| THE HIGHLAND COUNCIL                                       | Agenda Item        | 3.2 |  |
|--|--------------------|-----|--|
| NORTH PLANNING APPLICATIONS COMMITTEE<br>17 September 2013 | Report No PLN/080/ |     |  |

Erection of 13 wind turbines, hard standings, anemometer mast, wind farm control building, temporary construction compound, lay down area and access tracks at Achkeepster, Caithness.

12/02868/FUL: Bad a Cheo Wind Farm, RWE Npower Renewables Ltd

Report by Head of Planning and Building Standards

## SUMMARY

**Description:** The proposal is a 13 turbine wind farm development with installed capacity of 32.5MW located at a site approximately 15km south of Thurso and 19km west of Wick, in Caithness, adjacent to the A9(T). The operational Causeymire Wind Farm operated by RWE NRL, lies immediately to the north. The turbines will be a maximum of 105m to blade tip in height. Access will be taken directly from the A9(T).

Recommendation: GRANT planning permission.

Ward: 4 – Landward Caithness

Development category: Major.

Pre-determination hearing: None

Reason referred to Committee: More than 5 objections.

## 1.0 PROPOSED DEVELOPMENT

- 1.1 It is proposed to erect 13 wind turbines each of up to 2.5MW power rating (32.5MW in total) and associated infrastructure including control building, cabling, access tracks, watercourse crossings, hard standings, and a permanent wind monitoring mast.
- 1.2 The proposed wind turbines will have a maximum overall height of 105 metres to blade tip. No rotor diameter has been specified. A 60 metre high anemometry mast is proposed south of turbine 6.
- 1.3 A new site access will be constructed directly from the A9(T), south of the current Causeymire Wind Farm access. Within the site boundary around 6.86km of new access track will be constructed. The track will have a typical running surface width of 5m with 20m x 3m passing places. The construction of five new watercourse crossings will also be required.

- 1.4 Part of the site is currently used for commercial peat cutting under a separate planning permission and under license to the landowner. The applicant is proposing that the peat cutting can continue in specific areas of the site (as proposed within the Updated Outline Habitat Management Plan submitted in March 2013).
- 1.5 The power produced by the turbines will be fed to a control building, located to the north of the site close to the site entrance (grid ref 317196, 949778). Only indicative details of the proposed control building have been given but it is envisaged that this will be a single storey structure with a pitched roof and a footprint no greater than 200sqm. The proposed control building will be located in a compound of no greater than 1283sqm. The control building will house switchgear, control and monitoring computers aswell as welfare provision. Cabling connecting wind turbines to the switch room is to be laid alongside access tracks.
- 1.6 Connection to the grid will be via wooden poles from the control building to the upgraded Mybster Substation. This will be subject to a separate application under s37 of the Electricity Act 1989.
- 1.7 There are no borrow pits proposed on the site. It is proposed that aggregate will be brought on to site from local quarries.
- 1.8 The development will involve the felling of approximately 30 hectares of plantation forest. This will be undertaken prior to the commencement of construction. A separate application for a felling license to Forestry Commission for Scotland (FCS) is not required as the forest is included in the red line boundary.
- 1.9 As the proposal involves Environmental Impact Assessment development, the application is supported by an Environmental Statement (ES).

## 2.0 SITE DESCRIPTION

- 2.1 The wind farm site lies in open moorland to the south of Halkirk in Caithness. The site comprises a total of 230.9 hectares. Approximately 150 hectares has planning permission for commercial peat extraction, which is on going. Approximately 30 hectares of the site is forested. This was planted in 1996 and until recently has been managed by the Forestry Commission as experimental forestry. It is no longer actively managed. The remainder of the site comprises primarily of heaths and bog, both blanket and modified wet, as well as a network of man made drainage ditches, installed as a result of the Forestry and the peat cutting.
- 2.2 The site lies within the River Thurso catchment. The Little River, which is a tributary of the River Thurso flows to the west and south of the site. The Allt Aikergill forms the western boundary of the site and the Causeymire Burn flows along the south east of the site. The River Thurso is a designated as Special Area of Conservation (SAC) for Atlantic Salmon. Spawning gravels, spawn and juvenile salmon are protected from disturbance/injury/destruction under the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003.

- 2.3 There are no statutory natural heritage designations on the site. However, parts of the site, for example those adjacent to the principal watercourses, are likely to support otter, which is a European Protected Species (EPS), and water vole.
- 2.4 There are a number of statutory designated sites in the wider area (i.e. within 10 km of the proposed wind farm):
  - River Thurso SAC is adjacent to the site, to the south. Its designation is for Atlantic salmon.
  - Caithness & Sutherland Peatlands SAC, SPA and Ramsar are adjacent to the site to the south and south west. Its designation is for habitats, these being Acid peat-stained lakes and ponds, blanket bog clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, wet mires often identified by an unstable 'quaking' surface and Wet heathland. It is also designated for species, these being Marsh saxifrage, Otter, Breeding bird assemblage and breeding populations of black-throated diver, common scoter, curlew, dunlin, golden eagle, golden plover, greenshank, hen harrier, merlin, red-throated diver, short-eared owl, teal, wigeon and wood sandpiper.
  - Loch Watten SAC, which lies 7.5km to the north east of the site. This is designated for Habitats, these being Natural eutrophic lakes.
  - Blar nam Faoileag SSSI which lies adjacent to the site, to the south. This is designated for blanket bog habitats.
  - Sheilton Pealtand SSSI, which lies 0.4km to the south east of the site. This is designated for blanket bog habitats and for protected species, these being breeding bird assemblage and breeding populations of common scoter, dunlin, golden plover, greenshank and wigeon.
  - Leavad SSSI which lies 0.55km to the south of the site. This is designation is Geological
  - Dirlot Gorge SSI which lies 3.3km to the west of the site. This is designated for Scrub woodland habitat and also geological interest.
  - Strathmore Peatlands SSSI, which lies 3.3km west south west and is designated for blanket bog habitats and also for species including The beetle *Oreodytes alpines* Breeding bird assemblage and breeding populations of common scoter, dunlin, golden plover, greenshank and wigeon
  - Spittal Quarry SSSI lies 3.7km north of the site. Its qualifying interest is Geological.
  - Achanarras Quarry SSSI lies 3.9km north northwest of the site. Its designation is Geological.

- Coire na Beinne Mires SSSI which lies 3.9km to the south of the site. It is designated for blanket Bog Habitat.
- Westerdale Quarry SSSI which lies 4.2km north west of the site. It's designation as geological.
- 2.5 The proposed wind farm site is not covered by any national or local landscape designation. There is no National Scenic Area (NSA) within 35km of the site. The majority of the site is located within a landscape character type described as 'Flat Peatland' in the Caithness and Sutherland landscapes character assessment (SNH 1998). It is adjacent to 'Coniferous Woodland Plantation' and to the north 'Sweeping Moorland' landscape character. Key characteristics of the flat peatland are the flat open landscape.
- 2.6 There are a number of Areas of Great Landscape Value/Special Landscape Areas (AGLV/SLA) within 35km of the site; particularly The Flow Country and Berriedale Coast SLA which lies to the south of the site and the Dunnet Head and Duncansby SLAs which lie to the north of the site on the coast. Part of the Bens Griam and loch nan Clar SLA lies to the west. To the south also lies the Flow Country SAWL (Wild Land Core Area).
- 2.7 There are no Scheduled Ancient Monuments, Listed Buildings, Conservation Areas or sites recorded in the Inventory of Gardens and Designed Landscapes within the application site. Within 10km of the site there are seven Scheduled Ancient Monuments and one listed building:
  - Halsary Moss Standing stones (SM-5301)
  - Mybster Broch (SM-521)
  - Tulach Mor broch (SM-593)
  - Rangag Standing Stone (SM-433)
  - Dirlot Stone Rows (SM446)
  - Dirlot Castle (SM-5897)
  - Carn na Mairg Broch (SM-534)
  - Causeymire Meeting House (HB-14977).
- 2.8 There are two undesignated cultural heritage assets within the site boundary:
  - Torran Farmstead (SMR MHG27554) to the south of the site, and
  - Shieling (possible) on the western site boundary.
- 2.9 Outside the site, immediately to the east on the A9 layby is a Stone Memorial (erected in the 1990's) to the victims of the WW2 Flying Fortress plane crash in the area in 1942 (N/A SMR MHG32259).

- 2.10 All residential properties in the area were considered as sensitive receptors. Operational Noise Assessment Locations are:
  - Tacher to the south,
  - Corner Cottage to the north west, and
  - Mybster to the north.

#### 3.0 PLANNING HISTORY

- 3.1 <u>18.02.2011</u> EIA Scoping Opinion submitted.
- 3.2 In addition to Causeymire Wind Farm which is immediately to the north of the proposed development, the following wind energy projects lie within a 35km radius:

| Built and/or consented  | Under consideration                                       |
|---|---|
| Forss 1&2<br>Baillie Hill<br>Boulfruich<br>Wathegar<br>Flex Hill (Bilbster) | Halsary<br>Achlachan<br>Limekiln<br>Strathy South<br>Lyth |
| Achairn<br>Burn of Whilk<br>Camster   | <u>Refused</u>  |
| Stroupster<br>Wathegar 2<br>Strathy North                                   | Dunbeath<br>Spittal Hill<br>Smerral<br>Forss 3            |

## 4.0 PUBLIC PARTICIPATION

- 4.1 08.07.2011 Proposal of Application Notice submitted (11/02551/PAN). A Public Exhibition took place on 06 September 2012.
- 4.2 Advertised: 14 September 2012 in the John O'Groat Journal and Edinburgh Gazette and again on 15 March 2013 on receipt of the Supplementary Information.

Representation deadline: 07 May 2013

| Timeous representations against: | 23 - including one from RSPB                |
|----------------------------------|---|
| Comments:                        | 1 - Caithness District Salmon Fishery Board |
| Representations in support:      | 8   |

- 4.3 Material considerations raised against are summarised as follows:
  - Adverse visual impact both on its own and cumulatively with other wind farms in the area
  - Detrimental effect on landscape quality Adverse impact on bat
  - Adverse impact on birds; particularly Red Kite and migratory birds
  - Adverse impact on TV reception

- Adverse noise impact both on its own and cumulatively with other wind farms in the area; particularly to Mybster
- Cumulative noise limit would be above 35dBA normally required
- Difficulties in assessing which wind farm breached noise limits
- Driver distraction dangerous
- Obstruction of viewpoint on A9(T)
- Adverse impact on tourism
- Removal of woodland detrimental to heritage of the Flow Country
- Further extraction of peat detrimental to natural carbon sink of peatland
- Impact of grid connection unknown
- Adverse impact on protected species
- Disruption during construction
- Limited socio-economic gains
- General misgivings of on-shore wind energy
- No carbon balance assessment has been submitted
- No reduction in carbon
- No further wind farms should be built
- Loss of Caithness Peat business not acceptable
- 4.4 Material considerations raised in support are summarised as follows:
  - General support for wind energy
  - Employment benefits
  - Access opportunities
- 4.5 A list of all those who made representation is provided in Appendix 1 of this report. All letters of representation can be viewed via the Council's e-planning portal <u>http://wam.highland.gov.uk</u>.

