is 890 metres from the proposed turbine and illustrates the agricultural sloping landscape of this LCA.

Existing View

The existing view of this contained valley landscape shows the improved pasture of the LCA and the associated small scale power lines in the foreground, adjacent to this local access road.

Proposed View

The proposed view is of agricultural land with the turbine sitting on the local skyline to this valley in the LCA. This receptor is of Medium sensitivity to change since they are road users, although there is an isolated resident in this area.

Magnitude of Change

The magnitude of change is considered to be High due to the close distance of the turbine.

Significance of Effect

A High magnitude of change on a Medium and High sensitivity receptor represents a Major significant effect upon receptors at this viewpoint.

Table 4 - Summary of Effects upon Viewpoints

No	Location	Residual effect and significance
Vp1	Rear car park at Kinross Services Junction 6 of the M90	Road users-Moderate/minor
Vp2	Burleigh Castle by Milnathort	Road users-Moderate/minor Residents/Tourists-Moderate
Vp3	B9097 at Loch Leven Lodges	Road users-Negligible Residents-Negligible
Vp4	The B919 between Newlands and Pittendreich	Road users-Moderate/minor
Vp5	Bonnet Stane by Dow Craig West Lomond	Recreational users- Negligible
Vp6	M90 Overbridge at Glenfarg-no view	Road users-none
Vp7	Near Redfordneuk to the north east of Newhill	Road users-Major Residents-Major

6.4.6 Summary of Visual Assessment

It is fairly obvious that magnitude of change decreases with distance and major and moderate significance only occurs less than 4Km from the site and is restricted to high sensitivity receptors. The impact of change is mitigated somewhat by the fact that there is a major power line of 33KV which has 3 pylons located in this LCA of Newhill Slopes, which predominates the view at certain locations, especially when seen on the skyline.

It is understandable that major significance will occur where the receptor is only 890 metres from the turbine, but the location is embedded within the agricultural community, in the Newhill Slopes character area, and the benefits of the turbine to the agricultural community and the fact that this will assist in maintaining the important character of the Upland slopes as a backcloth to the Loch Leven Basin and all its inhabitants and visitors

7.0 Cumulative Impact Assessment

Cumulative impact was not raised as an issue by the Scoping Response received from Perth and Kinross Council and is not therefore considered further.

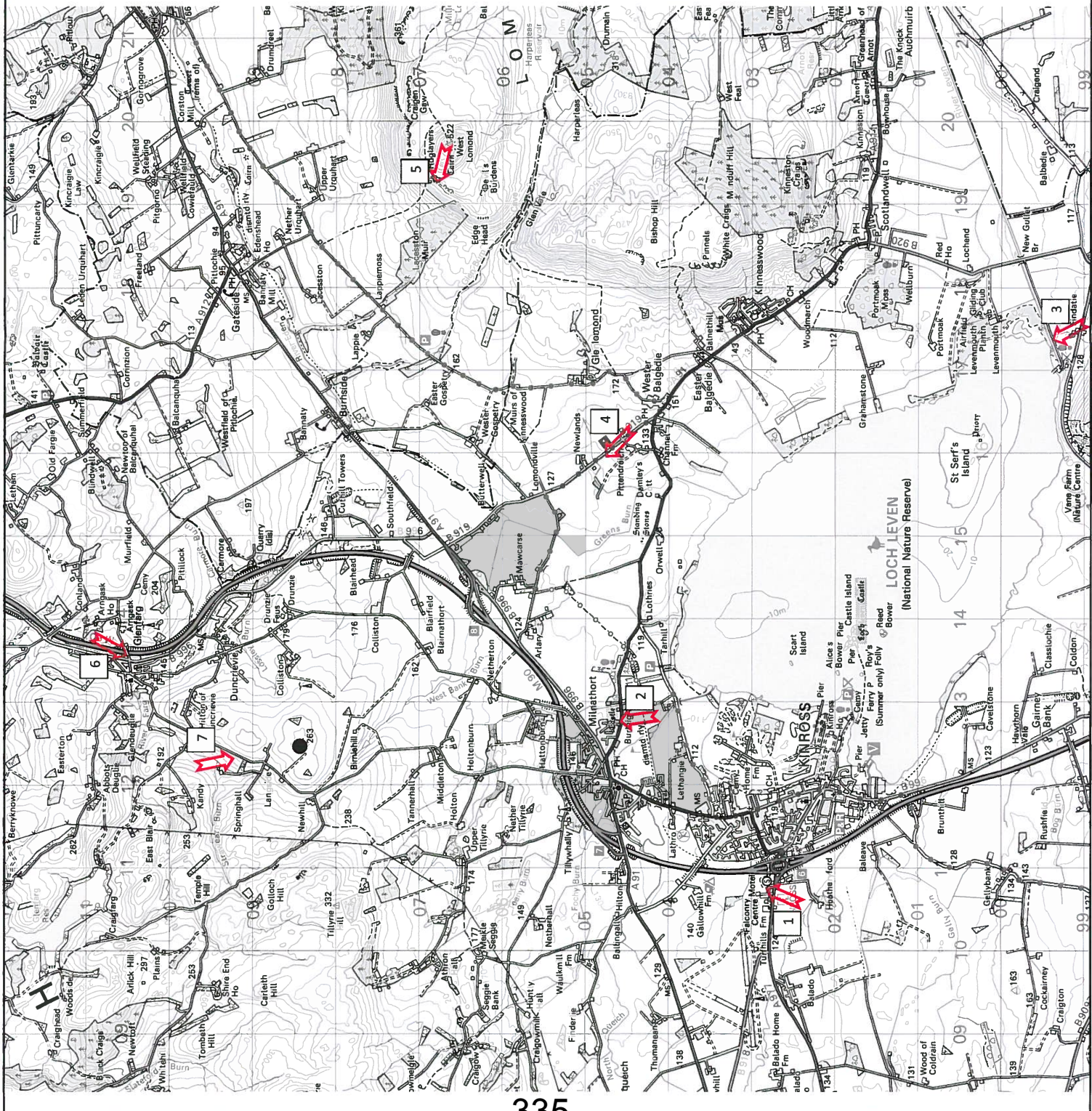
8.0 Summary

The proposed wind turbine lies in an undesignated area of countryside which lies within the Upland Slopes (Ochil hills) landscape type and in character area Newhill Slopes. The location of the turbine sits in an elevated position in an open undulating landform, with insignificant woodland groups or hedging. The landscape type is indicative of this predominantly agricultural landscape and has been modified over the ages by agricultural development and practice. The base line landscape character has been modified by the intrusion of a main 33KV transmission line with 3 pylons in the vicinity.

The landscape and visual impact assessment suggests that despite the visibility pattern of the bare ground ZVT the proposed wind turbine at Newhill Farm will have relatively limited and localised significant residual landscape and visual effects.

Potential impacts upon landscape character of the 10 landscape Types in the study area were assessed as, negligible to none, and not significant. Residual landscape effects arising from the proposed development of a single turbine are therefore considered to be generally localised and minimal.

It is therefore considered that significant and adverse visual effects will be restricted to the immediate vicinity of the proposed wind turbine as described.



Legend

- Proposed location of the Wind Turbines
- ➡ Viewpoint Locations

Notes

1. Created using Ordnance Survey Digital Terrain data at a 50m grid interval.
2. Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).

Project

Newmill Farm, Perth and Kinross

Title

Photomontage and Wireframe Viewpoint Locations

Scale: 1:50,000

Drawing Ref: 364 / VPTs



Drawn: CB / 29.11.11

3RI Energy Solutions

Hoodhill Falloway Kinross KY13 0PW
Tel: 01566 865988

planning@3rienergysolutions.co.uk



 <p> 3RI Energy Solutions Hoodshill Fossoy Kinross KY13 0PW Tel: 01506 865988 planning@3renergysolutions.co.uk </p>		Site: Newhill Farm Drawing Title: Viewpoint 1: Kinross Services off the M90 - Photomontage Scale: NTS Date: 27/10/2011 Drawing Number: CB / 001 / VPT Drawn by: C Burnmaster	
Grid Reference: 310739, 702858 Altitude: 121m Approx. distance to nearest turbine: 5.7 km Turbine Blade Tip Height: 48m Number of Blade Tips Visible: 3 Number of Turbines Hubs Visible: 1		Horizontal Angle of View (approx.): 43 degrees Height of Camera above ground: 1.4m – 2.0m Recommended Viewing Distance: 508 mm Date of Photography: 26/10/2011 Time of Photography: 2:11 pm Weather Conditions: Overcast	
		Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).	

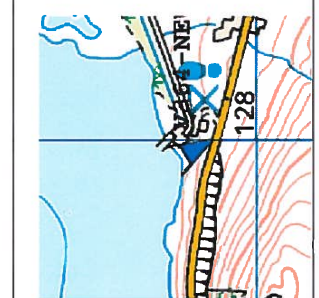


	<p>Grid Reference: 312930, 704583</p> <p>Altitude: 115m</p> <p>Approx. distance to nearest turbine: 3.8 km</p> <p>Turbine Blade Tip Height: 48m</p> <p>Number of Blade Tips Visible: 3</p> <p>Number of Turbines Hubs Visible: 1</p>	<p>Horizontal Angle of View (approx.): 39.6 degrees</p> <p>Height of Camera above ground: 1.4m – 2.0m</p> <p>Recommended Viewing Distance: 556 mm</p> <p>Date of Photography: 26/10/2011</p> <p>Time of Photography: 3:07 pm</p> <p>Weather Conditions: Overcast</p>	<p>Site: Newhill Farm</p> <p>Drawing Title: Viewpoint 2: Burleigh Castle near Milnathort - Photomontage</p> <p>Scale: NTS</p> <p>Date: 27/10/2011</p> <p>Drawing Number: CB / 002 / VPT</p> <p>Drawn by: C Burnester</p>
--	--	--	--


3RI Energy Solutions

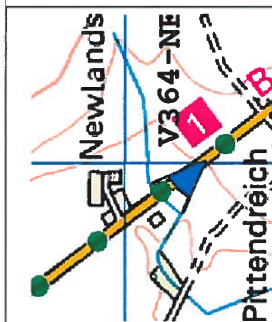
Hoodhill Fossoway Kinross KY13 0PW
Tel: 01506 865988
planning@3renergysolutions.co.uk

Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).



Grid Reference:	317004, 699174	Horizontal Angle of View (approx.):	39.6 degrees
Altitude:	127m	Height of Camera above ground:	1.4m – 2.0m
Approx. distance to nearest turbine:	10.3 km	Recommended Viewing Distance:	556 mm
Turbine Blade Tip Height:	48m	Date of Photography:	26/10/2011
Number of Blade Tips Visible:	3	Time of Photography:	1:59 pm
Number of Turbines Hubs Visible:	1	Weather Conditions:	Overcast

	
Hoodshill Fossoyway Kinross KY13 0PW	
Tel: 01506 865988	
planning@3renergysolutions.co.uk	
Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).	
Site:	Newhill Farm
Drawing Title:	Viewpoint 3: B9097 at Loch Leven - Photomontage
Scale:	NTS
Date:	27/10/2011
Drawing Number:	CB / 003 / VPT
Drawn by:	C Burnmaster



Grid Reference: 316012, 704741
 Altitude: 131m
 Approx. distance to nearest turbine: 5.1 km
 Turbine Blade Tip Height: 48m
 Number of Blade Tips Visible: 3
 Number of Turbines Hubs Visible: 1

Horizontal Angle of View (approx.): 43 degrees
 Height of Camera above ground: 1.4m – 2.0m
 Recommended Viewing Distance: 508 mm
 Date of Photography: 26/10/2011
 Time of Photography: 3:16 pm
 Weather Conditions: Overcast

3RI Energy Solutions
 Hoodshill Fossoway Kinross KY13 0PW
 Tel: 01506 865988
planning@3renergysolutions.co.uk

Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey © Crown copyright, all rights reserved. 2011 License number 100049996 (2011).

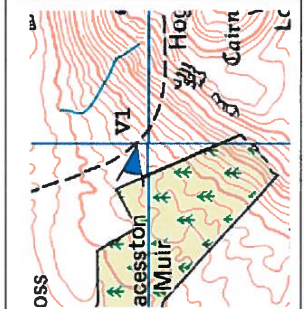
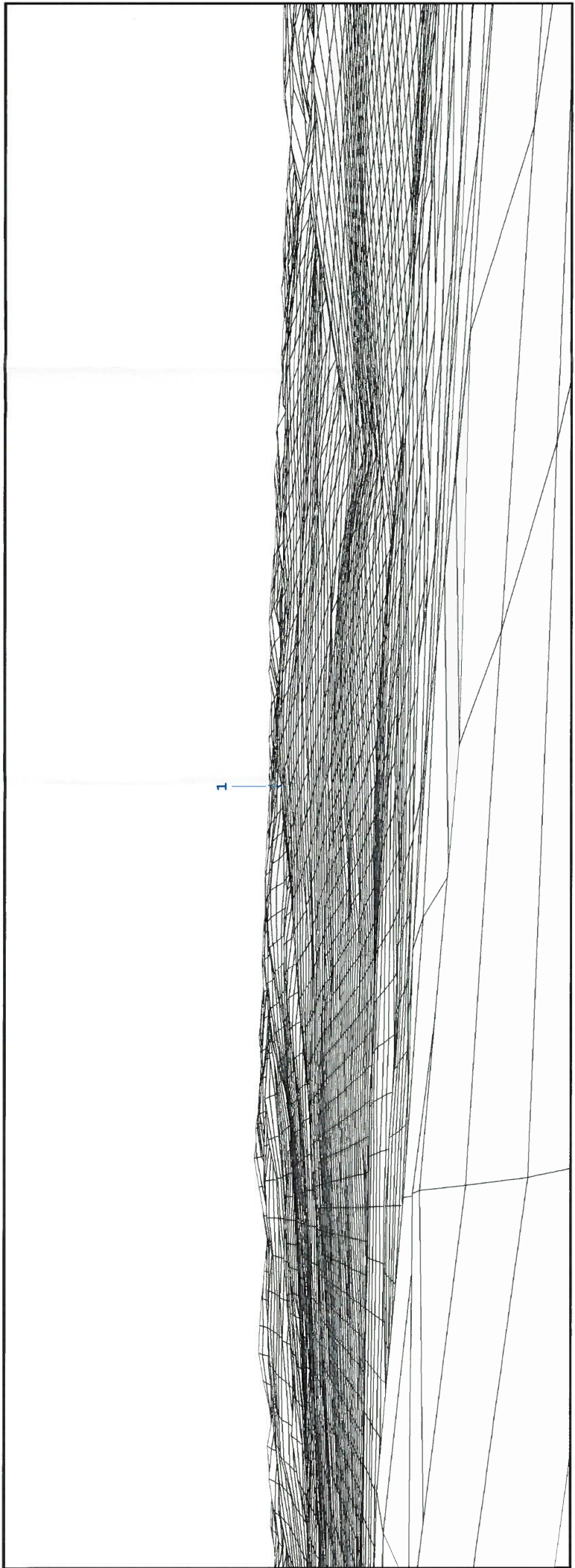
Site: Newhill Farm


Drawing Title: Viewpoint 4: B919 by Newlands and Pittendreich - Photomontage

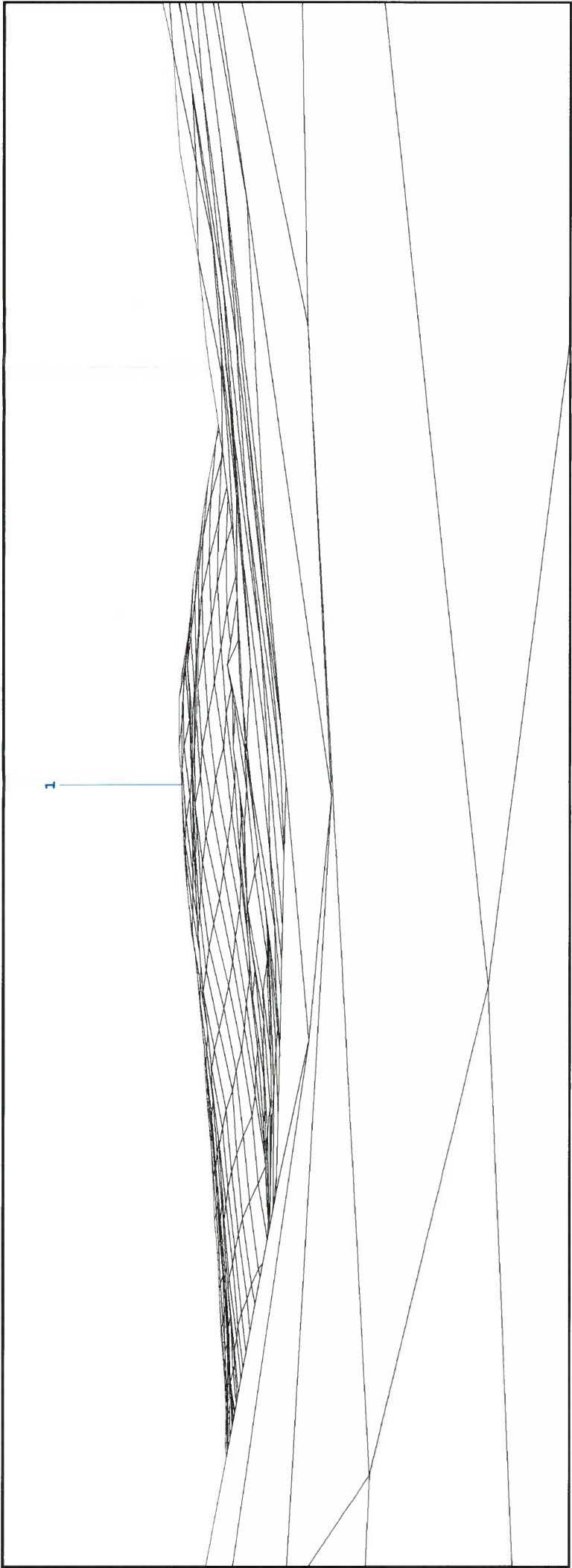
Scale: NTS
Date: 27/10/2011

Drawing Number: CB / 004 / VPT

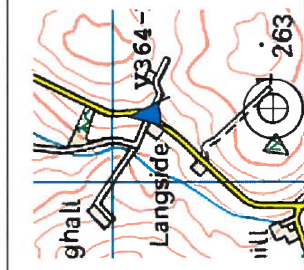
Drawn by: C Burmester



Grid Reference: Altitude: Approx. distance to nearest turbine: Turbine Blade Tip Height: Number of Blade Tips Visible: Number of Turbines Hubs Visible:		312266, 708933 232m 6.8 km 48m 3 1	Horizontal Angle of View (approx.): Height of View above ground:	39.6 degrees 1.4m – 2.0m	<div>  <p> 3RI Energy Solutions Hoodhill Fossoway Kinross KY13 0PW Tel: 01506 865988 planning@3renergysolutions.co.uk </p> </div> <p> Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011). </p>	Site: Newhill Farm Drawing Title: Viewpoint 5: Bonnet Stane - Wireframe Scale: NTS Date: 27/10/2011 Drawing Number: CB / 005 / VPT Drawn by: C Burnmaster
--	--	---	---	-----------------------------	---	--



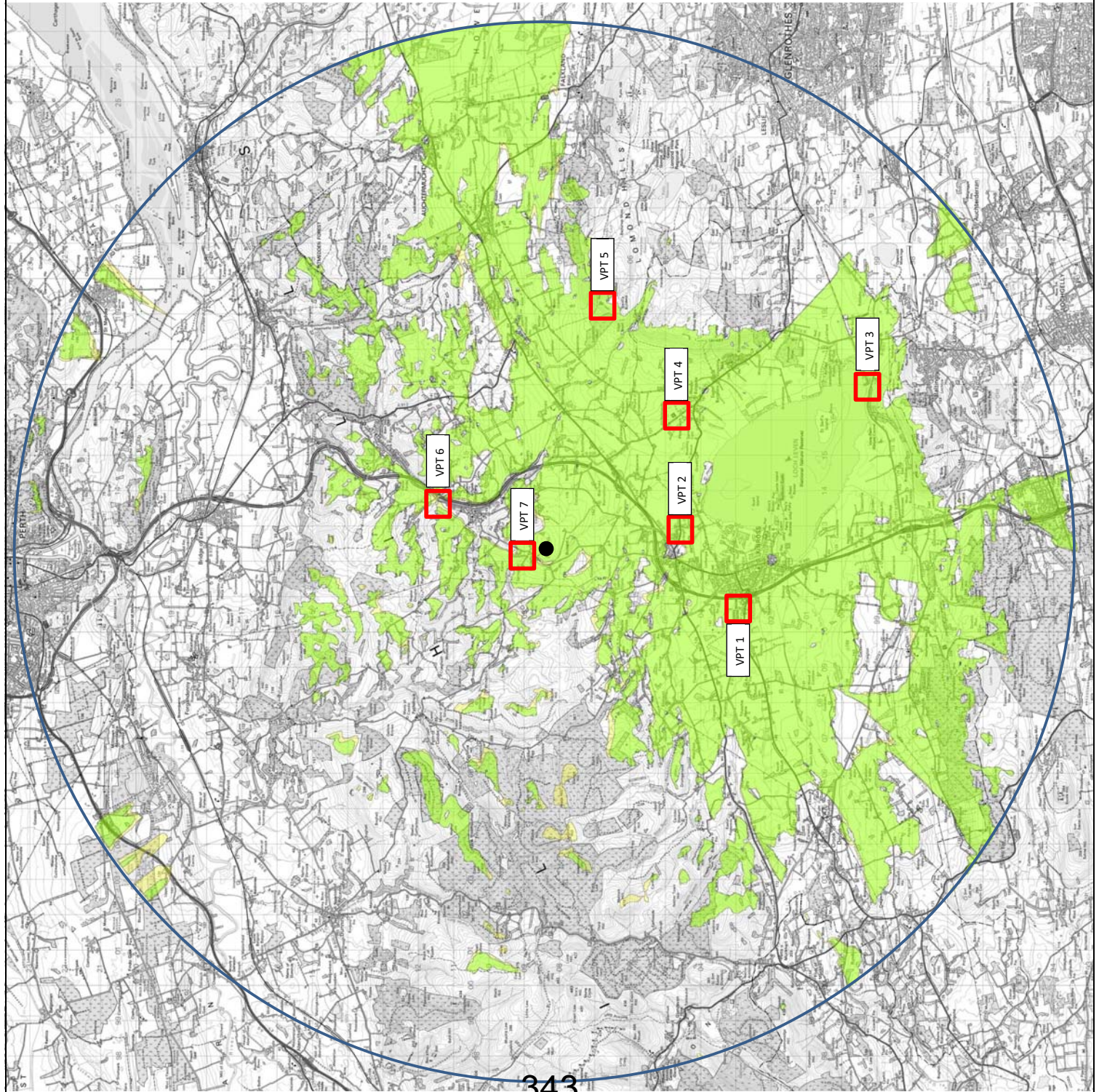
		Grid Reference: Altitude: Approx. distance to nearest turbine: Turbine Blade Tip Height: Number of Blade Tips Visible: Number of Turbines Hubs Visible:		313761, 711430 136m 3.4 km 48m 0 0	Horizontal Angle of View (approx.): Height of View above ground:		39.6 degrees 1.4m – 2.0m	 Hoodhill Fossoway Kinross KY13 0PW Tel: 01506 865988 planning@3renergysolutions.co.uk Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).		Site: Newhill Farm	Drawing Title: Viewpoint 6: M90 Overbridge at Glenfarg - Wireframe	Scale: NTS	Date: 27/10/2011	Drawing Number: CB / 006 / VPT	Drawn by: C Burnmaster
--	--	---	--	---	---	--	-----------------------------	---	--	------------------------------	--	----------------------	----------------------------	--	----------------------------------



Site:	Newhill Farm
Drawing Title:	Viewpoint 7: Near Redfordneuk - Photomontage
Scale:	NTS
Date:	27/10/2011
Drawing Number:	CB / 007 / VPT
Drawn by:	C Burnester

Hoodhill Fossoway Kinross KY13 0PW
Tel: 01506 865988
planning@3renergysolutions.co.uk
Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).

