THE HIGHLAND COUNCIL	Agenda Item	5.1			
NORTH PLANNING APPLICATIONS COMMITTEE 14 JANUARY 2014	Report No	PLN/003/14			
13/02749/FUL - Wind Prospect Developments Ltd 1,600m West of Craggiemore, Tressady Estate, Rogart. Report by Head of Planning and Building Standards					
SUMMARY					
<b>Description:</b> Wind farm (32.5MW) consisting of 13 turbines, max tip height of 115m, and associated infrastructure.					
Recommendation Grant planning permission with conditions					
Ward : 05 East Sutherland and Edderton					
Development category : Major					
Pre-determination hearing : none					

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Reason referred to Committee: more than 5 objections.

## 1. PROPOSED DEVELOPMENT

- 1.1 The application is for the development of a wind farm with a potential generating output of 32.5MW. It comprises the following main elements: -
  - Thirteen wind turbines (each 2.5 MW) with 70m tower, 90m rotor with maximum blade tip height of 115m. Turbines may have internal or external transformers.
  - Permanent meteorological mast max height 70m.
  - New access tracks (approximately 6km).
  - Switchgear building and compound.
  - Temporary construction compound.
- 1.2 The wind farm presents as a cluster, roughly set out as three rows of turbines running northwest to south east on the north side of the public road serving West Langwell. The turbines are located within the Strath Brora watershed as formed from the ridgeline between the local hill tops of Cnoc na Fardaich to the north west and Cnoc Achadh na h Uaighe south east.
- 1.3 The operational lifespan of the wind turbines is 25 years after which time the development will be decommissioned with above ground facilities being removed

and site restored. A bond is to be made available to provide a guaranteed decommissioning fund. Construction is anticipated to take 18 months. This would involve adherence to an approved Construction and Environmental Management Plan (CEMP) drawn up / committed to by the appointed contractor.

- 1.4 Access to the wind farm is from the local West Langwell road. This road is accessible from Rogart from the south, Dunrobin Glen (Golspie) via Knockarthur (east), and Strath Brora (north). Abnormal loads (principally turbine parts) are to be delivered to the site from the A9 Trunk Road network at Drummuie, south of Golspie where the Council offices are located, via a private road through Dunrobin Glen in the same manner as deployed with the construction of Kilbraur Wind Farm. The stretch of public road westward from Kilbraur Wind Farm site entrance to the site access on the West Langwell road is to be upgraded.
- 1.5 As the proposal involves Environmental Impact Assessment development, the application is supported by an Environmental Statement (ES). SNH has advised on some limitations on the Landscape and Visual Impact Assessment which lack for example 360° wireframes including all consented and proposed wind farms. Notwithstanding these limitations, with the knowledge and expertise of statutory consultees, there is sufficient information available on the case file to allow consultees and the Council to make a judgement on the application.

## 2. SITE DESCRIPTION

- 2.1 The site is set on open heather moorland subdivided between 4 crofts. It sits on the ridgeline / watershed between Strath Fleet and Strath Brora west of Craggiemore around the 200m Above Ordnance Datum (AOD) contour. It is currently used for grazing sheep and cattle as well as occasional shooting. It extends to 278 hectares although the actual footprint of the development is significantly more limited (approx. 6 hectares). Native woodland planting has been recently undertaken to the south east of the application site, with a further 18 hectares being planted in the autumn of 2013 within the application site. Approximately 4.3 hectares of these recent plantings would require being removed and equivalent plantings undertaken nearby.
- 2.2 The site is 4km north of Rogart and 13km northwest of Golspie. The surrounding area is sparsely populated by small farms and scattered crofts to the south and east of the site, the majority of which are grouped along a minor road approximately 2km to the east linking Pittentrail, Rogart, East Langwell, Rhilochan, Dalreavoch, Sciberscross and Balnacoil. The design of the site maintains as a minimum, a 800m buffer between the nearest turbine and local housing including Braegrudie (North), Craggiemore (East), Achnahuie (South) and Bardachan (West).
- 2.3 No part of the site is designated for any nature conservation interests but it does include habitat which is suitable for use by a number of protected species (Otters & Water Voles) and bird species including several linked with designated sites that lie close by. There are nine designated Special Protected Areas (SPA) and Sites of Special Scientific Interest (SSSI) within a 10km radius of the site. The closest of these (i.e. within 5km) are: Strath Carnaig and Strath Fleet Moors (SPA and SSSI); Creag na Croiche SSSI; and, Lairg and Strath Brora Lochs (SPA and SSSI).

- 2.4 Located within an area characterised in the Landscape Character Assessment (LCA) as "Sweeping Moorlands" no part of the site is covered by any international, regional or local landscape designations. Within the wider area around the site, there are a number of Special Landscape Areas (SLA) such as Loch Fleet, Loch Brora and Glen Loth (SLA) to the south-east and, Ben Klibreck and Loch Choire (SLA), Ben Griam and Loch nan Clar (SLA) and, The Flow Country and Berriedale Coast (SLA) to the north, while further afield there is the Dornoch Firth National Scenic Area (NSA). The proposed site does not fall within a Search Area for Wild Land (SAWL), a potential Core Area of Wild Land or a Landscape Character Area where wild land or perceptions of wilderness are noted as a key characteristic of the area. There are 6 SAWLs within the wider surrounding area of the site. The closest of these is the Ben Klibreck-Armine Forest SAWL, approximately 7.2km north of the proposed site boundary.
- 2.5 Whilst there are some archaeological interests recorded towards the southern end of the proposed development area, there are no cultural heritage designations within the site such as Scheduled Ancient Monuments (SAMs) or Listed Buildings (LB). Within 10km of the proposed development there may be visibility of the turbines from 12 SAMS and three Category B listed buildings. Eleven of the SAMs are prehistoric settlement or funerary / ritual sites and one is a post-medieval farmstead. Two of the category B listed buildings are churches and one is a road bridge which crosses the River Brora.
- 2.6 There are no core paths or recorded public rights-of-way affected within the site boundary. There are eight core paths in the area around Rogart which are within 5.5km of the proposed wind farm. A UK National Route 1 of the National Cycle Network is approximately 13.3km away at its nearest point at Lairg on the A839.
- 2.7 The proposed site area is within a designated drinking water protected area associated with the Strathfleet bedrock and localised sand and gravel aquifers. One private water supply has been identified within 2km of the site for Shepherds Cottage, north of the River Brora. The minor watercourses that flow within the site boundary have small catchments, originating within the site, and flood risk from these watercourses is limited to localised back up and flooding if water crossing points are insufficiently sized to convey flood flows.
- 2.8 Peat deposits are present across approximately 40% of the site and are located in the central and lower lying areas of the site. The peat depth surveys confirmed this distribution of peat across the site and showed that peat depths ranged from 0.5 to 5.1m. Peat slide risks on this site are low.
- 2.9 When assessing a wind farm proposal consideration of similar developments around the site is required. The list below presents the projects around this development site that are Operational, Approved or have been Submitted but are not yet determined. A plan highlighting these projects will be circulated with this report.

Built and / or Consented

Kilbraur (and Extension) Gordonbush Lairg Achany Rosehall Beinn Tharsuinn and Beinn an Ogran Coire na Cloiche Novar (and Extension) Lochluichart (and Extension) Corriemollie Boulfruich and Strathy North.

Under consideration

Glenmorie(Council raised an objection)Dalnessie(Council raised an objection)Glencassley(Council raised no objection)Sallachy(Council raised no objection)Braemore – as amended (pending consideration)Strathy South – (pending consideration)

## 3. PLANNING HISTORY

3.1 29 Nov 2012 Erection 60m high anemometer mast granted planning permission for a temporary period of two years (12/03893/FUL).
11 Dec 2012 Scoping Opinion for a Wind Farm proposal (12/04123/SCOP).

## 4. PUBLIC PARTICIPATION

- 4.1 Advertised as EIA development allowing 28 days for comment. Representations deadline was 16 August 2013.
- 4.2 The application has attracted 34 representations including 4 letters of support and 29 objections (see list appended to this report).
- 4.3 Material considerations raised in objection are summarised as follows:
  - Visual Impact
  - Cumulative visual impact on area.
  - Disturbance for residents from construction traffic
  - Noise local residential properties
  - Cumulative impact on wild life
  - Impact on tourism.
  - Impact on peat.
  - Concerns over decommissioning.
  - Wild land policy being advanced by Scottish Government.
  - Area is of outstanding natural beauty.
  - Impact on heritage of the community.
  - Lack of grid capacity

- 4.4 Material considerations raised in support are summarised as follows:
  - Employment.
  - Diversification for crofters.
  - Kilbraur demonstrates the acceptability (very little noise).
  - Reduce reliance on fossil fuels
  - Traffic disruption will be limited.
  - Won't ruin landscape.
- 4.5 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet <a href="http://www.wam.highland.gov.uk/wam">www.wam.highland.gov.uk/wam</a>. Access to computers can be made available via Planning and Development Service offices.