## 5.0 CONSULTATIONS

- 5.1 <u>Halkirk and District Community Council:</u> Object to the proposal.
- 5.2 <u>Watten Community Council:</u> No response received.
- 5.3 <u>Lybster and Clyth Community Council</u> has no objection on the basis that this is a suitable location.
- 5.4 <u>TEC Services (Roads and Transportation)</u> has no objection.
- 5.5 <u>TEC Services (Environmental Health)</u> has no objection subject to conditions.
- 5.6 <u>Council's Historic Environment Team</u> has no objection following the clarifications presented in the Supplementary Environmental Information March 2013.
- 5.7 <u>Council Forestry Officer</u> agrees that compensatory planting is not required for the experimental woodland block.
- 5.8 <u>Scottish Water</u>: No objection.

- 5.9 <u>Scottish Environment Protection Agency (SEPA)</u> has no objection subject to conditions in respect of the provision of a detailed Construction Environmental Management Plan and Habitat Management Plan, in particular in relation to the management of timber felling and treatment of felled timber as waste, peat storage and protection of the Little River (a tributary of the River Thurso SAC).
- 5.10 <u>Scottish Natural Heritage (SNH)</u> advice is that the proposal raises natural heritage issues of national interest in respect of the River Thurso SAC, but that the integrity of the site will not be adversely affected subject to adequate control over sediment, water and water quality and peat management through specific Construction Method Statements (CMSs), Construction Environmental Management Plans (CEMPs) and the Habitat Management Plan.

SNH advise that the proposal will not affect the integrity of the Caithness and Sutherland Peatlands SPA and Ramsar Site, Caithness Lochs SPA, East Caithness Cliffs SPA or Caithness and Sutherland Peatlands SAC.

With regard to European protected species interests, SNH consider that preconstruction surveys for otter will be required. SNH is satisfied that further survey work for bat is not required providing that no turbines are located within 50m of watercourses and/or woodland edges. Pre-construction surveys will be required for pine marten and water vole which are protected under the Wildlife & Countryside Act 1981.

In terms of ornithology, SNH specifically highlight potential effects on two protected bird species; breeding merlin (Annex 1 EC Wild Birds Directive/Schedule 1 - Wildlife & Countryside Act 1981) and greenshank (Annex 2 EC Wild Birds Directive/Schedule 1 - Wildlife & Countryside Act 1981).

SNH note that construction and tree felling works during the bird breeding season have the potential to damage or destroy bird nest sites, or to disturb species should they breed in proximity to work areas and advise that these impacts could be avoided by undertaking construction and tree felling activities outside the bird breeding season.

In the event that works are undertaken during the breeding season SNH advise that all areas affected by construction works plus a 1km buffer would have to be surveyed in advance of works commencing. Exclusion zones of 300m would then need to be established around any active nest sites. Should work within the bird breeding season be required such mitigation should be formalised through a Breeding Bird Protection Plan.

With regard to landscape and visual effects, SNH agree that Bad a Cheo wind farm would appear as an extension to the existing Causeymire Wind Farm in the same landscape character type, and it would be of similar layout and turbine type. In conjunction with Causeymire wind farm and the proposed Halsary Wind Farm, Bad a Cheo wind farm would result in a number of landscape and visual impacts, both adverse and beneficial. SNH therefore does not object but indicates that the four southernmost turbines 5, 6, 12 and 13 in Figure 4.1a would reduce the adverse effects from the proposal.

- 5.11 <u>Transport Scotland (Trunk Roads and Bus Operations)</u> advises that the proposed development represents an intensification of use of this site however the estimated increase in traffic on the trunk road is such that the proposed development is likely to cause minimal environmental impact on the trunk road network. Transport Scotland has no objection subject to conditions regarding the route of abnormal loads, the implementation of traffic control measures during construction, the appropriate design and construction of the site access from the A9, and the provision of wheel washing facility on the site during construction.
- 5.12 <u>Historic Scotland</u> notes that overall impacts are not of such significance to warrant an objection.
- 5.13 <u>National Air Traffic Services Limited (NATS)</u> has no safeguarding objection to the application.
- 5.14 <u>Civil Aviation Authority (Directorate of Airspace Policy)</u>: No comment.
- 5.15 <u>Highlands and Islands Airports Ltd</u> has no objection since the development will not infringe the safeguarding surfaces for Wick Airport.
- 5.16 <u>Ministry of Defence</u>: No objection subject to the condition that aviation lighting is provided and that they are notified of the commencement date, final turbine locations and maximum height of construction equipment.
- 5.17 <u>Ofcom</u> has found that no civil fixed links should be affected by the proposal.

## 6.0 DEVELOPMENT PLAN POLICY

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

## Highland Wide Local Development Plan (April 2012)

- Policy 28 Sustainable Development
- Policy 29 Design, Quality and Place Making
- Policy 51 Trees and Development
- Policy 52 Principle of Development in Woodland
- Policy 53 Minerals
- 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
- Policy 72 Pollution
- Policy 77 Public Access

## Caithness Local Plan (March 2006)

6.2 The general polices of the Local Plan have been superseded by the policies of the Highland wide Local Development Plan.

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

6.3 The site lies within an 'Area of Search' for wind energy development. This means that the site is within an area where there are fewer constraints to development. Proposals are therefore likely to be supported subject to further detailed consideration against Policies 57 and 67 of the Highland wide Local Development Plan.

## Trees, Woodlands and Development Supplementary Guidance (January 2013)

- 6.4 This Supplementary Guidance reflects the policy advice given in Policy 51 Trees and Development of the Highland wide Local Development Plan and Policy 52 Principle of Development in Woodland and in relation to wind farm development generally follows the advice within Scottish Government Control of Woodland Removal policy.
- 6.5 There is a strong presumption in favour of protecting the areas woodland resource. Development proposals involving woodland removal will only be supported where they offer clear and significant public benefit. In appropriate cases compensatory planting may be required. The purpose of compensatory planting is to secure, through new woodland on appropriate sites elsewhere, at least the equivalent woodland-related net public benefit embodied in the woodland to be removed.
- 6.6 While the Scottish Government Control of Woodland Removal policy accepts compensatory planting anywhere within Scotland, The Highland Council has a strong preference for planting to remain within the Highlands.

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

- 6.7 While superseded as location guidance by the Interim Supplementary Guidance above, HRES is still relevant as a strategy document. HRES sets out the Council's on-shore wind energy installed capacity targets. These are 1200MW by 2015, 1400MW by 2020 and 2900MW by 2050.
- 6.8 Relevant policies to the current application, not otherwise superseded by the above noted Supplementary Guidance, include:
  - Policy H1 Education and Training
  - Policy K1 Community Benefit
  - Policy N1 Local Content of Works

## Scottish Government Planning Policy and Guidance

- National Planning Framework for Scotland 2
  - SPP

6.9

- PAN 56 Planning and Noise
- PAN 58 Environmental Impact Assessment
- PAN 60 Planning for Natural Heritage
- Scottish Government policy on Woodland Removal
- 2020 Routemap for Renewable Energy

## 7.0 PLANNING APPRAISAL

7.1 Section 25 and of the Town and Country Planning (Scotland) Act 1997 requires that planning applications are determined in accordance with the Development Plan unless material considerations indicate otherwise. The Development Plan in this case comprises the Highland wide Local Development Plan (approved April 2012).

#### Determining Issues

- 7.2 The determining issues are:
  - do the proposals accord with the development plan?
  - if they do accord, are there any compelling reasons for not approving them?
  - if they do not accord, are there any compelling reasons for approving them?

#### Planning Considerations

7.3 In order to address the determining issues, the Committee must consider a) compliance with development plan policy, b) compatibility with national policy, c) roads and transport, d) peat, peat stability and carbon balance, e) ground water dependent terrestrial ecosystems, f) construction impacts and pollution control, g) the impacts on the forestry resource, h) the impact on natural heritage, i) the impact on built and cultural heritage, j) the visual impact and impact upon landscape resource, k) operational noise, l) aviation, m) radio/television and other networks, n) decommissioning and restoration, o) the impacts on the local economy; particularly tourism and p) any other material considerations.

## **Development Plan and Supplementary Guidance**

- 7.4 The Development Plan recognises the potential for renewable energy development in Highland. Policy 67 (Renewable Energy Developments) of the Highland-wide Local Development Plan gives general support to this type of renewable energy development and is the key policy consideration in assessing this application. However, various considerations and safeguards are built into the policy wording. Policies 28 (Sustainable Design), 57 (Cultural and Built Heritage), 58 (Protected Species) and 61 (Landscape) are all relevant to this application and require to be given due weight.
- 7.5 The Interim Supplementary Guidance on On-shore Wind Energy provides the spatial framework and guidance on which decisions on wind farm applications will be based. The proposed development sits within an Area of Search and as the least constrained of areas, one which is likely to be supported subject to more detailed consideration of the Development Plan policies outlined above. The land

is covered by polices that only support development where there would be no significant effects impact on heritage features, amenity or public health.

- 7.6 The Supplementary Guidance will be further informed by work on-going in respect of landscape capacity by Land Use Consultants (LUC) on behalf of the Council. Until the outcome of this is known, it is worth highlighting that some work in this regard has already been undertaken by the Planning and Development Service working in conjunction with Scottish Natural Heritage to inform an earlier version of the guidance. This work indicated that there was potential capacity (from a landscape and visual point of view) for a 'large scale' grouping to be situated within the Causeymire and Westerdale area. While the outcome of the LUC work may differ, a key question relates to whether wind farm development should be dispersed or concentrated within the landscape. This is particularly relevant to Caithness.
- 7.7 The development plan and supplementary guidance supports the broad principle of renewable energy development in this location. Providing that the impacts of the development are not considered to be **significantly detrimental**, particularly in relation to issues in the locality of the site, the proposals would comply with the Development Plan and Supplementary Guidance.

