Agenda Item	3.1
Report No	PLN/049/22

HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date: 29 June 2022

Report Title: 20/02659/FUL: Meall Buidhe Renewables LLP

Land 4420M NW Of Croick Estate, Ardgay

Report By: Area Manager North

Purpose/Executive Summary

- **Description:** Meall Buidhe Wind Farm Erection of and Operation of a Wind Farm for a period of 25 years, comprising of 8 Wind Turbines with a maximum blade tip height 149.9m, access tracks, substation, control building, and ancillary infrastructure with a maximum output of 40 Megawatts
- Ward: 01 North, West and Central Sutherland

Development category: Electricity Generation Major Development

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

Recommendation

Members are asked to agree the recommendation to **GRANT** the application as set out in section 11 of the report.

1. PROPOSED DEVELOPMENT

- 1.1 The application is for the erection and operation of a wind farm for a period of 25 years, comprising of 8 wind turbines with a maximum blade tip height of 149.9m, access tracks, substation, control building and ancillary infrastructure. The proposal has the capacity to generate up to 40MW.
- 1.2 The proposal has been submitted under the Town and Country Planning (Scotland) Act 1997 on the basis that the applicant has sought to operate the wind farm as a standalone consent which would have an electricity output of less than 50MW.
- 1.3 Key elements of the development as assessed within the application's Environmental Impact Assessment Report (EIAR) and Environmental Impact Assessment Report Supplementary Information (EIAR-SI) include:
 - 7 wind turbines of 149.9m to blade tip (with a maximum generating capacity of 5MW, a hub height of 92m and a rotor diameter of up to 115m);
 - 1 wind turbine of 144.5m to blade tip (with a maximum generating capacity of 5MW, a hub height of 87m and rotor diameter of up to 115m);
 - Turbine foundations and crane hard standings;
 - New access tracks (approximately 13.8km of permanent access tracks);
 - 13 watercourse crossings;
 - A network of underground cables;
 - Substation and control building;
 - Temporary construction compound, storage facilities and welfare facilities; and
 - Two temporary access compounds.

No on-site borrow pits are proposed for the purposes of sourcing aggregate for construction.

- 1.4 The applicant has engaged with a number of consultees and community councils from the earliest stages of the proposed development to create communication pathways with the local community and consultation with statutory consultees. A series of public consultation events / targeted engagements sessions were held to seek the views of the local community. These were held in Ardgay Public Hall, Lochinver Village Hall and Rosehall Village Hall between 24 August 2017 and 31 May 2019. A further online consultation took place on 20 May 2020 between 14:00 and 19:30, it included a designated website which was fully interactive with a facility to make comments directly to the project team through a live chat or through a telephone call back. A total of five public exhibitions and one online public consultation event was held. The applicant raised awareness of these events by notifying all Community Councils and placing statutory newspaper adverts. Meetings were also held with Ardgay, Creich and Lochinver Community Councils.
- 1.5 Access to the proposed development site will be taken from the A837 at Oykel Bridge then follow the minor road southwards to the site. As noted at para. 1.3 approximately 13.8km of new access tracks will be constructed to connect the proposed development site to the public road network, including a passing place on the section of access track located between Amat and Cnoc nan Con. It is proposed the turbine

components will be delivered from Lochinver Harbour onto Culag Road then follows A837, turning right just before Oykel Bridge.