## 5. CONSULTATIONS

- 5.1 <u>Rogart Community Council</u> has not objected to the application but wishes to raise a number of concerns some of which may require planning conditions to be set in the event the application is approved. Its concerns relate to: -
  - Disproportionate share of wind farms in the CC area.
  - Suitability of the site given the extent of peat resource / carbon properties.
  - Importation of aggregates / adverse carbon footprint.
  - Doubt over net carbon reduction arising from the project.
  - Misleading information on financial benefits.
  - Extent of visual impact particularly as viewed from local roads.
  - Noise.
  - Need for planning controls and financial compensation to residents and road users affected by construction traffic.
- 5.2 <u>HET Archaeology Unit</u> has not raised an objection to the application. It recognises a range of archaeological interests in the area and the potential impact arising from the project. It notes that the supporting ES offers mitigation to off-set the visual impact and loss of amenity to the historic environment. It is important that this is secured by planning condition and / or a legal agreement.
- 5.3 <u>TECS (Environmental Health)</u> has no objection to the application. Three, potentially four, properties have been identified as having a financial interest in the project. This can allow for a slightly more relaxed compliance with standards controlling noise impact on nearby receptors. A recommendation is made for a planning condition to require the operator to undertake compliance monitoring as soon as the wind farm is operational. The ES assessment has identified a potential issue for shadow flicker at two properties and it has proposed that any impact be minimised through a scheme of mitigation. This needs to be secured as a planning condition.
- 5.4 <u>Access Officer</u> has raised no objection and notes the site itself experiences very little access interest. However, the route of the construction traffic through Dunrobin Glen utilises and crosses several core paths. A request is made for a

planning condition to be attached to any consented scheme to secure recreational access interests on these core paths is maintained through positive management controls during the construction phase.

- 5.5 <u>TECS (Roads)</u> has no objection to the application. It advises that significant improvements will be required to the local road network to cater for construction traffic. The extent and detail of all road improvement and strengthening works require to be agreed with TEC Services. All construction traffic over 3.5 Tonnes should be directed via Drummuie/Dunrobin Glen unless otherwise agreed with TECS. All improvements to the public road shall be completed prior to windfarm construction commencing, other than where agreed with TEC Services. A Wear and Tear agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 will be required.
- 5.6 <u>Transport Scotland (TRBOD)</u> has no objection to the application. It notes that the development will add traffic movements during construction on the A9 trunk road in the vicinity of the development site. The impact is not seen as significant but a request is made for planning conditions to be attached to any consented scheme to assist with maintaining the safety and free flow of traffic on the trunk road network.
- 5.7 <u>Historic Scotland (HS)</u> has no objection to the application. It notes a significant adverse impact on the setting of the scheduled monument known as Cnoc an Liath-Bhaid stone circle, 880m east north east of Braegrudie, Strath Brora. The impact is not of an order to warrant an objection.
- 5.8 <u>Scottish Water (SW)</u> has no objection to the application. It highlights that there are water assets in the area that may be affected by the proposed development. Planning conditions are requested to ensure that these assets are protected from the risk of contamination and damage.
- 5.9 <u>Scottish Environmental Protection Area (SEPA)</u> has no objection to the application. It has set out suggested requirements for inclusion in planning conditions attached to any consented scheme. These must address matters on the use of disturbed peat for ecological benefit; design of water-crossings; buffers to watercourses; micro-siting; and controls over new tree planting away from disturbed areas created to establish windfarm infrastructure.
- 5.10 <u>Scottish Natural Heritage (SNH)</u> has no objection to the application. It notes that the impact on natural heritage interests is low. It does however highlight that the ES underplays some of the landscape and visual impact. SNH is of the view that there will be significant adverse landscape and visual impacts within the surrounding area (see later) but not sufficient to warrant an objection. A number of ecological mitigation measures and enhancement measures are set out in the ES and recommendations are made on how these could be incorporated into planning conditions attached to any approval.
- 5.11 <u>Ministry Of Defence (MOD)</u> has no objections to this application. It requests a planning condition to secure appropriate aviation lighting as advised.

- 5.12 <u>Civil Aviation Authority (CAA)</u> has no objection to the application but requests a planning condition to be attached to any approval requesting information on the locations, heights and lighting status of the turbines and meteorological masts, the estimated and actual dates of construction and the maximum height of any construction equipment to be used, prior to the start of construction, to allow for inclusion on aviation charts.
- 5.13 Highlands and Islands Airport Ltd (HIAL) has no objections to this application.
- 5.14 <u>National Air Traffic Systems (NATS)</u> has no objections to the application.

## 6. DEVELOPMENT PLAN POLICY

6.1 The following policies are relevant to the assessment of the application: -

## Highland Wide Local Development Plan 2012

- 6.2 Policy 28 Sustainable Development
  - Policy 29 Design, Quality and Place Making
    - Policy 31 Developer Contributions
    - Policy 51 Trees and Development
    - Policy 52 Principle of Development in Woodland
    - Policy 55 Peat and Soils
    - Policy 57 Natural, Built and Cultural Heritage
    - Policy 58 Protected Species
    - Policy 59 Other Important Species
    - Policy 60 Other Important Habitats
    - Policy 61 Landscape
    - Policy 64 Flood Risk
    - Policy 67 Renewable Energy including significant effects on: -
      - Natural, Built and Cultural Heritage
      - Other Species and Habitat Interests
      - Landscape and Visual Impact
      - Amenity at Sensitive Locations
      - Safety and Amenity of Individuals and Individual Properties
      - The Water Environment
      - Safety of Airport, Defence and Emergency Service Operations
      - The Operational Efficiency of Other Communications
      - The Quantity and Quality of Public Access
      - Other Tourism and Recreation Interests
      - Traffic and Transport Interests

Policy 72 Pollution

Policy 77 Public Access

## Sutherland Local Plan (2010) (as continued in force)

6.3 No relevant policies.

## 7. OTHER MATERIAL POLICY CONSIDERATIONS

## **Scottish Government Planning Policy and Guidance**

- 7.1 The Scottish Government has recently consulted on an updated policy statement. However it is SPP (February 2010) which requires to be considered in the determination of the current application. It contains a number of subject specific policy statements which are relevant to this application, including:-
  - Rural Development
  - Landscape and Natural Heritage
  - Wild Land
  - Transport
  - Renewable Energy
- 7.2 In addition to the above, the Scottish Government sets out further advice on Renewable Energy in a number of documents and web based information including: -
  - National Planning Framework for Scotland 2
  - PAN 56 Planning and Noise
  - PAN 58 Environmental Impact Assessment
  - PAN 60 Planning for Natural Heritage
  - 2020 Routemap for Renewable Energy
  - Onshore Wind Turbines (Updates July 2013)
  - Wind Farm developments on Peat Lands (June 2011)

## Interim Supplementary Guidance: On-shore Wind Energy (March 2012)

7.3 The site falls within an Area of Search requiring proposals to be assessed against Policy 67 / HwLDP.

## Highland Renewable Energy Strategy (HRES) (May 2006)

- 7.4 While superseded, in part, by the above Interim Supplementary Guidance, HRES is still relevant as a strategy document for renewable energy. Relevant policies to the current application, not otherwise superseded the above noted Supplementary Guidance, include:
  - Policy H1 Education and Training
  - Policy K1 Community Benefit
  - Policy N1 Local Content of Works

## 8 PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

- 8.2 The determining issues for the Council as planning authority responding to this consultation are:
  - Does the proposal accord with the development plan?
  - If it does, are there any material considerations for not approving the proposed development?
  - If it does not accord, are there any material considerations for approving the proposed development?

### Assessment

- 8.3 To address the determining issues, the Planning Authority must consider the following:
  - a) Development Plan
  - b) Interim Supplementary Guidance.
  - c) Highland Renewable Energy Strategy.
  - d) National Policy.
  - e) Roads / Traffic Impact and Public Access.
  - f) Water / Drainage and Peat.
  - g) Natural Heritage.
  - h) Design, Landscape (including Wild land) and Visual Impact.
  - i) Cultural Heritage.
  - j) Economic Impact and Tourism.
  - k) Noise and Shadow Flicker.
  - I) Telecommunications
  - m) Aviation Interests
  - n) Construction Impacts.
  - o) Other Material Considerations within representations.

#### Development Plan

- 8.4 The Development Plan comprises the adopted Highland wide Local Development Plan (HwLDP). There are no site specific policies affecting this application site within the Sutherland Local Development Plan. The principal HwLDP policy on which the application needs to be determined is Policy 67 Renewable Energy. The other HwLDP policies listed at 6.1 of this report are also relevant and the application must be assessed against these also for example Policy 61 Landscape. These matters all fall within the ambit of Policy 67 and are assessed in full within a number of material considerations examined within this report.
- 8.5 Policy 67 highlights that the Council will consider the contribution of the project towards renewable energy targets, positive and negative effects on the local and national economy other material consideration including making effective use of existing and proposed infrastructure and facilities. In that context the Council will support proposals where it is satisfied they are located, sited and designed such as they will not be significantly detrimental overall individually or cumulatively with other developments having regard to 11 specified criteria (as listed in para 6.2). If the Council is satisfied that there will be no significant adverse impact then the application will accord with the Development Plan.

### Interim Supplementary Guidance

8.6 The Council has developed Interim Supplementary Guidance to assist with the consideration of onshore wind energy. The site falls within an "Area of Search" for wind energy requiring the policy to be assessed, as noted above, within Policy 67 of the HwLDP. The Supplementary Guidance also expands on the considerations / criteria set out in the Development Plan policy. Criterion 1 Natural, Built and Cultural Heritage; 3 (Landscape and Visual Impact), 4 (Amenity at Sensitive Locations) and 5 (Safety and amenity of individuals and individual properties) will be key issues to be examined in this assessment. If the Council is satisfied on these matters then the application will accord with its Interim Supplementary Guidance.