Grid Reference:	312266, 708933	Horizontal Angle of View (approx.):	41 degrees
Altitude:	210m	Height of Camera above ground:	1.4m – 2.0m
Approx. distance to nearest turbine:	0.58 km	Recommended Viewing Distance:	535 mm
Turbine Blade Tip Height:	48m	Date of Photography:	26/10/2011
Number of Blade Tips Visible:	3	Time of Photography:	3:33 pm
Number of Turbines Hubs Visible:	1	Weather Conditions:	Overcast



Legend

15 km radius from the Wind Turbine

Approximate area from which the Wind Turbine Hub (36.7m) may be visible

Approximate area from which the Wind Turbine Blade Tip (47.1m) may be visible

Proposed location of the Wind Turbine

Photomontage Viewpoint locations

Notes

1. Predicted visibility defined from an observer eye level of 2m above ground level.
2. Created using Ordnance Survey Digital Terrain data at a 50m grid interval.
3. The analysis does not take into account intervening screening vegetation or buildings.
4. Reproduced from OS 1:50 000 scale raster maps by permission of Ordnance Survey® ©Crown copyright, all rights reserved. 2011 License number 100049996 (2011).

Project

Newhill Farm, Perth, PH2 9QN

Title

Zone of Theoretical Visibility and Photomontage Viewpoint Locations

Scale: 1:50,000

Drawing Ref: 364 / VPTS

Drawn: CB / 15.11.11



Hoodhill Ffosoway Kinross KY13 0PW
Tel: 01566 865988

planning@3renergysolutions.co.uk



Pullar House 35 Kinnoull Street Perth PH1 5GD

Tel: 01738 475300

Fax: 01738 475310

Email: onlineapps@pkc.gov.uk

Planning Department

Applications cannot be validated until all necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 000031832-001

The online ref number is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the Planning Authority about this application.

Type of Application

What is this application for? Please select one of the following: *

We strongly recommend that you refer to the help text before you complete this section.

- ☐ Application for Planning Permission (including changes of use and surface mineral working)
- ☒ Application for Planning Permission in Principle
- ☐ Further Application, (including renewal of planning permission, modification, variation or removal of a planning condition etc)
- ☐ Application for Approval of Matters specified in conditions

Description of Proposal

Please describe the proposal including any change of use: * (Max 500 characters)

Proposal to erect a single 100kW Wind Turbine (47.1m to blade tip) at Newhill Farm

Is this a temporary permission? *

☒ Yes ☐ No

Please state how long permission is required for and why: * (Max 500 characters)

25 years for the useful life of the wind turbine

If a change of use is to be included in the proposal has it already taken place?
(Answer 'No' if there is no change of use.) *

☐ Yes ☒ No

Have the works already been started or completed? *

☒ No ☐ Yes - Started ☐ Yes - Completed

Applicant or Agent Details

Are you an applicant, or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application)

☐ Applicant ☒ Agent

Agent Details

Please enter Agent details

Company/Organisation:

3R Energy Solutions Limited

Ref. Number:

First Name: *

Cole

Last Name: *

Burmester

Telephone Number: *

01506 865988

Extension Number:

Mobile Number:

Fax Number:

Email Address: *

planning@3Renegysolutions.
co.uk

You must enter a Building Name or Number, or both:*

Building Name:

3R Energy Solutions Limited

Building Number:

Address 1 (Street): *

West Wing Suites

Address 2:

Uphall

Town/City: *

Broxburn

Country: *

UK

Postcode: *

EH52 5NT

Is the applicant an individual or an organisation/corporate entity? *



Individual



Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title: *

Mr

Other Title:

First Name: *

Bruce

Last Name: *

Hamilton

Company/Organisation:

Tayforth Machinery Ring

Telephone Number:

Extension Number:

Mobile Number:

Fax Number:

Email Address:

You must enter a Building Name or Number, or both:*

Building Name:

Newhill Farm

Building Number:

Address 1 (Street): *

Newhill Farm

Address 2:

Glenfarg

Town/City: *

Perth

Country: *

United Kingdom

Postcode: *

PH2 9QN

Site Address Details

Full postal address of the site (including postcode where available):

Address 1:

Tay Forth Machinery Ring

Address 5:

Address 2:

Newhill

Town/City/Settlement:

Perth

Address 3:

Glenfarg

Post Code:

PH2 9QN

Address 4:

Please identify/describe the location of the site or sites.

Northing

708284

Easting

311774

Pre-Application Discussion

Have you discussed your proposal with the planning authority? *

☒ Yes ☐ No

Pre-Application Discussion Details

In what format was the feedback given? *

☐ Meeting ☐ Telephone ☒ Letter ☐ Email

Please provide a description of the feedback you were given and the name of the officer who provided this feedback. If a processing agreement [note 1] is currently in place or if you are currently discussing a processing agreement with the planning authority, please provide details of this. (This will help the authority to deal with this application more efficiently.) * (Max 500 characters)

A Screening Opinion was received from Council stating that no EIA was required.

Title:

Mr

Other title:

First Name:

John

Last Name:

Russell

Correspondence Reference
Number:

11/00705/PREAPP

Date (dd/mm/yyyy):

27/06/11

Note 1. A processing agreement involves setting out the key stages involved in determining a planning application, identifying what information is required and from whom and setting timescales for the delivery of various stages of the process.

Site Area

Please state the site area:

0.10

Please state the measurement type used:

☒ Hectares (ha) ☐ Square Metres (sq.m)

Existing Use

Please describe the current or most recent use: (Max 500 characters)

Agricultural Beef and Sheep production

Access and Parking

Are you proposing a new or altered vehicle access to or from a public road? *

☐ Yes ☒ No

If Yes please describe and show on your drawings the position of any existing, altered or new access points, highlighting the changes you propose to make. You should also show existing footpaths and note if there will be any impact on these.

Are you proposing any changes to public paths, public rights of way or affecting any public rights of access? *

☐ Yes ☒ No

If Yes please show on your drawings the position of any affected areas highlighting the changes you propose to make, including arrangements for continuing or alternative public access.

Water Supply and Drainage Arrangements

Will your proposal require new or altered water supply or drainage arrangements? *

☐ Yes ☒ No

Do your proposals make provision for sustainable drainage of surface water? (e.g. SUDS arrangements) *

☒ Yes ☐ No

Note: -

Please include details of SUDS arrangements on your plans

Selecting 'No' to the above question means that you could be in breach of Environmental legislation.

Are you proposing to connect to the public water supply network? *

☐ Yes

☐ No, using a private water supply

☒ No connection required

If No, using a private water supply, please show on plans the supply and all works needed to provide it (on or off site).

Assessment of Flood Risk

Is the site within an area of known risk of flooding? *

☐ Yes ☒ No ☐ Don't Know

If the site is within an area of known risk of flooding you may need to submit a Flood Risk Assessment before your application can be determined. You may wish to contact your Planning Authority or SEPA for advice on what information may be required.

Do you think your proposal may increase the flood risk elsewhere? *

☐ Yes ☒ No ☐ Don't Know

Trees

Are there any trees on or adjacent to the application site? *

☐ Yes ☒ No

If Yes, please mark on your drawings any trees, known protected trees and their canopy spread close to the proposal site and indicate if any are to be cut back or felled.

All Types of Non Housing Development - Proposed New Floorspace

Does your proposal alter or create non-residential floorspace? *

☐ Yes ☒ No

Schedule 3 Development

Does the proposal involve a form of development listed in Schedule 3 of the Town and Country Planning (Development Management Procedure (Scotland) Regulations 2008 ? *

☒ Yes ☐ No ☐ Don't Know

If yes, your proposal will additionally have to be advertised in a newspaper circulating in the area of the development. Your planning authority will do this on your behalf but will charge you a fee. Please check the planning authority's website for advice on the additional fee and add this to your planning fee.

If you are unsure whether your proposal involves a form of development listed in Schedule 3, please check the Help Text and Guidance notes before contacting your planning authority.

Planning Service Employee/Elected Member Interest

Is the applicant, or the applicant's spouse/partner, either a member of staff within the planning service or an elected member of the planning authority? *

☐ Yes ☒ No

Certificates and Notices

Certificate and Notice under Regulation 15 8 – Town and Country Planning (General Development Management Procedure) (Scotland) Order 1992 (GDPO 1992) Regulations 2008

One Certificate must be completed and submitted along with this application form. This is most usually Certificate A, Form 1, Certificate B, Certificate C or Certificate E.

Are you/the applicant the sole owner of ALL the land ? *

☒ Yes ☐ No

Is any of the land part of an agricultural holding? *

☒ Yes ☐ No

Do you have any agricultural tenants? *

☐ Yes ☒ No

Certificate Required

The following Land Ownership Certificate is required to complete this section of the proposal:

Certificate E

Land Ownership Certificate

Certificate and Notice under Regulation 15 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008

Certificate E

I hereby certify that –

(1) – No person other than myself/the applicant was the owner of any part of the land to which the application relates at the beginning of the period 21 days ending with the date of the application.

(2) - The land to which the application relates constitutes or forms part of an agricultural holding and there are no agricultural tenants
Or

(1) – No person other than myself/the applicant was the owner of any part of the land to which the application relates at the beginning of the period 21 days ending with the date of the application.

(2) - The land to which the application relates constitutes or forms part of an agricultural holding and there are agricultural tenants.

These People are:

Name:

Address:

Date of Service of Notice: *

(3) - I have/The applicant has taken reasonable steps, as listed below, to ascertain the names and addresses of the other agricultural tenants and *have/has been unable to do so –

Notice of the application has been published in:

On:

Signed:

Cole Burmester

On behalf of:

Mr Bruce Hamilton

Date:

30/11/2011

☒ Please tick here to certify this Certificate. *

Checklist - Application for Planning Permission

Town and County Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008

Please take a few moments to complete the following checklist in order to ensure that you have provided all the necessary information in support of your application. Failure to submit sufficient information with your application may result in your application being deemed invalid. The planning authority will not start processing your application until it is valid.

a) If this is a further application where there is a variation of conditions attached to a previous consent, have you provided a statement to that effect? *

☐ Yes ☐ No ☒ Not applicable to this application

b) If this is an application for planning permission, planning permission in principle or a further application and the application is for development belonging to the categories of national or major developments, have you provided a Pre-Application Consultation Report? *

☐ Yes ☐ No ☒ Not applicable to this application

Town and County Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008

c) If this is an application for planning permission and the application relates to development belonging to the categories of national or major developments and you do not benefit from exemption under Regulation 13 of The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008, have you provided a Design and Access Statement? *

☐ Yes ☐ No ☒ Not applicable to this application

d) If this is an application for planning permission and relates to development belonging to the category of local developments (subject to regulation 13. (2) and (3) of the Development Management Procedure (Scotland) Regulations 2008) have you provided a Design Statement? *

☐ Yes ☐ No ☒ Not applicable to this application

e) If your application relates to installation of an antenna to be employed in an electronic communication network, have you provided an ICNIRP Declaration? *

☐ Yes ☐ No ☒ Not applicable to this application

f) If this is an application for planning permission, planning permission in principle, an application for approval of matters specified in conditions or an application for mineral development, have you provided any other plans or drawings as necessary:

☒ Site Layout Plan or Block plan.

☒ Elevations.

☐ Floor plans.

☐ Cross sections.

☐ Roof plan.

☐ Master Plan/Framework Plan.

☐ Landscape plan.

☒ Photographs and/or photomontages.

☐ Other.

Provide copies of the following documents if applicable:

A copy of an Environmental Statement. *

☐ Yes ☒ N/A

A Design Statement or Design and Access Statement. *

☐ Yes ☒ N/A

A Flood Risk Assessment. *

☐ Yes ☒ N/A

A Drainage Impact Assessment (including proposals for Sustainable Drainage Systems). *

☐ Yes ☒ N/A

Drainage/SUDS layout. *

☐ Yes ☒ N/A

A Transport Assessment or Travel Plan. *

☐ Yes ☒ N/A

Contaminated Land Assessment. *

☐ Yes ☒ N/A

Habitat Survey. *

☐ Yes ☒ N/A

A Processing Agreement *

☐ Yes ☒ N/A

Other Statements (please specify). (Max 500 characters)

A Supporting Statement is included with the Application and a Landscape and Visual Impact Assessment

Declare - For Application to Planning Authority

I, the applicant/agent certify that this is an application to the planning authority as described in this form. The accompanying plans/drawings and additional information are provided as a part of this application .

Declaration Name: Cole Burmester

Declaration Date: 30/11/2011

Submission Date: 30/11/2011

Payment Details

Cheque: 3R Energy Solutions Limited, 000250

Created: 30/11/2011 14:52

TCP/11/16(184)

Planning Application 11/02012/FLL – Erection of a wind turbine on land 520 metres north east of Tay Forth Machinery Ring, Newhill, Glenfarg

PLANNING DECISION NOTICE (included in applicant's submission, see pages 303-304)

REPORT OF HANDLING (included in applicant's submission, see pages 305-313)

REFERENCE DOCUMENTS (part included in applicant's submission, see pages 315-343)

**SUPPORTING STATEMENT FOR THE INSTALLATION OF A SINGLE SMALL SCALE WIND
TURBINE AND ASSOCIATED INFRASTRUCTURE**

Prepared for Tayforth Machinery Ring, Newhill Farm (Applicant)

By 3R Energy Solutions Limited (Agent)



Northern Power 100kW Turbine

Newhill Farm, Glenfarg, Perth, PH2 9QN

December 2011

Table of Contents

1	Introduction	4
1.1	Outline.....	4
1.2	Background	4
2	The Proposal	5
2.1	Project Outline	5
2.2	Background to Small Scale Renewable Energy Development	5
2.3	Rationale behind Small Scale Renewable Energy Development at Newhill Farm	7
2.4	Site Selection.....	7
2.5	Turbine Selection and Specifications	8
2.6	Supporting Infrastructure	8
2.7	Construction Phase	9
2.8	Transportation	9
2.9	Decommissioning.....	10
3	Planning Policy Assessment	10
3.1	National Planning and Energy Policy.....	11
3.2	Scottish Planning Policy 2010	12
3.3	Perth and Kinross Structure Plan 2003	13
3.4	Perth Area Local Plan 2000	15
3.5	Perth and Kinross Council Supplementary Planning Guidance for Wind Energy Proposals 2005	17
4	Environmental Assessment.....	19
4.1	Positive Effects	20
4.2	Landscape and Visual Impacts	20
4.3	Socio-Economic Impacts	22
4.4	Ecology	23
4.5	Noise	24

4.6	Cultural Heritage	24
4.7	Shadow Flicker	25
4.8	Aviation and Radar	26
4.9	Telecommunications	26
4.10	Health and Safety	26
4.11	Carbon Balance and Peat Management	26
4.12	Additional Issues	27
5	CONCLUSION	27

Appendices

Appendix 1	Perth and Kinross Council Screening Opinion
Appendix 2	Consultation Responses
Appendix 3	Landscape and Visual Impact Assessment
Appendix 4	Site Plans
Appendix 5	Turbine Specifications and Drawing
Appendix 6	Transportation Statement
Appendix 7	Zone of Theoretical Visibility
Appendix 8	Northern Power 100 Acoustic Noise Assessment

1 Introduction

1.1 Outline

3R Energy Solutions has been invited by local landowner, Tayforth Machinery Ring, to submit a planning application for the erection of a single small scale 100kW wind turbine on land at Newhill Farm near Glenfarg.

This Supporting Statement discusses the technical reasons for the choice of location, the contribution to renewable energy targets, the effects on the local economy and environment and is submitted in conjunction with a full application for planning consent. This statement has been compiled following a Screening Opinion to Perth & Kinross Council and a Scoping Study with statutory consultees along with relevant information, plans, reports and specifications annexed to this report.

This supporting statement contains the following information:

- A description of the development, site and surrounding environments;
- A description of the proposed construction works for the structure;
- An assessment of the relevant statutory planning documents; and
- An assessment of potential and actual effects on the environment.

1.2 Background

In accordance with the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended) wind turbines fall within Schedule 2 development and can require an Environmental Impact Assessment where they exceed one of the two applicable thresholds and criteria set out below:

- The development involves the installation of more than 2 turbines.
- The hub height of any turbine or height of any other structure exceeds 15m.

3R Energy Solutions Limited submitted a request for a Screening Opinion to Perth and Kinross Council with an attached Zone of Theoretical Visibility (ZTV) to a radius of 15 km from the turbine location. Perth and Kinross Council's letter, dated 27th June 2011, outlined that *"the characteristics of the potential impact of the development, in terms of extent, transboundary nature, magnitude, complexity, probability, duration, frequency and reversibility that it is unlikely to have a significant effect on the environment"* (Appendix 1).

In addition, to ensure that this Supporting Statement contained relevant information regarding potential Environmental Impacts, 3R Energy Solutions Limited carried out a Scoping Study with the relevant statutory consultees to determine their concerns. These full responses are included in Appendix 2. Further investigations were also completed regarding Landscape and Visual Impacts and a Landscape and Visual Impact Assessment report is included in Appendix 3.

2 The Proposal

2.1 Project Outline

The applicant wishes to gain permission to erect a locally owned single small scale Northern Power 100kW wind turbine at Newhill Farm. This will include the construction of the electrical generation and associated components, the supporting infrastructure including foundations, tracks and the electricity transmission system. Each of these aspects of the proposal are outlined further below.

Newhill Farm is located in a rural environment approximately 2.3 km to the southwest of Glenfarg and is accessed from minor roads from the M90. The grid reference for the proposed turbine is E 312296, N 708349. The site sits at 254m AOD and benefits from an open aspect to the prevailing south-westerly wind. There nearest privately owned property lies over 380m to the northwest of the proposed turbine site. A scaled site plan is included as Appendix 4.

Currently the farm is utilized for beef production resulting in a large electricity usage for the farm steading. The wind turbine will help reduce the farms carbon footprint, something that is also highly desirable when marketing farm produce. Many large retailers now look to source their produce from farms who can demonstrate “green” credentials and the project will help secure the production of beef for future generations.

This proposal to develop a single 100kW wind turbine will assist in diversifying the current use of the land and help produce a renewable source of electricity that will be utilised for both farm operations and sold to the grid. This will allow for a further reduction in the carbon footprint of the farm and carbon emissions from fossil fuel consumption, in addition with another source of income to reinvest into the community and the farm operations.

2.2 Background to Small Scale Renewable Energy Development

The UK has one of the best wind resources in Europe and it is considered a natural, clean and sustainable resource. Local, small scale renewable energy installations are helping contribute

towards meeting Government targets for the supply of energy from sustainable sources. In September 2008 the Government confirmed that climate change was one of the most serious threats it faced and that urgent action was needed to cut emissions which cause climate change. The Scottish Climate Change Bill introduced a target to reduce emissions by 80 per cent by 2050, and a statutory framework to support delivery of this. It also sets a world-leading interim target for a 42% cut in emissions by 2020. Since the latest elections in Scotland, the Scottish National Party (SNP) has continued to push for a 100% of energy to be produced by renewable means. The Government therefore wants the existing targets to be exceeded rather than merely met, and not to be viewed as a cap on what renewables can deliver.

The Government released the 'Routemap for Renewable Energy in Scotland 2011' on 1st July 2011 which is an update and extension to the Scottish Renewables Action Plan 2009. The original Renewables Action Plan set out short term actions towards the delivery of 2020 targets for renewable energy. This updated and expanded Routemap reflects the challenge of the new target to meet an equivalent of 100% demand for electricity from renewable energy by 2020 in Scotland while ensuring that renewable energy is part of a wider electricity mix. One of the key targets that is outlined in the Routemap is for a new target of 500 MW community and locally-owned renewable energy by 2020. With the advent of the Feed in Tariff and the Renewable Heat Incentive, the time is right to capitalise on this experience and transform the scale of local ownership, thus allowing communities and rural businesses to take advantage of the significant revenue streams that can accrue from this form of asset ownership.

The introduction of this Feed-in Tariff scheme (FiT) in April 2010 is further acknowledgement of the Government's commitment to climate change and is aimed at small scale, low carbon electricity generation. It will allow many local people and communities to invest in small scale renewable technology and help in tackling climate change directly. The Government recognises the important contribution to be made from small scale renewable technologies in helping meet these targets. Perth and Kinross Council has an obligation to contribute to these targets, notwithstanding its cultural heritage and the importance of tourism to the local economy.

The benefit of small to medium scale FiT projects, privately funded by local individuals, communities and businesses, is that they are able to utilise a large proportion of the energy on site with much of the FiT revenue being circulated back into benefit the local community and economy.

2.3 Rationale behind Small Scale Renewable Energy Development at Newhill Farm

Increasingly there is a need to find alternative sources of power due to the increasing rise in electricity costs which are foreseen to continue. The turbines will allow for a revenue stream to be established which will not only alleviate the burden of rising power costs but assist in the continued development of the farming operation. A benefit promoted by the Rural Affairs Secretary Richard Lochhead, who stated on 4th August 2011 that through the development of an Agri-Renewables Strategy that *"The renewables revolution offers our farmers and land-based industries the opportunity to cut energy costs, generate new income and contribute to our low carbon future."*

Thus the turbines will contribute to the cumulative targets as set by the Scottish Government for the reduction of carbon emissions.