- 1.6 The applicant has requested a micro-siting allowance of 50m for site infrastructure, tracks and turbine locations to accommodate unknown ground conditions, whilst also maintaining environmental buffers (e.g. set back from areas of high bat activity and watercourses). The final design of the turbines (hub and tip heights, rotor diameters, colours, and finish), aviation lighting, substation and control buildings, compounds, ancillary electrical equipment, landscaping and fencing etc, would be expected to be agreed with the Planning Authority at the time of project procurement. For example, it should be noted that the 149.9m maximum tip height of the turbines is presented as a worst case scenario for the purposes of the assessment. Whilst typical drawings for these elements are set out in the application, turbine manufacturers regularly update designs that are available, thereby necessitating the need for some flexibility on the approved design details, the final details of which, can be secured by Condition.
- 1.7 As stated in paragraph 1.1 of this report, the wind farm has an expected operational life of 25 years from the date of final commissioning. The applicant has advised that a decision would then be made as to whether to apply to re-power the site. If, in the event permission is granted for the development, the decision is made to decommission the wind farm, the applicant advises that all turbine components, transformers, substation and associated buildings and infrastructure will be removed. The turbine components would be disposed of by following the principles of the waste hierarch to contribute to Scotland's Zero Waste Plan (2010), and so components of the site will be reused or recycled where possible. Turbine foundations would either removed in full and restoration to the original condition, full removal with a general full or partial removal and restoration. NatureScot states that 'there is relatively low environmental risk associated with reinforced concrete that is left in situ' and 'the noise, ground disturbance and costs (excavation/breaking/processing/transporting), along with associated carbon emissions, may create a larger environmental impact' compared to leaving the concrete in situ. Restoration of crane hardstandings will likely comprise of removing crushed rock which covers the surface of the crane hardstanding and restoring the original vegetation and soils. Three options will be considered in relation to the associated access tracks. NatureScot suggest that tracks can be left in situ, fully reinstated with original materials or partially reinstated with original materials. The environmental impact of each option will be assessed, and details of the chosen option will be confirmed. It would be expected that at a minimum the exposed concrete plinth of the turbine foundations would be removed to a depth of 1m below the surface. Hardstandings will be removed or regraded with soil and planting where appropriate and the temporary access to the site would need to be reinstated. The applicant acknowledges that these matters would not be confirmed until the time of the submission of the decommissioning and restoration plan. The applicant anticipates decommissioning works for a period of approximately 8 to 12 months.
- 1.8 The applicant anticipates that the wind farm construction period will last approximately 18 months with a Construction Environment Management Document to be utilised throughout the construction period with a brief outline included in Chapter 5 of the EIAR. This would require to be approved by the Planning Authority, in consultation with the relevant statutory bodies before the commencement of development. The

applicant has set out a draft programme of works within their Design and Access Statement.

- 1.9 The applicant utilised the Highland Council's Pre-Application Advice Service for Major Developments (ref: 18/03856/PREAPP). The response outlined a number of concerns with the proposal. The key issues highlighted from the pre-application process were:
 - The site lies predominantly within a Group 2 Area of Significant Protection within the Council's Onshore Wind Energy Supplementary Guidance. This is due to most of it being located within an area of carbon rich soils, deep peat and priority peatland habitat:
 - The proposal benefits from being well separated from residential properties and, in some viewpoints, appears to be well screened to minimise visual impacts however the extent to which the proposal contributes to a perception of settlements/key locations being encircled by wind energy development will be a key consideration in the assessment of the application. Other wind farm developments have been approved, have been built or are under construction in the vicinity of the settlements on the Kyle of Sutherland. The addition of this proposed development to the south may contribute to a sense of encirclement and assessing the impact on these settlements will therefore be important.
 - The majority of nearby public recreation is undertaken in and around the Kyle of Sutherland and Strath Oykel using a long established network of built trails and tracks within woodlands. Many of these trails are core paths and they could be used as viewpoints for landscape and visual impact assessment. There are also a number of prominent hills within 15km of the proposed development which may also be considered as VPs. Views from Rosehall and Strath Oykel will be particularly prominent given the turbines will be on the skyline from a wide range of view point location.
 - Subject to suitable detailed assessment and the provision of appropriate mitigation measures, there is no objection in principle to use of the A837 from Lochinver for the movement of AIL's, however sections of the road are on peat and without extensive mitigation these areas may be susceptible to damage from the movement of large and heavy loads.
- 1.10 The application is supported by an EIAR and EIAR-SI contains chapters on: Introduction; EIA Process and Methodology; Planning Policy; Site Selection, design Process and Alternatives; Project Description; Carbon Balance; Landscape and Visual; Noise; Shadow Flicker; Ecology; Ornithology; Communications Infrastructure and Electromagnetic Interference; Hydrology, Geology and Hydrology; Cultural Heritage; Access, Traffic and Transport; Socio-Economic. The application is also accompanied by a Pre-Application Consultation Report and Design and Access Statement.
- 1.11 During the determination of the application the scheme has been reduced from the originally proposal that was for a wind farm with a generating capacity of 45MW, including 9 turbines with a maximum blade tip height of 149.9m following officer comments in relation to the design and resultant visual impact of the proposed development.
- 1.12 In the EIAR-SI the applicant confirms that the scheme has been reduced to 8 turbines with a maximum blade tip height of 149.9m with an overall capacity of 40MW. The

locations of T7, 8 and 9 have been amended. This has resulted in the reduction of the associated infrastructure, such has crane hardstandings, installation areas and the access track has been reduced from 14km to 13.8km. While the description of the development as set out in Chapter 5 of the EIAR has changed, all other aspects and conclusions of the original submission remain largely unchanged. They should however be read in conjunction with the information set out in the EIAR-SI. This includes the updated sections and figures submitted as part of the EIAR-SI, the findings of the EIAR are considered to remain applicable.