## Highland Renewable Energy Strategy

8.7 The Development Plan references HRES developed by the Council on a range of Renewable Energy technologies. In particular the additional benefits from such investment including for example 'Education and Training,' 'Community Benefit' and 'Local Content' which are important considerations when assessing individual project proposals – see also later section on economic impact. For the avoidance of any doubt only those parts of the Council's HRES which are compliant with Scottish Government SPP remain in force.

## National Policy

- 8.8 The Scottish Government has a very positive approach on Renewable Energy technologies. This is set out in Scottish Planning Policy (SPP) with further advice on renewable energy targets available from its "Routemap for Renewable Energy in Scotland 2011". There is a Scottish Government target of 100% of Scotland's electricity demand to be generated from renewable resources by 2020. The target is not a cap. The Scottish Government has advised that operational onshore wind energy capacity at 30 June 2013 was 4,079MW with a further 4,048MW approved. As of 20 July 2013, within Highland large-scale onshore wind energy projects in operation or approved had a capacity to generate 2,394.5MW, which equates to 29.5% of the national figure. The draft SPP documents currently out for consultation do not substantially change the emphasis of the Scottish Government's stance on wind energy. No great weight can be given to this draft position at the current time.
- 8.9 SPP advises that planning authorities should support the development of wind farms in locations where technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. Criteria for the assessment of applications are listed including landscape and visual impact; effects on heritage and historic environment; contribution to renewable energy targets; effect on the local and national economy and tourism and recreation interests; benefits and disbenefits to communities; aviation and telecommunications; noise and shadow flicker; and cumulative impact. These elements, as relevant to this application, are examined within this assessment.

8.10 SPP advises that when considering cumulative impact the factors for planning authorities to consider should be set out in the development plan or supplementary guidance. Development Plans are expected to have a spatial framework for onshore wind farms over 20MW drawn from the identification of areas requiring significant protection, areas with potential constraints against identified criteria and areas of search where appropriate proposals are likely to be supported, again subject to identified criteria. The spatial approach advanced by Highland Council is as set out in its Interim Supplementary Guidance, noted above.

#### Roads / Traffic Impact and Public Access

- 8.11 The development will bring increased traffic onto the local road network principally during construction. There would also be short term impact on the local road network and trunk road network as Abnormal Loads (turbines parts) are delivered to the site on the A9 (T) road between the port of Invergordon and Drummuie (Golspie) towards the end of the construction stage. This impact would be similar to that experienced during the development of the Kilbraur Wind Farm and Kilbraur Extension project, which also saw the use of the private track between Drummuie A9 (T) junction and the Council road serving Dunrobin Glen. Substantial improvements to the local road network beyond the Kilbraur wind farm access to the proposed wind farm access are proposed.
- 8.12 The Trunk and Local Road Authorities have requested planning conditions to ensure the submission for approval a final traffic impact assessment, safeguards and minor improvements to the respective networks and a Wear and Tear Agreement covering the use of the local road network through the construction phase. A number of public representations have highlighted the concerns over traffic impact and particularly the use of local roads across the locality. It is normal for the Planning Authority to require community consultation in advance of any abnormal load deliveries to the site to ensure good liaison over key traffic concerns such as school bus routes and other important local events.
- 8.13 It is clear that the network of local roads serving this development site is of single track design with more limited design capacity for construction traffic. It is noteworthy that compared to many other wind farm developments, the lack of an on-site borrow pit will add to the number of deliveries to site providing for example crushed rock for the access tracks and turbine crane pads. It is for this reason that TEC Services has requested that all vehicles over 3.5 tonnes should use the route proposed for abnormal vehicles. Using this approach, the concerns from residents who live away from this route are addressed.
- 8.14 Whilst the development will not impact on any public access tracks on site the construction traffic route through Dunrobin Glen will impact as it crosses several core paths. Planning conditions securing management controls to construction traffic can sustain recreational access interests on these core paths and ensure the interests of all parties are catered for.

## Water / Drainage and Peat

8.15 The site sits principally within the River Brora water catchment area. The small

tributaries draining the site are too small for the burns to be classified as water bodies in their own right. The potential impact of additional surface water runoff from the site is relatively insignificant to the main watercourse interests downstream.

- 8.16 In line with best practice the development is to maintain a 50m set back buffer from all water courses apart from necessary water crossings. The CEMP to be produced with input from the selected contractor will require that the project Ecological Clerk of Works (ECOW) maintains a watchful eye on drainage outfalls to ensure all mitigation measures deployed in respect of surface water discharge / pollution prevention etc. are implemented effectively and sustained through the construction period. Such approaches to project management as set out in the ES needs to be secured by planning condition to allow for further input from SNH and SEPA. SEPA in particular has highlighted the need to secure the submission of a finalised scheme of water environment buffers prior to the commencement of development.
- 8.17 Whilst peat covers a large portion of the site 40% with peat depths ranging from 0.5m 5.1m, the deep areas are located in the central and lower lying areas of the site. The layout has been designed so as to avoid deep peat where possible. The peatland areas within the site are mostly classified as being within the insignificant peat slide risk zone. The designed layout together with the construction mitigation, such as the use of floating track design on areas where peat depths exceed 1m, suggest the risk of peat slide at construction to be low.
- 8.18 SEPA and SNH have welcomed the promotion of a Peat Management Plan to further advise on proposals for the use of disturbed peat for ecological benefit. This will also be outlined in the finalised Habitat Management Plan. Planning conditions are requested to secure these additional "plans" which will require details on finalised peat storage areas and best practice techniques to be deployed. By way of off-set on the impact on local peat deposits, the applicant has advised that the proposal will generate, on average, as much electricity as is used by approximately 17,655 households and avoid the emission of approximately 46,831tonnes of CO<sub>2</sub> per annum. In response to the carbon balance issues raised within public representations, this renewable energy project is regarded as one which will make an early return on the carbon costs of development.

#### Natural Heritage

- 8.19 The site does not fall within any designated site for ecological interests but has proximity to a number of valued sites, as noted in paragraph 2.3, designated nearby for particular interests. The topography, exposure and general lack of high quality habitat for many species limits ecological interests on site. SNH has assessed key interests associated with this application and in particular it has advised as follows: -
  - Lairg & Strath Brora Lochs SPA (and Site of Special Scientific Interest) and the qualifying interests including foraging black-throated diver. Due to the very low level of activity recorded across the wind farm site, it is unlikely that the proposal will have a significant effect on any qualifying interest either directly or

indirectly. An appropriate assessment is therefore not required.

- Strath Carnaig & Strath Fleet Moors SPA (and Site of Special Scientific Interest) and associated foraging of hen harrier, a qualifying interest of the SPA. No hen harrier were recorded over the wind farm site, meaning it is possible to conclude that, with the current numbers and level of hen harrier activity, there will not be a likely significant effect. An appropriate assessment is not required.
- Birds in the wider countryside due to the relatively low levels of activity recorded, the wind farm should not affect the favourable conservation status of the populations of the wild bird species that use or fly over the site.
- Protected Species including European Protected Species (EPS) make use of the proposed development site including bats, otter water vole and breeding birds. These are mobile species and will make varied use of the development site. Pre commencement surveys will be required to confirm what potential impacts need to be taken into account.
- Terrestrial habitats including peat and recent woodland plantings have been taken into account within the proposed design work. As the design iterations, particularly for the associated infrastructure evolves at final design opportunities to reposition development from areas of deep peat will arise (and should be encouraged). The intention to deploy a CEMP approach is welcomed along with a detailed Peat Management Plan and Habitat Management Plan.
- 8.20 Given the above comments from SNH, which advises the Council on such matters, it would be appropriate to ensure planning conditions are attached to any grant of planning permission as noted. These measures would be consistent with Council standards set out its approved guidance on Construction Environmental Management Process for Large-scale Projects.

## Design, Landscape (including wild land) and Visual Impact

## <u>Design</u>

- 8.21 The turbines sit on a broad finger of sweeping moorland which extends from the west to East Langwell. Given that the turbines will sit at or around the 200m contour AOD and are themselves 115m to max blade tip height, they will be visible at all points of the compass within a 3km radius and especially to the scatter small farms, crofts and rural housing at Dalreavoch, Rhilochan, East Langwell and Garvoult. Its wider visibility is more limited beyond the 10km radius given the higher intervening topography and lower straths (Strath Brora / Strath Fleet). For the avoidance of doubt this assessment considers the design impact on residential amenity from the potential impacts arising from visual impact, noise and shadow flicker in later sections of this report.
- 8.22 The turbine maximum blade tip height of 115m is not inconsistent with Kilbraur wind farm 5.5km to the east with its mixture of turbines at 115m and 125m, the latter used in its extension. Gordonbush wind farm is max 110m to tip height and Lairg is 100m. As seen from VP 4 Knockarthur, the turbines will very much be

seen on open moorland, where the deployment of internal transformers and not external transformers would assist minimise clutter around the turbine bases. This design detail can and should be secured by condition. The final design of the switchgear / substation will also require careful attention in design terms to fit / suit its location.