The site benefits from an open and exposed aspect to the prevailing wind direction, essential for efficient renewable energy generation from wind. Newhill Farm has a viable wind resource together with onsite infrastructure such as adequate access and a three phase connection.

2.4 Site Selection

The turbine site was chosen with several technical criteria considered to maximise output and minimise any potential environmental impacts. These considerations were:

- Elevation and exposure to prevailing wind direction
- Proximity of trees / buildings which can create a turbulence effect
- Proximity of residential dwellings
- National and local policy
- Local landscape designations
- Nature designations
- Proximity to airports which may present radar visibility issues
- Ease of access to the site for scale of components turbine parts
- Connection to the local grid network

The site is centred at Grid Reference E 312296, N 708349 at 254m AOD and is shown in the Site Location Plan (Appendix 4).

Prior to preparing the planning application a detailed site assessment was carried out to carefully identify a suitable location for the wind turbine. The site was initially identified by the landowner as having potential for development. A site assessment including a desktop study and walkover was then conducted to identify the wind speeds across the area due to its elevation and exposure to the

prevailing wind direction. This site assessment also identified access routes, proximity to grid connections, nearest privately owned properties and if there were any potential concerns.

In order for the turbine to be financially viable the turbine must be sited with sufficient tower height for the rotor to sit above any turbulence zones that may be created by obstacles or obstructions in the direction of the prevailing wind which is predominately from the Southwest at this location.

This site assessment allowed the turbine model to be carefully considered prior to choosing this final location to ensure a balance was found between generating the greatest output of wind energy and limiting any potential environmental impacts.

2.5 Turbine Selection and Specifications

The Northern Power 100kW turbine is the chosen design and consists of a monopole tower, the nacelle hub and the blade. The height of the turbine to the nacelle hub is 36.7m, with a rotor diameter of 20.7m, giving a total base to blade tip height of 47.1m.

These three components will be painted the same colour which will be within the off white to light grey colour palette similar to the usual Scottish sky. The painted surface will be non-reflective.

The turbine tower will be supported by a concrete foundation approximately 8 metres x 8 metres or 64m². Any disturbed soil will be rehabilitated to its pre-existing state such that the vegetation extends close to the base of the turbine tower.

The turbine specification (Appendix 5) is attached for reference together with foundation specifications, elevation plans and general design information in support of the application.

In terms of maintenance, the turbine will be serviced annually by a certified technician over the course of one day with only one return vehicle movement in a 4 x 4 standard vehicle. This maintenance will not affect any operations of the farm or impact upon any other concerns. No specialised equipment or conditions will be required for this maintenance to be carried out.

2.6 Supporting Infrastructure

To support the on-going operation of the turbine the generated power from the turbine will be transmitted along an 11 kV underground cable to a new distribution board located within proximity to the 3-phase connection point, approximately 380 metres to the northeast. The cable which carries the electrical power will be laid in a trench up to 1m deep and 0.45m wide along with earthing cables. The cable is laid on a bed of sand and backfilled using suitably graded material. All

soil that is disturbed on the site will be re-vegetated to its original state. Connection upgrades will be determined by the local Distribution Network Operator and this is on-going.

2.7 Construction Phase

During construction of the turbines, SEPA regulations and guidance will be adhered to for all site operations. As outlined in Appendix 2, SEPA do not provide site specific advice for wind turbine schemes under 10 MW and direct the developer to SEPA Guidance Note 8 “Standing advice for planning authorities on small scale local development management consultations”. The following outlines the proposal in regards to Guidance Note 8 and best practice will be adhered to at all times during construction and operation.

- The site is not located within a designated flood risk area.
- Care will be taken during construction to not affect any natural surface water drainage areas.
- All soil that is disturbed on the site will be re-vegetated to its original state.
- No transportation, storage or dispensing of fuel or oil is proposed for the development however diesel fuel for plant will be contained within the various fuel tanks of the plant machinery.
- There will be no concrete batching on site.
- Site practices will be in accordance with Pollution Prevention Guideline 6, “Working at construction and demolition sites”.
- Construction is planned for summer / autumn to take advantage of drier site conditions.
- Works will be planned to avoid potentially polluting activities during periods of high rainfall.
- Workers and subcontractors on site will be made aware of any environmental risks and that they understand and undertake proposed preventative/mitigation measures.
- Installation of the turbines will be phased with the foundations works carried out in advance of the turbines installation.

2.8 Transportation

The Transport Plan, attached as Appendix 6, assesses the transportation requirements and traffic generation associated with the proposal.

It is very important to note that the unique selling point of the Northern Power 100, the chosen turbine for this site, is that the turbine can be delivered in two standard sized 40 foot shipping containers. These shipping containers can be delivered by standard HGV’s. The weight and size of the containers is further outlined in Appendix 6. In summary the document states that the maximum gross weight (including the containers) is 14 tonnes.

Access to the site would be from the main M90 before travelling on minor roads to Newhill Farm. Existing farm tracks will be utilised to a point some 50m from the turbine. A temporary track will be required from this point to the turbine site.

In terms of maintenance, the turbine will be serviced annually by a certified technician over the course of one day with only one return vehicle movement in a 4 x 4 standard vehicle. This maintenance will not affect any operations of the farm or impact upon any other concerns. No specialised equipment or conditions will be required for this maintenance to be carried out.

Transport Scotland has also confirmed that *“the percentage increase in traffic on the trunk road is such that the proposed development is likely to have no impact on the trunk road network”* (Appendix 2).

2.9 Decommissioning

It has been determined that the life span of the Northern Power 100 wind turbine is in the region of 20 - 25 years when regularly serviced and maintained. On completion of the operational lifetime of the wind turbine, the turbine will be decommissioned and the site restored to a standard required by Perth and Kinross Council. A detailed method statement will be prepared for the decommissioning works and submitted to Perth and Kinross Council for approval. Preparation of a method statement nearer to the time of decommissioning will allow the operator to take advantage of advancements in technology and site practices relating to turbine and their operation.

However, as an example, it is likely that all of the area will be recovered to its original state with subsoil and topsoil materials and reseeded for agricultural use. The turbine blades, nacelles and hubs will be removed initially, followed by dismantling of the tower sections. Parts will be broken up into suitable lengths and weights for transportation off site. Cables, metal fixings, and other components will be disposed of in an appropriate licensed facility and recycled where possible.

Decommissioning transportation will be, in effect, the construction traffic movements in reverse.

3 Planning Policy Assessment

There are a number of National and Local Planning Policies that are relevant to wind turbine installations. Currently, the Development Plan in Perth and Kinross is made up of the Structure Plan and six Adopted Local Plans. These will remain in force until superseded by the new forms of development plan, the Local Development Plan (TAYplan) and the Strategic Development Plan. The existing relevant adopted development plans therefore comprise of the Perth & Kinross Structure

Plan Structure Plan 2003 and the Perth Area Local Plan (PALP). It is important to note that this proposal falls within Perth and Kinross Councils Supplementary Guidelines which identifies wind energy 'Broad Area of Search' where developments may be acceptable.

3.1 National Planning and Energy Policy

The first National Planning Framework (NPF1), published in 2004, set out a strategy for Scotland's development to 2025. The current and second National Planning Framework (NPF2) guides Scotland's development to 2030, setting out strategic development priorities to support the Scottish Government's central purpose - sustainable economic growth. In particular Scotland is concerned with combating Climate Change and reducing Carbon emissions. To achieve this, the Scottish Government is taking an international lead by introducing ambitious statutory emission reduction targets through the Scottish Climate Change Bill and setting a target of an 80% reduction in emissions by 2050.

Key elements of the strategy for achieving a substantial reduction in emissions are greater energy efficiency, making the most of Scotland's renewable energy potential and encouraging power and heat generation from clean, low carbon sources. By harnessing these renewable sources of energy there is a radical change in Scotland's energy economy, and the location of many of these resources means that rural areas are well placed to benefit. This application for a single 100kW wind turbine and other small-scale renewable energy projects can make a valuable contribution locally. They play a vital role in supporting the sustainable development of remote rural and island communities in particular. Cumulatively, they can make a significant contribution to the development of a more decentralised pattern of energy generation.

The introduction of the Feed-in Tariff scheme in April 2010 is further acknowledgement of The Government's commitment to climate change and is aimed at small scale, low carbon electricity generation. It will allow many people to invest in small scale renewable technology and help in tackling climate change directly. The Government recognises the important contribution to be made from small scale renewable technologies in helping meet these targets.

Finally the Government released the 'Routemap for Renewable Energy in Scotland 2011' on 1st July 2011 which is an update and extension to the Scottish Renewables Action Plan 2009. The original Renewables Action Plan set out short term actions towards the delivery of 2020 targets for renewable energy. This updated and expanded Routemap reflects the challenge of the new target to meet an equivalent of 100% demand for electricity from renewable energy by 2020 in Scotland

while ensuring that renewable energy is part of a wider electricity mix. One of the key targets that is outlined in the Routemap is for a new target of 500 MW community and locally-owned renewable energy by 2020. With the advent of the Feed in Tariff and the Renewable Heat Incentive, the time is right to capitalise on this experience and transform the scale of local ownership, thus allowing communities and rural businesses to take advantage of the significant revenue streams that can accrue from this form of asset ownership.

Comment:

As noted above, the Government is pushing extremely hard for the development of renewable energy in Scotland, and in particular wind power with over 500MW of new community and locally-owned schemes as the key target. By developing a single wind turbine at Newhill Farm it will promote the use of green technology and reduce reliance on CO₂ electricity generators. This will contribute to the Scottish Governments targets of reducing carbon emissions by increasing sustainable economic growth, as any electricity that is not used on the site will be sold back to the grid. The Feed in Tariff scheme will assist the local landowner to reinvest the income back into the community to help stimulate the local economy.

3.2 Scottish Planning Policy 2010

The Scottish Planning Policy Statement, released February 2010, outlines nationally important land use planning matters. The Sustainability section outlines the Scottish Governments goals and commitments to reducing carbon emission by 42% by 2020 and 80% by 2050, contribute to reducing energy consumption and to the development of renewable energy generation opportunities. The Renewable Energy section outlines the minimum requirements of 50% of electricity to be generated by renewable sources by 2020, and this is not to be viewed as a cap on generation. The SPP states that for this uptake to occur *“There is potential for communities and small businesses in urban and rural areas to invest in ownership of renewable energy projects or to develop their own projects for local benefit. Planning authorities should support communities and small businesses in developing such initiatives in an environmentally acceptable way”*.

In regards to the Wind Farms section, the SPP states that Planning Authorities should support the development of wind farms in locations where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. All wind farms will need to be appropriately assessed in regards to their size and the surrounding environment and the following should be considered:

- landscape and visual impact;
- effects on the natural heritage and historic environment;
- contribution of the development to renewable energy generation targets;
- effect on the local and national economy and tourism and recreation interests;
- benefits and drawbacks for communities;
- aviation and telecommunications;
- noise and shadow flicker; and
- cumulative impact.

Comment:

This application has taken into account the Policies in the SPP including the development criteria outlined and discusses any potential effects on the environment in Section 4 of this Supporting Statement.

3.3 Perth and Kinross Structure Plan 2003

This Structure plan seeks to promote the sustainable development of Perth and Kinross over the next 20 years. Its purpose is to ensure that resources are used efficiently. An essential feature of sustainable development is that the benefits should accrue to all of the community not just the privileged groups or favoured areas of Perth and Kinross both now and in the future. Development that does not achieve this is not truly 'sustainable'. Achieving sustainable development is therefore a huge challenge for both individuals and organisations, locally, nationally and globally.

It is thus considered that the following Strategy and Policies are considered relevant to this proposal.

Strategy 2 The Lowland Area

In the Lowland area the Strategy seeks to promote greater social and economic self-sufficiency and facilitate diversification of the rural economy by:

- *Encouraging economic use of minerals, renewable energy and forestry in support of rural diversification.*

Comment:

This locally owned development at Newhill Farm will promote economic self-sufficiency, as outlined in Strategy 2, by diversifying the existing operations on the farm to produce and utilise renewable

energy in the form of wind power. This will also reduce the CO₂ emissions in the area by not utilising fossil fuels for electricity generation.

The benefits are two-fold by reducing the local landowner's fuel bills for their rural business and through the Feed in Tariff scheme the local landowner will be able to reinvest the income back into the community.

Sustainable Economy Policy 3

Support will be given to measures which promote an integrated flexible and innovative approach to rural development which encompass economic, social and environmental considerations and which:

- *Maintain or enhance local employment opportunities.*
- *Promote diversification.*
- *Help sustain viable rural communities and services.*
- *Introduce new technologies to rural areas (including information and telecommunications technology and renewable energy schemes).*

Comment:

This planning application has been developed with reference to this Policy by ensuring that the proposal will enhance the existing use of Newhill Farm by supporting and enhancing the existing operations and making them more sustainable. Additionally, this wind turbine will provide renewable electricity to the farm and will provide diversification for the farm by establishing an additional source of income through the Feed in Tariff scheme so that the local landowner will be able to reinvest the income back into the community.

Environment and Resources Policy 14

Proposals for the development of renewable energy schemes will be supported where they are considered environmentally acceptable and where their energy contribution and benefits in reducing pollution outweigh any significant adverse effects on local environmental quality. Community based renewable energy developments in particular will be encouraged. Proposals for renewable energy schemes will be assessed against the following criteria:

- *The immediate and wider impact of the proposed development on the landscape and wildlife resource.*
- *The need to protect features and areas of natural, cultural, historical and archaeological interest.*

- *The specific benefits that the proposal would bring to the local community and/or Perth and Kinross.*
- *The cumulative effects of similar developments on the local area.*

An environmental assessment will normally be required for large-scale schemes and Local Plans will provide more detailed locational guidance particularly for windfarm developments and other renewable energy technologies

Comment:

The erection of a single wind turbine has the potential to generate in the region of 301,000 kWh/year representing a CO₂ saving of 191 tonnes per annum. This turbine will reduce the applicant's carbon emissions and contribute to the cumulative targets as set by the Scottish Government for the reduction of carbon emissions. During the preparation of the Scoping Report consultation involved Historic Scotland and Scottish Natural Heritage (SNH). Historic Scotland confirmed that *"there are no scheduled monuments, A listed buildings, or designed landscapes within the footprint of the proposed development. There is the possibility, given that it may affect the setting of a few scheduled monuments, although the distance is such that significant adverse impacts are unlikely"* and therefore a Landscape and Visual Impact Assessment has been included as part of this planning application from Burleigh Castle in Appendix 3.

It is important to note that we have prepared this application in line with SNH Guidance *"Natural Heritage Assessment of small scale wind energy projects which do not require formal Environmental Impact Assessment (EIA) March 2008"*. In addition, the SNH document *"A Service Statement for Planning and Development"* states that they no longer provide comments for single wind turbines below 50 metres (to the tip).

3.4 Perth Area Local Plan 2000

The Perth Area Local Plan 2000 (PALP) purpose is to guide development and change in land use in the way that can best serve the local community interest. The PALP outlines policies and instructions for the development and use of land and guides all day to day planning decisions. This locally owned development falls within the wind energy 'Broad Area of Search' where developments may be acceptable, the Landward Area and is not located in an Area of Great Landscape Value (AGLV). Therefore the following Policies of the PALP are considered relevant to this proposal.

POLICY 1: *Developments in the landward area, as shown in Proposals Map A on land which is not identified for a specific policy, proposal or opportunity will generally be restricted to agriculture, forestry or recreational and tourism projects and operational developments including telecommunications development for which a countryside location is essential. Developments will also be judged against the following criteria:*

- *The site should have a good landscape framework within which the development can be set and, if necessary, screened completely.*
- *In the case of built development the scale, form, colour and design of development should accord with the existing pattern of building.*
- *The development should be compatible with its surroundings in land use terms and should not cause unacceptable environmental impact.*
- *The local road network should be capable of absorbing the development and a satisfactory access onto that network provided.*
- *Where applicable, there should be sufficient spare capacity in local services to cater for the new development.*
- *The site should be large enough to accommodate the development satisfactorily in site planning terms.*
- *The need to accommodate development as part of the ongoing requirements of existing commercial land uses in the countryside.*

Comment:

The development has taken into account this Policy and in particular the turbine chosen for this development is considered the best for the site. An assessment of the potential environmental impacts has been undertaken and is included in Section 4 of this Supporting Statement. In addition, a Landscape and Visual Impact Assessment (Appendix 3) has been prepared.

It should be noted that in order to operate wind turbines efficiently they must be sited in open areas and it is not always possible or feasible, to mitigate by moving the site or providing visual screening as this will decrease the wind flow. The turbine will be absorbed into the landscape on site as identified by utilising the information provided in PAN 45 which states that a turbine under 50m to tip height will be only seen as part of the wider landscape during periods of clear visibility at distances over 2.5 km from the site. From distances greater than 7.5 km the turbine will be a minor element in the landscape and only seen in very clear visibility.

Furthermore, to mitigate any potential visual impacts, the turbines will be coloured off white to light grey to blend with the usual Scottish sky colour.

Transport Scotland has also confirmed in Appendix 4 that *“The proposed development represents an intensification of the use of the site, however the percentage increase in traffic on the trunk road is such that the proposed development is likely to have no impact on the trunk road network.”*

In addition, there will be no impacts on the drainage or water tables and the site is located outside the Loch Leven catchment area.

POLICY 6: *Encouragement will be given to farmers wishing to diversify their businesses, particularly where this will generate additional local employment, will provide additional tourist facilities or accommodation, or re-use existing buildings, provided proposals are compatible with other Landward Area policies (particularly Policy 35).*

Comment:

This locally owned development will provide agricultural diversification to the agricultural business as well as benefit the area by providing an additional stream of income to the landowners to reinvest in to the local community. Additionally this proposal does not contradict any of the above criteria.

3.5 Perth and Kinross Council Supplementary Planning Guidance for Wind Energy Proposals 2005

This Supplementary Planning Guidance Note (SPG) sets out policies, criteria and other advice to assist in positively planning for wind farm renewable energy developments in Perth and Kinross.

Policy 1 – Wind Energy

The Council will encourage the development of commercial wind energy schemes which assist in achieving the Scottish Executives target of electricity generation from renewable sources least damaging to landscape character, amenity, habitats, and species in Perth and Kinross as shown in Diagram 1. In the period to 2010, the Council will look favourably on those schemes within the ‘Broad Area of Search’ which meet the criteria set out in the Councils Wind Energy Policy Guidelines. The Council will work, in conjunction with public agencies and the private sector, to ensure that Perth and Kinross makes an appropriate contribution to meeting the Scottish Executives 40% aspirational target of electricity generated from all renewable sources by 2020. The contribution to be made in

Perth and Kinross to this target will be subject to a later review as wind energy schemes are implemented and other technologies come forward.

Policy 2 – Wind Energy

In the ‘Broad Area of Search’, Community and Commercial wind energy developments will be supported where they would be consistent with the Councils detailed Policy Guidelines and it has been demonstrated that they utilise turbines of a size and a scale appropriate to their location, are in locations least damaging to settlements, landscape character, visual amenity, habitats, and will not have unacceptable cumulative impacts.

Within the ‘Strategically Sensitive Area’ there is a presumption against wind energy developments unless it has been demonstrated that they utilise turbines of a size and a scale appropriate to their location, are in locations which will have a slight or no significant impact on settlements, landscape, character, visual amenity, habitats, will not have unacceptable cumulative impacts and would be consistent with the Councils detailed Policy Guidelines. Community schemes as defined in Table 2 will be supported where they meet the criteria in the Councils detailed Policy Guidelines. All wind energy proposals should be subject to a detailed environmental assessment covering matters included in the Councils detailed Policy Guidelines.

Comment:

This planning application has been prepared with reference to this Supplementary Planning Guidance (SPG) and has taken into account the focus on the ‘Broad Areas of Search’ for wind energy that may be acceptable for development. Furthermore, this proposal will contribute to Perth and Kinross targets to meet the Scottish Executives 40% renewable electricity targets by 2020.

This locally owned wind turbine will generate an extra source of income for Newhill Farm which is particularly significant in rural areas as stated in the Perth and Kinross Council’s Supplementary Planning Guidance for Wind Energy Proposals. This guidance supports community based renewable energy schemes (*single turbines typically more than 20m to hub height and blade diameter more than 20m*), such as this proposal, that are locally owned that will in turn stimulate the local economy.

In reference to Policy 2, which identifies the environmental assessments required for an application for Wind Farms, Section 4 of this Supporting Statement outlines these potential effects and offers mitigation if required. However, it is also noted that small to medium scale turbines, such as this application for a single small scale 100kW turbine with a tip height of less than 50m are likely to have

far smaller impacts than large scale wind farms (50m+) and therefore an appropriate level of assessment has been undertaken. SNH has also advised that they no longer wish to be consulted with for “*single wind turbines below 50 metres (to the tip)*” in accordance with the SNH guidance note “A Service Statement for Planning and Development”. This is considered that single turbines below 50m to tip, such as proposed in this application, have a much lesser impact on the environment than other turbines of a larger scale.

4 Environmental Assessment

3R Energy Solutions Limited, recognising that this proposal is not subject to Environmental Impact Assessment regulations, has investigated the site regarding a number items outlined below. On this basis, the philosophy has been to avoid, remedy or mitigate any potential adverse effects on the environment associated with the proposal, where possible, whilst ensuring the viability of the development. 3R Energy Solutions Limited undertook a comprehensive onsite assessment and consultation during the initial feasibility stage of this proposal to determine the location and potential benefits and constraints of the site as well as a desktop assessment of any potential effects on the environment.

A Scoping Assessment was undertaken with all the statutory consultees and other relevant agencies to note if they had any concerns with the development of two turbines in the proposed location. Their responses are contained in Appendix 2 and have been summarised in this Section where relevant.

The items covered within this assessment are:

- Positive effects;
- Visual and landscape effects;
- Socio-economic impacts;
- Ecological effects;
- Noise effects;
- Cultural and archaeological effects;
- Shadow Flicker;
- Aviation and Radar;
- Telecommunication;

- Health and Safety;
- Carbon Balance and Peat Management; and
- Other Potential Effects.