#### National Policy

- 7.8 While some objectors challenge the rationale of the UK and Scottish Government policy on renewable energy, particularly the extent to which on-shore wind farms are promoted, it is not the role of the Planning Authority to review the adequacy of national planning policy or guidance here. This policy and guidance is, however, a material consideration in the determination of this application.
- 7.9 In responding to climate change and advancing sustainable development the Scottish Government has recently re-emphasised within the National Planning Framework (NPF2) and Scottish Planning Policy (SPP) its support and commitment to achieving 50% renewable output in Scotland by 2020. The Government has more recently changed this target to 100% of Scotland's gross annual electricity consumption by 2020. The aim of the policy is to assist the planning system in the process of encouraging, approving and implementing renewable energy proposals when preparing development plans and processing planning applications. As the technology is well developed it is expected that the majority of this energy will be from on-shore wind farms.
- 7.10 SPP does, however, recognise that support for renewable energy projects and the need to protect and enhance Scotland's natural and historic environment must be regarded as compatible goals. The planning system has a significant role in securing appropriate protection to the natural and historic environment without unreasonably restricting the potential for renewable energy. National policies highlight potential areas of conflict but also advise that detrimental effects can often be mitigated and or effective planning conditions can be used to overcome potential objections to development.

- 7.11 Criteria outlined within SPP for the assessment of applications include 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 dis-benefits to communities; aviation and telecommunications; noise and shadow flicker; and cumulative impact.
- 7.12 The Council is responding positively to the Government's renewable energy agenda and specifically to the recently revised targets. 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 2394.5MW, which equates to 29.5% of the national figure.
- 7.13 In view of this record and that Highland has substantial areas that may be capable of satisfactorily absorbing renewable developments without such significant effects, the Council could take a more selective approach to determining which wind farm developments should be supported, consistent with national and local policy. This is not treating targets as a cap or suggesting that targets cannot be exceeded; simply recognition of the balance that is called for in both national and local policy.
- 7.14 Assuming that the impacts of the proposed development do not have a significant impact upon the landscape resource, amenity and heritage of the area then the development could be seen to compatible with Scottish Government policy and guidance and make a useful contribution to the Government, UK and European energy targets.

## Roads and Transport

- 7.15 The site has good access which for the most part would utilise the A9 trunk road where a new access to service the wind farm site will be taken from. The development will result in an increase in traffic on the road network during construction. Although the peak impact is assessed as being not significant, much of it will inevitably involve heavy goods vehicles. Transport Scotland confirms that there will only be a slight increase in the use of the road network as a result of this development. Transport Scotland has no objection to the proposal subject to conditions relating to visibility splays, signage and temporary traffic control, and routeing of abnormal loads.
- 7.16 On the basis that the wind farm construction traffic utilises the proposed access on the A9(T) as opposed to any of the local road network, TEC Services Roads and Transportation has no objection to the proposal.
- 7.17 Although it is unlikely that construction of Halsary Wind Farm will occur at the same time, the potential for cumulative construction traffic impacts have been taken into consideration in the ES. The A9(T) is estimated to have capacity to handle construction activities on both schemes.

7.18 Representations received indicate that the presence of additional turbines along the A9(T) will have implications for road safety from the perspective of driver distraction. Neither TEC Services nor Transport Scotland has raised this as a particular issue.

### Peat, Peat stability and Carbon Balance

- 7.19 Peat is found at all turbine locations. Having said that, all of the turbine locations are in peat that has been degraded by peat cutting or forestry. Areas of good quality peat habitat have been avoided. It is proposed to continue peat cutting within part of the site but ultimately the peat habitat is to be restored as mitigation as set out within the Outline Habitat Management Plan submitted with the ES. Both SEPA and SNH accept the principle of this mitigation but request that full details be agreed by condition.
- 7.20 In terms of peat stability, while naturally occurring peat slide events are relatively rare in Scotland, they are not unknown. A study of the site with regard to peat has been carried out. This has included a desk study, site visit and peat slide risk assessment. Turbines 1, 5, 7, 8, 9 are located on peat greater than 2m. Turbines 7 and 8 are located in (currently) forested area but in peat greater than 4m depth. The topography of the site is however relatively flat with minor slopes which indicate that the risk of peat slippage is low.
- 7.21 Representations received consider that as a result of the disturbance of peat and forestry, in combination with the carbon emission resulting from construction, there will be no carbon savings resulting from this scheme. They highlight that no carbon balance assessment has been undertaken.
- 7.22 At the request of SEPA, the applicant submitted a Carbon Assessment Report. This shows that annual carbon savings will be around 36,700 tonnes of CO<sub>2</sub> through the displacement of grid electricity. As the assessment contained with the Report utilises the Scottish Carbon Calculator methodology and has been undertaken by an experienced professional there is no reason to doubt this figure.

## Groundwater-Dependent Terrestrial Ecosystems

7.23 Groundwater-dependent terrestrial ecosystems (GWDTE) are distinct water based ecosystems protected under the EU's Water Framework Directive. SEPA is content that the development is designed so as to avoid undisturbed wetlands.

#### Construction impacts and pollution control

7.24 The most significant sensitive receptor during construction is the Little River, a tributary of the River Thurso, which is designated as a Special Area of Conservation (SAC) for its Atlantic Salmon populations. Care is needed to avoid particulate or chemicals entering the groundwater which could affect the spawning grounds.

- 7.25 In recognition of this, the applicant has committed to a number of mitigation measures relating to pollution prevention. These are set out within a draft Construction Method Statement (CMS). The expectation is that this will be developed further into a comprehensive Construction Environmental Management Plan (CEMP) that will be finalised prior to construction and will include topics such as a peat management plan, drainage plan (to protect water courses i.e. the tributaries of the River Thurso SAC), aswell as best practice guidance; for example the storage of chemicals and fuel, workforce accommodation and drainage requirements etc. Monitoring proposals will be included as will an Incident Response Plan during operation.
- 7.26 SEPA has no objection to the proposals subject to conditions to secure the proposed mitigation. This can be achieved by requiring a Construction Environmental Management Document (CEMD) and individual Construction Environmental Management Plans (CEMPs) as a condition of permission. This should provide the necessary assurance to Caithness and District Fisheries Board.
- 7.27 In addition to the effects on habitat, there is some potential for construction related noise and activity impacts that could affect neighbours. While the ES assesses the effect on neighbouring sensitive properties as not significant, the ES sets out mitigation to reduce the potential impact. These measures include:
  - Limiting audible construction work and HGV deliveries to 07:00 19:00 Monday to Friday and 07:00 – 13:00 on Saturday, with no work being carried out on a Sunday;
  - Adherence to British Standard 5228 best practice, including proper maintenance of equipment and the use of noise attenuation apparatus;
  - Liaison with neighbours on work schedule.
- 7.28 While it is no longer considered suitable to control construction hours through planning conditions, bespoke powers for regulating construction noise exist within the Control of Pollution Act 1974; powers which enable Environmental Health to specify working hours where problems exist. A condition can, however, be applied placing a restriction on vehicles entering/existing the development during certain times, as proposed in the ES, in order to reduce the potential for impact on residents. This, in conjunction with a traffic management plan will assist in regulating activity on the public road network in the interests of amenity.
- 7.29 Noise impact mitigation measures (which may include workings hours) will also form part of a Construction Environmental Management Document (CEMD).

#### Forestry Resource

7.30 Of the 230.9 hectares of the site area, approximately 30ha is currently planted as experimental coniferous forestry. The ES indicates that the forestry is no longer actively managed and the quality of the timber poor due to it being planted on deep peat, with much of it effected by wind blow. The applicant considers that there is limited potential for the site to produce an economic crop.

- 7.31 The applicant believes that the benefits of removal of the majority of the forest in terms of wind farm efficiency and future habitat management were considered to outweigh the benefits of retention of what is a small piece of forest, planted on deep peat.
- 7.32 The applicant is not proposing to provide compensatory replanting because this is an experimental site. This was confirmed by the Forestry Commission Scotland (FCS) in August 2011. The Council's Forestry Officer is content with this approach.

#### Natural Heritage

- 7.33 There are no natural heritage designations on the wind farm site. The site is however adjacent to Caithness & Sutherland Peatlands SAC, SPA and Ramsar Site, and close to the Caithness Lochs SPA and Ramsar Site and River Thurso SAC.
- 7.34 Caithness and Sutherland Peatlands SAC lies to the south of the wind farm and is designated for its peatland habitats and populations of marsh saxifrage and otter. The ES (and the accompanying report to Inform the Habitats Regulation Appraisal) concludes that the development would not have a significant impact on the qualifying interests and integrity of the SAC. SNH has confirmed that the development would be unlikely to have a significant effect on any qualifying interest either directly. SNH therefore has no objection in relation to this SAC.
- 7.35 Caithness Lochs SPA and Ramsar Site is located approximately 7km south of the proposed wind farm and is classified for its wintering populations of Icelandic greylag geese, Greenland white-fronted geese and whooper swans. The ES (and the accompanying report to Inform the Habitats Regulation Appraisal) concludes that the development would not have a significant impact on the qualifying interests and integrity of the SPA/Ramsar Site. SNH believes that the integrity of the SPA/Ramsar site will not be adversely affected and therefore has no objection in relation to this site.
- 7.36 The qualifying species for the River Thurso SAC is Atlantic salmon. Potential effects on Atlantic salmon are related to pollution of watercourses and sediment-laden runoff during construction/decommissioning of the wind farm. The Allt Aikergill (which borders the Bad a Cheo site to the west) is fed by numerous drainage channels across the site and ultimately discharges to the Little River. Other drainage ditches in the south feed the Little River. These are important points which establish a direct connection between the drainage ditches on the Bad a Cheo site and the River Thurso SAC. Most of the wind farm site is less than 15m from a watercourse, natural or man-made, which drains into the SAC.
- 7.37 Salmon require good water quality and clean gravels for spawning and successful egg incubation. Increased suspended solids (most likely to occur through the mobilisation of peat) or silt could damage spawning habitat and lead to decreased hatching success. Deterioration in water quality (either through increased suspended solids or pollution) could affect juvenile foraging and growth rates, body

condition and survival. Siltation or pollution of the Little River could therefore have an adverse impact on the SAC salmon population. The Caithness and District Fisheries Board is concerned precisely with this effect.

