THE HIGHLAND COUNCIL

Agenda Item	
Report No	

CAITHNESS, SUTHERLAND & EASTER ROSS PLANNING APPLICATIONS AND REVIEW COMMITTEE – 17 March 2009

07/00448/FULSU Construction and operation of onshore wind development comprising 2 wind turbines (installed capacity 5MW), access track and infrastructure, switchgear control building, anemometer mast and temporary control compound at land on Skelpick Estate 3 km east south east of Bettyhill

Report by Area Planning and Building Standards Manager

SUMMARY

The application is in detail for the erection of a 2 turbine windfarm on land to the east south east of Bettyhill. The turbines have a maximum hub height of 80m and a maximum height to blade tip of 120m, with an individual output of between 2 – 2.5 MW. In addition a 70m anemometer mast is proposed, with up to 2.9km of access tracks.

The site does not lie within any areas designated for their natural heritage interests but does lie close to the:

- Caithness and Sutherland Peatlands Special Area of Conservation (SAC)
- Caithness and Sutherland Peatlands Special Protection Area (SPA)
- Caithness and Sutherland Peatlands RAMSAR site
- Lochan Buidhe Mires Site of Special Scientific Interest (SSSI)
- Armadale Gorge Site of Special Scientific Interest (SSSI)
- Kyle of Tongue National Scenic Area (NSA)

Three Community Councils have been consulted on the application. Melvich and Tongue Community Councils have not objected, but Bettyhill, Strathnaver and Altnaharra Community Council has objected.

There are 46 timeous letters of representation from members of the public, with 8 non-timeous.

The application has been advertised as it has been accompanied by an Environmental Statement (ES), being a development which is classified as 'an EIA development' as defined by the Environmental Impact Assessment Regulations. The 28 day advert period expired on 8 February 2008.

The Recommendation is to GRANT planning permission subject to conditions and the prior conclusion of an appropriate legal agreement to cover wear and tear agreement for public roads, and restoration of the site.

SNH have objected to the proposal. There are no other technical objections.

Members should note that if they are minded to grant planning permission then the application must be referred to Scottish Ministers to allow them the opportunity to call it in for determination.

Ward Number 1 – North West and Central Sutherland

Applicants North British Windpower Ltd

The application is subject to the Council's Hearings procedure.

1. PROPOSAL

1.1 **Application Site** - The site is located on open moorland hill ground to the south of the main north coast road, the A836, approximately 3km to the ESE of Bettyhill.

1.2 The site extends from approximately 90m above sea level at the vehicular access from the A836 to 120m at turbine 1 (the south eastern turbine). It is located in an extensive and open flow country landscape consisting of peat bogs and moorland interspersed with areas of exposed rock, and lies near the course of the small Clachan Burn. The landscape has been heavily cut for peat over several centuries and is currently subject to miscellaneous crofting activity (such as sheep farming). The site lies to the east of the minor access track leading to the former Bettyhill dump and landfill site. This access from the A836 is to the east of the junction to the townships of Swordly, Farr and Crask.

1.3 The applicants are North British Windpower and the proposed windfarm is located on the Bettyhill Common Grazings, forming part of Skelpick Estate. The applicant has indicated that the crofters of the Common Grazings will share directly in the rents payable by the development.

1.4 **The proposed development would comprise the following detailed elements**:

- Wind turbines with a maximum hub height of 80m and a maximum height to blade tip of 120m. The turbines have an individual output of between 2 – 2.5 MW.
- Meteorological mast (maximum height 70m)
- Access tracks (up to 2.9km)
- Underground cabling between the turbines
- Overground cabling to connect the turbines to a switchgear unit
- Switchgear control building
- Temporary hardstanding areas

1.5 Construction would take place over a 6-10 month period after which the development would then become operational and generate electricity for a 25 year period. After 25 years it would either be de-commissioned or a new application made to extend its operational life.

1.6 The candidate turbine provisionally selected for this site, would have a hub height of up to 80m and a rotor diameter of up to 80m. The total height to blade tip would not exceed 120m as shown in Figure 3.2.

1.7 The turbine towers would be of tapering tubular steel construction and the blades would be made from fibre-reinforced epoxy. The finish of the turbines would be semi-matt pale grey.

1.8 The turbines would generate electricity in wind speeds between 4 and 25 m/s. At wind speeds greater than 25m/s (56mph) the turbines would shut down for self-protection. Such high wind conditions occur for a maximum of approximately 1% of the year. This development would be generating electricity for approximately 80-85% of the year.

1.9 The total area within the planning application boundary is 40.8 ha. It is estimated that the actual land-take of the development made up of the wind turbines, access track, switchgear control building and hard-standings following construction and restoration would be approximately 0.5 ha or about 1.2% of the total site area.

1.10 **Wind Turbines** - The scheme would consist of 2, three-bladed horizontal-axis machines with a hub height of up to 80m and a rotor diameter of up to 80m; the maximum height to blade tip would not be more than 120m. The blades would be manufactured from fibre-reinforced epoxy and the tower from rolled steel. The nacelle houses the gearbox and generator. Subject to agreement with the local authority the finish and colour of the turbines is likely to be semi-matt and pale grey. The turbines would be of a variable speed type, so that the turbine rotor speed would vary according to the energy available in the wind. A typical turbine of this type would have a rotational speed of approximately 8 to 19 revolutions per minute generating power for all wind speeds between 4m/s and 25m/s (9-56mph or force 3 to 9 (gale) on the Beaufort Scale). The turbines are computer controlled to ensure that at all times the turbines face directly into the wind to ensure optimum efficiency. The turbines are to be positioned to the east side of the existing / upgraded access track at an elevation of between 110-120m (turbine 1 located to the south) and 100-110m (turbine 2 located to the north). The developer has indicated that upon completion of the full peat slide risk assessment the proposed mitigation for the turbines and access tracks is to micro-site to areas of shallow peat.

1.11 **Wind Turbine Foundations** - The turbines would be installed on foundations comprising both stone and concrete. These typically measure 15-18m square in plan with a concrete depth of approximately 1-2m and stone overlay of 1m dressed back with topsoil to allow re-vegetation. The foundation would include a circular steel support plinth to suit the base profile of the tower section. This plinth would contain the base ring connection and several service ducts to allow electrical and communication cable connections to be made. A concrete upstand would be cast on top of the concrete slab to which the tower would be bolted. The final foundation design would depend on the results of detailed geotechnical investigations. The ultimate size of the turbine foundations will depend on the turbines selected, imposed loadings, ground conditions and drainage designs. Each foundation would require approximately 200-400m^3 of concrete. It is not anticipated that turbines would require piled foundations.

1.12 **Crane Pads** - Each turbine requires an area of hard-standing to be built adjacent to the turbine foundation. This provides a stable base on which to lay down the turbine components ready for assembly and erection and to site the two cranes necessary to lift the three tower sections, nacelle and rotors into place. The crane hard-standing would be left in place following construction in order to allow for use of similar plant should major components need replacing during the course of the

development's operational life. The hard-standing would be allowed to naturally re-vegetate. The total area of hard-standing at each turbine location, including the turbine foundations and the crane pad would be approximately 946m² (22m x 43m). Approximately one third of this area would be dressed back with topsoil and landscaped into the surrounding area upon completion of turbine erection.

1.13 **Site Access and On-site Access Tracks -** The main site access would be taken from the A836. An estimated 2.9km of site access tracks would be required for the development comprising 2.6km of existing tracks and 0.3km of new track. Access tracks would be constructed to access individual turbine locations.

1.14 The tracks would have a nominal width of 5m and would have regular passing places every 300m (or as required) of a total width of 10m (including the road width) and length of 15m in order to facilitate traffic movement. At bends the tracks would be widened as appropriate depending on bend radius to a maximum of approximately 13m. Bends would also require a swept area for traversing by long loads and all bends would be kept free from obstructions. The edges of the tracks would be allowed to re-vegetate following construction. All new tracks would be unpaved and constructed from local stone.

1.15 **Stone and Concrete Requirements and Sourcing** - It is estimated that approximately 5,600 tonnes of aggregate (stone and concrete) will be required during the construction of the access track, turbine bases and other infrastructure. Stone is expected to be sourced from local quarries. These quarries would be selected prior to construction following a competitive tendering process. Importing stone for construction, while increasing traffic for a short period, would prevent the additional visual and potentially polluting effects of digging borrow pits onsite, and would provide some benefits to the local community in terms of indirect economic benefits to the quarries selected. Concrete for construction of the turbine foundations and switchgear control building would be imported ready-mixed. It has been decided that a concrete batching plant on site would introduce additional environmental effects in terms of visual effects and risks to hydrology and ecology. A batching plant would also require the use of further hard-standing areas for storage of materials which may be extensive. These effects were deemed to be more harmful than the additional traffic generated by importing the concrete ready-mixed.

1.16 **Cabling -** Underground cabling would link the turbines to each other. Overground cabling supported by single wooden poles would link the northern turbine to the on-site switchgear unit. Detailed construction and trenching specifications would depend on ground conditions encountered. Typically cables would be laid in a trench 1m deep and 1-2m wide. To minimise ground disturbance, cables would be routed along the side of the access tracks where practicable. Approximately 0.5km of 33kV underground cables would be required on site to connect the turbines and approximately 1.2km of 33kV overground cables would be required to connect the turbines to the switchgear unit.