4.1 Positive Effects

There are many attributes associated with these proposed small to medium scale wind turbines at Newhill Farm which create significant positive effects. These positive effects need to be balanced with any potential adverse effects that may also be associated with the proposal. The positive effects include the following:

- The proposal will utilise a renewable energy resource, namely wind, to generate electricity. The use of this renewable resource will offset approximately 190 tonnes of CO₂ emissions per year associated with the equivalent output from a carbon emitting source;
- Reducing the CO₂ emissions by utilising the wind turbine will assist Perth and Kinross Council in promoting, and meeting the Governments targets to produce 100% of Scotland's electricity generation by renewable measures by 2020;
- The proposal will increase Scotland's installed electricity generation capacity by 100kW and approximately 301,000 kWh per annum;
- The generated electricity will also be able to be utilised on site, reducing the existing electricity bills significantly for the local landowner;
- During construction, where feasible, the developer will employ local contractors to assist with construction; and
- The land associated with the development, once the facility is constructed, can continue to be utilised in accordance with its previous land use, namely the existing agricultural use. The on-going utilisation of the land will not be diminished by the presence of the single wind turbine and in fact will provide a much needed rural diversification to the local landowner.

4.2 Landscape and Visual Impacts

The proposed wind turbine lies to the east of Newhill Farmstead and is located in an area of permanent improved pasture that is currently grazed by sheep and cattle. In general the field containing the development site is bounded by post and wire fences, and some areas of woodland and shelter belts. A large scale 132kV transmission line runs in a northly direction some 960m to the west of the turbine site.

In order to fully assess the potential Landscape and Visual Impacts within a general locale and the immediate area David Jenkins Associates Ltd, Chartered Landscape Architects, were commissioned by 3R Energy Solutions Ltd on behalf of their client to carry out a Landscape and Visual Impact Assessment (LVIA) for this proposal. This LVIA is included in full in Appendix 3 with the main conclusions summarised below.

A Zone of Theoretical Visibility diagram (ZTV) was provided to Perth and Kinross Council as part of the Council Screening response. The ZTV was provided out to 10 km in all directions and shows visibility at hub height (37m) and at blade tip height (48m) and is enclosed as Appendix 7.

Zones are shown which suggest there is theoretical visibility from these locations, but as these areas can comprise woodland, hedgerows and built urban form the likelihood of views being experienced is consequently much lower. The ZTV maps also do not take account of the attenuation of visibility with distance, weather or light. As a ZTV map does not allow for screening caused by micro-topography, forestry and buildings the actual visibility of the development on the ground will be substantially less than the bare ground ZTV predicts, given the large amount of development present within areas of the ZTV showing theoretical visibility.

Utilising the information provided in PAN 45 a table has been provided below outlining the visual impacts of turbines on the surrounding environment.

General Perception of a Wind Farm in an Open Landscape (adapted from PAN 45)

Perception for turbines:	100m high	60m high	50m high	20m high
Likely to be a prominent feature	Up to 2 kms	Up to 1.2km	Up to 1 km	Up to 400m
Relatively prominent	2 - 5kms	1.2 – 3 km	1 - 2.5km	400 – 1000m
Only prominent in clear visibility – seen as part of the wider landscape	5 - 15 kms	3 – 9 km	2.5 - 7.5km	1 – 3 km
Only seen in very clear visibility – a minor element in the landscape	15 - 30 kms	9 – 18 km	7.5 - 15km	3 – 6 km

The Northern Power 100 turbine has a tip height of 47.1m and therefore at distances over 2.5 km from the site it will be only seen as part of the wider landscape, during periods of clear visibility. From distances greater than 7.5 km the turbine will be a minor element in the landscape and only seen in very clear visibility.

SNH has advised that they no longer wish to be consulted with for “*single wind turbines below 50 metres (to the tip)*” in accordance with the SNH guidance note “A Service Statement for Planning and Development”. It is considered that single turbines below 50m to tip, such as proposed in this application, have a much lesser visual impact on the environment than other turbines of a larger

scale. SNH refers developers to best practices in accordance with their guidance. This application has been prepared in line with current SNH landscape guidance including SNH Guidance March 2008 for small scale wind projects which do not require EIA.

A summary of the conclusions from the LVIA are as follows:

The proposed wind turbine lies in an undesignated area of countryside which lies within the Upland Slopes (Ochil hills) landscape type and in character area Newhill Slopes. The location of the turbine sits in an elevated position in an open undulating landform, with insignificant woodland groups or hedging. The landscape type is indicative of this predominantly agricultural landscape and has been modified over the ages by agricultural development and practice. The base line landscape character has been modified by the intrusion of a main 33KV transmission line with 3 pylons in the vicinity.

The landscape and visual impact assessment suggests that despite the visibility pattern of the bare ground ZTV the proposed wind turbine at Newhill Farm will have relatively limited and localised significant residual landscape and visual effects.

Potential impacts upon landscape character of the 10 landscape Types in the study area were assessed as, negligible to none, and not significant. Residual landscape effects arising from the proposed development of a single turbine are therefore considered to be generally localised and minimal.

It is therefore considered that significant and adverse visual effects will be restricted to the immediate vicinity of the proposed wind turbine as described.

Therefore, given the relatively remote location of the site, the scale of the turbine, the distance and orientation of rural houses, screening from the existing built industrial environment, vegetation and the distance from major view points, any visual effects are considered to be no more than minor on the surroundings.

4.3 Socio-Economic Impacts

Perth and Kinross attracts large number of tourists due to the wealth of historical sites and buildings within the area as well as offering a large number of cultural and leisure facilities. There have been various studies carried out on the effect of wind turbines on tourism resulting in the conclusion that wind turbines do not have any effect on visitor levels to an area.

Renewable UK is the trade and professional body for the UK wind and marine renewables industries. It has conducted a number of studies in relation to wind energy developments and the effects on the tourism industry. It states on its web site *“One of the common myths about wind energy is that the presence of wind turbines in the landscape is a deterrent to tourists. What is true is that a diverse range of factors influence the UK tourist industry, unrelated to wind farm development, and that where studies have been carried out investigating the impact of wind farms on tourism, the results demonstrate that the effect is negligible at worst, with many respondents taking a positive view of wind farms, and saying that it would not affect their likelihood of returning to an area, while a common finding of many other surveys is the public's desire to find out more about wind farms and renewable energy.”*

The economic benefits to the local community during construction will stem from sourcing contractors locally where possible as well as materials used in the construction on site of the turbine. The applicant lives within the area and utilises local businesses where feasible. Development of a small scale renewable energy project at Newhill Farm will bring an alternative source of income into the farming business. This will allow the applicant to explore other business opportunities by enabling rural diversification which can indirectly benefit the area.

4.4 Ecology

The turbine and its features have been sited 50 metres from any hedgerows and buildings to ensure that there are no negative impacts upon ecological species, including barn owls, birds and bats in accordance with SNH guidance. This provides adequate clearance for these species.

There have been no other ecological sites of significance identified during consultation. Further investigative work was carried out by 3R Energy Solutions Limited to identify any sites of significance on the site utilising Scottish Natural Heritage Site Link database. This database identified that there are no natural heritage sites within 4.5 km of the proposed turbine site. The nearest site is Loch Leven which is identified as a SSSI. This SSSI will not be disturbed in any way during construction or operation of the proposed turbine and therefore it is not anticipated that there will be any effects from the turbine on this site.

In summary, with the mitigation measures already undertaken to reduce disturbance to the habitat features on the site by locating the turbine blade tips 50 metres from hedgerows, mature vegetation

and other trees, it is considered that the proposed turbine will have a less than minor effect on the ecological environment provided that no hedgerows or trees are disturbed during construction.

4.5 Noise

This Section of the Supporting Statement outlines the potential for noise impacts during both construction and operation of the proposed single wind turbine. The area is rural in nature with agricultural work being carried out across the area including moving of livestock and operation of day to day farming equipment and haulage operations.

The nearest privately owned neighbour is located over 380 metres to the northwest of the proposed turbine site.

Construction will be short term, over a period of approximately one week, with work being undertaken during normal working hours between 8 am – 6 pm. All construction noise will be compliant with Council Construction noise policies to ensure there are no noise effects on surrounding neighbours.

Northern Power Systems has had an independent standard noise monitoring assessment at wind speeds of 6.0m/s, 8.0m/s and 10m/s for the Northern Power 100 Turbine. A copy of this acoustic noise assessment document is attached as Appendix 8. In summary, at a distance of 380m the sound pressure level is 31.6dB(A) for 6.0 m/s, 33.7dB(A) for 8.0 m/s and 37.3dB(A) for 10 m/s. Therefore the estimated average wind speed of 7.55 m/s will generate a sound pressure level below the recommended limits of 35dB(A) as outlined in the planning advice on renewable technologies for Onshore wind turbines 'The Assessment and Rating of Noise from Wind Farms' (ETSU-R-97) published by the former Department of Trade and Industry.

It is considered that given the distance of the turbine from privately owned properties, the background noise of the surrounding area and the small scale of the turbine there will be no detrimental noise effects which will raise concerns for Environmental Health.

4.6 Cultural Heritage

As part of our pre-application Scoping and original Planning Application, consultation was carried out with Historic Scotland to gauge whether they had any concerns regarding this proposal for two wind turbines at Bankhead Farm.

As highlighted within their response in Appendix 2, dated 15th June 2011, that *"there are no scheduled monuments, A listed buildings, or designed landscapes within the footprint of the*

proposed development. There is the possibility, given that it may affect the setting of a few scheduled monuments, although the distance is such that significant adverse impacts are unlikely. Whilst a proposed turbine is unlikely to adversely affect the setting of the above (closest) scheduled monument, I would however be keen for any planning application to include a detailed assessment (photomontage or wireframe) of the impact that the proposed turbine would have on views from Burleigh Castle near Milnathort towards the turbine site”.

Therefore a Landscape and Visual Impact Assessment (Appendix 3) was undertaken to outline if there were any views from Burleigh Castle which is located over 4 km to the south of the turbine site. In summary, the LVIA concluded that *“the magnitude of change is considered to be low due to the distance and the mitigating effect of trees groups and woodland in the middle ground. A low magnitude of change on high and medium sensitivity receptors represents a moderate and moderate/minor effect upon receptors at this viewpoint.”*

Further investigations carried out by 3R Energy Solutions Limited utilising the Royal Commission on the Ancient and Historical Monuments of Scotland PASTMAP database identified that there are no historical sites or monuments on the application site.

However, to safeguard that no cultural heritage sites are affected, the developer will ensure that should a cultural artefact or site be identified during construction, all work shall stop and Perth and Kinross Council and Historic Scotland will be contacted immediately.

It is thus considered that the effects on Cultural Heritage are therefore no more than moderate/minor for this single wind turbine development.

4.7 Shadow Flicker

Shadow flicker can cause a problem to nearby properties early in the morning or late in the evening. It is caused by the rotating blades interrupting the light from sun when the turbine is between the property and the sun. Only properties within 130 degrees either side of North, relative to the turbine can be affected at these latitudes and turbines do not cast long shadows on their Southern side in the UK. At distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low.

The rotor diameter for the Northern Power 100kW turbine is 20.7m. There are no properties within a distance of 10 times the rotor diameter i.e. 207m.

Consequently, there are no effects arising from shadow flicker from the proposed turbine location.

4.8 Aviation and Radar

Consultation was carried out with both the Civil Aviation Authority (CAA) and the Ministry of Defence (MOD). There are no commercial airports within 30 km of the proposed turbine.

MOD has confirmed that they have no concerns with the proposal (Appendix 2).

It is proposed that there are no aviation or radar issues associated with this proposal.

4.9 Telecommunications

Consultation was carried out with the main identified telecommunications providers in the area. A summary of the responses is tabled below with full responses contained in Appendix 2.

Company	Response	Outcome
Ofcom windfarmenquiries@ofcom.org.uk	Email response received 27/5/2011	Ofcom have found that there are currently no fixed link end(s) within or fixed link paths that cross the proposed turbine site.
Atkins Ltd windfarms@atkinsglobal.com	Email response received 10/6/2011	Atkins has no objection to the proposal.
Joint Radio Company (JRC) windfarms@jrc.co.uk	Email response received 01/6/2011	JRC has no concerns with the proposal at this site.

The effects on telecommunications are therefore considered to be nil and no mitigation is proposed.

4.10 Health and Safety

This Section outlines any potential Health and Safety effects to the public arising from the construction and operation of this development.

As with all construction projects, there is a potential to create hazards to construction workers, contractors and the general public. In order to mitigate potential hazards the development site will not be accessible to the general public. All those permissible on site will be competent professional staff. The site supervisor will have overall authority with regard to site safety.

High standards of Health & Safety will be maintained at all times throughout the various stages of the project. Activities will be undertaken in a manner compliant with applicable health & safety legislation and with relevant good practice as defined under applicable statutory approved codes of practice and guidance.

4.11 Carbon Balance and Peat Management

Scottish Planning Policy (SPP) recognises that ‘the disturbance of some soils, particularly peat, may lead to the release of stored carbon, contributing to carbon emissions’ (Paragraph 133).

The land area utilised for the foundations for the turbine is not recognised as peat soil and therefore no effects are noted.

4.12 Additional Issues

The chosen turbine for the proposed site is designed and manufactured to a high standard with the ability to withstand extreme weather conditions which may occur in the United Kingdom. It is through a combination of the design, manufacture and quality to the highest standard that safe operation of the turbine is ensured. The turbine has automatic safety systems which require no manual intervention thus reducing the potential for health and safety issues to occur. In high winds the turbine will automatically shut down, preventing excessive wear on the gear box and potential damage to the turbine. Another safety feature is the lightning rod which protects the turbine by safely conducting any lightning strikes directly into the earth.

5 CONCLUSION

This report, together with the accompanying plans and specifications has been prepared to assist Perth and Kinross Council Planning Officers to consider the proposed development of a single small scale Northern Power 100kW wind turbine to be located on land at Newhill Farm.

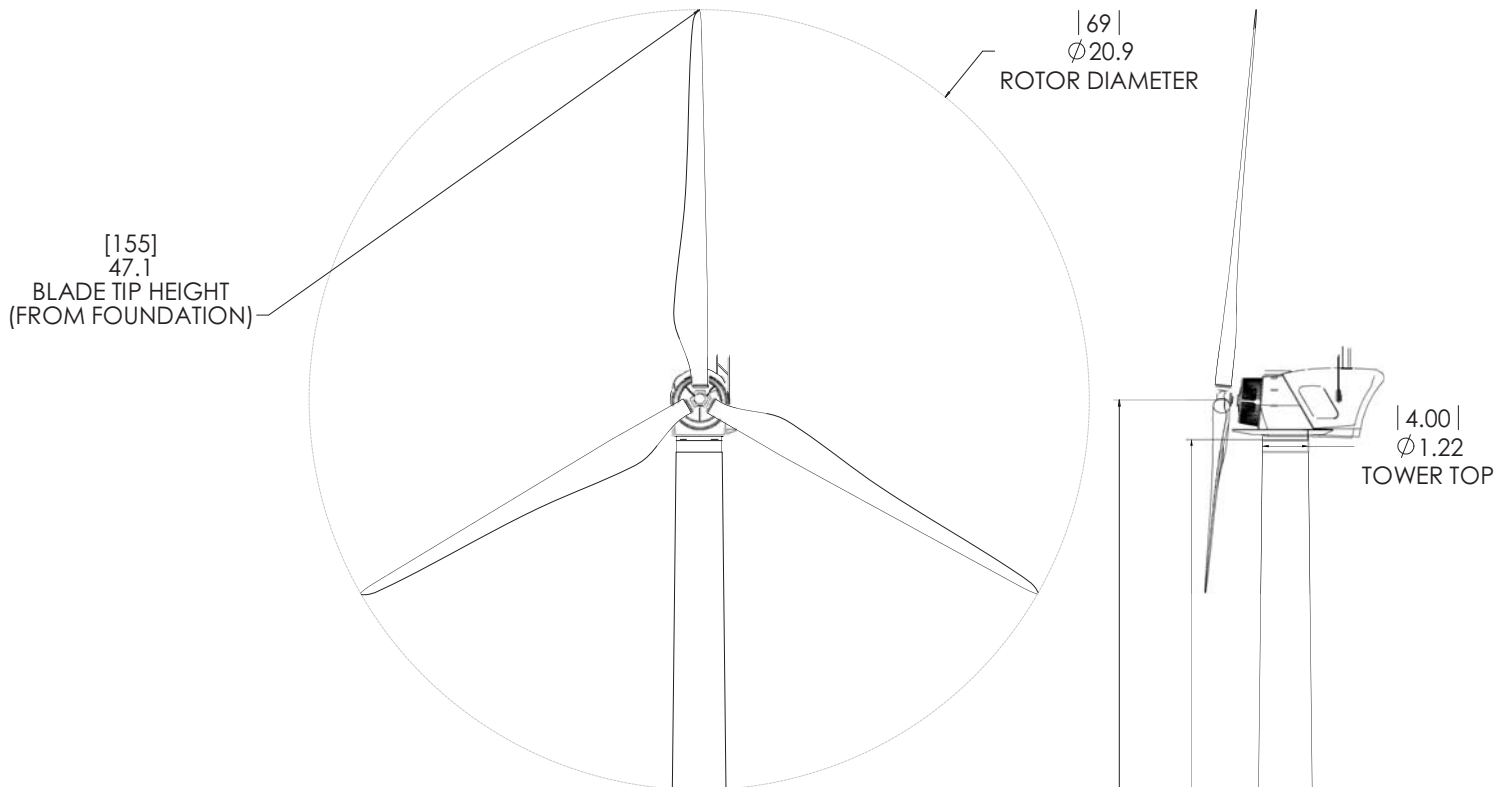
Contained within this statement is supporting information that has taken into consideration the potential impact of the turbine and the appropriate mitigation. In summary the LVIA concluded that the *“Potential impacts upon landscape character of the 10 landscape Types in the study area were assessed as, negligible to none, and not significant. Residual landscape effects arising from the proposed development of a single turbine are therefore considered to be generally localised and minimal. It is therefore considered that significant and adverse visual effects will be restricted to the immediate vicinity of the proposed wind turbine as described.”*

It is therefore considered that this is an appropriate location for the wind turbine and that any small impacts this development may have are greatly outweighed by the economic and environmental benefits detailed.

The position identified for the turbine is rural and takes advantage of prevailing south-westerly winds. The site assessment concluded that there were no alternative, better sites available. The alternative of not developing the turbine, which will amount to a CO₂ saving of approximately 191 tonnes per annum, is to continue to utilise non-renewable sources for electricity generation. This is

in direct conflict with the Scottish Government which is committed to promoting the increased use of renewable energy sources to help combat climate change. The Government wants targets to be exceeded rather than merely met, and not to be viewed as a cap on what renewables can deliver. Perth and Kinross Council has an obligation to contribute to these targets, notwithstanding its cultural heritage and the importance of tourism to the local economy. Furthermore, the Scottish Planning Policy 2010 advises that planning authorities should support wind farms in places where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed.

This development is a local development. The company investing in the project is locally based and the applicant resides and works in the area. It is hoped that the proposed turbine can be viewed as a positive symbol and a proactive approach to tackling climate change on a local level, utilising an infinite source with no detriment to the environment. This development does not prevent the current land use from continuing and provides diversification to the current business which will benefit the local community.



STRUCTURAL DESIGN IS PERFORMED ACCORDING TO IEC 61400-1, EDITION 2, "WIND TURBINE GENERATOR SYSTEMS - SAFETY REQUIREMENTS".
EXTREME WIND CONDITIONS ARE DEFINED BY IEC WTGS CLASS IIA.

TOWER LOAD CALCULATION ACCORDING TO IEC 61400-1 IS SIMILAR TO THAT DESCRIBED BY SECTION 6.5 (ANALYTICAL PROCEDURE) OF ASCE 7-05. STRUCTURAL DESIGN INFORMATION USED BY NORTHERN POWER IS ACCORDING TO IEC 61400-1 AND IS PRESENTED BELOW IN A FORM CONSISTENT WITH ASCE 7-05.

CHARACTERISTIC (UNFACTORED) LOADS AT TOWER TOP.....SEE NOTE 1

- Fxy (Shear): 51.2 kN (11.5 kip)
- Fz (Weight): -72.3 kN (-16.2 kip)
- Mxy (Overturning Moment): 35.6 kN-m (26.2 kip-ft)
- Mz (Torsional Moment): 10.3 kN-m (7.6 kip-ft)

CHARACTERISTIC (UNFACTORED) LOADS AT TOWER BASE.....SEE NOTE 2

- Fxy (Shear): 124.4 kN (28.0 kip)
- Fz (Weight): -194.1 kN (-43.6 kip)
- Mxy (Overturning Moment): 3352.8 kN-m (2471.0 kip-ft)
- Mz (Torsional Moment): 10.3 kN-m (7.6 kip-ft)

BASIC WIND SPEED, V = 51.9 m/s (116 mph).....SEE NOTE 3
AIR DENSITY, ρ = 1.225 kg/m³ (0.0765 lbm/ft³).....SEE NOTE 4
IMPORTANCE FACTOR, I = 1.0
EXPOSURE CATEGORY = C
WIND DIRECTIONALITY FACTOR, Kd = 1.0.....SEE NOTE 5
TOWER HEIGHT, h = 35.7 m (117 ft)
TOPOGRAPHIC FACTOR, Kzt = 1.0.....SEE NOTE 6
GUST EFFECT FACTOR, G = 1.0.....SEE NOTE 7
TOWER FORCE COEFFICIENT, Cf = 0.6

NOTES

1. TOWER TOP LOADS PROVIDED INCLUDE EFFECTS OF THE WIND ON THE BLADES AND NACELLE. NORTHERN POWER USED A LOAD FACTOR OF 1.35 (NOT INCLUDED ABOVE) FOR ALL AERODYNAMIC LOADS ON THE STRUCTURE ACCORDING TO IEC 61400-1.
2. TOWER BASE LOADS PROVIDED INCLUDE EFFECTS OF THE WIND ON THE BLADES, NACELLE, AND TOWER. NORTHERN POWER USED A LOAD FACTOR OF 1.35 (NOT INCLUDED ABOVE) FOR ALL AERODYNAMIC LOADS ON THE STRUCTURE ACCORDING TO IEC 61400-1.
3. BASIC WIND SPEED IS AT h=10m (33 ft). THIS VALUE IS DERIVED FROM THE EXTREME WIND SPEED AT HUB HEIGHT ACCORDING TO IEC 61400-1. $V_{e50} = 59.5$ m/s (133 mph), USING A POWER LAW EXPONENT CONSISTENT WITH EXPOSURE C.
4. STANDARD AIR DENSITY IS NOT EXPLICITLY IDENTIFIED IN SECTION 6.5 OF ASCE 7-05. IT IS IMPLICIT IN THE VELOCITY PRESSURE CALCULATION, EQUATION 6-15.
5. A DIRECTIONALITY FACTOR IS NOT USED BY NORTHERN POWER.
6. EFFECTS OF LOCAL TOPOGRAPHY ON THE WIND ARE NOT ACCOUNTED FOR IN THIS CALCULATION. THEY MUST BE CONSIDERED DURING PROJECT PLANNING AND SITE REVIEW.
7. THE TOWER LOADS LISTED ARE PREDICTED USING A COMPLETE AERO-ELASTIC SIMULATION WHICH ACCOUNTS FOR DYNAMIC INTERACTIONS OF THE STRUCTURE AND THE APPLIED LOADS. AN ADDITIONAL GUST EFFECT FACTOR (E.G. ACCORDING TO SECTION 6.5.8 OF ASCE 7-05) IS THEREFORE NOT USED BY NORTHERN POWER.
8. SEISMIC ACTIONS ARE NOT ACCOUNTED FOR IN THIS CALCULATION. THOUGH TYPICALLY NON-GOVERNING, THEY MUST BE CONSIDERED DURING PROJECT PLANNING AND SITE REVIEW.
9. THE VALUES STATED IN METRIC (SI) UNITS SHALL BE REGARDED AS THE STANDARD. THE INCH-POUND (IP) UNITS SHOWN IN PARENTHESES SHALL BE FOR REFERENCE ONLY.
10. NORTHERN POWER IS CONTINUALLY DEVELOPING PRODUCT UPGRADES, MODIFICATIONS, AND IMPROVEMENTS. AND AS A RESULT RESERVES THE RIGHT TO CHANGE OR ALTER THESE SPECIFICATIONS AT ANY TIME. REFER TO DOCUMENT A00281 "NORTHWIND100 GENERAL SPECIFICATION" AND DOCUMENT A00298 "NORTHWIND100 APPLICATION REQUIREMENTS" FOR FURTHER INFORMATION.