2. SITE DESCRIPTION

- 2.1 The site is located in the Highlands within the Croick Estate, situated reasonably distant from some small settlements, notably approximately 6km south of Rosehall, 9km southeast of Oykel Bridge, 11km west of Culrain, 14km northwest of Ardgay and 15.9km from Lairg. The site is accessed via a single access point from the A837 road between Lochinver and Inveran.
- 2.2 The site of the proposed wind turbines is located on the slopes and ridges between Meall Buidhe, Beinn Ulbhaidh, and Meall Dheirgidh, respectively 459m, 494m, and 506m above ordnance datum (AOD) at their summits, on part of the Croick Estate, whose policies include over 5000 hectares of land primarily to the west and southwest of the site. The site is located at a distance of approximately 8km southwest of the operational Rosehall wind farm,9km southwest of the operational Achany wind farm, and 9km southwest of the consented Braemore wind farm.
- 2.3 The site comprises of undulating upland habitat, which is located above the plantation woodlands that cover much of the intermediate slopes between the Kyle of Sutherland and the hilltops above Strath Oykel. In terms of NatureScot's Landscape Character Assessment (LCA) the site is located within the Rounded Hills Landscape Character Type (LCT) 135. The very north of the site is located within the Strath LCT 142. The proposed turbines and much of the associated infrastructure would be located between Beinn Ulbhaidh 493m AOD, and Meall Dheirgidh 506m AOD, which 'bookend' the proposed turbines when viewed from the Kyle of Sutherland and limit visibility to the northwest and southeast. Another minor summit at Meall Buidhe 459m AOD forms the centre of the site and is less noticeable. The site area is surrounded by large areas of mixed and coniferous woodland plantation to the southwest, west, north, and east. The river Okyel and Einig are located to the north of the site access.
- 2.4 There are several waterbodies within close proximity of the proposed development, including Loch nam Buidheag, Press nam Braid, Meoir na h-Uchdach, Loch Frith Cheannardaidh and Loch Meall Dheirgidh watercourses. The proposed development lies within the River Oykel and Kyle of Sutherland catchments that drain into the Dornoch Firth. The Oykel and its associated tributaries are positioned in the northern section of the proposed development and discharge into the upper section of Kyle of Sutherland. The Kyle of Sutherland has associated tributaries from the northern and southern sections of the proposed development.
- 2.5 There are no areas designated for natural heritage within the site. There are however a number of designations within a 20km radius study aera. Those with likely connectivity to the site a listed below and notably includes:

Special Areas of Conservation (SAC)

- Amat Wood (3.4km)
- Beinn Dearg (12.7km)
- Caithness and Sutherland Peatlands (8.5km)
- Dornoch Firth and Morrich More (9.8km)
- River Evelix (18.6km)
- River Oykel (0.5km)
- Rhidorroch Woods (12.5km)

Special Protection Areas

- Beinn Dearg (12.7km)
- Caithness and Sutherland Peatlands SPA and RAMSAR site (8.5km)
- Inverpolly. Loch Urigill and nearby Lochs (15.1km)
- Lairg and Strath Brora Lochs (18km)
- Strath Carnaig and Strath Fleet Moors (15.3km)

Site of Specific Scientific Interest

- Alladale Pinewood (7.4km)
- Amat Wood (3.4km)
- Beinn Dearg (12.7km)
- Ben More Assynt (13.3km)
- Ben Wyvis (20.9km)
- Cam Loch (19.2km)
- Knockan Cliff (18.3km)
- Kyle of Sutherland Marshes (4.1km)
- Lairg and Strath Brora Lochs (18km)
- Loch Awe and Loch Ailsh (20km)
- Loch Urigill (15.1km)
- Migdale Rock (16.4km)
- Oykel Gorge (0.5km)
- Strath Carnaig and Strath Fleet Moors (15.3km)
- Grudie Peatlands (8.6km)
- Strath an Loin (15.5km)

The distances as given above are approximate and are measured from the application site boundary, as such the separation distances from the nearest turbines to the designated area are greater.