1.17 **Grid Connection and Switchgear Control Building -** All wind turbine developments need to be connected into the grid distribution system though such connections are subject to a separate consenting process to the developments

themselves. The on-site switchgear unit would connect the development into the Scottish and Southern distribution system.

1.18 The switchgear control building, located approximately at grid reference NC 273350, 961815, would comprise a 6m x 5m single storey building with a pitched roof which would house switchgear and metering, protection and control equipment. Subject to requirements the building will house a single toilet facility for visiting maintenance staff. Rainwater would be collected via a gutter and inlet pipe to fill a header tank, and waste would be taken to a closed system and pumped out at regular intervals. The building would be constructed in keeping with the local built environment. Associated fencing, if required, would be either moorland green/brown or dark grey in order to blend with the existing landscape colours. Figure 3.10 provides an illustration of the switchgear control building.

1.19 **Meteorological Mast -** One permanent meteorological mast will be erected at grid reference 273685, 960585 to aid performance monitoring of the wind turbines and to collect and store meteorological data. The mast would be of lattice design and would have a maximum height of 70m. Instruments would be located at heights of 10m, 40m and 70m.

1.20 **Accommodation and Temporary Works**
A temporary construction compound with approximate dimensions of 50m x 100m would be located at grid reference 273780, 959930 on the site of the former municipal tip. Space will be provided for:

- Temporary portacabins needed for site offices and welfare facilities for contractors;
- Containers used for tool and equipment storage;
- Site toilets with a provision for sealed waste storage and removal;
- Parking for up to 20 vehicles; and
- Storage of components and materials.

1.21 **Construction -** It is estimated that construction would take approximately 6 - 10 months subject to the final details of the scheme, weather and ground conditions, with a further month for testing and commissioning. The construction process would consist of the following principal activities:

- Site survey and preparation;
- Construction of access tracks and passing places;
- Remedial works to lengths of the public highway to facilitate turbine delivery;
- Construction of the contractors' compound including temporary site office facilities;
- Construction of the crane pads;
- Construction of the turbine foundations;
- Construction of the site switchgear control building;
- Excavation of the cable trenches, erection of cable poles and cable laying;
- Delivery and erection of wind turbines and permanent meteorological mast;
- Testing and commissioning of the wind turbines; and
- Site restoration.

1.22 Most of these operations would be carried out concurrently, although predominantly in the order identified, in order to minimise the overall length of the construction programme. In addition, development would be phased such that the civil engineering works would be continuing in some parts of the site whilst wind turbines were being erected elsewhere. Site restoration would be programmed and carried out to allow restoration of disturbed areas as early as possible and in a progressive manner. The developer has indicated that if planning permission is granted, a detailed programme of works would be produced jointly with the appointed construction contractors and would be agreed with the local authority and any other relevant bodies prior to commencement to ensure full compliance with planning conditions.

1.23 Topsoil would be removed from the surface of proposed construction locations around the site and stored. It would then be used as necessary for land reinstatement following construction. Any excess would be used by the landowners elsewhere or deposited at general collecting points which would be agreed with the planning authority prior to removal to a licensed waste disposal site. Other materials removed from site would also be disposed of in the same manner.

1.24 **Routine servicing** would take place twice per year with a main service at twelve monthly intervals.

1.25 **Decommissioning** - The development has been designed to have an operational life of 25 years. At the end of this period the development would either be decommissioned, or an application made to extend its operational life. When dismantling and removing the turbines the bases would be broken out approximately 1m below ground level and all the cables cut at the same depth and left in the ground. Overground cabling and poles would be removed. Typically decommissioning would involve the removal of the upstand plinth and the top surface of the foundation base. The area would then be reinstated with a final layer of topsoil over the foundation.

1.26 Demolition of the control building would involve the removal of the equipment followed by demolition of the building. Roads would either be left for use by the landowners or covered in topsoil. No stone would be removed from the site. This approach is considered to be less environmentally damaging than seeking to remove all foundations, underground cables and roads entirely. It is estimated that decommissioning a development of this size would take approximately 6 - 8 months.

1.27 The site lies close to the following natural heritage designations:

- Caithness and Sutherland Peatlands Special Area of Conservation (SAC)
- Caithness and Sutherland Peatlands Special Protection Area (SPA)
- Caithness and Sutherland Peatlands RAMSAR site
- Lochan Buidhe Mires Site of Special Scientific Interest (SSSI)
- Armadale Gorge Site of Special Scientific Interest (SSSI)
- Kyle of Tongue National Scenic Area (NSA)

2. PLANNING HISTORY

2.1 Previous planning for or close to the site:

- 02/00367/FULSU – Temporary permission for 4 anemometers. Expiry 15.08.2006
- 06/00249/FULSU – Temporary permission for 2 anemometer masts at Sites 1 & 2 (50m tall anemometers). Expiry 11.08.2009

2.2 Members will note that the site layout has been refined and altered during ongoing discussions between the developers, landowners and statutory consultees over a considerable period of time. The layout has been reviewed against technical and environmental constraints and the number of proposed turbines has been reduced from an original 58 turbines to the currently proposed two turbines in order to minimise the impact on the landscape resource and visual amenity of the study area and to 'fit' the development into the receiving landscape.

3. PUBLIC PARTICIPATION

3.1 The application was advertised on 7 December 2007 under Section 34 of the Act, as a potential departure from the provisions of the development plan and as an application accompanied by an Environmental Statement. The period for representations to be made expired on 8 February 2008. Representations have been received and relate to the following matters:

- Visual and landscape impact
- Deter and impact on tourism
- Potential for further development of a larger windfarm
- Disturbance of peat
- Cumulative impact
- Pollution
- Siltation
- Damage to archaeology e.g. hut circles
- Impact on view from tourist viewpoint on A836
- Construction traffic and disruption to roads
- Impact on bird species
- Impact on otters
- Contrary to Highland Council policy

3.2 The letters of representation are available in the Area Office and will be available at the Committee meeting. The names of those making representation are listed at the end of this report.

3.3 RSPB Scotland have objected to the application as they consider that the conclusions drawn in the ES accompanying the application have to be validated by the provision of additional information. They have indicated that the impact of the proposal on birds can be mitigated by the use of appropriate conditions relating to:

- enabling and construction works being undertaken outwith the main bird breeding season (15th April to 1st August inclusive)

- trenching of all on site cabling
- Habitat Management Plan

4. CONSULTATIONS

4.1 Community Councils

- **Melvich Community Council** – No objections
- **Tongue Community Council** – No objections
- **Bettyhill, Strathnaver and Altnaharra Community Council** – Object. The reasons are reflected in section 3.1 above.

4.2 Internal Consultees

Archaeology – The site lies in a wider area where significant archaeological and historic remains are recorded and there is moderate to high potential for the survival of buried archaeological remains. ARC 1 condition (programme of archaeological work for preserving and recording of archaeological features)

Contaminated Land Unit – Part of the site has an historic use as a landfill, which may have resulted in land contamination and potential ground gas risk. Provided that no structures are located on or within 250m of the landfill there are no objections. This has been confirmed by the agent.

Access Officer – No objections. Any closure of the site to the public should be for the minimum period. After completion the track and adjacent ground should be free and open to the public for responsible access. Gates on the access track should allow for full non-motorised access provision for all users. The track from the A836 to the Clachan Burn and on to Bettyhill is part of the Draft Core Paths Plan for Sutherland.

TEC Services – No objections, subject to conditions. A traffic and road condition survey with appropriate wear and tear assessments will be required, the details of which are to be agreed in writing with the Roads Authority prior to the commencement of development.

Landscape Architect

1) Methodology - The methodology of this Landscape and Visual Analysis is heavily reliant on a matrix system, i.e. if Sensitivity to Change is ‘x’ and Magnitude of Change is ‘y’ then Impact will be ‘z’. Detailed examination of viewpoints is then presented only for those which are predicted by the matrix to have significant results. The lack of detailed consideration for other viewpoints raises the question of how rigorous the methodology is with regard to those views which fall outside the Significant category e.g. to verify that Sensitivity and Magnitude have been correctly ascribed.

The assessment of sensitivity to visual receptors is considered to be reasonable - however, it does not include the category of 'tourist' which is used widely in the assessment of Landscape Character Areas and occasionally in the assessment of

Viewpoints. This may be worth further consideration - tourists are ascribed a 'high' sensitivity in Viewpoint Assessment, but 'road users' for assessment of transport routes are universally ascribed a 'medium' sensitivity. While it is accepted that the sensitivity of receptors will change according to context and duration of view etc there would seem to be a reasonable argument that tourists will retain a high sensitivity whilst using roads and this should be given due consideration particularly where this might make a change to the outcome of the application of the Matrix.

2) Presentation of Visualisations - These do not meet the SNH Guidance in several particulars:

- Viewing distance is too short
- Height of images is too small

I would also suggest that there are too few full montages and that the degree of contrast where turbines skyline in montages is too low. Whilst light conditions will vary and contrast will change, visualisations should take care not to universally present a 'best case' scenario.