#### Landscape (including wild land)

- 8.23 A total of 22 viewpoints have been assessed with regard to landscape and visual impact, together with other key receptors including settlements, route-ways etc. The expected impact of the development can be seen within the ES from the Zone of Visual Influence (ZVI) Fig 7.5 and 7.6, and in combination with other operation and approved wind farms as noted within paragraph 2.9.
- 8.24 The assessment as presented within the ES advises that the proposed wind farm would exert a characterising influence locally over part of the Sweeping Moorland within which the turbines are located. This landscape is not designated, is not crossed by recreational routes and is not a significant tourist destination. In cumulative landscape terms the proposed wind farm would, the ES advises, fit within the general pattern of existing and consented wind farm development. The ES points out that in considering the emerging pattern of other existing and consented wind farm development within this area other developments are similarly set back from the coastline, main settlements and transport routes within the study area. This is also important when considering the views from areas of wild land and related remote areas.
- 8.25 SNH considers that the layout of the proposed development is broadly appropriate for the Landscape Character Type (LCT) in which it is located. However, it considers that proximity to other LCTs generates a number of significant impacts on the landscape character of neighbouring areas.
- 8.26 SNH point out that to the south and east, the relatively small scale Small Farms & Crofts and Strath LCTs (incorporating Strath Brora) would experience widespread visibility of the proposal, across areas with relatively high numbers of receptors, principally residents and road users. In these areas, broadly represented by VPs 3, 4, 5, 6 and 10, turbines will often be seen in association with other features that act as scale references. Due to the height of the turbines, the proposed development will often be seen as having a dominant influence on areas that are predominantly characterised by a far smaller scale of visual references (eg individual houses, small croft boundaries, etc). In contrast to the LVIA, SNH consider that there will be significant landscape impacts on Small Farms & Crofts and Strath Landscape Character Types (LCTs). It has nevertheless not objected to the application.
- 8.27 SNH advice is that the most significant cumulative landscape impacts are likely to affect those areas of Small Farms & Crofts and Strath LCTs that will be significantly affected by Tressady and Kilbraur and /or Gordonbush wind farms. Such locations incorporate a number of the above viewpoints. Overall the greatest cumulative effects are likely to be experienced by road users, residents and visitors, in locations between Rogart and Balnacoil.

- 8.28 Furthermore SNH advises that landscape impacts to the north are experienced across a large area of Moorland Slopes & Hills LCT, to the north of the River Brora and its associated Strath. The area is of very high sensitivity, due to its undeveloped and wild character. There is a Search Area for Wild Land (SAWL) located approximately 7.5km north of the proposed development. SNH's 2012 mapping of relative wildness indicates that an area to the north, between the proposed development site and the SAWL, also possesses strong qualities of wildness.
- 8.29 SNH's advice, based on its assessment of the impacts on wild land, is that the proposal has relatively extensive visibility across the area of wild land character in relatively close proximity. If considering Tressady on its own, it would consider this to result in a significant impact on wild land. However, the affected areas are already influenced by a number of wildness detractors, including more distant wind farms (e.g. Kilbruar, Gordonbush). Consequently SNH do not consider that Tressady will generate new or additional impacts that significantly compromise wild land character.
- 8.30 The Council has a number of designated sites identified as Special Landscape Areas (SLA's) in the wider countryside around this site as noted in paragraph 2.4. For the most part these are set back from the proposed development, with any impacted on the key features of such sites e.g. Loch Fleet, Loch Brora and Glen Loth the nearest SLA to the site being limited. The ES assessment advises that there would be no significant landscape effects or significant cumulative effects as a result of the proposed Tressady Wind Farm on any of these landscape designations. This conclusion is not contested.

#### Visual Impact

- 8.31 The supporting ES concludes that the significant visual effects of the development are most likely to be experienced in the range up to 3km (and principally relevant to local residents, walkers, riders and those enjoying other recreation interests and for whom the landscape is or may be a major contributor to enjoyment) and over sections of minor roads. The ES states there would be a significant visual effect on the views from 24 individual residential properties or groups of properties, two minor roads and one Core Path. None of the residential properties are within 800m of the proposed Tressady Wind Farm and none would be significantly affected in terms of their individual visual amenity. The two minor roads are located beyond 2km and the Core Path is located at approximately 3.5km distance from the nearest Tressady turbine.
- 8.32 Any decision on this application needs to recognise the likely receptors at these representative viewpoints: where the impact remains significant; the sensitivity of the change that is brought about; and what weight needs to be given to this impact in the round when considering all other policy tests. VPs identified in the ES as experiencing significant impacts largely represent impact upon residents and local road users. When considering the residential aspect of visual amenity the ES advises there would be no effect on the living standards of individual properties such that any of these properties would become an unattractive place to live. The

VP include: -

- VP 1 West Langwell nearest turbine 1.025km;
- VP 2 East Langwell nearest turbine 1.724km;
- VP 3 Craggie Beg nearest turbine 2.04 km,
- VP 4 Knockarthur nearest turbine 2.9km; and
- VP 5 Achnagarron nearest turbine 3.09km.
- 8.33 It is noteworthy that the above assessment is based on a methodology where by moderate impact was not deemed to be significant. SNH consider that the decision not to consider 'moderate' impact as potentially significant, underplays the overall assessment of visual impacts. The Council consistently adopts the position that moderate impact is regarded as significant and thereby assesses the proposal on this basis.
- 8.34 In addition to the above the VPs below the Council consider that the following locations will also experience significant impact: -
  - VP 9, Farlary All turbines are visible, with 9 turbines being fully visible, at a distance of approximately 5.5km. Road users travelling northwest experience direct visibility for over 1 km of travel.
  - VP 10, Sciberscross 10 turbines are visible, 4 being fully visible, at a distance of approximately 5.5km. The turbines are seen to occupy a commanding position on moorland above the strath, appearing as dominant focus of attention. Road users travelling westward will experience direct views of the development.
  - VP 11, Leathhad Liath All turbines are visible, with 8 partially screened by landform. This VP is located within an area of wild land and receptors will be highly sensitive to the development, which is located approximately 6.5km away.
  - VP 12, Creagan Glas All turbines will be visible, with nearly all being fully visible due to limited screening, at a distance of approximately 7.2 km. The turbines would be seen located on an undeveloped moorland plateau, with a mixture of hills and mountains in more distant views.
- 8.35 The assessment within the ES has also looked at cumulative visual impact. SNH advice is that there are likely to be significant cumulative impacts at a number of viewpoints. The key impacts being: -
  - A With Tressady and Kilbraur Wind Farms at: -
    - VP 2 (East Langwell)
    - VP 3 (Craggie Beg)
    - VP 5 (Achnagarron)
    - VP 9 (Farlary)

B - With Tressady in combination with Kilbraur and Gordonbush Wind Farms at: -

• VP 10 (Sciberscross).

- VP 17 (Meallan Liath Mor) will experience significant cumulative visual impacts.
- 8.36 The assessment has not brought about any objection from SNH. This standpoint no doubt takes on board that the impact is experienced in localised areas, affect a small numbers of scattered houses / residents, on roads which are not used in significant numbers or impact on designated sites and other valued community assets / businesses. It is noteworthy to recognise the development does not impact upon the main communities and roads within the East Sutherland area. The proposal has limited cumulative impact, including sequential impact, as experienced by travellers on local roads. There is no cumulative impact on the A9 (T) road or other main tourist routes across the area such as the A836 Bonar Bridge Lairg and A839 The Mound Lairg and North rail line.
- 8.37 Concerns have been raised by the community council in respect of the disproportionate share of these projects in its area. Scottish Government places no cap on its development ambitions and is expecting plans to be brought forward in significant numbers to meet its ambitious targets. Determination of this application needs to consider the application on its merits. This assessment has to have regard to other operational and approved developments as noted within para 2.9 above. No weight can be given to other potential projects which have yet to progress through the application process.

#### Cultural Heritage

- 8.38 The ES advises there are no Scheduled Monuments or Listed Buildings within the proposed development site, and no part of the development would lie within a Garden and Designed Landscape, Historic Battlefield or a Conservation Area. Eighteen heritage assets have been identified within the proposed development site. Twelve additional assets have been identified within a 200m wide study corridor centred on the section of the final access route that requires upgrading for Tressady wind from Kilbraur wind farm site entrance.
- 8.39 Analysis of the visibility mapping indicates that within 10km of the proposed development there may be visibility of turbines from 12 Scheduled Ancient Monuments (SAM) and three Category B Listed Buildings. Eleven of the SAMs are prehistoric settlement or funerary/ritual sites and one is a post-medieval farmstead. Two of the category B listed buildings are churches and one is a road bridge which crosses the River Brora. Indirect impacts of moderate significance, which are significant in terms of EIA, have been predicted on the settings of two cultural heritage assets in the wider landscape including Cnoc an Liath Bhaid stone circle (NE) and Dremergid hut circle settlement and field system (SE). Mitigation has been put forward to offset the predicted impact on Cnoc an Liath Bhaid stone circle. This is proposed to be a project for enhancement of knowledge and understanding the monument in its landscape context and its association with other potentially contemporary monuments in the landscape in this part of Strath Brora.
- 8.40 Although raising no objections to the application, although a close call, Historic Scotland, considers the ES to have underestimated the significance of the impact of the development on the above 2 SAMS as well as 4 other SAMs at Achnagarron

(2), Blairmore (1) and Cnoc an Ruidhearn Chruaidh (1) all of which within 4km of the development. It advises that the mitigation identified is compensatory in nature and that whilst the mitigation measures outlined may offset some of the impacts of the proposed development, it does not consider that they mitigate the significant adverse impact of the development on the setting of the scheduled monument to a meaningful degree.

8.41 The Council's Archaeology Team concur with the views of HS. It also does not put forward an objection to the development but believes the developer should be required to compensate through an appropriate package of mitigation for the visual impact and loss of amenity to the historic environment. It has also highlighted the need to consider the impact of the access route to the site on local archaeology and the need for specific mitigation to protect sites from any damage. The package of mitigation would be expected to incorporate improved access and understanding of the historic cultural resource of this area providing opportunities for training, education and increased visitor attraction.