- 7.38 The applicant has proposed a wide range of mitigation measures to avoid significant effects. SNH has no objection to the proposal and is of the view that no significant effects on the qualifying species is likely to occur subject to appropriate construction management. This can be secured by condition through the Construction Environmental Management Document (CEMD) and Plans (CEMP). This should be sufficient to address the concerns raised by the Caithness and District Fisheries Board.
- 7.39 While the site is around 15km distant, SNH had initial concerns that the development would impact upon the integrity of the East Caithness Cliffs SPA which is designated for its populations of cliff nesting seabirds and breeding peregrine falcon. Herring gulls and great black-backed gulls are two of the qualifying interests for this site. There are a number of onshore turbine proposals in proximity to the SPA, and potentially significant cumulative impacts may also be associated with offshore proposals. However, based on information within the ES and further clarification from the applicant, SNH has now revised its advice and considers that there will be no significant effect on this SPA as a result of the development.
- 7.40 As required when considering development that may affect a Natura site the competent authority must assess the likely impact before coming to its decision. An appropriate assessment has been carried out and this is set out within Appendix 2 to this report.
- 7.41 Turning to ornithological interests of the site, as opposed to entire designations, no Annex 1 or Schedule 1 bird species were found breeding on the site. Having said that the site is considered likely to support Annex1/Schedule1 wintering birds including hen harrier, golden plover & common cross bill. Merlin, golden plover, greenshank and common cross bill were all found breeding within 2km.
- 7.42 The ES recognises that construction and tree felling works during the bird breeding season have the potential to damage or destroy bird nest sites, or to disturb Schedule 1 species should they breed in proximity to these works areas. SNH has advised that where possible construction and tree felling activities should take place outside the bird breeding season. If works need to be undertaken during the breeding season within these areas a 1km buffer should be surveyed in advance of works commencing. Exclusion zones would need to be established around any active nest sites. In the case of greenshank, an exclusion zone of 300m will need to be implemented.
- 7.43 Looking to European Protected Species (EPS), the site habitat may support two species in particular; otter and bat. Having said that, with regard to otter, the ES concludes that there is limited potential habitat in the High Burn and Causeymire Burn and therefore the development will not have a significant impact on the

species. In respect of bat, no roosts were found on the site and on the basis that the turbines are located in open areas away from features favoured by common pipestrele, the ES considers that the impact on bats will not be significant.

- 7.44 SNH advise that pre-commencement surveys will need to be undertaken and possible additional mitigation measures put in place to ensure that these species are not disturbed. Subject to this, SNH has no objection. If as a result of further surveys, holts or resting sites are found, a Species Protection Plan will be required.
- 7.45 With regard to other protected species, the ES indicates that there is potential for impact on water vole but assesses this as not significant in the context of the Caithness vole population. Mitigation will be implemented to protect water courses from run off during construction and all turbine infrastructures has been located 50m from water course. SNH has no objection providing that pre-construction surveys are undertaken. If burrows are found SNH recommend a buffer zone of at least 10m between any construction areas.
- 7.46 Surveys to date have recorded no signs of pine marten. However, given the potential suitability of the plantation habitat and time likely to elapse before wind farm construction, SNH has requested that pre-construction surveys should be carried out. This can be controlled by condition.
- 7.47 In terms of site habitat, as noted in Para 2.1, part of the site is currently forested with the balance identified as wet heath/bog. The woodland was planted in the 1960s for experimental purposes. It is proposed to clear fell this. The peat land has been cut for commercial peat production under a separate planning application. As a result, the majority of terrestrial habitat is of relatively poor quality. The applicant has located infrastructure on areas of low quality peat.
- 7.48 Given this context, the applicant considers the impact on habitat resource to be of minor significance. There is however potential for this development to improve substantial areas of habitat. The applicant suggests implementing a Habitat Management Plan as mitigation; the main objective of which is the restoration of hydrological conditions conducive to the re-establishment of blanket bog vegetation. However, since commercial peat extraction is currently on-going on this site, and it is proposed that this activity will continue in specific areas of the site once the wind farm is operating, the Habitat Management Plan would need to be implemented along with the continued peat cutting. SNH considers that the habitat and peat impacts of this proposal are acceptable in this context. RSPB wish to be informed of the proposed Habitat management Plan.
- 7.49 Cumulative impacts on ornithology and non avian ecology have been assessed. The ES concludes that the additional effect of the proposal in combination with the operational Causeymire wind farm with other schemes, and Halsary in particular, will not be significant. Indeed it indicates significant positive cumulative impact with Causeymire on peat land, due to the proposed Habitat Management Plan.

## Built and Cultural Heritage

- 7.50 There are no features of archaeological interest within the application site.
- 7.51 A memorial cairn commemorating the airmen who lost their lives when their B-17 Flying Fortress, Z9-A, crashed nearby on their return from a weather reconnaissance sortie over the Norwegian Sea is positioned in a lay-by off the north bound A9(T), immediately to the east of the application boundary (at Viewpoint 8 in the ES). The crash site actually lies some 5km south west of the memorial. According to the applicant the memorial has no intrinsic value as it is a modern structure, erected in the 1990s but does have contextual value as the location plaque allows the visitor some impression of the wider landscape setting in which the aircraft crashed and its location relative to the position of the monument itself. This is a fair assessment.
- 7.52 Having said that, the applicant goes on to assess the effect of the proposed wind farm on the setting of the memorial to be of minor significance. The Council Historic Environment Team while not objecting to the proposal does not agree with this assessment in the sense that it is the very open nature of the vista to the crash site which provides the necessary appreciation and sense of place. The effect therefore is underplayed. Relocation of the monument to a position further to the south on the A9(T) may provide necessary mitigation.
- 7.53 Three properties listed within the Inventory of Gardens and Designed Landscapes lie within 30km of the site. The Zone of Theoretical Visibility (ZTV) contained within the ES indicates that the development (on its own) will not be visible from Castle of Mey (26km to the north east); Dunbeath Castle (20.3km to the south) or Langwell Lodge (25km to the south). Therefore the setting of these will not be affected by the addition of this proposal. Historic Scotland has no objection.

## Visual impact and impact on landscape resource; including cumulative effects

- 7.54 The form and layout of the development as presented in the application has been subject to an iterative design process and has involved input from consultees as well as the Council. The applicant is of the view that in taking into consideration key landscape and visual receptors as an integral part of the design process, particularly the A9(T), the SLA and Flow Country SAWL designations to the west and neighbouring settlements, has led to the evolution of a proposal of modest scale which relates positively to the existing wind farm at Causeymire to create the appearance of a single cluster.
- 7.55 Fundamental to assessing both landscape and visual impact of the proposed layout is Chapter 7 of the ES, Landscape and Visual Impact Assessment, along with the associated figures and appendices, which together comprise the Landscape and Visual Impact Assessment (LVIA) element of the EIA. The purpose of LVIA is to identify and record the potential significant effects of the proposed development on the receiving environment, including the landscape, landscape character, special designations, views and amenity. Impacts are

assessed both in terms of the proposal itself and cumulatively with other consented or proposed developments within a 35km radius although, to a more detailed extent, in the near vicinity of the site.

- 7.56 The Bad a Cheo wind farm is situated within the 'Flat Peatland' landscape character type (LCT) in the Caithness and Sutherland Landscape Character Assessment (Caithness and Sutherland LCA) (SNH 1998) which is a sub-type of the 'Sweeping Moorland' LCT that the adjacent Causeymire wind farm lies within. Defining characteristics of the Sweeping Moorland LCT include wide open space, simple visual composition and a sense of remoteness. Landform is fairly flat or undulating. The key characteristics of the Flat Peatland LCT are openness, which creates extreme exposure and panoramic visibility, and a sense of remoteness. Landform is generally flat. A common denominator is that these landscapes are large scale, affording open long distance views.
- 7.57 There is no specific reference to wind energy proposals as a force for change in the Flat Peatland LCT within the LCA. Instead it relies upon the advice provided for Sweeping Moorland which is that the landscape character type may be favoured for wind farm development due to high and consistent wind speeds and open space of relatively flat landform. It goes on to suggest that a wind farm would appear most appropriate where it is located in wide open areas so that the scale of turbines appear inferior to the scale of the surrounding space. With regard to design it considers that the layout of a wind farm will appear most rational where it is arranged in a clearly ordered manner, as a unified and concentrated group with its own identity. However, the Flat Peatland LCT section of the LCA does caution that there is potential for development to form a focus that may divert attention from the experience of this landscape and the appreciation of it open space and remoteness.
- 7.58 The ES acknowledged the high sensitivity to change of this landscape type but considers the effect on the site to be low since it is already influenced by development i.e. peat cutting and forestry. As the proposal will be viewed in the context of the existing Causeymire wind farm the applicant believes that the proposal will not undermine the character or qualities of the wider landscape resource.
- 7.59 The design of the proposed scheme, in particular its spacing, alignment and height, reflects that of the existing Causeymire development and the proposed Halsary development on the opposite side of the A9(T). So while it will not have its own identity, taken cumulatively with Causeymire, and indeed Halsary, there will be at least two closely associated developments with a recognisable single identity. The Zone of Theoretical Visibility (ZTV) diagrams illustrates that visibility of all three schemes is likely to overlap to a significant degree. This would support the view of a single identity and would suggest that the design/layout responds well to the LCA.
- 7.60 SNH agree that Bad a Cheo wind farm would appear as an extension, with similar layout and turbine type, to the existing Causeymire wind farm within the same landscape character type. It advises that the proposal, in conjunction with Causeymire wind farm and the proposed Halsary wind farm, would result in a

number of landscape and visual impacts, both adverse and beneficial. While SNH does not object, it recommends that Turbines 5, 6, 12 and 13 should be removed to reduce adverse effects on the basis of the increased landscape sensitivity to the south of the site, including The Flow Country and Berriedale Coast Special Landscape Area (SLA), and the impact of these turbines on views towards wild land and mountains.

- 7.61 In relation to cumulative impacts, SNH advise that 'should Bad a Cheo and Halsary receive planning consent, this cluster, including Causeymire, would collectively form the largest onshore wind farm in Caithness. This would reduce the capacity of the regional landscape to accommodate further wind turbines, without the likelihood of significant adverse effects. It is our view that, in combination with the existing Causeymire wind farm, its consented extension and, if approved, Halsary wind farm, Bad a Cheo wind farm would take the capacity of the local landscape to accommodate wind turbines to its limit. This would have potentially significant implications for future wind farm and single turbine developments in Caithness, particularly in the proximity of The Flow Country and Berriedale Coast SLA.'
- 7.62 The effects on visual amenity relate to changes to available views rather than perceived changes to whole areas of a distinctive landscape character. 17 viewpoints (VPs) were selected in order to assess visual and landscape impact, following discussion with the Council and SNH and the preparation of the ZTV diagram. Visualisations in line with Highland Council Standard have been produced for 10 of the 17 viewpoints.
- 7.63 The conclusion in the ES is that there will be no significant effect from the majority of viewpoints, with significant adverse impact being restricted to three VP's only. The ES considered the visual effects on receptors at Spittal and Mybster as significant and on the A9(T) to be locally significant only. This assessment is generally accepted although the effects on the A9(T) appear to be underplayed.
- 7.64 While it must be recognised that the visualisations do not provide the entire context when not viewed on site, they do however demonstrate the predicted effects well. The following VPs are considered the most relevant for this application:
  - VP3 A9(T) Spittal
  - VP5 Minor Road, Badlipster (north of Grey Cairns of Camster)
  - VP7 A9(T) Rangag
  - VP8 A9(T) Memorial
  - VP15 Westerdale

VP3 – A9(T) Spittal

- 7.65 This view is chosen to represent the effect of the proposed development on sensitive receptors within Spittal i.e. residents and also road users travelling the A9(T) south. The nearest turbine is approximately 4km from the VP.
- 7.66 The visualisations demonstrate that the Causeymire turbines are prominent within the view. The proposed Bad a Cheo development will appear as an extension to Causeymire and as it will increase the horizontal extent will similarly increase the

prominence. It is considered by the applicant that the proximity to sensitive receptors and the physical extent of the development would result in a significant effect in EIA terms. This is accepted. From the perspective of residential amenity, the orientation of properties in Spittal is generally east-west. The effects on visual amenity to these residents will therefore be indirect. Residents will however be aware of the presence of turbines when going about their daily lives.