3) Assessment of Viewpoints – It is poor practice to present detailed consideration of only those viewpoints which are predicted to have significant impacts. It is the role of the Council to assess the Landscape and Visual Impact Assessment presented, not to carry out an assessment. In presenting only a small selection of the assessment the applicants deny the Council the opportunity to fully review the assessment. Combined with the standard of visualisations presented this makes a full appreciation of the possible impacts of the proposals all but impossible.

4) Cumulative Impacts - The assessment of cumulative impacts is limited. Although there is extensive presentation of mapping, the interpretation and consideration of these is lacking in detail. There are a lot of general statements in the text to the effect that there are no significant cumulative effects in various areas, but little by way of detailed explanation of how these conclusions have been reached.

5) Sequential Cumulative Effects for Transport Corridors - Again there is a lack of meaningful detail. For example, the A836 is described as gaining new turbine visibility over a 5km stretch but no consideration is presented of the relevance of direction of travel or the impact this has on the experience of travelling the road. The information presented is purely quantitative, though lacking in detail, and lacking in any qualitative analysis.

It is difficult to advise on specific impacts of the proposed development due to this consistent lack of detail. Whilst I might broadly agree with the conclusions arrived at from the Viewpoints this comes with the strong *caveat* that the shortcomings of the presentation and lack of analysis may be fostering an under-estimation of impacts.

On the Cumulative Impacts the lack of detail in the presented analysis makes it difficult to either support or oppose the ES conclusions. An ES should be sufficiently complete that its content can be reviewed with confidence, not so scant that further assessment is required.

On balance, it is likely that a small development at a reasonable distance from other similar development will not have significant cumulative impacts, but I have serious concerns that we do not have sufficient information presented to be fully confident in this. My particular concerns would be focused on the sequential cumulative impacts on the A836.

4.3 **External Consultees**

Scottish Natural Heritage – Object to the application.

- Proposal will have significant visual impacts to the appreciation of the North Sutherland regional landscape character alone and in combination with other wind farm proposals.
- There is potential for the development to have a significant effect on the otter qualifying interest of the Caithness and Sutherland Peatlands SAC. However, SNH's objection can be overcome if consent is conditional on the mitigation measures as suggested in this letter being incorporated into any planning permission.
- There is potential for the development to have a significant effect on a number of qualifying interests of the Caithness and Sutherland Peatlands SPA. However, SNH's objection can be overcome if consent is conditional on the construction period being outside the breeding season, unless surveys can demonstrate absence of breeding of the qualifying interests within specified disturbance threshold distances.
- There is potential for the development to have a significant effect on otter as a 'European Protected Species'. However, this objection can be overcome if the conditions required in relation to the SAC are incorporated into any planning permission.

SEPA – Satisfied with the proposals in a planning context and consider that the mitigation measures identified in the ES can form the basis of a more detailed construction method statement and be secured by the use of appropriate conditions in relation to:

- Site specific construction method statement to be provided a minimum of one month prior to the commencement of development.
- The only watercourse engineering works use either a bridging solution or arch culvert and that no other watercourse engineering works take place on the site.
- Minimum buffer between all turbines and other construction activities, with the exception of road works leading to watercourse crossings of 50m.
- Upgraded culverts size are designed to cope with a 1 in 200 year return period flood event.
- Contingency measures to ensure the safe egress of workers during flood events.
- Detailed waste management plan is provided.
- Habitat Management Plan is provided as part of the restoration of the site.
- Environmental scientist / project ecologist is employed on site to supervise the construction and decommissioning of the windfarm.

- Decommissioning Plan to be submitted by the developers and approved by the Planning Authority at least one year prior to the cessation of operations.
- Peat slide risk assessment.
- Fuel storage is proposed only at the site compound, which is acceptable to SEPA. Stone will be imported from existing quarries and no borrow pits are proposed.

Scottish Water – No objections.

Scottish Government Trunk Road Network Managers – No objections.

Defence Estates – The Ministry of Defence has no objections.

NATS – No objections.

Highlands and Islands Airports – The site lies outside the safeguard areas for Wick Airport. The highest turbine should be lit by red obstruction lighting showing through 360° of 2000 candelas and positioned at the highest point possible but no lower than the turbine nacelle.

Civil Aviation Authority – No objections.

CSS Spectrum Management Services Ltd – No objections.

5. POLICY

5.1 The following policies are relevant to the assessment of the proposal

Highland Structure Plan:

- Policy G2 – Design for Sustainability
- Policy G6 – Conservation and promotion of the Highland heritage
- Policy E1 – Distributed renewable energy developments
- Policy E2 – Wind energy developments
- Policy L4 – Landscape character
- Policy T6 – Scenic views

5.2 The **Tongue and Farr Local Plan (1995)** does not allocate the site for any specific purpose but does note that:

- there is a need to protect croftland, crucially important in maintaining the economy and traditional way of life
- opportunities must also complement and integrate with the existing crofting lifestyle and unique natural environment

5.3 At paragraph 1.41 the Local Plan notes that the Council will encourage development of alternative energy schemes where these provide economic benefits and are environmentally acceptable. Wind power is acknowledged as having the

most potential, although there is a need to safeguard the landscape constraints. Furthermore, the Plan notes that proposals for wind farms should:

- be located outwith the National Scenic Area, the coastal fringe, areas of nature conservation value, historic and archaeological importance
- ensure substantial separation distances from houses (at least 400m) and roads/footpaths (at least 100m).

5.4 The **Deposit Draft Sutherland Local Plan (November 2008)** is a material consideration to the application. The following policies in particular are relevant:

- 4 - Natural, Built and Cultural Heritage
- 11 - Protected Species
- 12 - Other Important Species
- 13 - Important Habitats
- 19 - Travel

5.5 Highland Council's **Renewable Energy Strategy and Planning Guidelines (2006)** were approved by the Council as supplementary planning guidance and are a material consideration. For local scale (less than 5 MW) onshore wind projects, Policy E8 states that these will be encouraged within designated preferred development areas, such areas lying within 2km of the existing 11 kV grid network, close to settlements and infrastructure, and having relatively light planning constraint levels. The Policy is qualified by the need to confirm the detailed suitability of all prospective sites through normal planning processes. Members will note that at the PED Committee on 28 May 2008 it was agreed to prepare new Supplementary Planning Guidance for onshore wind energy development. It was anticipated that this will supersede parts of the Renewable Energy Strategy and Planning Guidelines (2006), and that the new guidance would be available in February 2009.

5.6 The proposal also requires to be assessed against the following relevant Scottish Planning Policies (SPP); National Planning Policy Guidelines (NPPG); and Planning Advice Notes (PAN) –

- Scottish Planning Policy
- SPP6 Renewable Energy
- NPPG14 Natural Heritage
- SPP15 Planning for Rural Development
- SPP17 Planning for Transport
- PAN45 Renewable Energy Technologies
- PAN58 Environmental Impact Assessment
- PAN60 Planning and Natural Heritage

6. PLANNING APPRAISAL

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

6.2 The proposal requires to be assessed against the appropriate policies of the Development Plan, supplementary guidance and National Planning Policy and Guidelines as referred to in the Policy section. In particular, the proposal requires detailed assessment of the following fundamental issues:

- whether the principle of development is appropriate in terms of policy
- whether the layout of development is appropriate
- the impact on the amenity of the area and residents
- other material issues raised by the objectors

6.3 The application is in detail for the erection of two wind turbines on land to the east south east of Bettyhill. The turbines have a maximum hub height of 80m and a maximum height to blade tip of 120m, with an individual output of between 2 – 2.5 MW. In addition a 70m anemometer mast is proposed, with up to 2.9km of access tracks.

6.4 **Development Plan and National Policy -** The Development Plan is based on policies of sustainability including the use of resources to produce renewable energy. Various safeguards are built into policy wording in order to protect the natural and built heritage. Policies G2 (Design for sustainability), G6 (Conservation and promotion of the Highland heritage), L4 (Landscape character) and T6 (Scenic views) of the Highland Structure Plan are all relevant in this regard and require to be given due weight. However, it is Policy E2 (Wind energy developments) which encompasses these matters that is the key policy consideration in assessing this application.

6.5 Both Scottish Government and Development Plan Policy are supportive of renewable energy development in principle. Providing that impacts are not significantly detrimental or seriously adverse in relation to issues in the locality of the site – such as visual impact; noise; electro-magnetic interference; roads, bridges and traffic; aircraft flightpaths / MOD operation; and cumulative effects – the proposals would comply with the Development Plan and with Scottish Government policy and guidance.

6.6 According to the **Highland Renewable Energy Strategy and Planning Guidelines (May 2006)** (at 6.2.2.4) the proposed two wind turbine development lies within an area where there is a presumption against national and major onshore wind farms designed for meeting national / regional energy requirements (an installed capacity of more than 5MW). However, the Strategy indicates that the **site lies within a Preferred Development Area where local onshore wind projects (with an installed capacity of less than 5MW) will be encouraged**. The Strategy indicates that details be provided with an application of the levels of community ownership, local ownership and local benefit.