## Economic Impact and Tourism.

- 8.42 This multi million pound renewable energy project anticipates a construction phase of 18 months and 25 years of operation prior to several months decommissioning. Such a project, as experienced during the construction of the Gordonbush wind farm, can offer significant investment / opportunities to the local, Highland and Scottish economy / businesses ranging across construction, haulage, electrical and service sectors. There will however be some adverse effects caused by construction disruption (traffic) as well as the operation of wind turbines within a traditional rural area.
- 8.43 The ES, in examining the local economy, highlights that in the locality of the development site there are few significant tourist related or other businesses that would be directly affected by the development project. The main tourist centres lie further afield for example Dunrobin Castle Golspie, Distilleries in Brora / Tain, golf courses, fishing on the River Brora, Walking, Cycling, Trekking, etc. is undertaken but within the wider Sutherland countryside. The principal tourist routes, roads and rail also will not be significant affected by the development, although as highlighted earlier by SNH there are some significant landscape and visual impacts which tourists who venture to the local area will experience. The impact on tourists visiting the area is seen as being minor.
- 8.44 Whilst the above conclusion reached by the applicant, is accepted, Kilbraur wind farm, Gordonbush wind farm and the impact from this project will bring about additional cumulative impact. The impact on tourists using the local roads through Rogart to and from Brora and Golspie has been particularly highlighted within public representations.

#### Noise and Shadow Flicker.

8.45 The wind farm has been assessed for potential noise impact. This has identified a number of nearby properties for particular attention. Three potentially four properties have been identified as having a financial involvement with the

development. Predicted background noise levels in some areas are very high at higher wind speeds. The accepted wind farm guidance in ETSU, suggests that a noise standard of up to 45dB LA90 or 5dB above background is applicable to such properties and the noise assessment for this development has continued on this basis.

- 8.46 Three / potential four nearby properties are not financially involved and therefore, the noise levels are required to comply with the following standards; 35dB LA90 daytime or 38dB Night time or 5dB above background. The assessment indicates that levels will comply with the exception of a potential breach of up to 1.3dB at wind speeds of 6m/s at a property West of Bardachan. The prevailing wind direction means that this property will be upwind of the development most of the time. The guidance does suggest that the lower daytime limit can be between 35 and 40 dB LA90 if the circumstances merit it, depending on the size of the development and the number of properties affected. In this case the lower daytime standard of 35dB LA90 is appropriate. Noise assessment takes into account prevail wind direction and where necessary cumulative impact from other similar developments. Kilbraur wind farm at over 5.5km distance to the east is not expected to impact on the assessment outcomes.
- 8.47 Given predicted background noise levels at high wind speeds the EHO has advised a cap for the upper limits to 48dB which would give at least 5dB margin over predicted levels but would be easier to deal with in the event of an extension or additional wind development in the area. For the non-financially involved properties night time limits should be restricted to 38db or 5db above background in accordance with Highland Council's preferred targets. The EHO has advised that in addition to the standard conditions, a requirement for the operator to undertake compliance monitoring as soon as the wind farm is operational should be requested. The standard condition includes a requirement to submit a scheme of mitigation which would be implemented should noise levels be found to exceed the conditioned limits.
- 8.48 The ES identifies that up to 10 properties could experience shadow flicker. For eight of these properties the impact is predicted to be negligible, for one property the impact is predicted to be minor to moderate and for one property a moderate to substantial impact is predicted. A scheme of mitigation has been proposed by the applicant that could involve a turbine(s) at a specific date, time and intensity of sunlight to automatically shut down when conditions result in shadow flicker at the affected property. It would be appropriate to ensure this mitigation is secured by planning condition to allow the planning authority to retain effective control on this issue.

#### **Telecommunications**

8.49 There have been no concerns raised in relation to potential interference with radio / television networks in the locality. Notwithstanding this, the Council has a standard practice of requiring developers to address adverse impacts that may emerge during construction and over the initial year of operation when problems may be detected. This should be sufficient to address any future concerns should they emerge with the project construction and over the initial year of operation when

problems might be experienced.

#### Aviation Interests

8.50 The application has raised no concerns with regard to aviation interests including those of the Ministry of Defence. As is normal a request has been made for aviation lighting on turbines. Provided this is secured using infra red lighting it should not impact adversely on the surrounding area. Standard conditions will also require notification of development start dates and confirmation of final build details for plotting on aviation maps.

#### **Construction Impacts**

- 8.51 The construction phase of the development is anticipated to last 18 months. Further works may be required for any interim site restoration in addition to decommission and site restoration at the end of the operation period of the wind farm. The key impacts for local residents through construction will be the additional traffic movements of the work force and material deliveries including abnormal loads associated with turbine deliveries. The ES highlights that using best practice construction management, the anticipated impacts can be managed to minimise the effect on local communities and residential properties in the proximity of the development / road access routes.
- 8.52 Should the development be approved it would be important to require a Construction and Environmental Management Plan /Document (CEMP/D) as a condition attached to any approval. This will ensure that all the proposed construction works are assessed prior to commencement of construction with the preferred contractor to minimise harm to the environment, hydrology, ecology and local communities / properties. In addition to such a condition the Council will require the applicant to enter into a legal agreement and provide financial bonds with regard to its use of the local road network (Wear and Tear Agreement) and a final site restoration (Restoration Bond). In this manner the site can be best protected from the impacts of construction and for disturbed ground to be effectively restored post construction and operational phases.

## Other Material Considerations

- 8.53 The application has highlighted new forestry plantings that have recently been undertaken within the proposed wind farm site. A commitment has been given to replace any tree loss, should the application be approved, within the surrounding area.
- 8.54 It is normal practice when considering a development of this nature to secure certain matters by way of a legal agreement in parallel with conditions for example, where financial bonds are to be provided or where actions require the involvement of parties other than the applicant and the Planning Authority. This project has highlighted the need for such an agreement to address: -
  - A habitat management / forestry plan on land outwith the application site.
  - A Cultural Heritage Management Plan addressing archaeological matters

outwith the application site.

- The provision of a bonded sum to be held for the ultimate restoration of the site.
- A "wear and tear" agreement under Section 96 of the Roads (Scotland) Act 1984 to cover the costs of any damage to the local road network arising from construction traffic associated with the proposed development.
- Widening Improvements to the local road.
- an agreed bonded sum to be held to correct any interference that is caused to television/radio reception by the proposed wind farm during its first 12 months of operation.
- 8.55 It is important that the legal agreement is finalised agreed within a short timescale (4 months) of a committee decision to approve a project as presented. It is for this reason in the event of a failure to deliver a suitable agreement the Committee can give delegated authority to the Head of Planning and Building Standards to refuse the application on the basis that it does not conform with Council policy(s) on appropriate mitigation in respect of the above issues.
- 8.56 In line with The Highland Council policy and practice, community benefit considerations are undertaken as a separate exercise and generally in parallel to the planning process. The representations in respect of compensation and financial benefits to local residents would be addressed as appropriate with that forum.
- 8.57 There are no other relevant material factors highlighted within representations for consideration of this application by the committee.

## 9. CONCLUSION

- 9.1 The Scottish Government gives considerable commitment to renewable energy and encourages planning authorities to support the development of wind farms where they can operate successfully and where concerns can be satisfactorily addressed. The project has the potential to provide a further 32.5MW generation of renewable energy towards Scottish government targets. As with all applications the benefits of the proposal must be weighed against potential drawbacks and then considered in the round, particular against the policies of the Development Plan.
- 9.2 The site falls within an "Area of Search" within the Council's Supplementary Guidance for onshore wind farm development; the default position set out in the guidance once national and local constraints are identified. Many issues highlighted in the processing of this application, for example in relation to construction traffic and impact on peat and archaeology, can be managed through appropriate mitigation, the adoption of good construction practices and / or planning conditions / legal agreement. No objections have been made to the application by statutory consultees, subject to appropriate planning conditions being put in place.
- 9.3 However, the application has attracted 29 representations against the proposal. The key issues of objection relate to the visual impact including the cumulative impact of largescale onshore wind energy in this locality as well as concerns in respect of impact of construction traffic on the local road network / local residents.

Recognition also needs to be taken of the impact on local archaeology as highlighted by Historic Scotland and the need to secure package of mitigation being offered by the applicant.