7.67 From a cumulative perspective, the addition of Halsary would further extend turbine development east in this view. It would however appear as a single very large wind farm cluster which although significantly increasing the prominence of wind farm development would not result in visual confusion. The applicant assesses the cumulative visual impact as not significant on the basis that Bad a Cheo fills the gap between Causeymire and Halsary thereby making a more defined cluster. This is a reasonable conclusion.

VP5 – Minor Road, Badlipster (north of Grey Cairns of Camster)

- 7.68 This view is approximately 7km east of the proposed development near Badlipster. It is located near to the Grey Cairns of Camster archaeological site and is representative of the experience of road users, including potential visitors. The view is looking to the west across the flat peatland landscape, broken in places by plantation, towards the distant hills.
- 7.69 The visualisations illustrate that the development will add to the horizontal extent of wind turbine development within this generally open vista. The design is complementary to that of Causeymire and will appear as an extension. The wide open panoramic view will on the whole remain. The applicant considers the effect not significant. While the southern most turbine will begin to affect views to the distant mountains particularly if moving further north on this road, the deletion of four turbines would not significantly improve this. It is considered that the applicant's assessment is appropriate.
- 7.70 From a cumulative perspective, the additional effect of Bad a Cheo on the addition of Halsary into this view is not considered significant. The conjoined schemes would read as a single development.

VP7 – A9(T) Rangag

- 7.71 This view is chosen to represent the effect of the proposed development on sensitive receptors travelling north on the A9(T) i.e. road users. The viewpoint is approximately 2.6km south of the nearest turbine and just to the north of Rangag Farm.
- 7.72 The visualisations demonstrate that the development will appear as part of Causeymire wind farm albeit at much closer range. It will therefore be prominent. At this point within the A9(T) the development will not affect the more open wider views across the Flows to the west. The applicant considers the effects on this view and users of the A9(T) as not significant. Given the distances involved it is considered that this is underplayed.

- 7.73 While it is accepted that as one travels towards the scheme and VP8, the memorial to the WWF Flying Fortress crew, further north this relationship between the development and the landform and vista will dramatically change. However, from this particular viewpoint it is not considered that the reduction in turbine numbers suggested by SNH would not necessarily improve this relationship.
- 7.74 Turning to cumulative effects, the applicant has not assessed the cumulative effect of Bad a Cheo in combination with Halsary with Causeymire. However, the effect is essentially as above; Bad a Cheo will fill the gap between schemes to the rear but will make turbines more prominent in the view closer to the viewpoint. Overall it will be a view of wind energy development in much the same way as VP3.

#### VP8 – Memorial A9(T)

- 7.75 Viewpoint 8 is approximately 200m from the closest turbine. It is situated just off the A9(T) within a well formed lay-by with a memorial cairn commemorating the airmen who lost their lives when their B-17 Flying Fortress, Z9-A, crashed nearby. The crash site actually lies some 5km to the south-west of the memorial.
- 7.76 The development will be in the immediate foreground of the view. As it is the very open nature of the vista to the crash site which provides the necessary appreciation and sense of place that will be affected, in addition to the substantial effect to road users passing the site, the visual effect on the viewpoint is considered to be significant.
- 7.77 While the removal of the four turbines suggested by SNH would reduce these impacts and permit views over the SLA beyond, equally relocation of the memorial to a position further to the south on the A9(T) would provide necessary mitigation.

VP15 – Westerdale

- 7.78 This view is on the B870, 4km from then nearest turbine. It is representative of road users but provides an indication of views of this scattered settlement. Causeymire wind farm is within the view.
- 7.79 The visualisations demonstrate that the proposed Bad a Cheo wind farm will be located behind Causeymire, appearing as an extension to it. It is considered by the applicant that, despite the proximity to sensitive receptors, the effect on visual amenity will not be significant in EIA terms at this viewpoint as the proposal will not result in a considerable change to the existing view. This is accepted.
- 7.80 Turning to cumulative effects, again the addition of Bad a Cheo to Causeymire and Halsary will not be significant given that Bad a Cheo is situated wholly behind Causeymire.
- 7.81 In the above paragraphs, the effects on five viewpoints within close proximity to the site have been considered. Two of these have a significant effect on the viewpoints considered, at VP3 and VP8, while there is also recognition of the

significant effects on road users within closer range. In addition to these, the applicant considers that there will be a significant effect on views from Dirlot Castle Scheduled Monument (VP13) which is located 4.5km to the south-west. From this location Bad a Cheo will extend the existing influence of wind turbines of Causeymire which are prominent in the view. It is the sensitivity of the castle itself, a Scheduled Monument, however that is the reason for effect being significant rather than development itself. Neither Historic Scotland nor the Council's Historic Environment Team has raised issue with the setting of this feature.

7.82 While the assessment is generally accepted, the significance of effect is considered to be slightly underplayed in respect of the distances at which visual effects become significant. Some effects on viewpoints are identified as moderate which is normally in EIA terms a threshold for an effect to become significant. In summary, the impact on visual amenity is most likely to be significant for residents within and around Spittal and those travelling through the area within reasonable proximity to the development.

#### Noise and vibration, including cumulative effects

- 7.83 The development will result in additional noise and activity during construction. The effect of this is however assessed as not significant given that the nearest noise sensitive receptor is over 800m from the turbine working areas. Good site practices will minimise the potential effects of noise and vibration.
- 7.84 An operational noise prediction assessment was carried out for the nearest noise sensitive receptors. Since the proposal is essentially an extension of Causeymire, this was in essence a cumulative assessment. Further cumulative assessment with Halsary and Spittal wind farms was also undertaken. With the recent refusal of Spittal it is considered that the most relevant schemes with regard to operational noise are Bad a Cheo in combination with Causeymire and Halsary. While Achlachan wind farm is located adjacent to the north of Causeymire it was received after Bad a Cheo and it will therefore be for that scheme to consider its own cumulative effects.
- 7.85 The ES considered that the cumulative noise impact of Bad a Cheo alongside the operational Causeymire would meet with the lower quiet daytime limit set out within ETSU-R-97 of 35dBA. Taking into consideration the cumulative impact should the proposed Halsary wind farm be consented, the ES considers that the lower daytime limit would not be met. According to the applicant the developments would be capable of meeting the night time noise criteria of 43dBA and be within the upper daytime ETSU-R-97 limit of 40dBA. However, the Council expects large scale wind energy schemes to meet with the lower quiet daytime limit of 35dBA, the limit to which Causeymire is currently conditioned to.
- 7.86 As a result of slightly different methodologies adopted between the respective consultants, which is permissible within the Good Practice Guide recently published by the Institute of Acoustics, it was initially difficult for Environmental Health to advise on potential noise effects. At the request of Environmental Health the consultants for Halsary and Bad a Cheo submitted a joint noise assessment to assist decision making.

- 7.87 This joint assessment demonstrates that Bad a Cheo will have a negligible impact on overall noise levels at all properties except Tacher. However, Environmental Health has advised that at this location the actual levels from Causeymire are significantly lower than their condition permits. Because Causeymire must comply with this condition at other properties, the levels at Tacher cannot increase significantly therefore, the cumulative levels from all the developments will not exceed the existing conditioned limits.
- 7.88 TEC Services Environmental Health has no objection to the application subject to conditions, including the need for a noise monitoring and mitigation scheme.

#### <u>Aviation</u>

7.89 Neither the MOD nor HIAL object to the proposals but requests have been received for aviation lighting. This is expected to include lighting at the outermost corners of the development and on a centrally located turbine. An appropriate lighting scheme, using infrared lighting where possible to reduce the introduction of light within a largely undeveloped and light-free area, is a matter that can be addressed by planning condition.

#### Radio/TV and other Networks

- 7.90 The ES includes an assessment on local telecommunication services including TV and radio. While the Rumster Forest Thurso digital terrestrial television rebroadcast link passes over the site it considers that there will be no significant impact on TV reception.
- 7.91 Notwithstanding this, representations received indicate that TV reception is already affected by wind farm development. The Council has a standard practice of of requiring developers to address adverse impacts that may emerge during construction and over the initial year of operation when problems may be detected/experienced. This should be sufficient to address the concerns raised.

## Decommissioning and Site Restoration

- 7.92 Site decommissioning is likely to take around 12 months. At this stage, the applicant proposes that, other than the access tracks, all elements of the proposal will be decommissioned at the end of its operational life. This will however require further consideration, particularly in light of the Habitat Management Plan.
- 7.93 SEPA has requested that a Decommissioning & Restoration Plan to manage removal of the development upon the expiration of the consent. This is standard practice and can be secured by condition.

7.94 In addition, the Council seeks a bond or financial mechanism to cover the full costs of site restoration. Will such securities are often secured through Section 75 legal obligation, particularly where an obligation is required to cover other issues within a proposal, they can also be achieved through planning conditions.

#### Access and Recreation

7.95 Representations received highlight that the existing Causeymire wind farm is currently used informally for access and recreation. There are therefore opportunities to provide more formalised access.