6.7 It is important to remember that the Strategy is not intended to be a site-specific planning tool, but a strategic document for the siting of renewable energy developments in the Highlands in areas where there are few constraints. At this strategic level, the Strategy cannot be prescriptive, but it does nevertheless provide a starting point for the assessment of a proposal. It gives an indication of where proposals may well be acceptable in principle and, conversely, where the level of constraints suggests that development might not be acceptable.

6.8 **Natural Heritage interests** – SNH have advised that the proposal has the potential to have a significant effect on the otter qualifying interests of the Caithness and Sutherland Peatlands SAC, and various qualifying interests of the Caithness and Sutherland Peatlands SPA. These effects can be mitigated by the use of suitable measures controlled by appropriate conditions including:

- post-construction monitoring programme
- pre-construction survey for water vole
- proposed Habitat Management Plan to be developed to include mitigation through habitat improvement to degraded bog in the application area
- works to be undertaken and supervised by a suitably-qualified project ecologist

6.9 SNH have indicated that the proposal is likely to have a significant impact on birds within the Caithness and Sutherland Peatlands SPA (notified for Golden Eagle, Golden Plover, Greenshank, Hen Harrier, Merlin, Red Throated Diver, and Black Throated Diver). However, if construction works are undertaken outwith the period 15 April to 31 July inclusive (or as may otherwise be agreed following survey work) then the proposal will not adversely affect the integrity of the site.

6.10 The Planning Authority has undertaken an Appropriate Assessment of the proposal as required by the Conservation (Natural Habitats, &c.) Regulations 1994. This concludes that the proposal is acceptable, subject to construction works being undertaken outwith the period 15 April to 31 July inclusive.

6.11 **Landscape and visual impact** - Within a 35km radius of the site, the ES accompanying the application indicates that there are ten landscape character types (described by SNH in the Caithness and Sutherland Landscape Character Assessment). The effects of the development would be limited to localised parts of four of these character types.

6.12 Designated landscapes within the study area include: six Areas of Great Landscape Value (AGLV); four proposed AGLVs; one National Scenic Area (NSA); one Historic Garden and Designed Landscape; and three Wild Land Search Areas. Only localised parts of one AGLV and localised areas of the NSA would be significantly affected. Members will note that the site does not cover any landscape or natural heritage designations.

6.13 A total of **seventeen viewpoints** were chosen for detailed analysis through a process of baseline study, consultation and fieldwork. The seventeen locations chosen are considered to provide a representative sample of views from publicly accessible locations, from different distances and directions from the site. The viewpoints selected also cover the landscape character areas from which the

development may be visible and a range of visual receptor types. Of the seventeen viewpoints, three are assessed as being more likely to have a significant effect on the visual amenity and are considered to be the public locations at which the proposal will have the most visual impact. These are all within approximately 3.5km from the proposed turbines and are described in more detail below -

The Store at Bettyhill - located within the crofting village of Bettyhill. Generally, the land rises to the south. It is a rough landscape with rock outcrops, groups of coniferous tree planting near dwellings and dry stone walls demarking croft boundaries. It is predicted that the tops of the hubs and the blades of both proposed turbines will be visible from this location. The magnitude of change will be medium as the large scale of the turbines is seen on the horizon in direct juxtaposition to the small scale of the dwellings, at a relatively close distance of just over three kilometres. Taking account of the medium to high sensitivity of the receptors, there will be a major - moderate and significant effect on the visual amenity at this viewpoint as a result of the proposed development.

Minor Road to Farr - This minor road turns of from the A836 to provide local access to Farr. Although the main views are to the sea looking north, when driving south to join the A836, the view is towards the moorland with mountains in the distance. It is predicted that two proposed turbines will be almost central in this view. The scale of the turbines and their proximity is likely to dominate this view. The nearest turbine will be seen at a distance of 1.8km from this viewpoint location. As a result of the proximity of the development to the viewpoint the magnitude of change at this viewpoint is considered to be high. This viewpoint is representative of views obtained by road users of the proposal. The effect of the proposed development upon the visual amenity of this group at this viewpoint is considered to be major - moderate, which represents a significant effect.

Bettyhill Viewpoint - The viewpoint is located on the A836 near Bettyhill. It is a recognised view point with a picnic bench and plaque demonstrating the mountains visible. As a recognised visitor stop-off this view is considered to be of high sensitivity to change associated with the development. From the viewpoint, the vista is a flat, open moorland with the mountains in the distance. The peaks of Ben Loyal and Ben Hope are visible and recognisable from this view. The magnitude of change to this view will be high given the scale of the turbines, their proximity to the viewpoint and their scale relative to the distant mountains. The effect on visual amenity at this viewpoint is likely to be major as a result of the proposed turbines.

6.14 SNH have indicated whilst the visibility of the wind farm may be significant, only the blades of the turbines to a varying extent will be visible, due to the nature of the topography of the area. In the context of the complex landform and detail of rock outcrop, ground cover vegetation and interspersed wetland and lochan, such a view of two turbines will not have a significantly adverse impact on the landscape character of the area. **SNH have not objected to the proposal with respect to landscape character**.

6.15 In terms of the **visual character** of the area, Members will note that views to appreciate the landscape are relatively rare and only gained from higher elevations, typically along the coastal A836. The turbines will be visible from a limited number

of locations along the A836 where the road reaches the crest of the ridges of sufficient height. The ES indicates that other than along a 3km stretch of road north of the site where views will be continuous, there will be regular intermittent views of the blades along the A836, particularly 6km and more to the east, and from the B871 in Strathnaver 7km to the south of the site.

6.16 SNH have advised that even to introduce turbines into the infrequent views gathered from the A836 ridges will have significant adverse visual impacts on the appreciation of the landscape and have objected to the application due to its visual impact. The Bettyhill Viewpoint (at 6.14.3 above) is particularly key, with many people driving along the road potentially viewing the site from this location, or indeed whilst stopped at it appreciating the landscape. Following discussions with the developer and SNH, alternative viewpoint locations to replace the Bettyhill Viewpoint were examined. However, whilst it is recognised that these could provide additional locations from which to appreciate the landscape, they do not better the existing viewpoint, and its removal by the developer is not considered appropriate as mitigation in order to allow the windfarm development to potentially proceed. It is considered more appropriate to retain the existing viewpoint. **Members will note that SNH have objected to the visual impacts of the proposal.**

6.17 In my assessment there will be a potentially significant impact on the view from the Bettyhill Viewpoint (at 6.14.3 above) as a result of the proposal. It is the main and closest point of public reference to the proposed development although it is relatively limited in its extent – you either drive past it and briefly see the proposed turbines, or you stop at the viewpoint and see them for the duration of the stop. Thereafter, the views from the north coast road are fairly restricted.

6.18 The ES landscape and visual assessment concludes that the proposed development is well sited with respect to landscape and visual effects. There will be no widespread adverse impacts from the development, either on its own or cumulatively. Significant effects will be limited and localised. In landscape and visual term, the ES concludes that the proposals are considered to be acceptable.

6.19 **Cumulative impacts** - There are a number of windfarms at various points in the planning application / consent process, with the nearest operational developments at Forss to the east and Melness to the west. To the south and south east of the site is the Strathy West / East / Strathy Forest area where there are various proposals. Further to the east in Caithness are the Baillie, Hill of Lieurary and South Shebster. SNH have advised that the predicted cumulative impacts of the proposed development are unacceptable when assessing the additional impact of the proposal with other development either built, consented or at application. SNH consider that the cumulative visual impact and impact on landscape character at points where the Bettyhill proposal would be intervisible with the (far larger) Strathy proposals is not significantly adverse. Furthermore, with regards to the recently approved Melness windfarm (3 turbines), SNH have indicated that views in combination (Bettyhill and Melness) are possible, and that the windfarms will be viewed in succession when driving along the A836, which will contribute to cumulative impacts.

6.20 **SNH have objected to the proposal with respect to cumulative visual impacts on the appreciation of the distinctive North Sutherland regional landscape character.** Members will note that if the Bettyhill application is approved prior to the other proposals in the area then the baseline will alter and the cumulative assessment for those proposals would need to be reviewed.

6.21 The ES assessment of cumulative impacts is limited. Although there is extensive presentation of mapping, the interpretation and consideration of these is lacking in detail. There are a lot of general statements in the text to the effect that there are no significant cumulative effects in various areas, but little by way of detailed explanation of how these conclusions have been arrived at.

6.22 The Council's Landscape Architect has indicated that there is a lack of detail in the ES analysis when examining the potential cumulative impacts of the proposal, which makes it difficult to either support or oppose the ES' conclusions. The Landscape Architect has serious concerns that there is insufficient information presented in the ES to be fully confident in this. In particular, there are strong concerns focussing on the sequential cumulative impacts on the A836. On balance, it is considered likely that a small development at a reasonable distance from other similar development will not have significant cumulative impacts.

6.23 It is difficult to advise Members on the specific impacts of the proposed development due to the consistent lack of detail in the ES. Whilst the Council's Landscape Architect has indicated that the broad conclusions arrived at from the viewpoint analysis in the ES are acceptable, this comes with the strong caveat that the shortcomings of the presentation and lack of analysis in the ES may be fostering an underestimation of impacts.