- 2.6 In terms of built and cultural heritage, during preliminary studies the applicant did not consider it necessary to search beyond 10km for the proposed site as it is considered that beyond 10km, the potential for significant effects to the setting of a cultural or archaeological asset would be limited. The applicant has broken the assessment down to 3 areas:
 - Area A 500m from wind farm infrastructure;
 - Area B 500m 5km from each turbine;
 - Area C 5km 10km from each turbine.

- 2.7 The EIAR has identified 1 category A listed building and 2 category B listed building within Area B, which could be categorised as the Inner Study Area. This included the following listed building:
 - Category A Listed Building LB7181: Coick Parish Church (3.1km)
 - Category B Listed Building LB7182: The Old Manse, Croick (3.3km)
 - Category B Listed Building LB287: Suspension Footbridge, Brae Doune (4.7km)

The distances as given above are approximate and are measured from the nearest turbine.

- 2.8 Within Area C (between 5km 10km) which could be categorised as the Outer Study Area the EIAR has identified 1 Scheduled Monument, 4 category B listed buildings and 5 category C listed buildings:
 - Category C Listed Building LB71979: Braelandwell Lodge (5km)
 - Category B Listed Building LB275: Rosehall House and Walled Garden (5.5km)
 - Category B Listed Building LB266: Invernauld Bridge (5.7km)
 - Category C Listed Building LB278: United Free Church, Rosehall (5.9km)
 - Category C Listed Building LB7163: Gruinards Lodge, Strathcarron (6km)
 - Category C Listed Building LB276: North Lodge, Rosehall (6km)
 - Category B Listed Building LB277: Cassley Bridge, Rosehall (6km)
 - Category B Listed Building LB273: Oykel Bridge (7.5km)
 - Category C Listed Building LB7180: Cawdearg, Byre and Weaving Shed (9.9km)
 - Scheduled Monument SM5302: Landwell, fort and dun 500m WSW of (5.6km)

The distances as given above are approximate and are measured from the nearest turbine.

- In terms of archaeology (Area A) a walkover survey was conducted in November 2017 2.9 to identify all relics of cultural heritage value in close proximity to the wind turbine sites. The proposed site is located in a wider area that is rich in archaeological remains from prehistory through to more recent times. In the landscape to the southwest of the site, in Strath Cuileannach, are a number of post-medieval farmsteads spread along the river valley (e.g. Allt Thomais township MHG24690, buildings and enclosure at Alltan Dhubh MHG40562 and the Airidhnantuath settlement MHG7437). Further farmsteads are recorded to the south from Croick to Braelangwell. In addition, prehistoric remains are also evident in this area, such as a burnt mound at Croick (MHG7436) and hut circle at Braelangwell (MHG39025). To the northeast of the site is a broch, Carn Mor (MHG7421) together with post-medieval settlement such as Kilmachalmack township (MHG9173) and Wester Achnahanat township (MHG25254). The ground conditions of the proposed development were found to be generally unfavourable for archaeological remains; consisting of open heather-covered ground with peat hags and stream run-offs. Furthermore, no archaeological remains were found during the survey.
- 2.10 The bedrock geology of the proposed development site is predominantly underlain by Pre-cambrian crystalline basement rocks of Glascarnoch and Altnaharra Psammite Formation with two smaller areas of Glen Achall Psammite and Semipelite Member.

The bedrock geology – Psammite from the Morar Group is a type of metasedimentary rock composed largely of quartz, feldspar and mica and underlies much of central and southern Sutherland. The Metamorphic bedrock of the Glascarnoch Psammite Formation was formed between the Siderian and Ediacaran periods (2500 and 541 million years ago) with the younger Altnaharra and Glen Achall Psammites formed between the Tonian and Ediacaran periods (1000 and 541 million years ago). The superficial deposits within the proposed development comprise predominantly of peat with scattered smaller areas of Till - Diamicton. The sedimentary superficial deposits formed between 2.5 million years ago and were present during the Quaternary.