#### Socio-economic impact/tourism

- 7.96 Separate studies have been carried out by industry and the Scottish Government into the effects of wind farm developments on tourism and public acceptability respectively, for example; The Scottish Government commissioned report *Economic Impact of Wind Farms on Tourism in Scotland* (2008) undertaken by Glasgow Caledonia University/Cogent Si and more recently a questionnaire survey *Wind Farm Consumer Research* (2011) conducted by OnePoll for Visit Scotland. These studies have indicated both benign and positive effects.
- 7.97 The applicant recognises the importance of tourism to Caithness and has taken this into consideration in the assessment of socio-economic impacts. The research that accompanies this indicates that the main source of visitors to Caithness is the Scottish domestic market on short breaks and main holidays. Iconic destinations such as John O'Groats and the Castle of Mey attract a certain market from other parts of the UK and overseas. Business 'tourism' is a significant market accounting for 26% of overnight expenditure. Thurso benefits from this more than any other part of Caithness, possibly as a result of the proximity to Dounreay.
- 7.98 Other than for business and visiting friends and family, the main reason to visit Caithness is to undertake activities such as fishing, visiting places of interest and generally enjoying the countryside. The application site or immediate environs are not really a destination in themselves in respect of tourism and therefore the effects are indirect and more related to perception of the landscape and visual amenity when travelling through the area. While the applicant views the effect on visual amenity to be moderate on users of the A9(T), the effect on tourism is considered to be minor, the justification really being that the proposal will be located within an area that is already influenced by wind farm development. This is not disputed.
- 7.99 Within the ES, the applicant refers to the positive socio economic impacts that the construction of a wind farm can have. Until such time as a viable turbine manufacturing base is established within the Highlands, it is unlikely that schemes will be capable of meeting with the agreed guideline levels for local content identified within HRES. However, Caithness is well equipped to capitalise on elements of construction, particularly the civil engineering elements.
- 7.100 The applicant provides evidence of the value to the local economy from other onshore wind farm developments in the Highlands, for example Causeymire, where £3.3m of construction spend went to Caithness businesses and Novar 2, where

£5m of the civil contract went to Highland businesses (within 100miles of the site). The applicant also estimates that based on the example of Causeymire where 5 turbine technicians are employed in Caithness (also maintaining Forss Wind Farm) it is likely that a further 5 turbines technicians may be employed during operation (25 years) in Caithness / Highlands as a result of Bad a Cheo being constructed.

### Other material considerations

7.101 There are no other material considerations.

## 8.0 CONCLUSION

- 8.1 The Development Plan and national policy support renewable energy development, with a range of differing technologies, where projects can be located without undue environmental or amenity impact. Representations against this application have specifically highlighted conflict with protected species, loss of peat and woodland habitat, effects on wilderness/landscape resource and the visual impact/scenic quality of the area, both as a result of this development individually and in combination with neighbouring operational and proposed wind farm development.
- 8.2 Planning Advice Note 58 Environmental Impact Assessment states that experience shows that there will usually be a small number of major issues, perhaps only one, on which the acceptability of a project hinges and that these major issues should be highlighted in the planning report, drawing on the content of the Environmental Statement.
- 8.3 As is evident from the assessment, many of the impacts of the proposed development, even those connected with protected species and designated sites, will not be significantly detrimental and could be adequately controlled through both the mitigation measures proposed or through conditions. The major residual issues for the Council in this case relate to the impact on landscape and visual amenity.
- 8.4 The acceptability of a proposal with regard to its visual impact is a subjective matter. While a significant number of objectors consider that the development will have an adverse impact on visual amenity and landscape qualities of the area, other views indicate that this is a suitable site for wind energy development.
- 8.5 There will undoubtedly be additional adverse visual effects to the community around Westerdale, Spittal and Mybster as a result of this development. This will also be the case for those who travel the A9(T), whether for leisure, work or as a tourist. This will increase significantly in the event that Halsary is also approved.
- 8.6 While it is acknowledged that the existence of the wind farm at Causeymire should not in itself justify overcrowding an area with yet more development, there is an opportunity here to have a well designed cluster that will maintain as far as possible the open views over the remainder of the landscape resource, as opposed to having more dispersed patterns of development. The advice from SNH, which does not object to this proposal, would seem to support this (Paragraph 7.61). This would also be consistent with the work carried out to date by the Planning and

Development Service on landscape capacity for this type of development. Essentially it is a balance between accepting visual impact in one location and preserving as far as possible the qualities of a whole landscape setting.

- 8.7 SNH recommends that the four southern most turbines be removed. However, it is not considered that this would significantly improve the appreciation of the landscape to the south and west unless static at the memorial viewpoint. This feature is somewhat artificial in that it sits some distance from the wreckage. It could quite easily be moved further south on the A9(T) without loosing the connection to the landscape and crash site.
- 8.8 The benefits of the proposal must be weighed against potential drawbacks and then considered in the round. The project carries considerable support in principle by virtue of the Government's policy and targets towards greater renewable energy production. With a generating capacity of up to 32.5MW the proposal would make a useful contribution to meeting both national and the Highland Council's own renewable energy targets. The proposal will create a number of construction jobs, albeit short term, as well as providing wider economic benefits to the local economy during the construction of the wind farm. It will also result in the end of the day result in another part of the peatland habitat being restored. The applicant has been able to demonstrate that many of the potential adverse impacts can be adequately addressed and that there will be benefits also.
- 8.9 While the development will become a significant feature of the local area, it is considered that the proposed layout is acceptable in terms of design and layout and the Bad a Cheo and Causeymire (and the proposed Halsary) schemes can co-exist in the landscape. The visual impact, while significant, is not considered to be significantly detrimental either on its own or when taken cumulatively with other developments in the area.
- 8.10 In view of this, it can be concluded that the proposals would comply with the Development Plan.

## 9.0 **RECOMMENDATION**

It is recommended the application be **GRANTED** subject to the following conditions and reasons:

1. For the avoidance of doubt the development shall be constructed and operated in accordance with the provisions of the application, the submitted plans, and the Environmental Statement. This permission shall be for a maximum of 13 turbines and 1 anemometer mast, to be sited as shown on the site layout drawing (Figure 4.1a) contained within Chapter 4 of the Bad a Cheo Wind Farm ES, June 2012.

Reason: In order to clarify the terms of permission.

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 2 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 new 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 the decommissioning and removal of the development in an appropriate and environmentally acceptable manner and the restoration of the site, in the interests of safety, amenity and environmental protection.

- 4. No development shall commence until:
  - i. Full details of a bond or other financial provision to be put in place to cover all of the decommissioning and site restoration measures outlined in the Decommissioning and Restoration Plan approved under Condition 3 of this permission have been submitted to, and approved in writing by, the Planning Authority; and
  - ii. Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under part (i) above is sufficient to meet the full estimated costs of all decommissioning, dismantling,

removal, disposal, site restoration, remediation and incidental work, as well as associated professional costs, has been submitted to, and approved in writing by, the Planning Authority; and

iii. Documentary evidence that the bond or other financial provision approved under parts (i) and (ii) above is in place has been submitted to, and confirmation in writing that the bond or other financial provision is satisfactory has been issued by, the Planning Authority.

Thereafter, the Wind Farm Operator shall:

- i. Ensure that the bond or other financial provision is maintained throughout the duration of this permission; and
- ii. Pay for the bond or other financial provision to be subject to a review five years after the commencement of development and every five years thereafter until such time as the wind farm is decommissioned and the site restored.

Each review shall be:

- a. conducted by a suitably qualified independent professional; and
- b. published within three months of each five year period ending, with a copy submitted upon its publication to both the landowner(s) and the Planning Authority; and
- c. approved in writing by the Planning Authority without amendment or, as the case may be, approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part (c) above recommends that the amount of the bond or other financial provision should be altered (be that an increase or decrease) or the framework governing the bond or other financial provision requires to be amended, the Wind Farm Operator shall do so within one month of receiving that written approval, or another timescale as may be agreed in writing by the Planning Authority, and in accordance with the recommendations contained therein.

**Reason:** To ensure financial security for the cost of the restoration of the Site to the satisfaction of the Planning Authority.

- 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 12 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 wind turbine is removed from site, in the interests of safety, amenity and environmental protection.

6. 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. No development shall commence until full details of the location, layout, external appearance, dimensions and surface materials of all control and/or substation 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.

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

- 8. No development shall start on site 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 all mitigation proposed in support of the planning application, other relevant agreed mitigation (e.g. as required by agencies) and set out in the relevant 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
    - ii. Pollution prevention plan
    - iii. Drainage and surface water management plan to address both construction and post construction with specific regard to protection of the River Thurso SAC.
    - iv. Chemical pollution plan
    - v. Species protection plan
    - vi. Fisheries protection plan Site waste management plan
    - vii. Noise and vibration mitigation plan
    - viii. Traffic Management Plan– providing details on the proposed route for any abnormal loads, any accommodation measures required and any additional signing or temporary traffic control measures deemed necessary
  - 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 micrositing, if 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 'stop 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.

- 9. No development shall commence, including tree felling operations, until a Habitat Management Plan (HMP) has been submitted to, and approved in writing, by the Planning Authority in consultation with SNH and SEPA, providing for measures to protect and manage habitat and species within the site. The HMP, which shall be implemented in full and in accordance with any timescales outlined therein unless otherwise agreed in writing, shall include the following elements:
  - Measures to minimise any impact of the development on statutorily protected species and other species of nature conservation interest (including hen harrier, otters, bats, water vole and wild cat) and their respective habitats
  - The enhancement, restoration and future management of the site to its blanket bog/heath habitat

**Reason:** To protect and enhance the nature conservation interests of the area, including the management of vegetation and peatland within the site, mitigate any effects on statutorily protected species and their habitat and avoid adverse effects on other species of nature conservation interest.

10. No development shall commence, including tree felling works, until precommencement surveys to locate the presence or absence of water vole, otter and wild cat is undertaken and a report of survey has been submitted to, and approved in writing by, the Planning Authority. The survey shall be carried out in the year preceding the commencement of development and the report of survey shall inform any mitigation measures identified in the Species Protection Plan required as part of the Construction Environmental Management Document/Plan(s) approved under condition 9.

Reason: To protect and enhance nature conservation from construction activities.

- 11. No development shall commence until the applicant has provided the Ministry of Defence (Defence Estates Safeguarding) with the following information; a copy of which shall be submitted to the Planning Authority:
  - proposed date of commencement of the construction;
  - estimated date of completion of the construction;
  - height above ground level of the tallest structure;
  - maximum extension height of any construction equipment;
  - position of the turbines in latitude and longitude plus eastings and northings;

**Reason:** In order to ensure the safety of low flying military aircraft.

- 12. No development shall commence until a Noise Measurement and Mitigation Scheme has been submitted to, and approved in writing by, the Planning Authority. The scheme shall include:
  - i. A framework for the measurement and calculation of noise levels to be undertaken in accordance with "The Assessment & Rating of Noise from Wind Farms", September 1996, ESTU report number ETSU-R-97 having regard to paragraphs 1-3 and 5-11 inclusive, of The Schedule, pages 95 to 97; and Supplementary Guidance Notes to the Planning Obligation, pages 99 to 109. Wind speeds shall be determined using the methods in the IOA Good Practice Guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise.
  - ii. Mitigation measures to be enacted, along with a timetable(s) for implementation, should noise emissions exceed the limits prescribed under this planning permission.

**Reason:** To ensure that the noise impact of the built turbines can be assessed, if necessary following a complaint, in order to demonstrate that they do/do not exceed the predicted noise levels set out within the supporting Environmental Statement, and where excessive noise is recorded, suitable mitigation measures can be undertaken.

13. No development shall commence until the baseline water quality within the site has been assessed and a scheme for monitoring quality both during construction and post-construction has been submitted to and agreed in writing by the Planning Authority, in consultation by SEPA. The agreed scheme shall be implemented for the period specified therein unless otherwise agreed in writing by the Planning Authority in consultation with SEPA.