6.24 **Transportation** – The large turbine components will be delivered by sea to Scrabster Harbour and then to the site via the A9(T) and A836. The majority of the A836 road is a two lane single carriageway of width varying between 7.5 metres and 12.5 metres. Approximately 6 km of the A836 between Melvich and the junction for Brawl is one lane single carriageway of width varying between 4.5 metres and 7.5 metres. Access to the site would be taken from the A836 via the existing track approximately 2 km east of Bettyhill. During the 6-8 month construction period, the following vehicles will access the site:

- Low loaders (turbine delivery vehicles) and other heavy goods vehicles (HGVs) to deliver non standard equipment to the site;
- 20-tonne lorries to deliver / move stone for access tracks;
- Flat-bed lorries to deliver control building components;
- Semi-low extendible trailers to deliver turbine components (requiring escort);
- Cranes delivered as mobile units and on low-loaders;
- Deliveries of fuel and water by tanker; and
- Construction personnel, by private car or light vehicles.

6.25 TEC Services have assessed the proposed development and, in particular, the proposed route for delivering abnormal loads. In principle, they have no objection to the proposals as submitted. A wear and tear agreement under Section 96 of the Roads (Scotland) Act with before and after surveys of the road would be required. These are matters that can be covered by legal agreement and by condition.

6.26 Whilst it is recognised that there will be some short-term significant increase in traffic levels on the approach to the site, this will be over the first three months (access track and turbine foundations construction) of the projected nine month construction period. It is considered that these are short-term adverse impacts, but overall the transportation issues will not have a significantly detrimental impact on the local community.

6.27 **Noise** - The separation between the nearest occupied houses and the nearest turbine is 1.27km. This house lies to the north of the A836. It is considered highly unlikely that there would be any significant effects due to construction noise. Furthermore, the ES indicates that the noise effects from the proposed development would not be significant.

6.28 **Representations** relate to the following general issues:

- Visual and landscape impact; impact on view from tourist viewpoint on A836 – In my assessment, the proposal will not have a significantly detrimental impact on these issues.
- Deter and impact on tourism – It is not considered that the development of a two turbine windfarm in this location will have an impact on tourism in the area.
- Cumulative impact – It is considered that it is likely due to the small size of the proposal (2No. turbines) that a small development at a reasonable distance from other similar development will not result in a significant cumulative impact.
- Pollution and siltation - SEPA have indicated that pollution and siltation prevention and control measures can be addressed by the use of conditions (in the Construction Method Statement).
- Impact on bird species – SNH have indicated that the proposal is likely to have a significant impact on birds within the Caithness and Sutherland Peatlands SPA (notified for Golden Eagle, Plover, Greenshank, Hen Harrier, Merlin, Red Throated Diver, Black Throated Diver). However, if construction works are undertaken outwith the period 15 April to 31 July inclusive (or as may otherwise be agreed following survey work) then the proposal will not adversely affect the integrity of the site.
- Impact on otters – SNH have advised that the potential effects can be mitigated by the use of suitable mitigation measures controlled by appropriate conditions including pre-construction survey of the site for otter holts.
- Contrary to Highland Council policy – The proposal is considered to accord with Development Plan Policies.
- Damage to archaeology e.g. hut circles – The Council's Archaeologist has indicated that the proposal is acceptable subject to the developer undertaking a programme of archaeological work for preserving and recording of archaeological features. This can be addressed by a condition.
- Potential for further development of a larger windfarm – Any such proposal would be subject to a further application and would be assessed on its own individual merits.

- Construction traffic and disruption to roads – TEC Services have indicated that the proposal is acceptable, subject to various measures which can be addressed by the use of appropriate conditions.

6.29 Members will note that there are no other technical difficulties with the proposal that cannot be addressed by the use of conditions.

6.30 **Development Plan Policy** – The proposal is considered to accord with development plan policy.

7. CONCLUSION

7.1 The proposal is for the development of a small wind farm of two turbines. The broad thrust of Scottish Government's renewable energy policies and guidance and Highland Council's Development Plan policies are supportive of the principle of renewable energy developments. The Council's renewable energy guidelines promote small scale renewable energy proposal in this area. The proposal generally accords with the development plan policy for the area.

7.2 The major issue in this application is the cumulative visual impact of the proposal on the landscape and on the appreciation of the distinctive North Sutherland regional landscape character. The visual impacts of the proposal are considered to be relatively limited and over a small public area – generally the infrequent views on the A836 from Bettyhill village to the viewpoint on the A836 approximately 4km to the east. The major issues in this case are the impacts on visual and cumulative visual amenity. The cumulative visual impact increases when the Bettyhill windfarm is considered with the Strathy North and Strathy South windfarm proposals.

7.3 The representations focus on the visual and cumulative impact of the proposals with their perceived adverse effect on the natural environment. The acceptability of the proposals with regard to their visual impact is largely a subjective matter. The visual impact of the development on its own, while significant, will not in my view be significantly detrimental to visual amenity. Undoubtedly the development of a small number (2No.) of wind turbines in this location will be a significant change to the landscape.

7.4 In my assessment, the proposal is acceptable in terms of Structure Plan Policy G2 Design for Sustainability, as it will not have a significantly detrimental impact on individual or community residential amenity. Furthermore, the proposal will help to contribute to the economic development of the community through shareholders in the Bettyhill Common Grazings. The development of the site does not have a direct impact on any designated sites (notified by the policy for their habitat, species, landscape, scenic, cultural or freshwater system interests).

7.5 The development of a 2 turbine windfarm is supported by Policy E1, albeit with any proposal limited for a 25 year period, after which the site should be reinstated, or application made by the developer for renewal. The proposal is also acceptable with regards to Policy E2 Wind Energy Developments.

7.6 Policy T6 of the Structure Plan requires the protection of important scenic views enjoyed from tourist routes and viewpoints. In this instance the view from the Bettyhill Viewpoint is generally to the west, whereas the windfarm is to the southwest of the viewpoint. It is not considered that the scenic view is unduly impacted on from this viewpoint. The visual impact of the development on its own, while significant, will not in my view be significantly detrimental to visual amenity.

7.7 It is considered that this proposal does not conflict with the provisions of the Development Plan. Having taken into account the concerns of the local Community Council and all public representations, as well as the current legislation and supplementary guidance, I am of the view that the balance lies in favour of granting planning permission subject to appropriate legal agreements and conditions.

RECOMMENDATION

Grant planning permission subject to the conditions set out below. If Members are minded to approve the application then it is recommended prior to the issue of planning permission that the developer enters into and concludes legal agreements with the Planning and Roads Authorities to cover:

- **A wear and tear agreement under Section 96 of the Roads (Scotland) Act with before and after surveys of the local road network as agreed with TEC Services undertaken by the developer and at his expense. This agreement shall include a financial bond or other agreed insurance of an amount to be specified by the Highland Council to ensure reinstatement of the public road in the event of a major catastrophic failure of the public road caused by traffic attributable to the wind farm construction.**
- **A financial bond for the restoration of the site at the expiry of the permission or at the cessation of operation of the wind farm for a period exceeding six months.**

Members should be aware that if they are minded to approve the application without imposing the conditions recommended by SNH to mitigate the impact of the proposal then the application would have to be referred to Scottish Ministers to allow them the opportunity to call in the application.

Members are reminded that if they do approve the development, the application will require to be notified to Scottish Ministers in accordance with the provisions of the Town and Country Planning (Notification of Applications) (Scotland) Direction 2007, given that the proposal involves "EIA development" as defined by Regulation 2 of the Environmental Impact Assessment (Scotland) Regulations 1999.

CONDITIONS

1. The permission hereby granted shall endure for an operational period of twenty-five years from the date that electricity is first sold to the grid network, such date to be notified in writing to the Planning Authority within three months of this time. At the end of this period, unless with the express approval in writing of the Planning Authority, all wind turbines, buildings and ancillary equipment, shall be dismantled and removed from the site, and the ground fully reinstated to the satisfaction of the Planning Authority in accordance with the relevant conditions listed below.

   Reason: The anticipated design life of the wind farm is 25 years.

2. Except as otherwise provided for and amended by the terms of this approval, the developer shall construct and operate the development in accordance with the provisions of the application, the Environmental Statement submitted in November 2007 and the submitted and approved plans. This permission shall be for a maximum of 2 wind turbines and (installed capacity 5MW), access track and infrastructure, switchgear control building, anemometer mast and temporary control compound as shown on Figure 3.1 of the ES. The prior approval in writing of the Planning Authority in consultation with the Scottish Environment Protection Agency and Scottish Natural Heritage shall be required for the siting of any wind turbine or access track more than 20 metres from the approved location, any such submission by the developer to include a revised site layout for the location of all wind turbines and access roads.

   Reason: To ensure that the development is carried out in accordance with the approved plans.

3. In the event that any wind turbine fails to produce electricity supplied to a local grid for a continuous period of six months not due to it being under repair or replacement, then it shall be deemed to have ceased to be required and, unless otherwise agreed in writing with the Planning Authority, the wind turbine and its ancillary equipment shall be dismantled and removed from the site within the following six months and the ground fully reinstated to the specification and satisfaction of the Planning Authority.