TOWER SECTION 3
WALL THICKNESS=8mm
STEEL GRADE :
GB Q235B (CHINA)
Fy= 235 N/mm² MINIMUM
Fu= 370-500 N/mm²

TOWER SECTION 2
WALL THICKNESS=8mm
STEEL GRADE :
GB Q235B (CHINA)
Fy= 235 N/mm² MINIMUM
Fu= 370-500 N/mm²

TOWER SECTION 1
WALL THICKNESS=10mm
STEEL GRADE :
GB Q345D (CHINA)
Fy= 345 N/mm² MINIMUM
Fu= 470-630 N/mm²

121 | 36.7
HUB TO FOUNDATION

117 | 35.7
TOWER HEIGHT

DRAWING NUMBER: 1006225



Northern
POWER SYSTEMS

29 Pitman Road Barre, VT
05641 USA
www.northernpower.com

This drawing and specifications contained hereon is proprietary and confidential to Northern Power and is loaned to facilitate bidding, construction, fabrication and/or execution of requirements stated and is to be surrendered upon request or completion of services. It may not be reproduced or transferred to other documents or discussed to others without written permission from Northern Power.

NORTHWIND 100
100kW WIND TURBINE
HUB HEIGHT: 37m
ROTOR DIAMETER: 21m

SCALE 1:50
WHEN PRINTED ON ISO A0

ALL DIMENSIONS IN METERS AND [FEET]

COPYRIGHT 2009 NORTHERN POWER SYSTEMS



REV	DESCRIPTION	DATE	ENG	CHK	APR
B	RELEASE FOR CUSTOMER USE, ADD TOWER SECTION NOTES	15JUL09	DAH	CBC	WEN
A	RELEASE FOR CUSTOMER USE	30JUN09	CBC	WEN	CAM

383



Northwind[®] 100 Wind Turbine General Specifications

A01465 Rev D

Contents

1	Introduction.....	3
2	Environmental Specifications	5
3	Power Curve and Energy Production.....	6
4	Electrical Specifications	7
4.1	Section Overview	7
4.2	Turbine Output Specifications	7
5	Disclaimers and Reservations	8

1 Introduction

This document presents key specifications for the Northwind[®] 100 wind turbine with a 21 meter rotor and 37 meter tower. Specifications for the Northwind 100 are provided in Table 1, with certain details deferred to the appropriate section(s) of this document. Where applicable, alternative specifications are given for the Northwind 100 Arctic wind turbine.

Table 1 Northwind 100 General Information

General Configuration	
Model	Northwind [®] 100
Design Class	IEC WTGS IIA ¹ (Standard Turbine 50/60 Hz) IEC WTGS S (Arctic Turbine)
Drive Train	Direct drive (gearless architecture)
Generator Type	Permanent magnet - synchronous
Power Regulation	Variable speed; stall control
Orientation	Upwind
Yaw Control	Active
Number of Blades	3
Rotor Diameter	21 meters (69 feet)
Performance	
Rated Electrical Power at standard conditions	100 kW
Approximate Rotor Speed	60 RPM
Cut-in Wind Speed	3.5 meters/second (7.8 miles/hour)
Rated Wind Speed	15 meters/second (34 miles/hour)
Cut-out Wind Speed	25 meters/second (56 miles/hour)
Noise	55 dBA at 40 meters (55 dBA at 130 feet)
Control System	
Controller Type	DSP-based multi-processor embedded platform
Monitoring System	SmartView [®] Monitoring System

¹ International Electrotechnical Commission Wind Turbine Generating System, 61400-1 ed2

Safety System	Designed to IEC 61400-1 ed2, redundant braking	
Communications Protocol	ModbusTCP	
Tower System		
Approximate Hub Height	37 meters (120 feet)	
Tower Configuration	3 section tubular monopole, nested for shipping	
Approvals and Conformity	60 Hz Turbines (Approved to)	50 Hz Turbines (Conformance with)
	UL 1741 UL 1004-4 CSA C22.2 107.1-01 CSA C22.2 100-04	EN 60204-1 EN 12100-1, 2 EN 6100-6-2:2005 EN 6100-6-4:2007N
Unit Mass		
Nacelle and Rotor Mass	7,200 kilograms (15,900 pounds)	
Tower Mass	14,000 kilograms (30,900 pounds)	
Standard Conditions	60 Hz Turbines	50 Hz Turbines
Elevation	Sea Level	
Air Temperature	15 degrees Celsius (59 degrees Fahrenheit)	
Air Density	1.225 kilograms per cubic meter (Specific Volume: 13.08 cubic feet per pound)	
Class S Conditions (Arctic Turbine)	60 Hz Turbines	50 Hz Turbines
Elevation	Sea Level	
Air Temperature	-10 degrees Celsius (14 degrees Fahrenheit)	
Air Density	1.34 kilograms per cubic meter (Specific Volume: 11.95 cubic feet per pound)	

2 Environmental Specifications

This section provides the environment specifications for the Northwind 100 turbine.

Table 2 Ambient Turbine Conditions

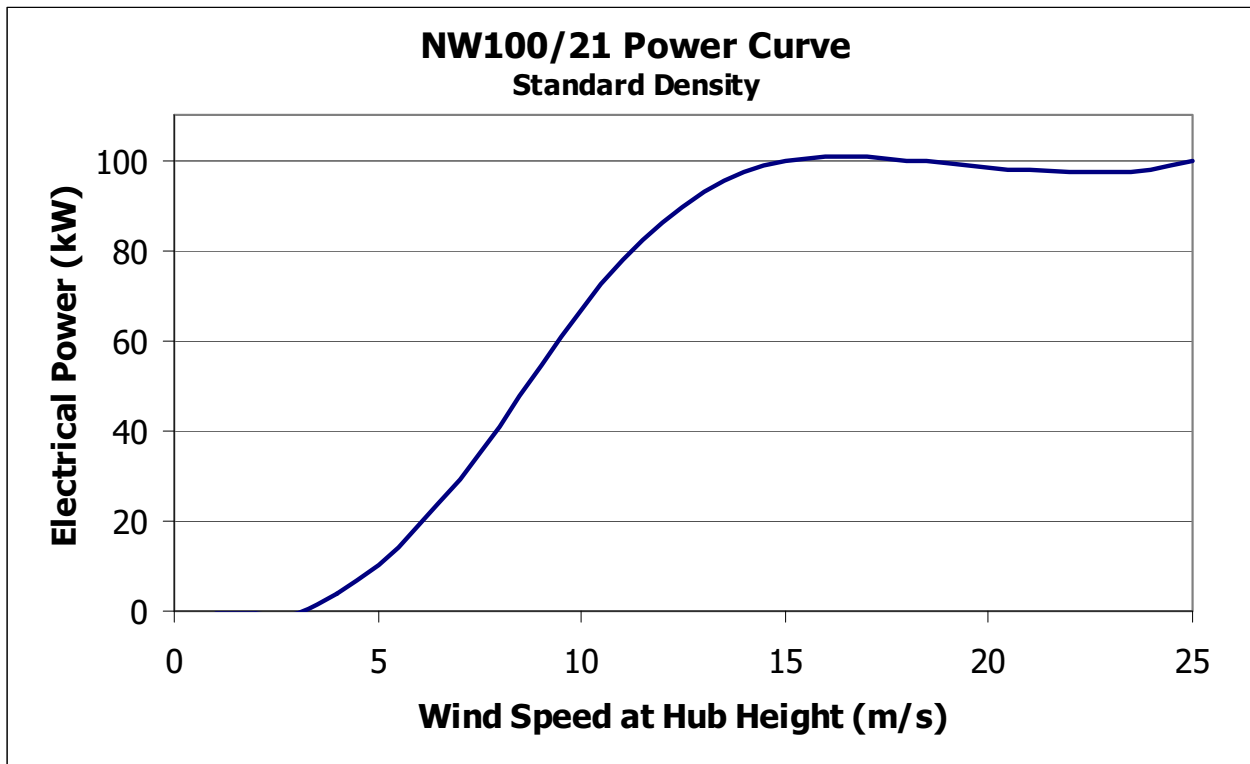
	Standard Turbine	Arctic Turbine
Operational	-20°C to 50°C (-4 °F to 122°F)	-40 °C to 50°C (-40 °F to 122°F)
Storage	-40°C to 55°C (-40 °F to 131°F)	-40°C to 55°C (-40 °F to 131°F)
Maximum Elevation	1,000 meters above sea level	1,000 meters above sea level

Table 3 IEC WTGS² Conditions

Parameter	Class IIA	Class S (Arctic Turbine)
Annual Average Wind Speed at hub height, V_{avg} (maximum annual average)	8.5 meters/second (19 miles/hour)	8.3 meters/second (18.5 miles/hour)
Reference Wind Speed at hub height, V_{ref} (10-minute average)	42.5 meters/second (95 miles/hour)	40.6 meters/second (90.5 miles/hour)
Extreme Wind Speed at hub height (3-second gust, 50-year recurrence period) V_{e50}	59.5 meters/second (133 miles/hour)	56.0 meters/second (125 miles/hour)
Characteristic turbulence intensity at 15 m/s, I_{15}	0.18 (defined by IEC 61400-1 ed2)	0.18 (defined by IEC 61400-1 ed2)
Design lifetime	20 years	20 years

² International Electrotechnical Commission Wind Turbine Generating System, 61400-1 ed2

3 Power Curve and Energy Production



Power Curve Data				
Vm (m/s)	Power (kWe)		Vm (m/s)	Power (kWe)
			14	97.3
			15	100.0
4	3.7		16	100.8
5	10.5		17	100.6
6	19.0		18	99.8
7	29.4		19	99.4
8	41.0		20	98.6
9	54.3		21	97.8
10	66.8		22	97.3
11	77.7		23	97.3
12	86.4		24	98.0
13	92.8		25	99.7

Annual Energy Production	
Annual Average Wind Speed (m/s)	Annual Output (kWh)
4.0	77,000
4.5	110,000
5.0	145,000
5.5	183,000
6.0	222,000
6.5	260,000
7.0	298,000
7.5	334,000
8.0	368,000
8.5	400,000
Rayleigh Distribution	

The annual energy production shown is calculated at standard conditions with a 100% availability factor.

4 Electrical Specifications

4.1 Section Overview

This section defines the electrical specifications for the Northwind 100 wind turbine. Northwind 100 wind turbine scope of supply includes turbine equipment up to and including the fused disconnect and junction box located at the bottom of the tower. Specifications herein refer to turbine output at the base of the tower.

4.2 Turbine Output Specifications

These specifications refer to the base of the tower and the fused disconnect

Table 4 Northwind 100 Output Specifications

	60 Hz Turbines	50 Hz Turbines
3-Phase Output Voltage	480 VAC (+/-10%)	
Nominal Active Power Output	100 kW	
Maximum Reactive Power	+/-45 kVAR	

5 Disclaimers and Reservations

Weather and altitude beyond standard conditions may affect system performance. High turbulence can reduce system performance.

The turbine controls may safely stop operation or delay startup when ambient conditions appear to be within specification. Various safety, environmental and situational variables will cause the turbine's control system to behave this way.

Following periods of grid outage and/or extended low temperatures, a time allowance for warm-up must be expected; the time will vary based on ambient conditions and the duration of the conditions.

A variety of conditions can affect turbine performance, including but not limited to maintenance, site conditions, climatic conditions and electrical grid conditions. These general specifications do not guarantee performance or operability at a particular site.

The Northwind 100 Arctic wind turbine includes additional heaters, which may increase parasitic load at lower ambient temperatures.

Turbines may be installed in coastal environments, but should not be subjected to sea spray. The lifetime maintenance costs of a turbine will vary based on site conditions, including wind, precipitation, temperature, and corrosivity of the air. Corrosivity of the air varies based on the local atmospheric conditions at the site including time of wetness, acidity, and salinity.

The values stated in metric (SI) units shall be regarded as the standard. The inch-pound (IP) units shown in parenthesis shall be for reference only. Northern is continually developing product upgrades, modifications and improvements, and as a result reserves the right to change or alter these specifications at any time.

Engineered to be Quiet

The Northern Power 100 turbine is designed to be quiet. The permanent magnet direct drive architecture eliminates many sources of noise common in gearbox designs.

Source of Noise	NPS 100	Gearbox turbine
Gearbox	No	Yes
Downwind turbine "tower thump"	No	downwind designs
Hydraulic pumps	No	Some
Cooling fans	No	Some
Generator	Low speed	High speed
Blades	Yes	Yes
Power converter	Yes	Yes
Yaw motors	Yes	Yes
Bearings	2	18 or more

"Direct drive turbines are the latest design concept in turbine technology. Simply put, these machines have no gearbox or drive train, and consequently no high speed mechanical (or electrical) components. Direct drive turbines are therefore much quieter than gearbox machines."

— British Wind Energy Association



"The Mountain View Grand Resort and Spa is an experience in tranquility, rejuvenation and family fun—Northern Power's quietly spinning blades are a peaceful addition to the scenic backdrop of our eco-friendly resort."

— Chris Diego, Managing Director Mountain View Grand Resort & Spa

Supported by Research grants from NASA, DOE & NSF.



Independently Measured Noise Data

The noise measurements for the Northern Power 100 were conducted by DNV, one of four worldwide independent assurance bodies, in accordance with the IEC61400-11 standard (Acoustic Noise Measurement Techniques for Wind Turbine Generators). Measured sound power levels at source, as well as the resulting sound pressure values at various distances, are illustrated in the following table:

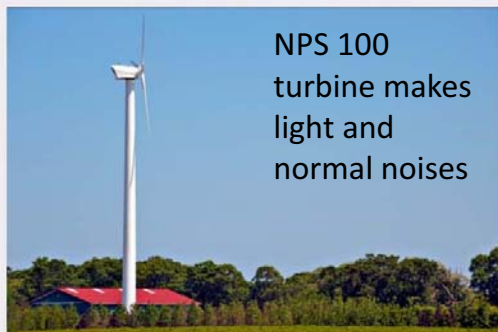
NPS 100 Sound Pressure Level Chart dB(A)

Distance from tower base	Feet	Meters	Sound Pressure Level dB(A) at wind speed (m/s at 10m ref. height):		
			6 m/s wind (19.7 mph)	8 m/s wind (26.2 mph)	10 m/s wind (32.8 mph)
66	20		52.4	54.5	58.1
131	40		50.1	52.2	55.8
197	60		47.8	49.9	53.5
262	80		45.8	47.9	51.5
328	100		44.0	46.1	49.7
394	120		42.5	44.6	48.2
459	140		41.2	43.3	46.9
525	160		40.0	42.1	45.7
591	180		38.9	41.0	44.6
656	200		37.9	40.0	43.6
722	220		37.0	39.1	42.7
787	240		36.2	38.3	41.9
853	260		35.4	37.5	41.1
919	280		34.7	36.8	40.4
984	300		34.0	36.1	39.7
1,050	320		33.3	35.4	39.0
1,115	340		32.7	34.8	38.4
1,181	360		32.1	34.2	37.8
1,247	380		31.6	33.7	37.3
1,312	400		31.0	33.1	36.7
1,378	420		30.5	32.6	36.2
1,444	440		30.0	32.1	35.7
1,509	460		29.5	31.6	35.2
1,575	480		29.1	31.2	34.8
1,640	500		28.6	30.7	34.3

Key Sound Data

Background wind noise level	45.6 dB(A)	47 dB(A)	48.1 dB(A)
Distance at which a turbine matches background noise	81.9 m	89.6 m	121.6 m
35 dB(A) distance	270 m	335 m	470 m
Acoustic power level at the turbine	93.1 dB(A)	95.2 dB(A)	98.8 dB(A)





NPS 100
turbine makes
light and
normal noises



SPL dB(A)	Category	Examples
10 to 40	light noises	wind in the leaves, desert, quiet apartment
40 to 60	normal noises	calm office, normal conversation
60 to 80	irritating noises	street traffic, TV
80 to 100	disturbing noises	train passing, loud music
100 to 120	pain threshold	pneumatic drill, jet aircraft taxiing

What is sound?

- Sound is rapid changes in air pressure, or vibrations, which are sufficiently strong to be heard. The vibrations also need to be within the frequency range of the human ear – not high pitched dog whistles or low infrasound. Our ears are extraordinary in that they can listen to both silence and a jet engine, which is 100 billion times louder.

What is noise?

- Noise is unwanted sound. There are some sounds generally accepted as noise like jet engines but there is a aspect of personal preference. For example, parents and children may disagree about what is music and what is noise. Similarly, people may react differently to wind turbine sounds.

How do we measure sound?

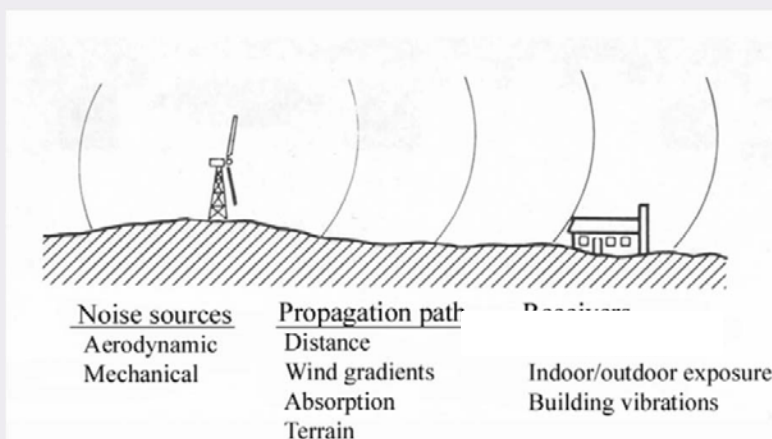
- We measure the strength of the changes in sound pressure, what we commonly think of as loudness, in decibels (dB). As we need to measure sound that ranges from silence to the roar of jet engines, we decibels is a logarithmic scale. That means that for every 10 units higher on the scale, the sound is 10 times more powerful. 60dB is 10 times louder than 50dB and 70dB is 100 times more powerful than 50dB (10x10).

What is background noise and why does it matter?

- Background noises are environmental noises such as waves, traffic noise, agricultural equipment, people talking, bioacoustics noise from animals or birds and mechanical noise from devices such as air conditioning, power supplies or motors. Background noise can mask some or all of the noise of a wind turbine, even as wind speed increases.

What role does distance play?

- You know from your own experience that distance affects the intensity of sound -- if you are far away, the sound power is greatly diminished. In addition to distance, sound from wind turbines is affected by wind gradients, absorption and terrain. Proper siting can ensure a successful project for turbine owners and neighbors.



As sound travels from its source, sound pressure level reduces due to:

Ground cover

- Ground cover – trees vs fields
- Terrain – hills vs plains

Molecular absorption

- Air absorbs sound

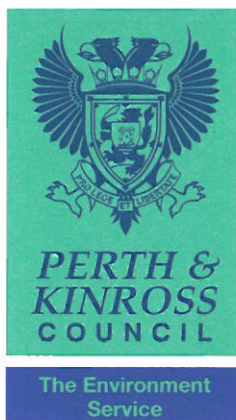
Distance

- 6dB per doubling of the distance

**Delayed Office Opening for
Employee Training**

*This Office will be closed from 8.45 am –
11.00 am on the 1st Thursday of each
month*

3R Energy Solutions
FAO Cole Burmester
Hoodshill
Fossoway
Kinross
KY13 0PW



RECEIVED
29 JUN 2011

Planning and Regeneration
Head of Service **David Littlejohn**

Pullar House 35 Kinnoull Street
Perth PH1 5GD
Tel 01738 476500 Fax 01738 475310

Contact: John Russell
Direct Dial: 01738 475346
E-mail: JRussell@pkc.gov.uk

Our ref 11/00705/PREAPP

Your ref N/A

Date 27 June 2011

Dear Sir,

Request for Screening Opinion 11/00705/PREAPP: Erection of a wind turbine with a hub height of 37 metres and overall blade tip height of 48 metres at Newhill Farm, Glenfarg.

As a schedule 2 Development under The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 your proposal is required to be screened to determine whether an Environmental Statement is required, and whether this should form part of any formal planning application.

This process has been undertaken and I can inform you that the Council holds the view that an Environmental Statement **is not** required in this instance. The Council has taken cognisance of Scottish Government's and The European Commission's screening checklist and determined that the proposed development is unlikely to have significant effects on the environment by virtue of factors such as its size, nature or location. A copy of the Council's Screening Opinion is attached for your perusal.

Please be advised that competent supporting information will be required to support any forthcoming application. Scottish Natural Heritages document 'Natural Heritage assessment of small scale wind energy projects which do not require formal Environmental Impact Assessment (EIA)' will be of particular relevance which is available by following the attached link <http://www.snh.gov.uk/docs/C206956.pdf>.

I hope the above is of assistance.

Yours faithfully



John Russell
Planning Officer
Development Management



Environmental Impact Assessment (Scotland) Regulations 1999

EIA SCREENING OPINION

Part I - Particulars of Screening Request/Planning Application

Applicant's Name & Address	Agent/Applicant's Name & Address
Not Known	3R Energy Solutions FAO Cole Burmester Hoodhill Fossoway Kinross KY13 0PW

Date Request/Application received	Application Ref. (if applicable)
31 May 2011	11/00705/PREAPP

Site Location	Description of Proposal
Land at Newhill Farm Glenfarg	Erection of a wind turbine with a hub height of 37 metres and overall blade tip height of 48 metres.