- 9.4 With regard to landscape and visual impact, the ES has highlighted the significant impacts. The assessment also identifies the need to recognise "moderate" impacts noted in the ES to be recognised as significant. It is on the small scattered rural housing groupings where these significant impacts are experienced. That said the significant visual effects from residential properties are not seen to be significantly detrimental in terms of residential amenity. None would be so affected such as to transform any property into one which would come to be widely regarded as an unattractive place to live. Affected properties (24) are small in number, many of which have outlooks that do not face the wind farm site and have a much wider panorama.
- 9.5 Some local properties in the area already have sight of Kilbraur wind farm which has been successfully absorbed into the locality. There is no reason to suggest that the current application cannot also be accommodated, with cumulative visual impact not being seen as a significant issue. Clearly drivers who use the local roads from Rogart to Brora or Golspie will have a cumulative experience of wind farms, but such experiences are generally short lived and lost in the wider countryside which has many features of interest. In many respects the development is relatively discreet, particularly to the main communities of East Sutherland and the main roads / railways used by public and travellers / tourists in the north Highlands.
- 9.6 With regard to traffic impact the Council's TEC Service has requested that all vehicles over 3.5 tonnes involved with the construction project be directed via Drummuie / Dunrobin Glen. This in effect would place all construction vehicles on the same routing as the abnormal loads from the A9 (T) road and thereby utilise a route that is to be improved from the Kilbraur Wind farm site access to the proposed site access for the development. The applicant has agreed to this approach and would accept a condition that in effect limits the use of existing public roads in the area for construction vehicles in excess of 3.5 tonnes. In this manner concerns of many residents in the area, who live away from this route, can be addressed.
- 9.7 The decision of Historic Scotland not to object to the application was one of balance which did recognise significant impact on a small number of SAMs. The Council's own Archaeology Unit is also content not to object subject to the impact on local archaeology being appropriately mitigated through careful management of construction and the resourcing of positive measures to provide improved access and understanding of the historic cultural resource of this area providing opportunities for training, education and increased visitor attraction. It is through a commitment to the resourcing of this endeavour that would best offer some mitigation for the adverse impact of this renewable project on the area's rich archaeology.
- 9.9 The determination of this application principally lies within the provisions of Policy 67 of the Highland Wide Local Development Plan. It is supportive of renewable

energy projects, which is currently beneficial to the local economy in terms of employment. The application has been tested against the eleven criteria of the Policy where relevant. Whilst the development will become a significant feature of the local area, it is considered that the proposal is acceptable in terms of design and layout. The application is one that can be seen as being sited such that it will not be significantly detrimental overall, either individually or cumulatively with other operational developments. The impact of the project is also reversible in that permission is being sought for a period of 25 years after which time the infrastructure can be removed and the site largely restored.

9.10 The application is therefore seen to accord with the policies of the Council's Development Plan. The application is therefore one which on balance should be supported.

## 10. **RECOMMENDATION**

## Action required before decision issued Y

Notification to Scottish Ministers	Ν
Notification to Historic Scotland	Ν
Conclusion of Section 75 Agreement	Y
Revocation of previous permission	Ν

10.1 It is recommended the application be **granted planning permission** subject to the following matters as highlighted below.

#### **Conditions**

1 The development shall be undertaken in accordance with the application and the supporting Environmental Statement (ES) and in compliance with the planning conditions as set out below. For the avoidance of doubt the turbines, access tracks and crane hard-standing areas may be micro sited but no more than 50 metres from the positions shown in the approved plans unless otherwise agreed in writing with the Planning Authority in consultation with SEPA and SNH.

**Reason**: To ensure the development is carried out in accordance with the approved plans with some flexibility to take account of local site conditions uncovered at the final design / construction stage.

2 This planning permission shall expire and cease to have effect after a period of 30 years from the date when electricity is first exported from any of the approved wind turbines to the electricity grid network (the "First Export Date"). Upon the expiration of a period of 25 years from the First Export Date, the wind turbines shall be decommissioned and removed from the site, with decommissioning and restoration works undertaken in accordance with the terms of condition 3 of this permission. Written confirmation of the First Export Date shall be submitted in writing to the Planning Authority within one month of the First Export Date.

**Reason**: - Wind turbines have a projected lifespan of 25 years, after which their condition is likely to be such that they require to be replaced, both in terms of technical and environmental considerations. This limited consent period also enables a review and, if required, reassessment to be made of the environmental impacts of the development and the success, or otherwise, of noise impact, species protection, habitat management and mitigation measures. The 30 year cessation date allows for a 5 year period to complete commissioning and site restoration work.

3. No development shall commence until a draft Decommissioning and Restoration Plan (DRP) for the site has been submitted to, and approved in writing by, the Planning Authority in consultation with SNH and SEPA. Thereafter:

i. No later than 3 years prior to the decommissioning of the development, the draft DRP shall be reviewed by the Wind Farm Operator and a copy submitted to the Planning Authority for their written approval, in consultation with SNH and SEPA; and

ii. No later than 12 months prior to the decommissioning of the development, a detailed DRP, based upon the principles of the approved draft plan, shall be submitted to, and approved in writing by, the Planning Authority, in consultation with SNH and SEPA.

For the avoidance of doubt, the DRP shall include the removal of all aboveground elements of the development, all access tracks, the treatment of disturbed ground surfaces, management and timing of the works, environmental management provisions and a traffic management plan to address any traffic impact issues during the decommissioning period. The detailed Decommissioning and Restoration Plan shall be implemented as approved.

**Reason**: To ensure that all wind turbines and associated development is removed from site should the wind farm become largely redundant; in the interests of safety, amenity and environmental protection.

4 No development shall commence until section 69 Agreement Local Government (Scotland) Act 1973 is in place to provide a financial guarantee with the Highland Council to secure the proper de-commissioning of the wind farm and site reinstatement as set out within the approved draft Decommissioning and Restoration Plan required under Condition 3 above.

Reason: -

- 5 The Wind Farm Operator shall, at all times after the First Export Date, record information regarding the monthly supply of electricity to the national grid from each turbine within the development and retain the information for a period of at least 24 months. The information shall be made available to the Planning Authority within one month of any request by them. In the event that:
  - i. any wind turbine installed and commissioned fails to supply electricity on a

commercial basis to the grid for a continuous period of 6 months, then the wind turbine in question shall be deemed to have ceased to be required. Under such circumstances, the wind turbine, along with any ancillary equipment, fixtures and fittings not required in connection with retained turbines, shall, within 3 months of the end of the said continuous 6 month period, be dismantled and removed from the site and the surrounding land fully reinstated in accordance with this condition; or

ii. the wind farm fails to supply electricity on a commercial basis to the grid from 50% or more of the wind turbines installed and commissioned and for a continuous period of 12 months, then the Wind Farm Operator must notify the Planning Authority in writing immediately. Thereafter, the Planning Authority may direct in writing that the wind farm shall be decommissioned and the application site reinstated in accordance with this condition. For the avoidance of doubt, in making a direction under this condition, the Planning Authority shall have due regard to the circumstances surrounding the failure to generate and shall only do so following discussion with the Wind Farm Operator and such other parties as they consider appropriate.

All decommissioning and reinstatement work required by this condition shall be carried out in accordance with the approved detailed Decommissioning and Reinstatement Plan, or, should the detailed Decommissioning and Reinstatement Plan not have been approved at that stage, other decommissioning and reinstatement measures, based upon the principles of the approved draft DRP, as may be specified in writing by the Planning Authority.

**Reason**: To ensure that any redundant or non-functional wind turbines removed from site, in the interests of safety, amenity and environmental protection.

- 5. No development shall commence until full details of the proposed wind turbines have been submitted to, and approved in writing by, the Planning Authority. These details shall include:
  - i. The make, model, design, power rating and sound power levels of the turbines to be used; and
  - ii. The external colour and/or finish of the turbines to be used (incl. towers, nacelles and blades) which should be non-reflective pale grey semi-matt.

Thereafter, development shall progress in accordance with these approved details and, with reference to part ii above, the turbines shall be maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned. For the avoidance of doubt, all wind turbine blades shall rotate in the same direction.

**Reason:** To ensure that the turbines chosen are suitable in terms of visual, landscape, noise and environmental impact considerations.

7 Unless otherwise agreed in writing by the Planning Authority, all of the wind turbine transformers shall be located within the tower of the wind turbine to which they

relate. Agreement for external transforms will only be given if the developer can, through detailed design work and additional landscape and visual impact assessment, demonstrate, to the satisfaction of the Planning Authority, that they would not adversely affect the character, integrity or general amenity of the application site and its setting.

**Reason:** To ensure ancillary elements of the development, such as external transformers, are only permissible if, following additional design and LVIA work, are demonstrated to be acceptable in terms of visual, landscape, noise and other environmental impact considerations.

8 No development shall commence until full details of the final location, layout, external appearance, dimensions and surface materials of all control buildings, welfare facilities, compounds and parking areas, as well as any fencing, walls, paths and any other ancillary elements of the development, have been submitted to, and approved in writing by, the Planning Authority (in consultation with SEPA and SNH, as necessary). Thereafter, development shall progress in accordance with these approved details. For the avoidance of doubt, details relating to the control, substation and welfare buildings shall include additional architectural design, LVIA and other relevant assessment work, carried out by suitably qualified and experienced people, to ensure that they are sensitively scaled, sited and designed. For the avoidance of doubt the deployment of peat bunds for screening of such buildings / equipment is not permitted.

**Reason:** To ensure that all ancillary elements of the development are acceptable in terms of visual, landscape and environmental impact considerations.

9 Notwithstanding the provisions of the Town and Country Planning (Control of Advertisements) (Scotland) Regulations 1984 (as amended), and unless there is a demonstrable health and safety or operational reason, none of the wind turbines, anemometers, power performance masts, switching stations or transformer buildings/enclosures, ancillary buildings or above ground fixed plant shall display any name, logo, sign or other advertisement without express advertisement consent having been granted on application to the Planning Authority.

**Reason**: To ensure that the turbines are not used for advertising, in the interests of visual amenity.

- 11 No development shall commence until a scheme of aviation lighting is submitted to, and approved in writing by, the Planning Authority after consultation with the Ministry of Defence. Thereafter the approved scheme of aviation lighting shall be fully implemented on site. The Company shall provide both the Ministry of Defence and the Defence Geographic Centre (AIS Information Centre) with a statement, copied to the Planning Authority and Highland and Islands Airports Limited, containing the following information:
  - a. the date of Commencement of the Development;
  - b. the exact position of the wind turbine towers in latitude and longitude;
  - c. a description of all structures over 300 feet high;
  - d. the maximum extension height of all construction equipment;

- e. the height above ground level of the tallest structure; and
- f. detail of an infra red aviation lighting schemes as agreed with aviation interests and the Planning Authority.