   Reason: In the interests of visual amenity and to ensure that redundant equipment is removed from the site.

4. Prior to the commencement of the development the final specification of the wind turbine details shall be submitted to and require the approval in writing of the Planning Authority, including the make, model, design, power rating and sound power levels. The noise assessment shall be updated as necessary to reflect the turbine specification chosen. For the avoidance of doubt, wind turbines on this site shall not exceed 80 metres above existing ground level in hub height and 120 metres above existing ground level in overall height (to blade tip). Turbines should meet British Standards BS EN 61400-1:1995 and transformers shall be housed

within the towers or bases unless otherwise agreed in writing with the Planning Authority.

Reason: In the interests of safety and amenity.

5. All access arrangements shall be provided to the satisfaction of the Planning Authority in consultation with the Roads Authority prior to the first generation of any power to the national grid. For the avoidance of doubt, and prior to the commencement of development the developer shall submit a Transport Management Plan (TMP) to for the agreement in writing of the Planning Authority in consultation with the Roads Authority, to cover HGV transport to the wind farm site. The TMP shall include:-

   i) Health and safety access plan for emergency services and a contingency plan in the event of a vehicle break down or road blockage.

   ii) Schedules for road improvements and/or repairs to be undertaken prior to or during the construction period of the wind farm, and will include any temporary removal of street furniture that may be necessary during the period of turbine component delivery.

   iii) Details of a photographic survey recording the size and condition of all culverts and bridges.

   iv) A date of commencement of road haulage operations and the duration of the road haulage operation.

   v) Full written construction and plan details of the proposed A836 / site access junction improvements. For the avoidance of doubt, the junction shall have visibility splays of at least 4.5m x 180m, and the first 10m of the access shall be constructed to a found finish e.g. dense bound macadam or concrete. A 10m bellmouth radii shall be provided. Wheel wash facilities shall be provided by the developer together with measures to prevent silting of ditches, drains or watercourses.

   Reason: In the interests of road safety.

6. The access shall be constructed in accordance with details that shall be submitted to and approved by the Planning Authority, after consultation with the Roads Authority, before any part of the development is commenced.

   Reason: In the interests of road safety.

7. The new access to the site shall be formed before any works commence on the site unless otherwise agreed in writing with the Planning Authority in consultation with the Scottish Environment Protection Agency, Scottish Natural Heritage and the Roads Authority.

Reason: In the interests of road safety.

8. An adequate and unobstructed turning area should be provided within the curtilage of the site.

Reason: In the interests of road safety.

9. Prior to the commencement of development a Road Assessment Condition Survey to identify the capacity of the public road network from point of origin to the site for the movement of construction materials and equipment, to include any improvement and modification measures necessary to accommodate the transport within the Highland area of normal and abnormal loads, all such costs to be met by the developer, shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Roads Authority and the Scottish Government – Trunk Road Network Management Division unless otherwise agreed in writing by the Planning Authority in consultation with the relevant authorities of one or more of the Roads Authority and the Scottish Government – Trunk Road Network Management Division.

Reason: In the interests of road safety.

10. Prior to the commencement of delivery of construction materials and equipment along the public road network within the Highland area, all the necessary and approved improvements and modifications to such parts of the network in order to accommodate the transport of normal and abnormal loads shall have been implemented to the satisfaction of the Planning Authority in consultation with the Roads Authority and the Scottish Government – Trunk Road Network Management Division.

Reason: In the interests of road safety.

11. Prior to the commencement of delivery of abnormal loads along the public road network, a detailed traffic management plan, including a programme for the movement of abnormal loads, and a contingency plan in the event of the public road network becoming blocked by a vehicle carrying an abnormal load, shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Roads Authority and the Scottish Government – Trunk Road Network Management Division.

Reason: In the interests of road safety.

12. At monthly intervals during the construction, Road Condition surveys of construction traffic routes utilised during construction within the Highland area shall be undertaken to identify any reinstatement works necessary to the public road network which can be reasonably attributed to the wind farm construction traffic,

such works to be implemented thereafter at the developer's expense to the satisfaction of the Planning Authority in consultation with the Roads Authority and the Scottish Government – Trunk Road Network Management Division.

Reason: In the interests of road safety.

13. Within three months of completion of construction a Final Road Condition Survey of construction traffic routes utilised during construction within the Highland area shall be undertaken to identify any reinstatement works necessary to the public road network which can be reasonably attributed to the wind farm construction traffic, such works to be implemented thereafter at the developer's expense to the satisfaction of the Planning Authority in consultation with the Roads Authority and the Scottish Government – Trunk Road Network Management Division.

Reason: In the interests of road safety.

14. The Wind Farm Operator shall log wind speed and wind direction data continually and shall retain the data which has been obtained for a period of no less than the previous 12 months. The data shall include the average wind speed in metres per second for each 10 minute period. The measuring periods shall be set to commence on the hour or in 10 minute increments thereafter. The wind speed data shall be made available to the Planning Authority on request. The data shall be provided on a Microsoft Excel spreadsheet in electronic format. In the case where the wind speed is measured at a height other than 10 metres, the data shall be supplemented by adjusted values which allow for wind shear, normalised to 10 metre height. Details of the wind shear calculation shall be provided.

Reason: In the interests of the amenity.

15. Access to the site by heavy goods vehicles shall be restricted to 0700 to 1800 on Mondays to Fridays and from 0700 to 1200 on Saturdays with no such access on Sundays. Any work on site outwith these times shall only take place with the prior written approval of the Planning Authority, with such approval not unreasonably being withheld. Except in the case of an emergency, written notification shall be submitted at least 4 weeks prior to such works commencing. The appointed contractor shall adopt "Best Practical Means" in controlling noise levels and shall follow guidance contained within BS5228 Part 1 –1997 – Noise and Vibration Control on Construction and Open Sites.

Reason: In the interests of the amenity of noise sensitive premises.

16. Prior to the commencement of development, the developer shall enter into a **site ecological monitoring programme** with the Planning Authority, SNH and other relevant parties. For the avoidance of doubt, the monitoring programme shall cover both pre- and post- construction.

The developer shall undertake a **pre-construction survey for water vole**, full details of which, including appropriate methodology, reporting mechanism, mitigation measures if required and appropriate timescale, shall be agreed in writing with the Planning Authority in consultation with SNH.

The developer shall also develop and implement within an agreed timescale with the Planning Authority and SNH a **Habitat Management Plan** for the site and the development hereby approved. This Plan shall include:

- appropriate mitigation measures including habitat improvement to degraded bog in the application area,
- details of infill of trenches, re-vegetation of disturbed areas, protection of existing interests, water table management,
- long term monitoring and feed back mechanisms.

For the avoidance of doubt, the developer shall employ a suitably qualified **project ecologist** to oversee and implement the ecological monitoring programme, Habitat Management Plan, surveys and any mitigation measures for the development hereby approved.

All construction works shall be undertaken by the developer outwith the period 15 April to 31 July inclusive, or as may otherwise be agreed in writing with the Planning Authority in consultation with SNH following appropriate ornithological surveys to demonstrate the absence of breeding of the qualifying interests within specified disturbance threshold distances of any part of the development.

The developer shall submit full details for the approval in writing of the Planning Authority in consultation with SNH of **appropriate mitigation measures to protect otters** and their resting places from disturbance during the construction, operational and decommissioning phases of the development. The agreed mitigation measures shall be put in place by the developer within a timescale to be agreed with the Planning Authority in consultation with SNH and prior to the commencement of any development on the site. For the avoidance of doubt, the mitigation measures shall include those referred to at the end of section 7.2.5 of the ES in connection with otters.

The developer shall undertake a **pre-construction survey** of the development site for otter holts (including resting places) including a 500m buffer zone around all proposed construction areas. Should any holts be discovered then SNH shall be consulted by the developer on an appropriate exclusion zone from any holt. Should signs of breeding or resting otter be observed or discovered during construction works, then works within 100m radius shall cease until a survey by a suitably qualified ecologist determines whether there is a holt. If a holt is discovered during construction then the developer shall consult the Planning Authority and SNH to agree suitable mitigation. For the avoidance of doubt, no further work shall occur within 30m of the holt until suitable mitigation has been agreed in writing with the Planning Authority in consultation with SNH. No construction works shall take place within 30m of watercourses except where directly related to any burn crossings.

Reason: In order to protect the natural heritage interests of the area and integrity of nearby designated sites and for the avoidance of doubt.

17. Prior to the commencement of development, a programme of archaeological work for the preservation and recording of any archaeological features affected by the proposed development, including a timetable for investigation, all in accordance with the attached specification, shall be submitted to and require the approval in writing of the Planning Authority. All arrangements thereby approved shall be implemented by the developer at his expense in accordance with the approved timetable for investigation.

Reason: In order to protect the archaeological and historical interest of the site.

18. No fencing shall be erected by the developer on the site, other than that to secure buildings and the construction compound. These fences shall be temporary in nature and shall be removed following the completion of all construction works.

Reason: In order to protect the natural heritage interests of the area and integrity of nearby designated sites and for the avoidance of doubt.