Part 2 - Particulars of Screening Decision

Perth and Kinross Council hereby give notice, in accordance with the provisions of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 that the development referred to in Part I above is **unlikely** to have significant effects on the environment. The Council's reasons for reaching this conclusion are set out below.

1. Does the development fall within schedule 2, and if it does, does the development meet the relevant thresholds and criteria in schedule 2?

The relevant extract from the table in schedule 2 is set out below and highlights the thresholds and criteria for the Energy Industry:

3. Energy industry

(i) Installations for the harnessing of wind power for energy production (wind farms).	(i) The development involves the installation of more than 2 turbines; or (ii) the hub height of any turbine or height of any other structure exceeds 15 metres.
--	---

This proposal qualifies as a Schedule 2 Development under the above regulations, as the proposal is for the erection of a turbine with the hub height exceeding 15 metres in height.

2. Does the development fall within a sensitive area?

In terms of the EIA Regulations "sensitive area" means any of the following:

Site of Special Scientific Interest
Land subject to Nature Conservation Orders
International Conservation Sites
National Scenic Areas
World Heritage Sites
Scheduled Ancient Monuments
National Parks

Circular 03/2011 advises that the likely environmental effects of Schedule 2 development will often be such as to require EIA if it is located in or close to sensitive sites. The circular advises that other statutory and non-statutory designations may also be relevant in determining whether EIA is needed, such as local landscape or biodiversity designations.

The site identified within your screening request lies within a non-statutory designation, namely:

- Area of Great Landscape Value associated with Kinross-shire.

A number of statutory designations also lie in proximity to the site:

- Loch Leven – Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Ramsar Site, National Nature Reserve.

3. Is the development likely to have a significant effect(s) on the environment?

Paragraph 39 of Circular 3/2011 sets out the considerations that are required to be taken into account in determining whether EIA is needed, it states:

"The regulations reflect the requirement in the Directive to determine whether the proposed development is likely to have a significant effect(s) on the environment by virtue of factors such as 'its nature, size or location'. The word 'or' suggests the EIA may be required by reason of just one of these factors."

Paragraph 40 states that:

"For many types of development, perhaps the majority, it will be necessary to consider the characteristics of the development in combination with its proposed location in order to identify the potential for interactions between a development and its environmental effects. In determining whether a particular development is likely to have such effects, authorities must take account of the selection criteria in Schedule 3 in Schedule 3 of the Regulations (Annex A of the Circular). Three categories of criteria are listed:

- *Characteristics of Development*
- *Location of development*
- *Characteristics of the potential impact"*

The Scottish Government and The European Commission have prepared checklists. I have taken cognisance of these checklists in the assessment of the characteristics and location of the development, the potential impacts upon the environment are identified below.

Characteristics of the development

- The structure is high in scale in comparison to surrounding landscape.
- The development will result in further consequential development (requirement to connect to the grid).
- There may be a potential cumulative impact with other energy developments within the area (power line to the west of the site) (other consented wind turbines/windfarms or sites where screening opinions have been issued).
- There may be electromagnetic interference with nearby sensitive equipment.
- There may be noise from the development associated with the construction and operation of the infrastructure. There may be associated noise with construction and operational traffic.
- There may be escape of pollutants from construction activity into surrounding watercourses (for example Newhill Burn).
- Potential physical changes from construction and operation of the development will occur, instillation of energy infrastructure will result in a change to the existing land use for the lifetime of the development

until decommissioning. Development is likely to include pre-construction investigation, excavation, construction works, temporary site for housing workers/ materials, new diverted transmission lines, decommissioning and restoration works.


Location of the Development.

- The existing landuses on and around the site could be affected by the development, for example homes, gardens, recreation, agriculture tourism, water catchment.
- The development is located in a predominantly undeveloped area.
- There is the potential for an impact on surface waters, agriculture and tourism.
- There may be effect on the landscape value of the area (Area of Great Landscape Value) the site is also in close proximity to a Listed Building and its setting could be affected (Langside, Item No 24, Arngask Parish).
- There are known protected species in close proximity to the site (Red Squirrels).
- There are watercourses in close proximity of the site (Newhill Burn).
- The development would be visible from the local road network which is used to access recreational facilities in this area.

Characteristics of the potential impact

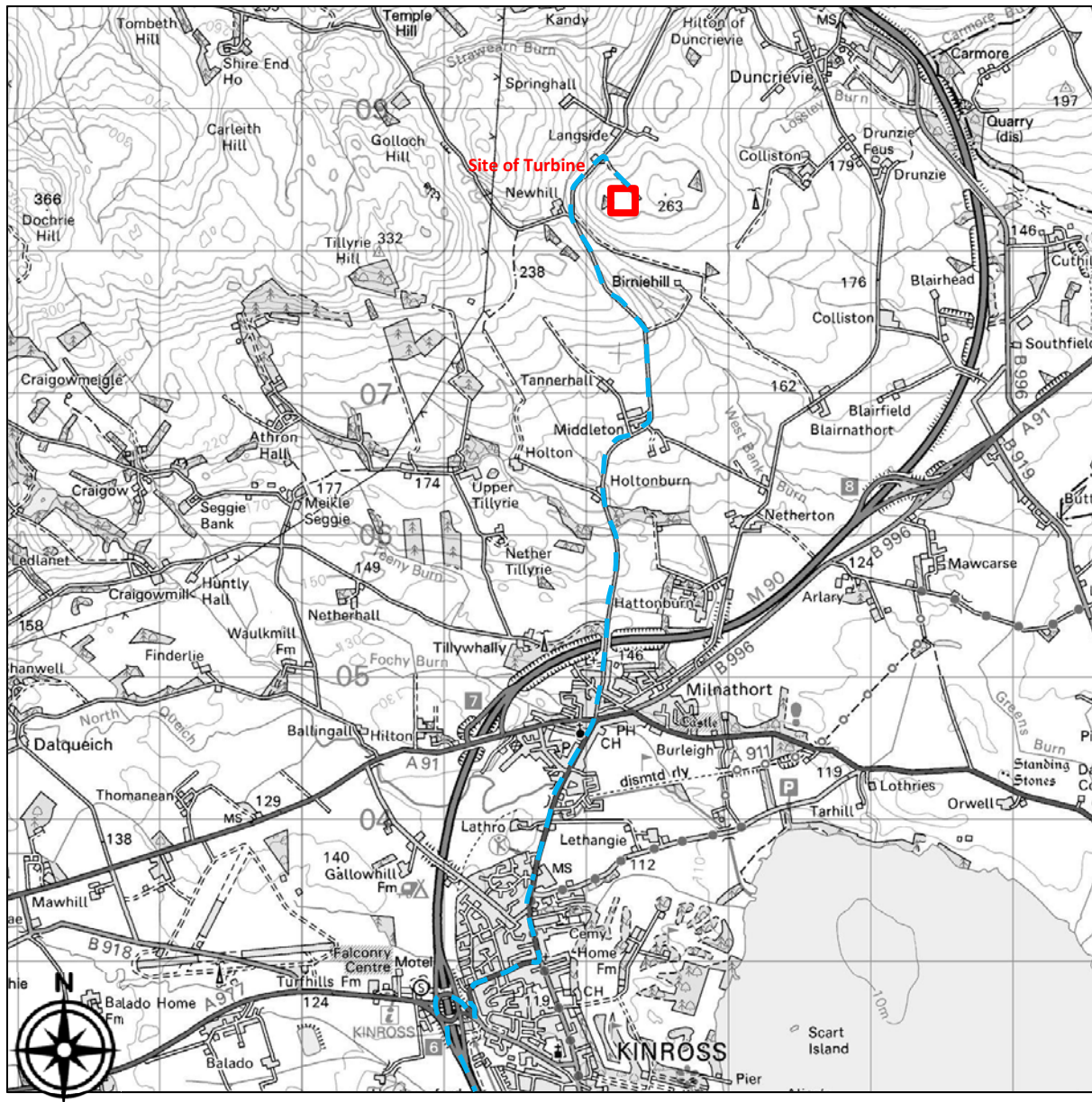
I have evaluated the potential significance of each environmental effect identified above using the second checklist of Annex B. This checklist is designed to help decide whether the interactions identified between the development and location are likely to be significant.

It is the opinion of the planning authority having taken account of the characteristics of the potential impact of the development, in terms of extent, transboundary nature, magnitude, complexity, probability, duration, frequency and reversibility that it is unlikely to have a significant effect on the environment. A detailed study through an **EIA is therefore not needed**. This Screening Opinion should not be taken as implying that the planning authority considers this to be an acceptable development in this location.


Development Quality Manager
The Environment Service
Perth and Kinross Council

Dated: 27 June 2011

Appendix 6: Transportation Statement for the Erection of a Single 100kW Wind Turbine at Newhill Farm



Scale: 1:50,000

Drawing Ref: 364/003

Drawn: CB / 10.11.11

This statement relates to the installation of a small scale single Northern Power 100kW wind turbine at Newhill Farm, Glenfarg, Perth and Kinross, PH2 9QN.

Site Access

Access to the site, as shown by the blue dashed line above, would be from the main M90 before taking the A922 exit at Kinross through Milnathort onto minor roads to Newhill Farm. Existing farm tracks will be utilised across the site.

It is very important to note that the unique selling point of the Northern Power 100, the chosen turbine for this site, is that the turbine can be delivered in two standard sized 40 foot shipping containers. These shipping containers can be delivered by standard 8 wheel HGV's. The weight and size of the containers is further outlined in the attached document. In summary the document states that the maximum gross weight (including the containers) is 14 tonnes.

Newhill Farm, as part of its normal farming operation receives HGV vehicles along the proposed route as outlined above. Therefore there are no requirements for associated road improvements.

Size and Type of Vehicles

Please refer to the Northern Power Systems Access Roads and Crane Platforms information below for further detail on loads and weights. Indicative loads are as follows:

Material	Number of Loads	Vehicle Type	Comments
37m Turbine Tower – 3 nested sections on one load (12m total length)	1	Standard 40 foot Shipping Container delivered by Standard HGV. 14 tonne gross weight.	Only one return traffic movement required of tower load for the turbine.
Nacelle (includes power cable and shipping skid), 3 x 10m turbine blade, Rotor hub, Misc. Parts.	1	Standard 40 foot Shipping Container delivered by Standard HGV. 12.1 tonne gross weight.	Only one return traffic movement required to turbine site for the turbine.
Ready mix concrete	8 - 10	6 - 8m ³ Standard Concrete Mixers. No heavier than 6.5 tonnes per truck.	Turbine base requires approximately 68m ³ of concrete. Material will be sourced locally where possible.
Crane	1	Single Crane with a lifting capacity of 80 tonnes.	Only one return traffic movement required to turbine site.
Misc. Parts	1	Standard HGV	Rebar and misc. items as required.
Workforce	5 personnel	1/2 x 4wd	Installation takes approximately 5 - 7 working days for crane operator, a foreman, operating engineer and two riggers.

Traffic to the turbine site will be spread over the construction period with the exception of the concrete loads which are likely to be delivered within one working day.

Maintenance

The turbine will be serviced annually by a certified technician over the course of one day with only one return vehicle movement in a 4 x 4 standard vehicle. This maintenance will not affect any operations of the farm or impact upon any other concerns. No specialised equipment or conditions will be required for this maintenance to be carried out.

Northwind® 100 Wind Turbine Logistics & Installation Guidelines

W00188 REV C MAY 2009



CONTENTS

1	INTRODUCTION	3
2	TRANSPORT (BY OTHERS)	3
2.1	COMPONENTS FOR TRANSPORT	3
2.2	TOWERS FOR TRANSPORT	3
2.2.1	30M TOWER, 3 NESTED SECTIONS	3
2.2.2	37M TOWER, 3 NESTED SECTIONS	4
3	FOUNDATION (BY OTHERS)	4
3.1	PURPOSE	4
3.2	SUMMARY OF FOOTING PARAMETERS	4
4	INSTALLATION (BY OTHERS)	5
4.1	CRANE LIFTS	5
4.1.1	30M TOWER	5
4.1.2	37M TOWER	5
5	ELECTRICAL INTERCONNECT (BY OTHERS)	6
6	COMMISSIONING (BY NORTHERN)	6
7	REFERENCE DOCUMENTS	6

1 INTRODUCTION

This document describes the work associated with installation of the Northwind 100 wind turbine. It is meant to serve as a guide for estimating and planning purposes.

2 TRANSPORT

2.1 Components for transport

Component	Crate Mass (kg)	Crate Mass (lb)	Crate Exterior Dimensions LxWxH (m)	Crate Exterior Dimensions LxWxH (in)
Nacelle (<i>includes power cable and shipping skid</i>)	6000	13200	4.2 x 1.9 x 2.1	165 x 75 x 83
10m Blade (3)	1800	3960	10.4 x 1.14 x 1.10	409 x 45 x 43
Rotor Hub	290	640	0.61 x 0.91 x 0.91	24 x 36 x 36
Misc. Parts	150	325	1.22 x 0.61 x 0.91	48 x 24 x 36
<i>All of the above in a 40' ISO Shipping Container (gross; includes container)</i>	12100	26600		

2.2 Tower for transport

2.2.1 30m Tower, 3 nested sections

Tower Section	Mass		Length		OD-large		OD – small	
	Kg	Lb	M	ft	m	in	m	In
Lower	6500	14300	11.7	38.4	2.235	88.0	1.820	71.7
Middle	4400	9680	10.0	32.8	1.820	71.7	1.470	57.9
Upper	2900	6380	7.3	24.0	1.470	57.9	1.220	48.0
<i>Nested 30m Tower</i>	13800	30360	11.8	38.7	2.235	88.0	1.820	71.7

2.2.2 37m Tower, 3 nested sections

Tower Section	Mass		Length		OD - large		OD – small	
	kg	Lb	m	ft	m	in	m	in
Lower	6200	13640	11.9	39.0	2.000	78.7	1.740	68.5
Middle	4200	9240	11.9	39.0	1.740	68.5	1.480	58.3
Upper	3600	7920	11.9	39.0	1.480	58.3	1.220	48.0
Nested 37m Tower	14000	30800	12.0	39.4	2.000	78.7	1.740	68.5

3 FOUNDATION (BY OTHERS)

3.1 Purpose

The foundation shall be designed according to the requirements defined in A00298, Northwind 100 Application Requirements. It is expected that a traditional concrete spread footing foundation design will be appropriate for the majority of sites. Additional information regarding spread footing foundation design is provided below for use by contractors and engineers for estimating purposes. This information is not intended to replace the need for a site-specific geotechnical investigation or footing design, which are required per local building codes. It is rather intended to provide enough information to support a rational cost estimate with little effort. A design for the specific site conditions is virtually guaranteed to produce a lower-cost foundation design.

3.2 Summary of Footing Parameters

The following table shows dimensions and quantities for octagonal concrete spread footings sized for soil of five different bearing pressures from 1,500 psf to over 4,000 psf.

Allowable Soil Pressure (lb/ft ²)	Side (ft)	Area (ft ²)	Depth (ft)	Volume (yd ³)	Resteel (lb)
1,500	14	946	3	105	20,000
2,500	12	695	3	77	16,000
3,000	12	695	3	77	16,000
4,000	12	695	3	77	16,000
4,000+	11	584	3	65	14,000

4 INSTALLATION (BY OTHERS)

Installation takes approximately five working days for an equipment erection crew consisting of a crane, a foreman, an operating engineer, and two riggers. Refer to W00308, Northwind 100 Installation Instructions for the complete procedure and for a list of tools and other equipment required for installation.

1. Tower: Un-nest three tower sections. Install ladder and platform into each tower section.
2. Grout: Place bottom tower section onto foundation bolts. Level and grout tower base flange.
3. Rotor: Assemble three blades and hub on ground. Pitch each blade to required setting.
4. Nacelle: Minor preparations made on ground. Install met-mast.
5. Erection: Consists of lifts described below, with bolted connections made during each.

4.1 Crane Lifts

4.1.1 30m Tower

Lifts	Lift Weight		Hook Height	
	Kg	lb	m	Ft
30m Tower - Lower Section	6500	14300	15	49
30m Tower - Middle Section	4400	9680	25	82
30m Tower - Upper Section	2900	6380	32	105
Nacelle <i>(includes power cable)</i>	5800	12760	33	108
21m Rotor Assembly	1400	3080	33	108

4.1.2 37m Tower

Lifts	Lift Capacity		Hook Height	
	Kg	lb	m	Ft
37m Tower - Lower Section	6200	13640	15	49
37m Tower - Middle Section	4200	9240	27	89
37m Tower - Upper Section	3600	7920	39	128
Nacelle <i>(includes power cable)</i>	5800	12760	40	131
21m Rotor Assembly	1400	3080	40	131

5 ELECTRICAL INTERCONNECT (BY OTHERS)

Refer to A00298, Northwind 100 Application Requirements. Installer shall terminate the cables from the transformer to the junction box located inside the tower base.

6 COMMISSIONING (BY NORTHERN)

Commissioning will be completed by a Northern Power technician in 2-3 days (procedure is weather-dependent), according to the Northwind 100 Commissioning Test Procedure. The turbine will be ready for standalone operation at the completion of commissioning, at which time a Commissioning Certificate will be issued.

NOTE: The local utility will typically require a witness test prior to full-time operation of the wind turbine. This test must be performed by the utility and/or a designated third-party test engineer. This will have to be scheduled carefully. The Northern Power technician will need to be allowed to operate the turbine on a limited basis prior to the witness test. The Northern Power technician need not be present during the witness test.

7 REFERENCE DOCUMENTS

A00281, Northwind 100 General Specification

A00298, Northwind 100 Application Requirements

W00308, Northwind 100 Installation Instructions

Newhill Farm, P364 - Statutory Consultee List



Organisation	Scoping date	Letter	Response Received Date	Comments
CAA windfarms@caa.co.uk	N/A		N/A	CAA no longer consults on preplanning applications for Windfarm Proposals.
BAA safeguarding@baa.com	N/A		N/A	No airports within 30 km of the proposed turbine site.
MOD Deopsnorth-Lmswind@de.mod.uk	Sent proforma 27/5/2011		Letter dated 15/8/2011	MOD has confirmed that they have no concerns with the proposal.
SEPA Edinburgh Office Clearwater House Avenue North Heriot Watt Research Park Edinburgh EH14 4AP	N/A		N/A	SEPA no longer provides comments for wind turbine installations with a generating capacity less than 10MW. Due to the proposed development being less than 10MW no comments regarding the specific site are available.
SNH 30 Hope Street Lanark ML11 7NE	N/A		N/A	SNH no longer provides comments for single wind turbines below 50 metres (to the tip) as per the SNH Guidance: A Service Statement for Planning and Development.
Historic Scotland Development Assessment Team Longmore House Salisbury Place Edinburgh EH9 1SH	Letter sent 27/5/2011		Email response received 15/6/2011	Historic Scotland confirmed that "there are no scheduled monuments, A listed buildings, or designed landscapes within the footprint of the proposed development. There is the possibility, given that it may affect the setting of a few scheduled monuments, although the distance is such that significant adverse impacts are unlikely. Whilst a proposed turbine is unlikely to adversely affect the setting of the above (closest) scheduled monument, I would however be keen for any planning application to include a detailed assessment (photomontage or wireframe) of the impact that the proposed turbine would have on views from Burleigh Castle near Milnathort towards the turbine site."
Transport Scotland Buchanan House 58 Port Dundas Road Glasgow G4 0HF	Letter sent 27/5/2011		Letter dated 08/6/2011	The proposed development represents an intensification of the use of the site, however the percentage increase in traffic on the trunk road is such that the proposed development is likely to have no impact on the trunk road network.
Coal Authority planningconsultation@coal.gov.uk	Email sent 27/5/2011		Email with letter response	The site of the proposed development is located outside of the defined coalfield. The Coal Authority therefore has no observations or specific comments to make on the proposed

Newhill Farm, P364 - Statutory Consultee List



Organisation	Scoping Letter date	Response Received Date	Comments
gov.uk		03/6/2011	planning application.
Ofcom windfarmenquiries@ofcom.org.uk	Email sent 27/5/2011	Email response received 27/5/2011	Ofcom have found that there are currently no fixed link end(s) within or fixed link paths that cross the proposed turbine site.
Atkins Ltd windfarms@atkinsglobal.com	Email sent 27/5/2011	Email response received 10/6/2011	Atkins has no objection to the proposal.
Joint Radio Company (JRC) windfarms@jrc.co.uk	Email sent 27/5/2011	Email response received 01/6/2011	JRC has no concerns with the proposal at this site and that this proposal is cleared with respect to radio link infrastructure operated by Scottish and Southern Energy.



MINISTRY OF DEFENCE

COMMERCIAL IN CONFIDENCE

RECEIVED

18 AUG 2011

Defence Infrastructure Organisation

Beverly Fletcher
Assistant Safeguarding Officer
Safeguarding - Wind Energy
Defence Infrastructure Organisation
Kingston Road
Sutton Coldfield
West Midlands
B75 7RL

Tel: 0121 311 2010
Facsimile: 0121 311 2218
E-mail: beverly.fletcher@de.MOD.uk
Internet Site: www.defence-estates.MOD.uk

Cole Burmester
3R Energy Solutions Ltd
West Wing Suites
Loaninghill
Uphall
Broxburn
EH52 5NT

Your Reference: 3RE/P364

Our Reference: DE/C/SUT/43/10/1/14054

15 August 2011

Dear Mr Burmester

DE Reference Number: 14054

Site Name: Newhill Farm

I am writing to tell you that the Ministry of Defence (MOD) has no concerns with the proposal as set out in your pro-forma dated 27 May 2011.

The application is for 1 turbine at 47.5 metres to blade tip. This has been assessed using the grid reference below as submitted in your pro-forma.

Turbine	100km Square Letter	Easting	Northing
1	NO	11515	08366

If the application is altered in any way we must be consulted again as even the slightest change could unacceptably affect us.

If you apply for planning permission you must ensure that the relevant planning authority consults this office to ensure that no concerns have arisen since the date of this letter.

If planning permission is granted you must tell us;

- the date construction starts and ends;
- the maximum height of construction equipment;
- the latitude and longitude of every turbine.

This information is vital as it will be plotted on flying charts to make sure that military aircraft avoid this area.

It should be noted that this response is based on current levels of wind farm development in the area. If additional wind farms are consented or built prior to this development being submitted for planning consent, our position may change.