**Reason**: -To ensure that the erected turbines present no air safety risk and in a manner that is acceptable to local visual impact considerations.

- 11 No development shall commence until a Construction Environmental Management Document is submitted to and agreed in writing by the Planning Authority in consultation with SNH and SEPA. The Document shall include:
  - An updated Schedule of Mitigation (SM) including mitigation proposed in support of the planning application and supported by statutory agencies and other agreed mitigation as set out in the attached planning conditions.
  - Processes to control / action changes from the agreed Schedule of Mitigation.
  - The following specific Construction and Environmental Management Plans (CEMP):
    - i. Peat Management Plan to include details of all peat stripping, excavation, storage and reuse of material in accordance with best practice advice published by SEPA and SNH. This should for example highlight how sensitive peat areas are to be marked out on-site to prevent any vehicle causing inadvertent damage.
    - ii. Management of Geo-technical Risks including provision of a completed Peat Landslide Risk Assessment
    - iii. Water Management Plan highlighting drainage provisions including monitoring / maintenance regimes, deployment of water- crossings using bottomless culverts, surface water drainage management (SUDs) and development buffers from watercourses.
    - iv. Pollution Prevention Plan.
    - v. Site Waste Management Plan.
    - vi. Construction Noise Mitigation plan.
    - vii. Species Protection Plan for Water Vole, Otter, Badger, Wild and Breeding Birds including details of pre-commencement surveys and development buffer areas to prevent encroachment on protected species and habitat.
    - viii. Site Landscaping and Restoration Plan highlighting measures to ensure grazing animals do not damage restoring and reinstated ground.
    - ix. Habitat Management Plan to mitigate the loss of priority habitat caused by construction of the wind farm highlighting works to be undertaken within and beyond the development site including the offered continual monitoring and reporting.
    - x. Woodland Management Plan highlighting the extent of works to under undertaken within the application site and confirming the volume / area of compensatory planting beyond the site.
  - Details of the appointment of an appropriately qualified Environmental Clerk of Works with roles and responsibilities which shall include but not necessarily be limited to:

- i. Providing training to the developer and contractors on their responsibilities to ensure that work is carried out in strict accordance with environmental protection requirements;
- ii. Monitoring compliance with all environmental and nature conservation mitigation works and working practices approved under this consent;
- iii. Advising the developer on adequate protection for environmental and nature conservation interests within, and adjacent to, the application site;
- iv. Directing the placement of the development (including any micro-siting, as permitted by the terms of this consent) and the avoidance of sensitive features; and
- v. The power to call a halt to development on site where environmental considerations warrant such action.
- Details of any other methods of monitoring, auditing, reporting and communication of environmental management on site and with the client, Planning Authority and other relevant parties.
- Statement of any additional persons responsible for 'stopping the job / activity' if in potential breach of a mitigation or legislation occurs.

Unless otherwise agreed in writing by the Planning Authority the development shall proceed in accordance with the agreed Document.

**Reason**: To protect the environment from the construction and operation of the development and secure final detailed information on the delivery of all on-site mitigation projects.

12 No development shall commence until the proposed route for any abnormal loads on the trunk road network is approved by the Trunk Roads authority. Any accommodation measures required including for example the removal of street furniture, junction widening, traffic management must similarly be approved and implemented on an agreed timescale.

**Reason**: - To minimise interference and maintain the safety and free flow of traffic on the Trunk Road as a result of the traffic moving to and from the development.

13 During the delivery period of the wind turbine construction materials any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland before delivery commences.

**Reason**: - To ensure that the transportation will not have any detrimental effect on the road and structures along the route.

- 14 No development shall commence until the following matters have been addressed in full with the Planning Authority in consultation with TEC Services: -
  - An assessment of the capacity of existing bridges and other structures along the construction access route(s) to cater for all construction traffic will be

required. Approval of this assessment by TEC Services will be required prior to commencement of construction. Any work necessary as a result of this assessment shall be carried out by the developer to the satisfaction of the Planning Authority in consultation with TEC Services.

- All improvements to the local road network are in place including verge widening and strengthening; carriageway widening and strengthening; and provision of additional passing places. Construction of a site entrance to full industrial standard, including provision of visibility of 160 metres in both directions, in accordance with THC Road Guidelines will be required.
- A Wear and Tear agreement is secured in accordance with Section 96 of the Roads (Scotland) Act 1984 under which the developer is responsible for the repair of any damage to the local road network that can reasonably be attributed to construction related traffic. As part of this agreement, pre-start and post construction road condition surveys will need to be carried out by the developer to the satisfaction of TEC Services.
- On completion of works required to accommodate abnormal vehicles a trial run will be required to confirm the ability of the local road network to cater for turbine delivery. TEC Services will require three weeks' notice of this trial run to allow us the opportunity to attend.
- A Traffic Management Plan will be required describing proposed measures to manage traffic during the construction and operation period. Approval of this Traffic Management Plan by TEC Services will be required prior to commencement of construction. This TMP should recognise in full: -
  - The mitigation agreed by the applicant to ensure all construction traffic over 3.5 Tonnes should be directed via Drummuie/Dunrobin Glen unless otherwise agreed with TECS. (The developer has given a commitment to reducing the impact of construction traffic around Rogart and Strath Brora. This commitment is being given on an entirely voluntary basis.) This will require the development of a briefing note, to implement this voluntary code, to all drivers associated with the construction or supply of materials to the development of Tressady wind farm. On the approval of the TMP, including the wording of the briefing note, the developer must issue this guidance to all relevant parties or individuals and monitor traffic deliveries in compliance with this advice.
  - That at times of adverse weather heavy vehicles will not be permitted to use public roads as an alternative to forestry road between Drummuie and Dunrobin Glen. Therefore appropriate allowance should be made for this risk in the construction programme.
  - Local events and any necessary to ensure there is no conflict between construction traffic and the increased traffic generated by these events.

**Reason**: - To safeguard the local road network and maintain the safety and free flow of traffic on the local road network as a result of the traffic moving to and from the development.

15 Access to the site by heavy goods vehicles and any noisy construction activity on the road network (e.g. piling) shall be restricted to 07.00 to 19.00 on Mondays to Fridays and from 07.00 to 13.00 on Saturdays with no such access on Sundays unless otherwise agreed in advance in writing by the Planning Authority.

**Reason**: To safeguard the general amenity of the wider area at quiet periods.

16 No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and local Community Councils. The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the delivery of turbine components; this should also ensure that local events and tourist seasons are considered and appropriate measures to coordinate deliveries and work to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons. The liaison group, or element of any combined liaison group relating to this development, shall be maintained until wind farm has been completed and is operational.

**Reason**: To assist with the provision of mitigation measures to minimise the potential hazard to road users, including pedestrians travelling on the road networks.

- 17 No development shall commence until an Access Management Plan (ACP) is submitted for the approval of the Planning Authority to detail: -
  - how construction traffic will be managed to ensure Core Paths and general access to the countryside will be sustained / improved during the construction period.
  - Permanent site signage and access control (gates) etc. to manage public access provision during the operation of the development when the wind farm tracks are to be available for public access.

The approved plan will then be implemented on an approved timetable.

**Reason**: - To ensure public access to the countryside is not impeded as a result of this development.

18 No development shall commence until a Cultural Heritage Management Plan advancing mitigation to offset the impact of the development, including the access road improvements for abnormal loads, on the archaeological and historic features affected by the development including measures to assist with the preservation of cultural heritage assets in situ or, where necessary, by record; to improve and enhance access to the cultural landscape; to improve and enhance understanding of the cultural landscape; to provide opportunities for training and education in the historic environment and archaeological techniques; and provide resources to enable the promotion of the cultural landscape. The approved plan shall be implemented in accordance with a timetable which is expected to extend throughout the operational period of the wind farm. **Reason**: In order to protect the archaeological and historic interest of the site and secure an appropriate package of mitigation to offset the impact of development on features of archaeological and historic features.

19 No development shall commence until a scheme of mitigation for shadow flicker has been submitted to and approved in writing by the Planning Authority. The scheme shall include mitigation measures to reduce the impact of shadow flicker on nearby houses and shall be based on a detailed assessment of the impact of each turbine, its final siting design and on any occupied house surrounding the development at the time of construction. The approved scheme shall be implemented prior to the commissioning of the wind farm.

**Reason**: To protect the occupiers of residential units from the effects of shadow flicker.

20 No development shall commence until a TV and radio reception mitigation plan has been submitted to, and approved in writing by, the Planning Authority. The plan shall provide for a baseline TV reception survey to be carried out prior to the commencement of turbine installation, the results of which shall be submitted to the Planning Authority. Within 12 months of the Final Commissioning of the development, any claim by any individual person regarding TV picture loss or interference at their house, business premises or other building, shall be investigated by a qualified engineer appointed by the developer and the results shall be submitted to the Planning Authority. Should any impairment to the TV signal be attributable to the development, the developer shall remedy such impairment so that the standard of reception at the affected property is equivalent to the baseline TV reception.

**Reason**: To ensure local TV and Radio Services are sustained during the construction and operation of this development.