19. Prior to the commencement of development, the developer shall have submitted to and have approved in writing by the Planning Authority:

i) Detailed measures to prevent erosion, sedimentation or discolouration will be required.

ii) Monitoring proposals and contingency and emergency plans. SEPA would expect this to include the establishment of an environmental checklist to monitor and plan construction activities, specifically:
- Proposals for daily visual inspections and the recording of required environmental actions (for example, in relation to silt management or peat stability);
- Proposals for planning activities in light of the weather (up to 3 day forecast), particularly in relation to heavy rain. Various commercial companies and the Met Office can provide (at a cost) three to five day forecasts tailor made for an individual site;
- Details of temporary peat and vegetation storage areas and management to prevent environmental impact; and
- Aspects relating to peat stability mitigation.

iii) Specific measures to address silt-laden run-off from temporary and permanent access tracks and other engineering operations.

iv) Proposals and mitigation measures for the dewatering of turbine bases. Of specific relevance is demonstration that there is sufficient area to allow settlement of silty water and if not other appropriate means for treating the dirty water.

v) Specific measures to prevent entry of cement materials to watercourses and mitigation related to this.

vi) The location and design of bulk storage of fuel or oils and its subsequent use. All fuel storage areas shall have impervious bases and be placed within a secure bund. All vehicles and plant shall be regularly inspected by the developer, with particular emphasis on hydraulic hoses, for fuel and oil leaks. Oil spill kits shall be provided and maintained on site by the developer.

vii) Permanent drainage arrangements for access tracks, turbines and switch station based on sustainable drainage principles.

viii) Details of cable laying, especially in relation to watercourse crossings.

ix) Details of dust sprays and vehicle wheel wash facilities.

The measures thereby approved shall be implemented by the developer. For the avoidance of doubt, the only watercourse engineering works shall utilise either a bridging solution or arch culvert and no other watercourse engineering works shall take place on the site. A minimum buffer between the turbines and other construction activities, with the exception of road works leading to watercourse crossings, shall be 50 m. Prior to the commencement of development the developer shall provide details for the agreement in writing of the Planning Authority of:
i) The proposed upgraded culverts size are designed to cope with a 1 in 200 year event, and allow for the impact of climate change and possible blockages as identified by SPP7 and PAN69.
ii) Contingency measures to ensure the safe egress of workers during flood events.
The measures thereby approved shall be implemented by the developer.

20. Prior to the commencement of development all transformer areas shall be bunded by the developer to the satisfaction of the Planning Authority in consultation with SEPA. Furthermore, the developer shall also provide a detailed waste management plan, detailing the individual waste streams, proposals to minimise the production of waste, storage, use and disposal, for the agreement in writing of the Planning Authority in consultation with SEPA.

Reasons: In order to avoid pollution of the site and for the avoidance of doubt.

21. At least one year prior to the ceasing of operations at the site, the developer / owner / operator of the windfarm shall submit a Decommissioning Plan for the approval in writing of the Planning Authority in consultation with SEPA and SNH, or other successor bodies. The plan shall detail measures in writing and on plan of the decommissioning of the site. The decommissioning of the site shall be undertaken in accordance with the approved plan by the developer / owner / operator.

Reason: In order to successfully decommission and reinstate the site and for the avoidance of doubt.

22. Prior to the commencement of development, details of the sub-station building including its design, finishes and any associated compound and fencing, shall be submitted to and require the approval in writing of the Planning Authority. For the avoidance of doubt, the building shall be finished in grey harled walls with a pitched roof finished in dark grey/black roof tiles to match the adjacent building.

Reason: In order to clarify the terms of this permission and to retain effective control over the development.

23. The wind turbines shall be finished in a non-reflective semi-matt pale grey colour, and that colour shall not be altered thereafter unless previously approved in writing by the Planning Authority.

Reason: In the interests of visual amenity.

24. The site shall not be permanently illuminated by lighting without the prior approval in writing of the Planning Authority which, if the lighting is required by law, shall not unreasonably be withheld.

Reason: In the interests of visual amenity.

25. No symbols, signs, logos or other lettering by way of advertisement shall be displayed on any part of the wind turbines nor any other buildings or structures without the prior approval in writing of the Planning Authority.

Reason: in the interests of visual amenity.

26. All cables between the wind turbines, the sub-station building and the point of connection to the Grid, shall be laid underground and the ground thereafter reinstated to the satisfaction of the Planning Authority.

Reason: In the interests of visual amenity.

27. Prior to the commencement of development, details of the proposed arrangements for the disposal of foul drainage from the temporary welfare facilities for workers shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Scottish Environment Protection Agency. The approved proposals shall be implemented thereafter to the satisfaction of the Planning Authority in consultation with the Scottish Environment Protection Agency.

Reason: In order to prevent pollution of groundwater or any watercourse

28. A minimum of two weeks prior to the commencement of development, the developer shall provide written notice of his intention to start works to the Planning Authority, the Scottish Environment Protection Agency and Scottish Natural Heritage.

Reason: In order to retain effective control over the development.

29. All portacabins, containers, machinery and equipment associated with construction, temporary areas of hardstanding, geogrids and other lay-down materials shall be removed from the site within three months of the wind turbines becoming operational, and the ground affected by construction activity, including the on-site borrow pit, reinstated to the satisfaction of the Planning Authority, all in accordance with a method statement which shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Scottish Environment Protection Agency and Scottish Natural Heritage prior to the commencement of development. The method statement shall include details of how turfs will be stripped, stored and replaced.

Reason: In order to clarify the terms of this permission and to ensure restoration of the site.

30. Within twelve months of the date of electricity first being sold to the grid network, an indicative scheme and method statement for the decommissioning and ultimate reinstatement of the site, comprising the removal of all above-ground structures and ground reinstatement, shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Scottish Environment Protection Agency and Scottish Natural Heritage. The scheme shall be reviewed and amended as necessary, taking into account the operation of the scheme and monitoring, at least twelve months prior to actual decommissioning and reinstatement works.

Reason: In order to clarify the terms of this permission and to ensure restoration of the site.

31. At Wind Speeds not exceeding 12 metres/second, as measured or calculated at a height of 10 metres above ground level at the wind farm at a grid reference or grid references to be approved by the Planning authority, the Wind Turbine Noise Level at any dwelling or other noise sensitive premises shall not exceed:

a) during Night Hours, 38dB LA90, 10min, or the Night Hours LA90, 10min Background Noise Level plus 5dB(A), whichever is the greater;

b) during Quiet Waking Hours, 35dB LA90, 10min or the Quiet Waking Hours LA90, 10min Background Noise Level plus 5 dB(A), whichever is the greater providing that this condition shall only apply to dwellings or other Noise Sensitive Premises existing at the date of this planning permission.

At the request of the Planning Authority, following a valid complaint to the Planning Authority relating to noise emissions from the wind turbines, the Wind Farm Operator shall measure, at its own expense, the level of noise emissions from the wind turbines. The measurement and calculation of noise levels shall be undertaken in accordance with "The Assessment and Rating of Noise from Wind Farms", September 1996, ETSU report number ETSU-R-97 having regard to paragraphs 1-3 and 5-11 inclusive of The Schedule, pages 95-97; and Supplementary Guidance Notes to the Planning Obligation, pages 99-109. In comparing measured Wind Turbine Noise Levels with Background Noise Levels, regard shall be had to the prevailing Background Noise Levels as measured at specified properties. In the event of a complaint from a property, the measured Wind Turbine Noise Levels at that other property shall be compared to the prevailing Background Noise Levels at the specified property which is most likely to have similar background noise levels.

"Wind Turbine Noise Level" means the rated noise level due to the combined effect of all the Wind Turbines, excluding existing background noise level but including any tonal penalty incurred under the methodology described in ETSU-R-97, pages 99-109. "Background Noise Level" means the ambient noise level already present within the environment (in the absence of noise generated by the development) as measured and correlated with Wind Speeds.

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

"Night Hours" means 2300-0700 hours on all days.

"Quiet Waking Hours" means 1800-2300 hours on all days, plus 0700-1800 hours on Sundays and 1300-1800 hours on Saturdays.

"Noise Sensitive Premises" means existing premises, the occupants of which could be exposed to noise from the wind farm and includes hospitals, residential homes,nursing homes, etc.

Should the noise levels be exceeded, the Wind Farm Operator shall take immediate steps to ensure that noise emissions from the Wind Farm are reduced to the aforementioned noise levels or less, to the written satisfaction of the Planning Authority.

Reason: In order to ensure satisfactory noise control arising from operation of the development.