Defence Infrastructure Organisation Safeguarding wishes to be consulted and notified of the progression of planning applications and submissions relating to this proposal to verify that it will not adversely affect defence interests.

COMMERCIAL IN CONFIDENCE

COMMERCIAL IN CONFIDENCE

I hope this adequately explains our position on the matter. If you require further information or would like to discuss this matter further please do not hesitate to contact me.

Further information about the effects of wind turbines on MOD interests can be obtained from the following websites:

MOD: <http://www.mod.uk/DefenceInternet/MicroSite/DIO/WhatWeDo/Operations/ModSafeguarding.htm>

Restats: <https://restats.decc.gov.uk/cms/aviation-safeguarding-maps/>

RenewableUK: <http://www.bwea.com/aviation/index.html>

Yours sincerely



Beverly Fletcher

Assistant Safeguarding Officer – Wind Energy

Defence Infrastructure Organisation

<http://www.mod.uk/DefenceInternet/MicroSite/DIO/WhatWeDo/Operations/ModSafeguarding.htm>

SAFEGUARDING SOLUTIONS TO DEFENCE NEEDS

Cole Burmester

From: Oliver.Lewis@scotland.gsi.gov.uk
Sent: 15 June 2011 19:24
To: cole@3renergysolutions.co.uk
Subject: Pre-planning application consultation on a proposed 48m wind turbine at Newhill Farm, near Kinross

Follow Up Flag: Follow up
Flag Status: Completed

Dear Mr Burmester,

I email regarding your letter of 27 May 2011 which we received on 31 May 2011 requesting comments on the proposed erection of a wind turbine with a tip height of 48m on land at Newhill Farm near Kinross. I apologise for not having been in touch sooner.

As part of the pre-planning consultation process, you asked us to provide comments on the proposed 48m wind turbines. There are no scheduled monuments, A listed buildings, or designed landscapes within the footprint of the proposed development.

In preparing this planning application, you will wish to refer to national and local policies on scheduled monuments, listed buildings, and the preservation of their settings.

There are numerous scheduled monuments (archaeological sites designated as being of national importance under the Ancient Monuments and Archaeological Areas Act 1979) within the wider vicinity of the proposed turbine, of which the nearest is known as 'SAM 7634 Nether Tillyrie, souterrain 490m W of' and lies approximately 2.5km SSW of the proposed turbine. There are also a number of A listed buildings and designed landscapes in the wider vicinity of the proposed 48m wind turbine.

There is the possibility, given the height of the proposed turbine, it's location, and the local topography, that it may affect the setting of a few scheduled monuments, although the distance is such that significant adverse impacts are unlikely. Whilst a proposed turbine is unlikely to adversely affect the setting of the above (closest) scheduled monument, I would however be keen for any planning application to include a detailed assessment (photomontage or wireframe) of the impact that the proposed turbine would have on views from Burleigh Castle near Milnathort towards the turbine site.

For advice on unscheduled archaeology you should contact the local authority archaeologist (David Strachan, Perth and Kinross Heritage Trust, The Lodge, 4 York Place, Perth, PH2 8EP – DLStrachan@pkc.gov.uk).

Whilst you are likely aware of it already, you may find the following generic advice useful.

We don't have any specific policy guidance on the location of wind farms / turbines, and likewise don't have any maps due to the nature of the resource that our remit covers. Our predominant concern will likely be the potential indirect impacts on the settings of assets within our remit, be they scheduled monuments, category A listed buildings, or sites on the Inventory of Gardens and Designed Landscapes. All direct impacts on any of these assets should be avoided.

GIS datasets can be obtained from our website to give you and/or your archaeological consultant details of where each asset is located. We usually suggest that you then apply a Zone of Theoretical Visibility (ZTV) to that data as an initial way of establishing what may be visible (at least in theory) of the turbine(s) at each site and to identify where setting impacts might be likely. We can then provide more focussed advice on any scheduled monument, A listed building, or designed landscape issues that might come up once you have undertaken this initial assessment. You will also likely wish to consult with the relevant local authority archaeologist regarding the potential impacts upon unscheduled archaeology.

You may find our guidance on setting useful – see <http://www.historic-scotland.gov.uk/index/heritage/policy/managingchange.htm> for further details.

Hope this is helpful for you.

Regards,

Oliver Lewis | Inspector of Ancient Monuments | Heritage Management: North Casework

Historic Scotland | Alba Aosmhor

Longmore House, Salisbury Place, Edinburgh, EH9 1SH

t| 0131 668 8092

m| 07824 518 200

e| oliver.lewis@scotland.gsi.gov.uk

www.historic-scotland.gov.uk

Roy Brannen, Director
Trunk Road and Bus Operations

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF
Direct Line: 0141 272 7329, Fax: 0141 272 7350
Tricia.Catterson@transportscotland.gsi.gov.uk

CÒMHDHAIL
ALBA



3R Energy Solutions
Hoodshill
Fossoway
Kinross
KY13 0PW

Your Ref:
P364

Our Ref:

Date: 8 June 2011

RECEIVED
13 JUN 2011

FAO – Cole Burmester

Dear Mr Burmester

NEWHILL FARM, GLENFARG, PH2 9QN (SCREENING OPINION)

I refer to your letter dated 27 May and the accompanying report the comments of the Trunk Road and Bus Operations Directorate (TRBOD) are as follows.

The proposed development represents an intensification of the use of this site, however the percentage increase in traffic on the trunk road is such that the proposed development is likely to have no impact on the trunk road network. On this basis TRBOD have no comment to make.

I trust this meets your requirements.

Yours sincerely


Patricia catterson
Development Management

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.coal.gov.uk/services/planning

For the Attention of Cole Burmester
3R Energy Solutions Ltd

[By Email: cole@3renergysolutions.co.uk]

03 June 2011

Dear Mr Burmester

Single Wind Turbine Proposal – Newhill Farm, PH2 9QN

Thank you for your consultation letter of 27 May 2011 seeking the views of The Coal Authority on the above proposed planning application.

I have reviewed the proposals and confirm that the site of the proposed development is located outside of the defined coalfield. The Coal Authority therefore has no observations or specific comments to make on the proposed planning application.

I trust this is helpful. However, please do not hesitate to contact me if you require any additional information or would like to discuss this matter further.

Yours sincerely

D Berry

David Berry *B.Sc.(Hons), MA, MRTPI*
Planning Liaison Manager

Table of assessed fixed links bands and frequency ranges

Band (GHz)	Frequency Range (MHz)
1.4/1.5	1350 – 1375
	1450 – 1452
	1492 – 1530
1.6	1672 – 1690
1.7	1764 – 1900
2	1900 – 2690
4	3600 – 4200
6	5925 – 7110
7.5	7425 – 7900
11	10700 – 11700
13	12750 – 13250
14	14250 – 14620
15	14650 – 15350
18	17300 – 19700
22	22000 – 23600
25	24500 – 26500
28	27500 – 29500
38	37000 – 39500
50	49200 – 50200
55	55780 – 57000

Regards

:: Gemma Bunting
Licensing Officer
Spectrum Licensing
Tel: 0300 123 1000
licensingcentre@ofcom.org.uk

Windfarms & fixed links - 020 7981 3131
fixedlinklicensing@ofcom.org.uk

windfarm.enquiries@ofcom.org.uk

:: Ofcom

Cole Burmester

From: Windfarms (windfarms@atkinsglobal.com) <windfarms@atkinsglobal.com>
Sent: 10 June 2011 09:15
To: cole@3renergysolutions.co.uk
Subject: WF 10889 - Newhill Farm - NO 11515 08366

Follow Up Flag: Follow up
Flag Status: Completed

Dear Cole,

I am responding to an email of 27-May-2011, regarding the above named proposed development.

The above application has now been examined in relation to UHF Radio Scanning Telemetry communications used by our Client in that region and we are happy to inform you that we have **NO OBJECTION** to your proposal.

Please note that this is not in relation to any Microwave Links operated by Scottish Water

Atkins Limited is responsible for providing Wind Farm/Turbine support services to TAUWI.

Windfarm Support

ATKINS

The official engineering design services provider
for the London 2012 Olympic and Paralympic Games

Web: www.atkinsglobal.com/communications

This email and any attached files are confidential and copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. Unless otherwise expressly agreed in writing, nothing stated in this communication shall be legally binding.

The ultimate parent company of the Atkins Group is WS Atkins plc. Registered in England No. 1885586. Registered Office Woodcote Grove, Ashley Road, Epsom, Surrey KT18 5BW. A list of wholly owned Atkins Group companies registered in the United Kingdom and locations around the world can be found at http://www.atkinsglobal.com/terms_and_conditions/index.aspx.

Consider the environment. Please don't print this e-mail unless you really need to.

Cole Burmester

From: Windfarms Team <windfarms@jrc.co.uk>
Sent: 01 June 2011 10:46
To: Cole Burmester
Cc: Ruairidh Maclean
Subject: Newhill Farm, Fife - Wind Turbine Proposal

Follow Up Flag: Follow up
Flag Status: Completed

Dear Cole,

Site Name: Newhill Farm, Fife

Turbine at NGR: 311515 708366

Hub Height: 37m Rotor Radius: 11m

This proposal cleared with respect to radio link infrastructure operated by Scottish and Southern Energy

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements.

In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However, if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal. Please note that due to the large number of adjacent radio links in this vicinity, which have been taken into account, clearance is given specifically for a location within 100m of the declared grid reference (quoted above).

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, you are advised to seek re-coordination prior to submitting a planning application, as this will negate the possibility of an objection being raised at that time as a consequence of any links assigned between your enquiry and the finalisation of your project.

JRC offers a range of radio planning and analysis services. If you require any assistance, please contact us by phone or email.

Regards

Alessandra Lees BSc (Hons) MSc

Wind Farm Team

The Joint Radio Company Limited
Dean Bradley House,
52 Horseferry Road,
LONDON SW1P 2AF
United Kingdom

TEL: +44 20 7706 5196

<alessandra.lees@jrc.co.uk>

NOTICE:

This e-mail is strictly confidential and is intended for the use of the addressee only. The contents shall not be disclosed to any third party without permission of the JRC.

JRC Ltd. is a Joint Venture between the Energy Networks Association (on behalf of the UK Energy Industries) and National Grid.

Registered in England & Wales: 2990041

<<http://www.jrc.co.uk/about>>



Produced 30/11/2011 from the Ordnance Survey National Geographic Database and incorporating surveyed revision available at this date, © Crown Copyright 2011

Reproduction in whole or in part is prohibited without the prior permission of Ordnance Survey

Ordnance Survey and the OS Symbol are registered trademarks of Ordnance Survey, the national mapping agency of Great Britain.

The representation of a road, track or path is no evidence of a right of way.

The representation of features as lines is no evidence of a property boundary.






Scale: 1:500

Serial number: 001013528
Supplier: JH Energy Solutions
Plot Centre Coordinates: 312214, 708444

Newhill Farm Single Wind Turbine

KEY:

-  Turbine Location - 8m x 8m (312296, 708349)
-  Temporary Crane Platform - 10m x 7m
-  Existing Access track

TCP/11/16(184)**Planning Application 11/02012/FLL – Erection of a wind turbine on land 520 metres north east of Tay Forth Machinery Ring, Newhill, Glenfarg**

REPRESENTATIONS

- Representation from Environmental Health Manager, dated 17 January 2012
- Objection from James Mair, dated 22 January 2012
- Objection from Friends of the Ochils, dated 23 January 2012
- Objection from Peter Hessey, dated 24 January 2012
- Objection from Ewen and Katrina Bell, dated 25 January 2012
- Objection from Thomas and Mary Bell, dated 25 January 2012
- Objection from John and Alison Burlison, dated 26 January 2012
- Objection from Alison and Chris Grave, dated 27 January 2012
- Objection from Graeme Bruce, dated 27 January 2012
- Objection from David Cockburn, dated 27 January 2012
- Objection from Mr R Spence, dated 27 January 2012
- Objection from Angus Cockburn
- Representation from James Mair, dated 11 May 2012
- Representation from John and Alison Burlison, dated 14 May 2012
- Representation from Ewen and Katrina Bell, dated 15 May 2012
- Response to Representations from Agent, dated 30 May 2012

Memorandum

To	Development Quality Manager	From	Environmental Health Manager
Your ref	PK11/02012/FLL	Our ref	NK
Date	17 January 2012	Tel No	(01738) 475 444

The Environment Service

Pullar House, 35 Kinnoull Street, Perth PH1 5GD

Consultation on an Application for Planning Permission

PK11/02012/FLL RE: Erection of a wind turbine Land 520 Metres North East Of Tay Forth Machinery Ring Newmill Glenfarg for Tayforth Machinery Ring

I refer to your letter dated 22 December 2011 in connection with the above application and have the following comments to make.

Recommendation

I have no objection in principle to the application but recommend the undernoted conditions be included on any given consent.

This application is for the positioning of a single 100kW Northwind 100 wind turbine on a 37 metre mast which has been located on agricultural land. The nearest residential property is located around 380 metres from the turbine.

Planning Advice Note (PAN) 45 suggests the use of a simplified noise condition for single turbines or wind farms with a large separation distance and this condition alone would offer sufficient protection of amenity and background surveys would be unnecessary.

Conditions

1. Noise arising from the wind turbine shall not exceed an L_{A90} , 10 min of 35 dB at the nearest noise sensitive premises at wind speeds not exceeding 10m/s, and measured at a height of 10m above ground at the wind turbine site, all to the satisfaction of the Council as Planning Authority. In the event that audible tones are generated by the wind turbine, a 5dB(A) penalty for tonal noise shall be added to the measured noise levels.
2. On a formal written request by the Council as Planning Authority, appropriate measurements and assessment of the noise arising from the wind turbine (carried out in accordance with ETSU report for the DTI - The Assessment and Rating of Noise from Wind Farms (ETSU-R-97)) shall be submitted for the approval in writing by the Council as Planning Authority.



RECEIVED
25 JAN 2012

Langside Farm
Glenfarg
Perthshire
PH2 9QN.

22 January 2012.

Perth & Kinross Council
Planning Department
Pullar House
35 Kinnoull Street
Perth PH1 5GD.



Dear Sirs

Planning Application 11/02012/FLL
Newhill Farm, Glenfarg, Perth, PH2 9QN.

I refer to the above Planning Application and write to formally register my objection on the following grounds.

Based on the Grid Reference co-ordinates and the site location plan, the proposed development is only approximately 30 m from my property boundary, and would place the turbine approx 460 m from my farm

steading and dwelling house, which I feel is too close.

Given that the turbine would be built on ground 40 m above the height of my living and work place, a 48 m tall turbine would have a very dominating presence.

There is no mention of how local topography can influence the effects of a turbine regarding noise and shadow flicker. I anticipate that this would cause a major impact in this case as the turbine would be almost due South of my property.

There is no mention of Ice Throw, which I understand to be very dangerous for residents livestock and property.

The environmental Assessment does not mention bird flight paths for species such as geese and swans. Swans do use this route to and from Loch Leven, Birniehill Dam and Glenfarg Reservoir.

I conclude that this development would have a detrimental impact to myself and my family, in terms of health, enjoyment

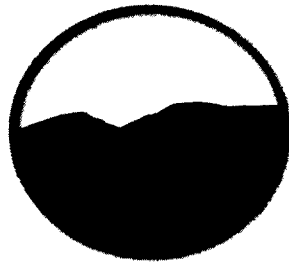
of my own property, and along with the cumulative impact with Kachelbank wind farm (all 12 turbines visible from Langside) would de-value my property which is, as noted, a listed building.

I would be grateful if this letter of objection could be formally acknowledged as having been received.

Yours faithfully

A black rectangular box redacting the signature of James A. Mair.

JAMES A. MAIR.



SCANNED

Friends of the Ochils

Viewfield
Muckhart
Dollar
Clackmannanshire
FK14 7JN

23rd January 2012

Development Management
Perth and Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

Dear Sir/Madam

Objection to Wind Turbine at Land 520 Metres North East of Tay Forth Machinery Ring, Newmill, Glenfarg. Application Reference No. 11/02012/FLL

The Friends of the Ochils object to the proposed wind turbine on land at Newmill Farm Glenfarg. Our aims and objectives as a registered Scottish Charity result in an objection based primarily on landscape and visual amenity grounds but we recognise that other legitimate grounds for objection may also exist.

The loss of visual amenity resulting from a turbine over 47 metres high in this attractive area of the Ochils would be very significant. Given the topography of the area, the turbine would be visible over a wide tract of countryside as demonstrated by the ZTV, and it would have a serious detrimental impact on the landscape and visual amenity of the surrounding countryside. Views towards the Loch Leven Basin from the Ochils would be damaged as would views of the Ochils from the basin. Views within the Ochils in the area would also be damaged. Recreational amenity would be impacted as a result

We are also concerned about the cumulative impact of the turbine with other built windfarms, Lochelbank in particular. We are surprised that a cumulative impact analysis is not included in the documentation but our knowledge of the area indicates that unacceptable cumulative impact would result if this turbine were to be built.

Finally we would draw your attention to the Reporter's letter, dated 25 February 2008, in which he gave reasons for refusing the application for wind turbines at Tillyrie Farm, Milnathort. This followed a local public inquiry (ref P/PPA/340/575) in which the Friends of the Ochils participated and we believe that a number of the grounds for refusal given by the Reporter apply equally to the above application. An important precedent was set by the Tillyrie decision and we trust that it is given due consideration in the determination of the Newmills turbine application.

Yours faithfully,

A large black rectangular box redacting the signature of Stuart Dean.

Stuart Dean. Chair, Friends of the Ochils

Mr P. Hessey
Shire End House
Forgandenny
Perth
PH2 9DR

FAO John Russell, Planning Officer

Perth & Kinross Council
Planning & Regeneration Dept.
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

24th January 2012

Dear Sir,

Ref: Planning Application 11/02012/FLL

I wish to register my objection to the proposed erection of a wind turbine as detailed in the above planning application.

The basis for my objection to the planning application 11/02012/FLL are as follows:

- 1) The proposed turbine at 47 metres high would be a major industrial development in a rural environment – dominating the surrounding area. The location of the proposed turbine is at around 255 metres above sea level – the Loch Leven basin itself is at c 125 metres above sea level. This proposed turbine would therefore intrude over the skyline and ridgeline of this area having a negative visual impact across the Loch Leven basin.
- 2) The cumulative impact of the turbine with other built wind farms, Lochelbank in particular. Cumulative impact is a very important aspect of determining the appropriateness of any wind farm or in this case single turbine – and I am disappointed that no reference appears to be made to this aspect in the documentation.

- 3) The reporter's decision letter on the Tillyrie Wind Farm following a public inquiry (ref P/PPA/340/575) dated 25th February 2008 in which he gave reasons for refusing that application is an important reference point for informing the determination of this application. I would draw particular attention to the issues of cumulative impact; impact on the Loch Leven basin skyline; impact on the adjacent AGLV.

I would urge the Council to refuse this application for the above reasons

Yours Sincerely

Peter Hessey

CB

RECEIVED
30 JAN 2012

Sheiling Cottage
Whitehill Farm
Forgandenny
Perth
PH2 9DP

25th January 2012

Development Management
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD



Dear Sirs,

**Planning Application Reference 11/02012/FLL -
Proposed Erection of a Wind Turbine at Land 520 Metres North East of Tay Forth
Machinery Ring, Newhill, Glenfarg,**

We refer to the above Planning Application and write to formally register our objection. Our objections are on the following grounds:

- significant loss of key landscape and visual amenity would result if a turbine over 47 metres high in this area of the Ochils were approved,
- the public enquiry for the proposed wind farm development at Tillyrie refused that planning application on the grounds of cumulative impact with the nearby developments at Lochelbank and Green Knowes - refer Tillyrie Wind Farm Appeal (ref P/PPA/340/575) which stated that *"SPP 6 requires a balance to be struck between the benefits of the development and its potential impacts and does not expect every renewable energy scheme to be approved, irrespective of those impacts."* Further, Scottish Natural Heritage (SNH) recommends a 60km area around a proposed site within which account should be taken of all permitted, completed and yet to be determined developments. It appears that no cumulative impact assessment has been included in this application,
- it is understood that the nearby Lochelbank wind farm development did not permit a turbine to be erected within 1,000m of a residential property not owned by the applicant, there are properties not owned by the applicant within 1,000m of this proposed development,
- several small businesses operate in close proximity and some neighbouring and nearby residents work predominantly from home. This development would have a negative effect on these businesses and home workers as a result of shadow flicker and noise,



- there may be concern as to the proposed access route for the turbine itself and associated materials. The access route to Newhill is single track for a proportion of its length and permission would no doubt be required from numerous separate landowners along the route for access to their land,
- a number of people regularly visit the area on holiday and there would no doubt be an adverse effect on visitors and tourism to the area if this development came to fruition,
- erection of the proposed turbine would doubtless de-value the surrounding land, properties and businesses, not only in monetary terms but in terms of noise, shadow flicker, landscape and visual amenity,

We trust you find our objections valid at this initial stage and would be grateful if this letter of objection could be formally acknowledged as having been received.

Yours faithfully,

A large black rectangular redaction box covering the signature of Ewen & Katrina Bell.

Ewen & Katrina Bell

RECEIVED
30 JAN 2012

Whitehill Farm
Forgandenny
Perth
PH2 9DP

25th January 2012

Development Management
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

CUSTOMER SERVICE
POINT
27 JAN 2012
RECEIVED

Dear Sirs,

**Planning Application Reference 11/02012/FLL -
Proposed Erection of a Wind Turbine at Land 520 Metres North East of Tay Forth
Machinery Ring, Newhill, Glenfarg,**

We refer to the above Planning Application and write to formally register our objection. Our objections are on the following grounds:

- significant loss of key landscape and visual amenity would result if a turbine over 47 metres high in this area of the Ochils were approved,
- the public enquiry for the proposed wind farm development at Tillyrie refused that planning application on the grounds of cumulative impact with the nearby developments at Lochelbank and Green Knowes - refer Tillyrie Wind Farm Appeal (ref P/PPA/340/575) which stated that "*SPP 6 requires a balance to be struck between the benefits of the development and its potential impacts and does not expect every renewable energy scheme to be approved, irrespective of those impacts.*" Further, Scottish Natural Heritage (SNH) recommends a 60km area around a proposed site within which account should be taken of all permitted, completed and yet to be determined developments. It appears that no cumulative impact assessment has been included in this application,
- it is understood that the nearby Lochelbank wind farm development did not permit a turbine to be erected within 1,000m of a residential property not owned by the applicant, there are properties not owned by the applicant within 1,000m of this proposed development,
- several small businesses operate in close proximity and some neighbouring and nearby residents work predominantly from home. This development would have a negative effect on these businesses and home workers as a result of shadow flicker and noise,

ENTERED IN COMPUTER
30 JAN 2012

- there may be concern as to the proposed access route for the turbine itself and associated materials. The access route to Newhill is single track for a proportion of its length and permission would no doubt be required from numerous separate landowners along the route for access to their land,
- a number of people regularly visit the area on holiday and there would no doubt be an adverse effect on visitors and tourism to the area if this development came to fruition,
- erection of the proposed turbine would doubtless de-value the surrounding land, properties and businesses, not only in monetary terms but in terms of noise, shadow flicker, landscape and visual amenity,

We trust you find our objections valid at this initial stage and would be grateful if this letter of objection could be formally acknowledged as having been received.