**Reason:** To provide a baseline on water quality against which to monitor construction methods.

- 14. No development shall commence until a detailed Access Management and Recreation Plan of public access across the site (as existing, during construction and following completion) has been submitted to, and approved in writing by, the Planning Authority. The plan shall include details showing:
  - i. All existing access points, paths, core paths, tracks, rights of way and other routes (whether on land or inland water), and any areas currently outwith or excluded from statutory access rights under Part One of the Land Reform (Scotland) Act 2003, within and adjacent to the application site;
  - ii. Any areas proposed for exclusion from statutory access rights, for reasons of privacy, disturbance or effect on curtilage related to proposed buildings or structures;
  - All proposed paths, tracks and other routes for use by walkers, riders, cyclists and any other relevant outdoor access enhancement i.e. car park (including construction specifications, signage, information leaflets, proposals for on-going maintenance etc.);
  - iv. Any diversion of paths, tracks or other routes (whether on land or inland water), temporary or permanent, proposed as part of the development (including details of mitigation measures, diversion works, duration and signage).

The approved Access Management and Recreation Plan, and any associated works, shall be implemented in full prior to the first occupation of the development or as otherwise may be agreed within the approved plan.

**Reason:** To safeguard and maximise the opportunities for continued public access to the countryside during the construction and operation of this wind farm.

15. 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.

- 16. Where ground conditions specifically require it, wind turbines, masts, areas of hardstanding and tracks may be micro-sited within the application site boundary. However, unless otherwise approved in writing by the Planning Authority (in consultation with SEPA and SNH), micro-siting is subject to the following restrictions:
  - i. That no turbine rotor shall fall with 50m of any trees on or adjacent to the site
  - ii. No wind turbine, mast, hardstanding or track shall be moved:
    - a. More than 50m from the position shown on the original approved plans;
    - b. and in any case to a position within 50m of any watercourse.

All micro-siting permissible under this condition without requiring the approval of the Planning Authority must be approved by the development's Environmental Clerk of Works (ECoW) identified under Condition 9. A written record must be kept of any such ECoW approval and shall be maintained for a period extending to no less than four years following the First Export Date.

Within one month of the wind farm being commissioned, the developer must submit an updated site plan to the Planning Authority showing the final position of all wind turbines, masts, areas of hardstanding, tracks and associated infrastructure within the site. The plan should also highlight areas where micrositing has taken place and, for each instance, be accompanied by copies of the ECoW or Planning Authority's approval, as applicable.

**Reason:** To minimise the effect of the development on the landscape and species and habitat of conservation importance.

17. Bird flight deflectors should be fitted, at 5 metre intervals, to all anemometer mast guy wires. Stops or clamps should be fitted to the guy wires to prevent the deflectors sliding down the wires. The mast should be inspected and maintained annually to ensure the deflectors remain in place.

**Reason:** To minimise bird collision risk.

18. No work shall take place on the site at night or within two hours of sunset/sunrise, except from the period November – February (inclusive) when this period can be relaxed to 1 hour due to the short day length. Any temporary lighting shall be directed away from watercourses and there shall be ne impedance upon otter runs identified along. No water course otter runs identified should be impeded at any time.

**Reason:** In order to protect otter during the construction phase.

19. Unless otherwise agreed in writing by the Planning Authority, in consultation with MoD, the cardinal turbines shall be fitted with infra-red or 25cd red lighting at the highest practical point.

**Reason:** In order to ensure the safety of low flying military aircraft.

20. Access to the site by heavy goods vehicles and any noisy construction activity (e.g. piling, blasting, rock-breaking) 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:** In order to control noise in the interest of amenity.

21. The Wind Turbine Noise Levels, including the application of any tonal penalty specified in ETSU-R-97 at pages 99-109, shall not exceed the values specified for the locations listed in Tables 1 and 2 below.

For Noise-Sensitive Premises not listed in Tables 1 and 2, but on the date of this planning permission lawfully exist or are yet to exist but benefit from extant planning permission., noise limits shall be taken from the listed location that is closest matching in terms of background noise.

This condition shall apply at wind speeds not exceeding 12m/s, as calculated at a height of 10m above ground level in accordance with the methods described in the IOA Good Practice Guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise.

|          |      | levels<br>ls (m/s) | •    | 490) at | standa | rdised | 10 met | er heig | ht wind |
|----------|------|--------------------|------|---------|--------|--------|--------|---------|---------|
| Location | 4    | 5                  | 6    | 7       | 8      | 9      | 10     | 11      | >=12    |
| Mybster  | 25.0 | 25.0               | 27.3 | 29.9    | 31.6   | 33.0   | 33.0   | 33.0    | 33.0    |
| Corner   |      |                    |      |         |        |        |        |         |         |
| Cottage  | 25.0 | 25.0               | 25.0 | 26.5    | 28.6   | 30.6   | 32.3   | 33.8    | 34.8    |
| Tacher   | 32.8 | 36.1               | 38.6 | 40.6    | 42.2   | 43.8   | 45.2   | 46.5    | 47.8    |
| Shielton | 25.0 | 25.0               | 26.5 | 29.7    | 32.9   | 35.8   | 38.3   | 40.2    | 41.1    |

Table 1 – Daytime Noise Limits

#### Table 2 – Night Time Noise Limits

|          |      | e levels<br>ds (m/s) | •    | A90) at | standa | rdised | 10 met | er heig | ht wind |
|----------|------|----------------------|------|---------|--------|--------|--------|---------|---------|
| Location | 4    | 5                    | 6    | 7       | 8      | 9      | 10     | 11      | >=12    |
| Mybster  | 28.0 | 28.0                 | 28.0 | 29.9    | 31.6   | 33.0   | 33.0   | 33.0    | 33.0    |
| Corner   |      |                      |      |         |        |        |        |         |         |
| Cottage  | 28.0 | 28.0                 | 28.0 | 28.0    | 28.0   | 28.9   | 30.0   | 30.9    | 31.7    |
| Tacher   | 36.1 | 36.1                 | 36.6 | 38.3    | 39.0   | 39.6   | 40.2   | 41.1    | 42.4    |
| Shielton | 28.0 | 28.0                 | 28.0 | 28.0    | 29.7   | 31.5   | 33.2   | 34.9    | 36.5    |

**Reason:** To ensure that the noise impact of the built turbines does not exceed the predicted noise levels in the interest of amenity.

22. The Wind Farm Operator shall, beginning with the first day upon which the wind farm becomes operational, log wind speed and wind direction data continually and shall retain the data for a period of at least 12 months from the date that it was logged. The data shall include the average wind speed, measured in metres per second, over 10 minute measuring periods. These measuring periods shall be set

to commence on the hour and at 10 minute consecutive increments thereafter. Measurements shall be calculated at 10m above ground level using the methods described in IOA Good Practice Guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise. All wind speed data shall be made available to the Planning Authority on request in Microsoft Excel compatible electronic spreadsheet format.

**Reason:** To ensure that the noise impact of the built turbines can be assessed, if necessary following a complaint, in order to demonstrate that they do/do not exceed the predicted noise levels set out within the supporting Environmental Statement.

23. At the reasonable request of the Planning Authority, the Wind Farm Operator shall assess, at its own expense and using a suitably qualified consultant(s) not involved in the original noise assessment, the level of noise emissions from the Wind Turbines.

Assessment shall be carried out in accordance with the Noise Measurement and Mitigation Scheme approved under this planning permission and a report of assessment shall be submitted to the Planning Authority within two months of a request under this condition, unless an alternative timescale is otherwise agreed in writing by the Planning Authority.

If noise imissions are found to exceed limits prescribed under this planning permission, then the Wind Farm Operator shall implement mitigation measures in full accordance with the approved Noise Mitigation Scheme, or alternative equal or better mitigation measures as may first be approved in writing by the Planning Authority, in order to reduce noise levels to comply with prescribed limits. The time period for implementing mitigation measures shall be as outlined in the approved Noise Mitigation Scheme or as otherwise may be specified writing by the Planning Authority.

**Reason:** To ensure that, following a complaint, noise levels can be measured to assess whether or not the predicted noise levels set out within the supporting Environmental Statement have been breached, and where excessive noise is recorded, suitable mitigation measures are undertaken.

24. A community liaison group shall be established by the developer prior to development commencing, 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.

25. At least 6 months before the development commencing, a scheme for the relocation of the memorial to the crew of the WW2 Flying Fortress situated on the west side of the A9(T) (VP8 in the ES), shall be submitted to and agreed in writing by the Planning Authority, having first been agreed with all the relevant interested parties. The agreed scheme shall be implemented by the First Export Date, as defined within Condition 2, or some other date as may be agreed.

**Reason:** In the interest of finding an alternative position within the area where the effect of wind farm development will minimize the impact upon the appreciation of the landscape which is one of the important features of the memorial site.

| Signature:         | Malcolm MacLeod                                   |
|--------------------|---|
| Designation:       | Head of Planning & Building Standards             |
| Author:            | David Mudie (01463) 702255                        |
| Date:              | 02 September 2013                                 |
| Background Papers: | Documents referred to in report and in case file. |

Appendix 1 – Letters of Representation

## OBJECTORS

- 1. Mr William Brown, Dunvegan Achscrabster Achscrabster Road, Thurso, Highland, KW14 7QN,
- 2. Mr John Brown, Upper Larel Farm, Halkirk, KW12 6UZ,
- 3. Mrs Denise Brown, Upper Larel Farm, Halkirk, KW12 6UZ,
- 4. Miss Christine Davidson, 6 Rose Street, Thurso, Caithness, KW14 7HH,
- 5. Mr A Fraser, Knockglass Cottage, By Spittal, Caithness, KW1 5XW,
- 6. Mr. M. G. Grogan, Keepers Cottage, Spittal, , Wick, , KW1 5XR,
- 7. Mrs Brenda Herrick, Sandmill, Harbour Road, Castletown, Thurso, KW14 8TG,
- 8. Mrs Jem Hindley, nr. Halkirk, KW12,
- 9. Mr/Mrs Michael Holley, Hill Croft, Rangag, Latheron, KW5 6DX,
- 10. Mrs Lyndall Leet, 8 Burnside, Scrabster, Thurso, KW14 7UG,
- 11. Dr George Lindsay, 2 Whinfield Gardens, Kinross, KY13 8BF,
- 12. Mr & Mrs Andrew & Sara Mackay, Kaylair, Harpsdale, Halkirk, KW12 6UL,
- 13. Mrs Islay Macleod, Thrumster House, Thrumster, nr Wick, KW1 5TX,
- 14. Dr And Mrs J S Mahood, Rangag Farm, Latheron, KW5 6DX,
- 15. Mr Ian Pickthall, 23 Upper Burnside Drive, Thurso, Caithness, KW14 7XB,
- 16. Mr David Poupard, Eriska, Achow, Lybster, KW3 6BY,
- 17. Paul Simonite, Station House, Watten, Caithness, KW1 5UH,
- 18. Ms Elizabeth G Wallace,
- 19. Mr Alan Wilcock, Baslow House, Battery Road, Castletown, Caithness, KW14 8F,
- 20. Miss Joyce Wilson, Beachwood House, West Dunnet Road, Dunnet, Highland, KW14 8YD,
- 21. Mr Stuart Young, Dunmore, Westside, Dunnet, Thurso, KW14 8YD,
- 22. RSPB
- 23. Bairds Malt Ltd, Longman Road, Inverness, IV1 1SL