Signature: Allan J Todd

Designation: Area Planning & Building Standards Manager

Author: Bob Robertson 01408 635371

Background Papers: As referred to in the report above and case file reference number 07/00448/FULSU

Date: 9 March 2009

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Environmental Statement

Legend

- Site Boundary
- Turbine Locations
- Access Route

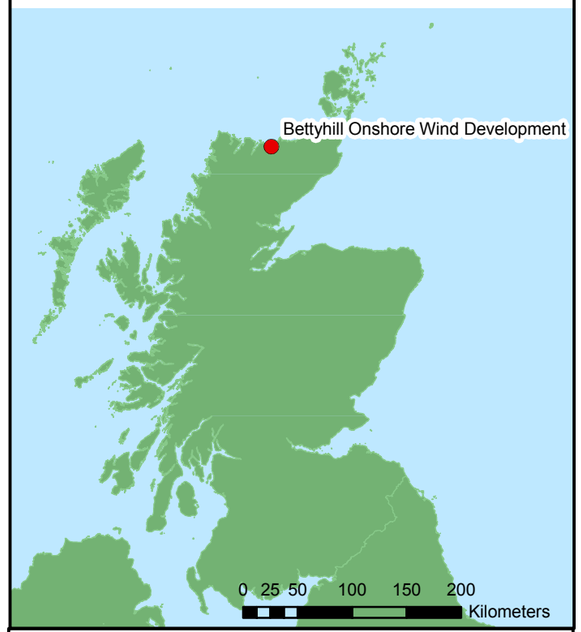

Figure: 1.1 SITE LOCATION

Scale: 1:25,000 @ A3

North British Windpower

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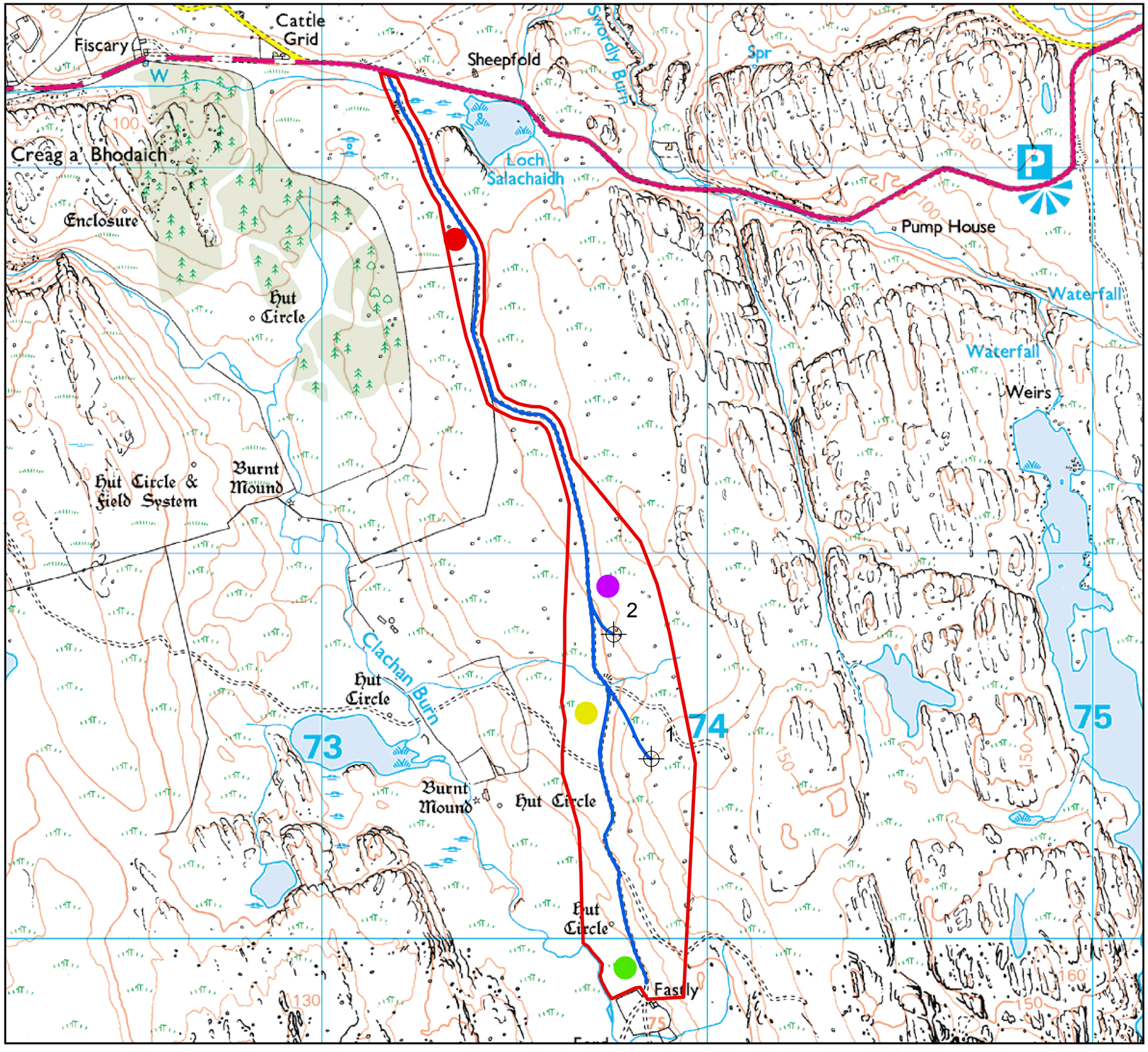
Environmental Statement



Legend

- Site Boundary
- Turbine Locations
- Access Route
- Construction Compound
- Switchgear Control Building
- Meteorological Mast
- Laydown Area

Figure: 3.1 SITE LAYOUT

Scale: 1:10,000 @ A3

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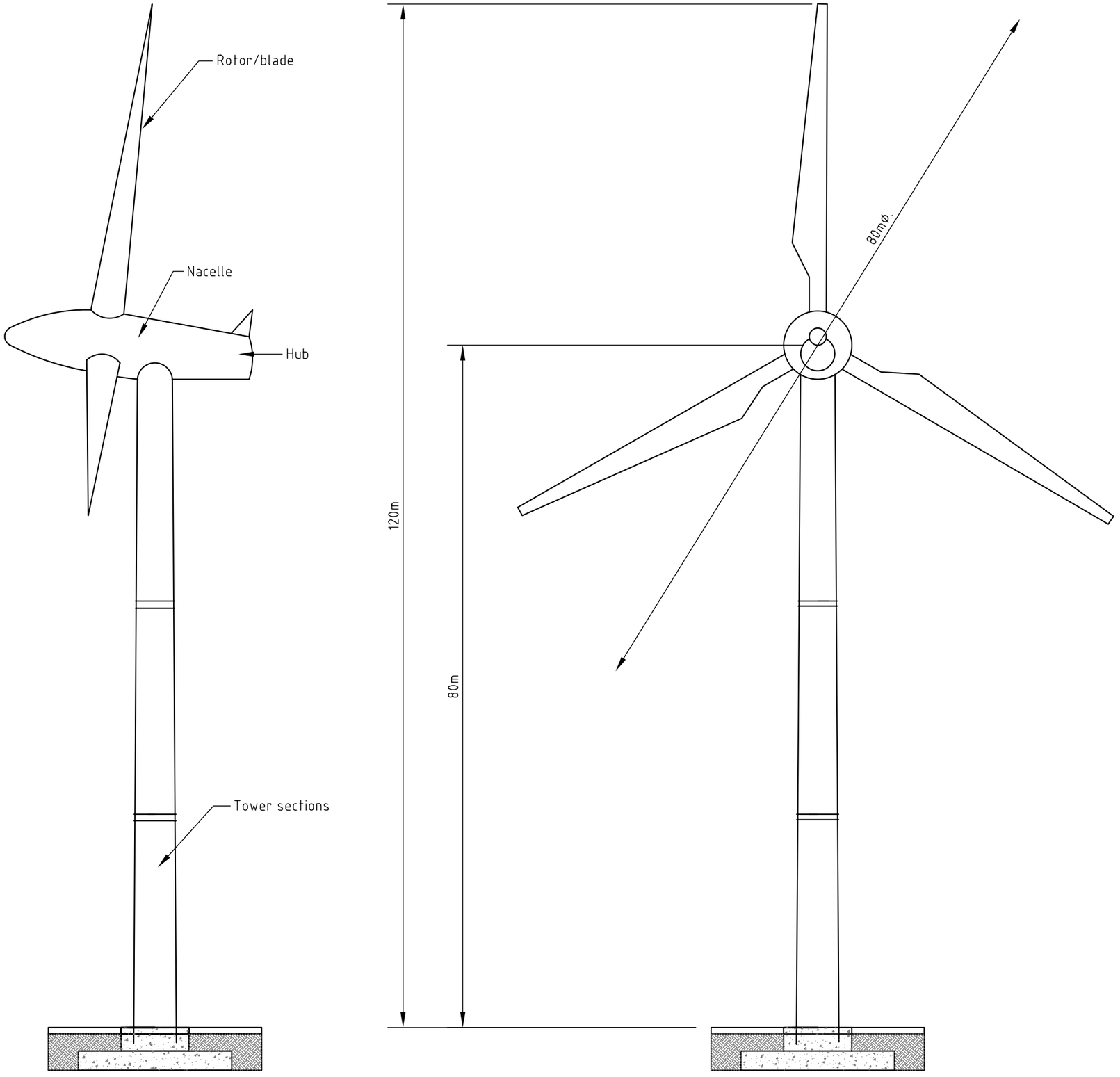

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Legend:

1. This drawing is for illustrative purposes only.
2. Drawing based on a 2.4MW wind turbine.

FIGURE 3.2
A TYPICAL WINDFARM TURBINE

Scale: 1:50

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