Yours faithfully

A large black rectangular redaction box covering the signature of Thomas and Mary Bell.

Thomas and Mary Bell

Shuttlefauld
Glenfarg
Perth
PH2 9QN

FAO John Russell, Planning Officer
Perth & Kinross Council
Planning & Development Department
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

26 January 2012

Dear Sirs

Town & Country Planning (Scotland) Act 1997 as amended by Planning etc (Scotland) Act 2006

Planning Application 11/02012/FLL: Erection of a wind turbine at Newhill Farm, Glenfarg.ⁱ

We refer to the above planning application and write formally to object to this proposal.

Our reasons for objection are:

Visual impact

- The erection of a 48m turbine, which will be clearly visible from our property and the surrounding rural area, will have a very significant and detrimental impact on the landscape quality of the area. Further, it will reduce our enjoyment of our home.
- The proposed site lies within an Area of Great Landscape Value associated with Kinross-shire and would thus appear to be in conflict with the Kinross Area Local Plan.
- While the landscape impact assessment does acknowledge a major significant effect in the view labelled as near Redfordneuk (actually it is taken from near Langside) it makes no mention, nor does it display visualisations, for the impact which will be experienced from the road from Milnathort or from other surrounding properties. Our property and access to it lie within this major impact zone.
- Despite the above statement, the landscape impact assessment photo-visualisations concentrate on mainly distant views, against a pale sky, and conclude that there will be a low magnitude of change. This disregards the greater sensitivity of the human eye and the effect of the movement associated with a turbine which greatly exacerbates the negative impact.
- We understand that the findings of the Public Enquiry into the Tillyrie windfarm development proposal cited cumulative impact with the nearby Lochelbank and Green Knowes developments as a reason for refusal of permission. It would appear that a similar issue arises with this application.
- On the issue of cumulative impact, we understand that Scottish Natural Heritage recommends a 60km zone around a proposed site within which account should be taken of all permitted, completed and yet to be determined developments.
- The Tillyrie Public Enquiry stated that “ *SPP6 requires a balance to be struck between the benefits of the development and its potential impacts and does not expect every renewable energy scheme to be approved, irrespective of those impacts*”. This statement is relevant in view of the way in which the documentation supporting the application cites the support of

certain policy statements without, in some instances, acknowledging a balance needs to be struck.

Noise

- There has been no noise impact assessment that we are aware of in relation to our property. Statements in the application about noise from agricultural operations are misleading as these operations are not continuous throughout the day and night whereas a turbine is. It is at the quiet times of day, when other sources of noise are reduced, that the turbine noise would be most intrusive. There will be no respite to allow for quiet enjoyment of the countryside and one's own property.

Nature conservation

- While the proposed site does not lie within any formal nature conservation designation, it is close to Loch Leven Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Ramsar Site and National Nature Reserve. The prime reason for these designations is wild birds and as such there will be bird movements in the area which could be affected by the turbine, especially in poor visibility, for example due to mist and fog, or in windy conditions. The application and supporting documentation do not refer to this, despite the proposed site being regularly over flown by geese and whooper swans during the winter and ospreys in the spring, summer and early autumn – indeed we have seen an osprey carrying fish from the small reservoir below Birniehill (about 700m south of the proposed turbine site) and flying at low altitude directly over the proposed site heading towards Glenfarg. Recently white-tailed eagle have also been seen over and around the proposed site, also at low altitudes. It is not clear if these issues have been considered or whether the Council has conducted an appropriate assessment of the potential impact on the SPA.

Other concerns

- The erection of the proposed turbine would be likely to depress adjacent property values in monetary terms through reducing visual amenity, changing the landscape setting, and through concerns over noise, shadow flicker and – for some people – health concerns.

Whilst we are not opposed to alternative “green” energy sources (and indeed use solar power and biofuel in our own property) we consider that wind turbines can be particularly obtrusive. Great care must be taken on their siting to ensure minimal visual impact, and that noise and “flicker” will not annoy neighbours and those passing close by. It seems strange to consider placing one in a prominent location in a beautiful rural area, where it will be clearly seen for miles around, including from a major beauty spot, tourist attraction and wildlife refuge of European importance, namely Loch Leven.

We urge the Council to consider this application with great care – in our view, it should not go ahead as significant damage will be done and an unfortunate precedent could be set.

Yours faithfully

John Burlison

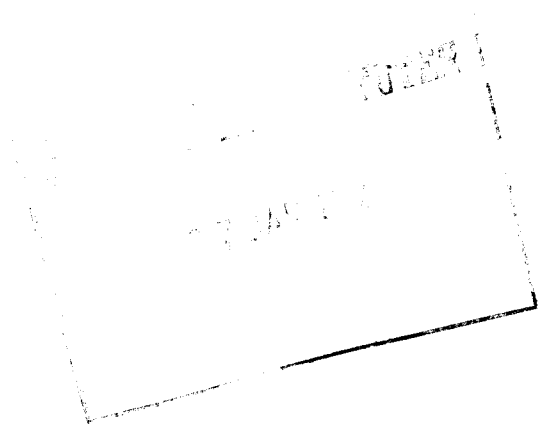
Alison Burlison

ⁱ These comments are being submitted by e-mail and in writing. The reason for this is that although only advertised on 13th January 2012, the Council's on-line system for comment on planning applications already stated that this application was closed for public comment. On contacting the Council Planning Department, one of the signatories – John Burlison – was told that this was because the advert was only able to be placed once the lodging fee had been paid, but that the entry of the application into the on-line system took place immediately. Since payment of the fee was delayed by several weeks, the on-line system had automatically calculated the period for public comment had closed and placed a notice on the application details to that effect. John Burlison immediately rang the Planning Department who informed him that comment was possible until 27th January. We are aware of other concerned individuals who, having looked at the on-line system, thought they were too late to comment and who therefore may not have done so. This surely defeats the objective of the system which is to allow the Council to make decisions on the best possible measure of public consultation. The Council might wish to look at this issue and either alter the system, or ensure that any case of this nature has the entry on the on-line system manually altered to make it clear that public comment is still possible.

CB

Easterton
Glenfarg
Perthshire
PH2 9QJ

Christine Brien
Perth and Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD



27 January 2012

Dear Ms Brien,

**Objection to Wind Turbine at Land 520 Metres North East of Tay Forth Machinery Ring,
Newhill, Glenfarg. Application Reference No. 11/02012/FLL**

We are writing to object to the above planning application.

We object due to the following:

1. Detrimental cumulative visual impact – At present there are two wind turbines on the same hill as the proposed Newhill wind turbine, these are of approx 12m and 24m height and to introduce another structure of 47m height will give this ridge the appearance of a pin cushion effect from wind turbines of differing sizes and design.
2. Detrimental cumulative visual impact with regard to Lochelbank Windfarm which lies to the immediate north of the proposed Newhill wind turbine. There will be an effect of changing the landscape from one of a landscape with wind turbines to a wind turbine dominated landscape.
3. The proposed turbine of 47m is considerably higher than the 30m turbine that Council's Planning Guidance recommends for community based renewable energy schemes.

Yours sincerely,

Alison and Chris Grave

Mr Graeme Bruce (Objects)

Comment submitted date: Fri 27 Jan 2012

a 47m high wind turbine introduces a large tall structure which is out of character to those already existing. a turbine of half this height might be acceptable when related to the existing structures. The current proposal is therefore out of context with its surroundings.

There is an obvious loss of visual amenity when viewed from the north. The impression of over development/ intensive development is created by crowding numerous metal masts on a prominent rise. Thus a rural character becomes one of industrial useage.

Mr David Cockburn (Objects)**Comment submitted date: Fri 27 Jan 2012**

There are already two existing turbines of different size and design on the same ridge as the proposed turbine. Too many wind turbines of different design and size in a small landscape will result in "bitty" additions to the landscape and a "messy" appearance.

Mr R Spence (Objects)

Comment submitted date: Fri 27 Jan 2012

1. The proposed turbine (47m) is very high relative to the landform as seen from the north and relative to the adjacent mature shelter plantation. From our group of houses at Candy, we envisage a view of the turbine at about 1.3km distance, which will appear higher than the small hill on which it would be placed (approximately 60m from the minor road to the summit of the hill). This is a small scale landscape where horizons are within 3km and any structures placed on these skylines are prominent, particularly those to the south (i.e. between the houses and the main direction of sunlight).

2. Again, viewed from the north, this turbine will add significantly to the cumulative effect of metal structures surrounding our environment, including the line of pylons (approximately 45m height) to the west and north, the turbines of Lochelbank (95m height to the north east), and the many smaller individual turbines to the south and east. There are currently two turbines located immediately adjacent to one another on the northern end of the same ridge as the proposed Newhill turbine, (one approximately 12m high and a second turbine immediately alongside of approximately 24m height, also both at 1km distance). These smaller turbines make a much smaller visual impact and I would not be as concerned about an additional turbine of this scale. However I am very concerned about the proliferation of different types and sizes of turbines within close proximity of each other, within a context of larger scale commercial development in this small scale landscape.

3. The report dismisses potential visual effects as being "no more than minor" due to the distance and orientation of rural houses, and screening from the existing built industrial development" (?not sure what this is). Yet the accompanying Landscape and Visual Impact Assessment identifies a significant effect at Viewpoint 7 Redfordneuk. Three of the four houses at Candy and those closer to the turbine, including Redfordneuk and Springhall, are all oriented towards the site at distances of less than 1.5km. In my view, all of these properties will be significantly affected.

4. The supporting statement for the proposed turbine states that the Council's supplementary planning guidance supports community based renewable energy schemes, typically of 20m to hub height and 20m rotor diameter. The proposed turbine is two thirds higher than this "typical" small turbine. If the turbine was 20m high, there would be no issue for me, and I believe it would fit more closely with the Council's Planning policy.

Dear Sir,

In respect of planning application 11/02012/FLL. I write to oppose this application on the grounds of its detrimental affect on its surroundings, as well as setting a precedent for future large scale single turbines (47 metres in this case) that will be out of keeping with this and potential other environs. Whilst I appreciate, after a lengthy hearing process, that there has been a wind farm passed and now on stream nearby, the passing of this application would be the thin edge of a wedge that would see numerous other copy-cat applications, that would potentially sprout out across Perthshire.

My objection is not to that of wind farms per se, but I firmly believe that firm guide lines need to be set as to what is appropriate, and what is deemed excessive. This application is vastly out of keeping with the two other wind turbines that already exist near there, and for these reasons is the base for my objection.

Yours sincerely

Angus Cockburn.

p.s. I would have done this online through our web site, but the click through seems to be having problems.

Langside Farm
 Glenfarg
 Perthshire
 PH2 9QN
 Tel. 01577 830 244

11 May 2012.

Perth & Kinross Local Review Body
 Perth & Kinross Council
 2 High Street
 PERTH
 PH1 5PH.



Dear Mrs Taylor.

PLANNING APPLICATION REF 11/02012/FLL
 ERECTION OF WIND TURBINE, NEWHILL GLENFARG

With reference to the above application.
 I agree that Perth & Kinross Planning Services has made the correct decision in refusing permission for a wind turbine.

My original comments and reasons for objection still stand, and would like to add the following points regarding 3R Energy Solutions Ltd seeking a reversal of this decision.

1. Newhill Farms use of diesel and fertilizers and as the base for Tayforth Machinery Ring.
 — Not Relevant.
2. To "measurably reduce the carbon footprint" of Newhill Farm.
 — How large is the carbon footprint required to manufacture and install a turbine of this size?
3. How is a single turbine going to "stimulate the local economy"?
4. Yes, there are existing power lines in the area, but there is one BIG difference.
 They are not moving structures, creating a nearly constant visual disturbance in the landscape made from light coloured shining metal.

Yours faithfully

Mr James Mair

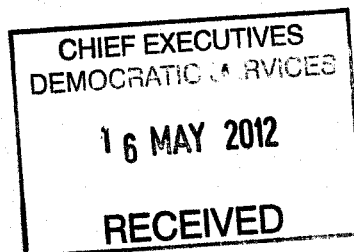
TCP/11/16(184)

T042

Shuttlefauld
Glenfarg
Perth
PH2 9QN

14 May 2012

Gillian A Taylor
Clerk to the Local Review Body
2 High Street
Perth
PH1 5PH



Dear Ms Taylor

Town & Country Planning (Scotland) Act 1997

The Town & Country Planning (Schemes of Delegation & Local Review Procedure) (Scotland) Regulations 2008

Application Ref: 11/02012/FLL – Erection of a wind turbine on land 520 metres north east of Tay Forth Machinery Ring, Newhill, Glenfarg – B and J Hamilton.

Thank you for your letter of 02 May informing us of the applicants' request for a review of the recent refusal of the above application and offering us the opportunity to make further representations.

We have read the documentation on the Perth & Kinross Council website and in particular the applicants' statement in support of the request for a review (the Statement). Our original comments, contained in our letter of 26 January 2012 to the Planning Officer, remain relevant and we re-affirm our position on this – in our view the Council reached the correct decision in refusing the application.

The following comments refer to the Statement and appear in the same order as the points are raised in the Statement.

- Mention is made of the Tay Forth machinery ring. This joint use of machinery is laudable and has proven its worth and will continue to do so whether or not there is a turbine.
- The existing 33kV power line is mentioned. However, this is almost 1km away from the proposed site and about the same distance from the road corridor between Glenfarg and Milnathort, so is not close by. In addition it does not have rotating blades which serve to draw attention to itself in the way a turbine does.
- The assertion that 'no permanent development is involved' might be technically correct but 20 years (25 according to the application) is a long time – an entire childhood or most of the rest of the life of a retired person. The impact is not insignificant.
- We note that PKCs Environmental Health Department has no concerns regarding health issues. We would re-iterate our original comments about low level noise which will be constant while the turbine is working.

- The Statement comments that the ZTV is a worst case scenario and actual visibility will be less. This does not take account of the movement of the turbine blades which will attract attention – the human eye is highly sensitive in this regard, indeed more sensitive than the photographic depictions presented.
- The applicant suggests that the overhead lines, pylons and pole-mounted transformers are in some way mitigation because they are already there. As mentioned above, the 33kV line is at some distance from the Glenfarg-Milnathort road corridor and the local distribution line is of a far smaller scale which is much better 'absorbed' by the landscape than the proposed turbine will be. The 20 (or 25) year life has been commented on earlier and in any case once the precedent is set there is no guarantee it will not simply be subject to application for extension or replacement at the end of that period.
- In commenting on the Reason for refusal no. 2 the statement lists the criteria in the local plan, these include

The site should have a good landscape framework within which the development can be set and, if necessary, screened completely, and

The development should be compatible within its surroundings in land use terms and should not cause unacceptable environment impact.

The Statement then comments that it is not always possible to mitigate the impacts – this is indeed the case in this instance as the proposed development will, by nature of its size and location, totally dominate the local landscape and introduce an incongruous and disruptive element – it certainly will not be accommodated by that landscape.


- We note also that mention is made of the Scottish Government target for renewable energy. It is unclear how the postulated carbon saving was calculated and how the carbon costs of the manufacture, transport and installation have been accounted for. Moreover, as we stated in our original submission, this Government target should not be taken to mean that such schemes should be acceptable anywhere and everywhere – a position of balance needs to be struck. This was highlighted by the report to the Tillyrie Public Enquiry.

In conclusion, we believe the proposed turbine will have a significant adverse impact on the local landscape and does not accord with the local plan. We believe the Council decision to refuse the application was well founded and would respectfully request that the Local Review Body upholds that decision.

Yours sincerely



John Burlison



Alison Burlison

RECEIVED

16 MAY 2012

Sheiling Cottage
Whitehill Farm
Forgandenny
Perthshire
PH2 9DP

15th May 2012

Development Management
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD



Dear Sirs,

Town & Country Planning (Scotland) Act 1997

The Town & Country Planning (Schemes of Delegation & Local Review Procedure) (Scotland) Regulations 2008

Application Ref: 11/2012/FLL - Erection of a wind turbine on land 520 metres north east of TayForth Machinery Ring, Newhill, Glenfarg - B & J Hamilton

We refer to the above Planning Application and to your letter dated 2nd May 2012 advising that the applicant has made an application for a review, of the Council's refusal decision dated 12th March 2012, by the Perth and Kinross Local Review Body.

We object to this application and agree with the council's decision to refuse this application. The Council's reasons for refusal are supported by:

1. Adverse impact on visual amenity - significant loss of key landscape and visual amenity would result if a turbine over 47 metres high in this area of the Ochils were approved. This would adversely affect local residents (many of whom also work from home) but also tourists who holiday in the area.

Proposal contrary to Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003 - the proposed development does not follow the recommendations of the Perth & Kinross Structure Plan and in particular ER Policy No 14. Under Policy 14 there is a requirement to consider

- the immediate and wider impact that the proposed development will have on the landscape and wildlife resource - e.g. Scottish Natural Heritage (SNH) recommends a 60km area around a proposed site within which account should be taken of all permitted, completed and yet to be determined developments. It appears that no cumulative impact assessment has been included within this application. Further, it is understood that the nearby Lochelbank wind farm development did not permit a turbine to be erected within 1,000m of a residential property not owned by the applicant. There are properties not owned by the applicant within 1,000m of this proposed development.

- the need to protect features and areas of natural, cultural, historical and archaeological interest - e.g. the turbine would be seen from Loch Leven Castle and as a historic monument attracting many visitors this proposed development would have a detrimental effect on tourism to the Loch Leven and Kinross area.
- the specific benefits that the proposal would bring to the local community and/or Perth & Kinross - there appear to be no such benefits of this proposed development.
- the cumulative effects of similar developments on the local area - e.g. the public enquiry for the proposed wind farm development at Tillyrie refused that planning application on the grounds of cumulative impact with the nearby developments at Lochelbank and Green Knowes - refer Tillyrie Wind Farm Appeal (ref P/PPA/340/575).

2. Adverse impact on the landscape character of the area / proposal contrary to Policy 1 of the Perth Area Local Plan 1995 and Environment and Resource Policy 14 of the Perth and Kinross Structure Plan 2003 - given the topography of the area loss of visual amenity from a 47m high turbine would be significant. The turbine would be seen from Loch Leven and from areas of the Ochils looking towards Loch Leven.
3. Proposal would establish an undesirable precedent for similar sized developments / be to the detriment of the overall visual character of the area / could potentially undermine the established Development Plan / policies - again we would refer to the Tillyrie Wind Farm Appeal which stated that *"SPP6 requires a balance to be struck between the benefits of the development and its potential impacts and does not expect every renewable energy scheme to be approved, irrespective of those impacts"*.

Yours faithfully



Ewen & Katrina Bell

Development Management,
Perth and Kinross Council,
Pullar House,
35, Kinnoull Street,
Perth,
PH1 5GD

30th May 2012

Dear Sir / Madam

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Schemes of Delegation and Local Review Procedure)(Scotland) Regulations 2008

Application Reference 11/2012/FLL – Erection of a wind turbine , Newhill, Glenfarg

Thank you for forwarding me the 3 third party representations for consideration by the Local Review Body. I am pleased to comment as follows:

Visual amenity and landscape character issues are, as they arise from the Councils Reasons for Refusal 1 and 2, matters which the representations still wish to be relied upon. However, our planning application documentation and our statement of case submitted with the appeal documentation, provide compelling clarification that impact would not be of a scale to justify refusal of this proposal. Indeed, the Planning Department of Perth and Kinross Council **itself** confirmed that a significant effect on the environment is unlikely, including taking of account of duration and reversibility.

The representations support the Councils decision and reasons for refusal. However we contend that the two policies referred to in the reasons for refusal do not provide a sufficient basis for refusal. Policy 14 of the Perth and Kinross Structure Plan 2003 actually provides general support for renewable energy schemes where environmentally acceptable (as we contend), and a test is "significant" adverse effects on local environmental quality which as confirmed above, the Council itself does not consider to be the case in this instance. Policy 1 of the Perth Area Local Plan 1995 refers to unacceptable environmental impact which for the same reasons as mentioned for Policy 14 is not the case. In any event, Policy 1 is a general policy, not specifically for renewable energy proposals, and it is not the case that all the criteria require to be satisfied in every development instance.

It is the case, in any event, that while decisions should **generally** be made in accordance with the Development Plan, this is to be subject to consideration of material considerations. A fundamental material consideration is how up to date the Development Plan in question is. The Local Plan is 17 years old and the Structure Plan is 9 years old. It is incumbent on the Council to take account, therefore, of more recent direction on renewable energy development

We have already commented on the Council's Supplementary Planning Guidance of 2005 which includes the proposal site within its Broad Area of Search.

We have already commented on the more up to date Scottish Government's Scottish Planning Policy which clearly looks to planning authorities to be supportive of suitable renewable energy projects.

Other material considerations include:

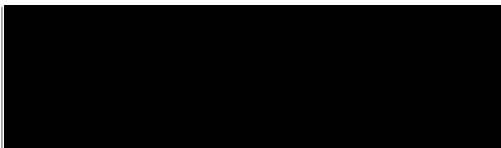
The Council's new Local Development Plan (Proposed Plan) January 2012 which includes the **Council's own up to date statement** on Renewable and Low Carbon energy Generation. Policy ER1 provides absolute general support, specifically including large scale freestanding installations. It lists a range of considerations but the purpose of the policy is clear – general support.

It is also of note that there are a small number of objections, with only 3 additional comments made to the LRB and the absence of any objection from the nearest neighbour. Further, there are no objections from any statutory consultee/body.

Lastly, regards the issue of precedent, the Council should be looking to support the proposals that have merit, given that all applications require to be considered on their individual merit, and deal with other future applications in the same way. It is important that the Council is able to find a way forward to approve appropriate proposals. We consider this proposal to have that merit.

May we respectfully request the Local Review Body to fully reconsider the Council's decision for refusal and that it be overturned.

Yours faithfully
FOR 3R ENERGY SOLUTIONS LTD



Jennifer Chapman
Mob: 07595 120522
Jennifer@3renergysolutions.co.uk