21 The rating level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed the values for the relevant integer wind speed set out in, or derived from, the tables attached to these conditions at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

a) The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.

b) No electricity shall be exported until the wind farm operator has submitted to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.

c) Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

d) The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority, prior to the commencement of development. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.

e) Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

f) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The

instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions.

g) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

**Table 1** – Between 23:00 and 07:00 – Noise limits expressed in dB LA90,10minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

	No	ise	levels	s (dB L	A90)	at star	dardise	d 10 me	tre heigl	nt wind s	speeds	(m/s).
Location	1	2	3	4	5	6	7	8	9	10	11	12
Achnahuie	38	38	38	38	38	38	41.3	46.9	48	48	48	48
Bardachan*	45	45	45	45	45	45	45	45	45	47.3	48	48
Braegrudie*	45	45	45	45	45	45	45	45	45	45.2	48	48
Craggiemore*	45	45	45	45	45	45	45	45.9	48	48	48	48
53 Craggie Beg	38	38	38	38	38	38	41.2	45.9	48	48	48	48
East Langwell	38	38	38	38	38	38	41.3	46.9	48	48	48	48
West of Bardachan	38	38	38	38	38	38	38.7	42.7	44.5	47.3	48	48

**Table 2** – Between 07:00 and 23:00 – Noise limits expressed in dB LA90,10 minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

	Nois spe			`	_A90)	at st	andaro	dised	10 met	re he	ight wi	nd
Location	1	2	3	4	5	6	7	8	9	10	11	12
Achnahuie	35	35	35	35	35	38.3	41.3	46.9	48	48	48	48
Bardachan*	45	45	45	45	45	45	45	45	46.3	48	48	48
Braegrudie*	45	45	45	45	45	45	45	45	45	45	45.3	46.4
Craggiemore*	45	45	45	45	45	45	45	47.4	48	48	48	48
53 Craggie Beg	35	35	35	35	35	38.2	42.8	47.4	48	48	48	48
East Langwell	35	35	35	35	35	38.3	43.6	48	48	48	48	48
West of Bardachan	35	35	35	35	35	35	38.7	42.7	46.3	48	48	48

\* Financially involved occupier

**Table 3**: Coordinate locations of the properties listed in Tables 1 and 2.

Property	Easting	Northing
Achanhuie	271900	907100
Bardachan	270300	908800

Braegrudie	271900	909900
Craggiemore	273355	908555
53 Craggie Beg	274000	908100
East Langwell	272359	906700
West of Bardachan	269800	908800

Note to Table 3: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

## INFORMATIVES

## 1. Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

- The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.
- On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

## 2. Accordance with Approved Plans & Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

## 3. Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (p.198), planning permission does not remove the liability position of developers or owners in relation to flood risk.

## 4. Local Roads Authority Consent

In addition to planning permission, you may require one or more separate consents (such as a road openings permit, wear and tear agreement, occupation of the road permit etc.) from TECS Roads prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local TECS Roads office for further guidance at the earliest opportunity.

## 5. Mud & Debris on Road

Please note that it is an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

## 6. Definition of Terms Used in this Decision Notice

"Wind Turbine Noise Level" means the rated noise level due to the combined effect of all the Wind Turbines, excluding existing background noise level but including any tonal penalty incurred under the methodology described in ETSU–R -97, pages 99 - 109.

"Wind Farm Operator" means the individual(s), organisation(s) or company(ies) responsible for the day-to-day operation of the windfarm, who may or may not also be the owner of the windfarm.

"Background Noise Level" means the ambient noise level already present within the environment (in the absence of noise generated by the development) as measured and correlated with Wind Speeds.

"Wind Speeds" means wind speeds measured or calculated at a height of 10 metres above ground level on the site at a specified Ordnance Survey grid reference agreed in writing by the Planning Authority

"Night hours" means 23:00 – 07:00 hours on all days.

"Noise-Sensitive Premises" means any building, structure or other development that, on the date of this planning permission, exists or is yet to exist but benefits from extant planning permission, the lawful use of which falls within Classes 7 (Hotels & Hostels), 8 (Residential Institutions) or 9 (Houses) of the Town and Country Planning (Use Classes) (Scotland) Order 1997 (as amended) or is as a flat or static residential caravan. Where such documents exist, this definition also includes any other premises defined as being noise-sensitive within any Environment Statement or other assessment or survey submitted in support of the planning application. For the purposes of this definition, 'premises' includes any relevant curtilage.

Signature:

Designation:	Head of Planning and Building Standards
Author:	Ken McCorquodale – 01463 702256
Background Papers:	Documents referred to in report and in case file13/02749/FUL

## LIST OF REPRESENTATIONS FOR TRESSADY WIND FARM AT LAND 1600M WEST OF, CRAGGIEMORE, TRESSADY ESTATE, ROGART,

## Application 13/02749/FUL

## OBJECTORS

- 1. Mrs Frances Ross, Croft 75, Inchcape, Rogart, IV28 3UD
- 2. Dr Alastair and I Gilchrist, Cnoc an Uchdair, 135 East Langwell, Rogart, Sutherland
- 3. J W Mackay, Cnoc An T Sithien, Blairmore, Rogart, IV28 3XE
- 4. Roger Roseveare, The Point, Brora, Sutherland, KW9 6LX
- 5. Mr & Mrs Jonathan Hedges, Caravan, Rossal, Rogart, iv28 3ud
- 6. Sinclair Car Sales, Per William Sinclair, Greenbank, Inchomney, IV28 3YE
- 7. Mrs And Mr Joy And Steven Wonderley, Dalnabreac, Rogart, Sutherland
- 8. Linda Cruickshanks, Keepers House, Morvich Lodge, Rogart, IV28 3XB
- 9. Dr. Peter Watson, Tigh-nan-Con, West Langwell, Rogart, IV28 3XQ
- 10. Mr Leslie And Tanyalou Sharp, Rean Rhu, 184 Muie, Rogart, IV28 3UB
- 11. Mr Andrew Vivers, Arniefooul, Glamis, Forfar, DD8 1UD
- 12. Mr And Mrs Donald Robert And K Jones, 228 North Tannachy, Rogart
- 13. Mr And Ms O'Reilly, Creag Nuek, 89 Inchomney, Rogart, IV28 3YE
- 14. Ms Kirsty Gunn, 70 Dalreavoch By Rogart, IV28 3YF
- 15. J G, R, H, and S Gordon, Wayside, West Langwell, Rogart, IV28 3XQ
- 16. Dr John Ross, 75 Inchcape, Rogart, IV28 3UD
- 17. Joseph And John Beedles, 89 Inchomney, Rogart, Sutherland, IV28 3YE
- 18. Mrs Merran Gunn Robb, Drudarald, Melvich, Sutherland, KW14 7YS
- 19. Ms Susan Fraser, Murras , Old Caithness Road, Helmsdale, KW8 6JW
- 20. Mr Peter Moore, 4 Hallow Park, Golspie, KW10 6RQ
- 21. Mr David Warwick Graham, 70 Dalreavoch , By Rogart, IV28 3YF
- 22. Mr Gordon Magee, 397 Drumanairgeid, Rogart, IV28 3YD
- 23. Mr And Mrs N And D Kilpatrick, Tarywan, Garvoult, Rogart, IV28 3YD
- 24. Mr & Mrs Roderick & Sheila Broad, Hartshay Cottage, Rogart, IV28 3TZ
- 25. Mr & Mrs David & Anne Walker, Banscol Lodge, Rogart, IV28 3YF
- 26. Mrs Mary E Stobo, 35 Beech Tree Park, Denny, FK6 6BU
- 27. Kirsty Neilson And Jory Roseveace, The Old Point, Strath Brora, Brora, KW9 6CX
- 28. Dave Matthews, 250 Little Rogart, Rogart, IV28 3XF
- 29. Mrs J A Gordon, 283 Achlauchrach, Rogart, IV28 3XQ

## SUPPORTERS

- 1. Miss Sarah Dangerfield, 39 Banscol, Rogart, IV28 3YF
- 2. Mr Brian Reid, 53 Craggiebeg, Rogart, Sutherland
- 3. Donald William And Jasmine Ross, Acheillach, Rogart, Sutherland, IV28 3YD
- 4. Mr Richard Claydon, 39 Banscol, Rogart, IV28 3YF

# Annex 2 - Guidance Notes for Wind Farm Noise Conditions

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

## Guidance Note 1

(a) Values of the LA90,10 minute noise statistic should be measured at the complainant's property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2 - 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The LA90,10 minute measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres . It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter.

(e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

## Guidance Note 2

(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 (b)

(b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (d) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1. In specifying such conditions the Local Planning Authority shall have regard to those conditions which prevailed during times when the complainant alleges there was disturbance due to noise or which are considered likely to result in a breach of the limits.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the LA90,10 minute noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

## **Guidance Note 3**

(a) Where, in accordance with the approved assessment protocol under paragraph (d) of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(b) For each 10 minute interval for which LA90,10 minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(c) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104109 of ETSU-R-97.

(d) The tone level above audibility shall be plotted against wind speed for each of the 2 minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be used.

(e) A least squares "best fit" linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



Guidance Note 4

(a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Guidance Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the Local Planning Authority in its written protocol under paragraph (d) of the noise condition.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (e) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:

(e). Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.

(f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:  $L_1 = 10\log [10^{L2/10} - 10^{L3/10}]$ 

(g) The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.

(h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note 3 above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then the development fails to comply with the conditions.





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