## SUPPORTERS

- 1. Budge Formwork Ltd, Helen Budge, Company Secretary, Craigie House, Mid-Clyth, Lybster, Caithness, Kw3 6BA
- 2. Mr P Campbell, Caithness Tyre Company, George Street, Wick, KW1 4DG
- 3. Europcar, John Edgar, Wick , John O Groats Airport
- 4. Ian Gunn, No Acknowledgement Sent No Address
- 5. Mr John MacKay, Upper Achies, Harpsdale, Halkirk, KW12 6UW
- 6. MowaT, James Mowat, Technical Design And Services Ltd, Achlibster, Westerdale, Halkirk, Caithness, KW12 6UP
- 7. Mr G Sutherland, Speedy Skip Hire, Sir Archibald Road, Thurso, KW14 8HN
- 8. W J And Mrs P Sutton Sutton,

## COMMENTS

1. Caithness and District Salmon Fishery Board, Mrs E Constable, Clerk Of The Board, Skerraboe, North Keiss, Wick, KW1 4XF

## Appendix 2 – Appropriate Assessment

### 1.0 CONSIDERATION OF PROPOSALS AFFECTING EUROPEAN SITES

- 1.1 River Thurso status as a classified Special Area of Conservation (SAC). Caithness and Sutherland Peatland SAC, Special Protection Area (SPA) and Ramsar site, Caithness Lochs SPA and Ramser Site and Loch Watten SAC are all classified under the Habitats Directive. This means that the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), the 'Habitats Regulations,' apply.
- 1.2 Where the conclusion reached by the Council on a development proposal unconnected with the nature conservation management of a Natura 2000 site is that it is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated. The need for appropriate assessment extends to plans or projects outwith the boundary of the site in order to determine their implications for the interest protected within the site.
- 1.3 This means that the Council, as competent authority, has a duty to:
  - determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
  - determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
  - make an appropriate assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.
- 1.4 The competent authority can only agree to the proposal after having ascertained that it will not adversely affect the integrity of the site. If this is not the case, and there are no alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.
- 1.5 The proposal is clearly not connected with or necessary to the management of the site or for its conservation, hence further consideration is required. As the responsible body, the Council must undertake an 'appropriate assessment' of the implications of the proposal for the SPA in view of the site's conservation objective.

## 2.0 APPROPRIATE ASSESSMENT

2.1 While the responsibility to carry out the appropriate assessment rests with the Council, advice contained within Circular 6/1995 is that the assessment can be based on the information submitted in the Environmental Statement and informed by SNH's appraisal. The applicant provided a Report to Inform a Habitats Regulation Appraisal. SNH has provided an appraisal to assist.

## <u>Appraisal</u>

### 2.2 River Thurso SAC

For the River Thurso SAC a potential for significant effects on the distribution and population size of the following qualifying species, or the habitats supporting the species, has been identified: Atlantic salmon. Potential effects on Atlantic salmon are related to pollution of watercourses and sediment-laden runoff during construction/decommissioning of the wind farm. However the applicant has proposed a wide range of mitigation measures will be implemented to avoid significant effects. No in combination impacts on salmon have been identified, in large part due to the range of mitigation measures which will be adopted to protect the water environment. As such it is concluded that the conservation objectives for Atlantic salmon, and therefore the integrity of the SAC, will not be adversely affected by the proposed development, either alone or in combination with other schemes.

#### 2.3 Caithness and Sutherland Peatlands SAC

For the Caithness and Sutherland Peatlands SAC a potential for significant effects on the distribution and population size of the following qualifying species, or the habitats supporting the species, has been identified: Otter. Potential effects on otters are related to pollution of watercourses, sediment-laden runoff during construction of the wind farm affecting prey numbers, disturbance and collision with construction and maintenance vehicles. However, a wide range of mitigation measures will be implemented to avoid significant effects due to pollution of watercourses and sediment-laden runoff, and the risk of collision with vehicles is very small given the nocturnal habit of the species and imposition of site speed limits. No in-combination impacts on otters have been identified because a wide range of otter mitigation measures will be implemented for both the proposed development and the Halsary scheme and because Causeymire is operational and located within a different catchment. As such it is concluded that the conservation objectives for otter, and therefore the integrity of the SAC, will not be adversely affected by the proposed development, either alone or in combination with other schemes.

## 2.4 Caithness and Sutherland Peatlands SPA and Ramsar site

For the Caithness and Sutherland Peatlands SPA and Ramsar site a potential for significant effects on the distribution and population size of the following qualifying Species or the habitats supporting the species, has been identified: Merlin; and Golden plover. Potential effects on Merlin are related to disturbance, whereas for golden plover the potential for effect are related to collision with turbine blades. Disturbance impacts on Merlin are not significant, because the closest known Merlin nest is beyond the maximum known disturbance distance and very low levels of flight activity were recorded within the boundary. For golden plover, the calculated risk of collision does not represent a significant increase in the background mortality rate of SPA and Ramsar birds. No cumulative impacts on Merlin or golden plover have been identified, as there will be no impact due to disturbance to nesting Merlin or collision resulting from the proposed development and there is no evidence that wind farms have a significant effect on foraging Merlin, due to the extent of foraging

habitat that this species utilises, and because the cumulative collision risk for golden plover remains not significant. As such it is concluded that the conservation objectives for Merlin and golden plover, and therefore the integrity of the SPA and Ramsar site, will not be adversely affected by the proposed development, either alone or in combination with other schemes.

## 2.5 Caithness Lochs SPA and Ramsar site

For the Caithness Loch SPA and Ramsar site a potential for significant effects on the distribution and population size of the following qualifying species, or the habitats supporting the species, has been identified: Whooper swan and Greylag goose. Potential effects on these species are related to collision with turbine blades. The calculated risk of collision for both species does not represent a significant increase in the background mortality rate of SPA and Ramsar birds. The potential for cumulative impacts has been assessed for both species: for whooper swan, collision impacts in combination with Halsary Wind Farm are predicted to be much lower than 4% level which could lead to the decline of the SPA/Ramsar population. For greylag goose the predicted levels of collision in combination with Halsary and Spittal Hill Wind Farms would represent less than a0.5% increase in background mortality rates for the SPA/Ramsar population. As such it is concluded that the conservation objectives for whooper swan and greylag goose, and therefore the integrity of the SPA and Ramsar site, will not be adversely affected by the proposed development, either alone or in combination with other schemes.

#### Decision

2.6 On the basis of the information contained within the ES, the Habitat Appraisal and particularly the advice received from SNH, the Council can be confident that the proposal is unlikely to have an adverse affect on the integrity of the River Thurso SAC, Caithness and Sutherland Peatland SAC, SPA and Ramsar site, Caithness Lochs SPA and Ramsar Site and Loch Watten SAC.

Appendix 3 – Abbreviations.

CEMD – Construction Environmental Management Document

- CEMP Construction Environmental Management Plan
- CMS Construction Method Statement
- EIA Environmental Impact Assessment
- ES Environmental Statement
- EPS European Protected Species
- FCS Forestry Commission for Scotland
- HRES Highland Renewable Energy Strategy and Planning Guidelines
- HMP Habitat Management Plan
- LCA Landscape Character Assessment
- LCT Landscape Character Type
- LVIA Landscape and Visual Impact Assessment
- MW Megawatt
- MOD Ministry of Defence
- NHZ Natural Heritage Zone
- SM Schedule of Mitigation
- SNH Scottish Natural Heritage
- SAWL Search Area for Wild Land
- SPP Scottish Planning Policy
- SSSI Site of Special Scientific Interest
- SAC Special Area of Conservation
- SLA Special Landscape Areas
- SPA Special Protection Area
- ZTV Zone of Theoretical Visibility



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Turbine Locations

Study Area



# BAD A' CHEÒ WIND FARM

## FIGURE 7.1.1

## SITE LOCATION PLAN

| SCALE   |                | PROJECT | NO.           |
|---------|----------------|---------|---------------|
|         | 1:275,000 @ A3 |         | JE30383       |
| CONTENT |                | DRAWN   |               |
|         | VH             |         | VH            |
| CHECKED |                | DATE    |               |
|         | NO             |         | NOVEMBER 2011 |
|         |                |         |               |





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|------|---|---|---|---|--|

- Application Boundary
- Turbine and Base
- Scoping Boundary
- Permanent Anemometry Mast •
- Access Tracks
- Substation
- Indicative Crane Hardstanding
- Construction Compound
- O Permanent Water Crossing Points



# BAD A' CHEÒ WIND FARM

# FIGURE 4.1a SITE LAYOUT

| SCALE   |              | PROJECT NO. |          |
|---------|--------------|-------------|----------|
|         | 1:12,000@ A3 |             | JE30383  |
| CONTENT |              | DRAWN       |          |
|         | PM           |             | FJ/KW    |
| CHECKED |              | DATE        |          |
|         | PM           |             | MAY 2012 |
|         |              |             |          |





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1. 2 Turbine Locations

Study Area

#### Viewpoint Locations

- B874 Thurso (by hospital) A882 Bilbster (east of Wattern)

- A9(T), Spittal Minor road on North Watten Moss
- Minor Road, Badlipster A9(T), Lochend/Cnoc Dubh
- A9(T), Rangag A9(T), Memorial Scaraben 8.
- 9.

- Scaraben
  Ben Alisky
  River Thurso Walk
  Minor route from Westerdale to Loch More
  Dirlot Castle
  Ben Dorrery
  B870 Westerdale
  B870/Scotscalder Station
  The Grey Cairns of Camster





# Suggested VPs for site visit



## BAD A' CHEÒ WIND FARM

## FIGURE 7.1.4

## VIEWPOINT LOCATION PLAN

| SCALE   |                   |   | PROJECT | NO.          |
|---------|-------------------|---|---------|--------------|
|         | 1:275,000 @ A3    |   |         | JE3038       |
| CONTENT |                   |   | DRAWN   |              |
|         | VH                |   |         | VH           |
| CHECKED |                   |   | DATE    |              |
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