- NatureScot's 2016 Carbon and Peatland Map indicates that the majority of the site is 2.11 covered by Class 1 Peat, defined as "nationally important carbon-rich soils, deep peat and priority peatland habitat; areas likely to be of high conservation value. The site also contains scattered smaller areas of Class 2 (potentially high conservation), 3 (occasional peatland habitat) and 5 peat (no peatland habitat). The surface cover soil types present in the proposed development area are generally peaty gleys and blanket peat. Peat probing has been undertaken which identified much of the site was covered with just over one third (34.7%) of the locations surveyed exhibited peat thickness of 1.0m or less, with 13.5% of those being <0.5m in thickness. Approximately 44% of the locations surveyed were 1.0 to 2.0m in thickness with 21% being >2.0m up to a maximum depth of 3.9 m in thickness. The deepest areas of peat are situated in the far east of the proposed development area, north of Meall Dheirgidh. The average peat depth across the entire proposed development area was 1.42 m. The largest area of Class 1 covers the area between Meall Dheirgidh in the south east and Beinn Ulbhaidh in the north west of the proposed development.
- 2.12 The proposed development belongs to the Precambrian North aguifer which typically forms low or very low productivity aguifers, with negligible intergranular porosity and low permeability. Weathering of the uppermost few metres of rock, often most pronounced in areas of intensive tectonic fracturing, can create enhanced permeability, but in general groundwater flow and storage is entirely within fractures. Groundwater emanating from rare springs are generally of low yields and weakly mineralised. The primary store for the groundwater within the proposed development will be within the overlying peaty soil deposits and in shallower areas of limited vertical extent, flow directions are likely to follow riparian corridors and topography. There is also the possibility of water transmission from glacial till deposits, however this will depend primarily upon the occurrence of more disaggregated sand and gravel components. The low permeability of the underlying crystalline basement rocks may also exacerbate water saturation in near surface soils as a result of limited infiltration potential. The steeper relief of the proposed development is likely to provide base flow to the local surrounding watercourses.
- 2.13 There are habitats which are potentially sensitive within the site, which include National Vegetation Classifications (NVC). A total of 29 habitats were recorded with blanket bog, wet dwarf shrub heath, dry heath/acidic grassland mosaic and acidic dry dwarf shrub heath dominating the Proposed Development area. The majority of potentially Groundwater Dependent Terrestrial Ecosystems (GWDTE), which are protected under the Water Framework Directive, identified include wet heath (M15) occasionally found within a wider mosaic containing blanket peatland (M19), rush (U6) and dry heath (H12) as well as marsh grassland (MG10) and acid / neutral flush (M6c),

which was occasionally found with M6a / H12. In addition to the NVC communities with the potential for groundwater dependence additional communities were identified including those directly associated with ombrotrophic habitat such as blanket sphagnum bog (M17).

- 2.14 As the site has suitable Protected Species Surveys were undertaken, the results reported evidence of otter, water vole and bats (common pipistrelle, soprano pipistrelle, brown long-eared bat and Myotis sp). There is also the potential for watercourses to support freshwater pearl mussel.
- 2.15 Ornithological Surveys have also been carried out that identify the site and immediate surrounds are frequented by a varied range of birds including but not limited to golden eagle, white-tailed eagle, hen harrier, merlin, black grouse, red-throated diver, black-throated diver, snipe and greenshank.
- 2.16 The applicant's assessment therefore considers the following ecological features:
 - Blanket bog (Annex I habitat) (NVC M17, M19 and M20 Priority Habitats in the UK Biodiversity Action Plan (UK BAP));
 - North Atlantic wet heaths (Annex I habitat) (referred to as Wet Heath within this document) - (H10, H12 and M15 Priority Habitats in the UK Biodiversity Action Plan (UK BAP));
 - European dry heaths (Annex I habitat) (referred to as dry heaths in this document) (H10, H12 and M15 Priority Habitats in the UK Biodiversity Action Plan (UK BAP));
 - Ground Water Dependant Terrestrial Ecosystems (GWDTEs);
 - Otter;
 - Water Vole;
 - Freshwater Pearl Mussels;
 - Bats; and
 - Golden eagle;
 - White-tailed eagle;
 - Hen harrier;
 - Merlin;
 - Black grouse;
 - Red-throated diver;
 - Black-throated diver;
 - Snipe; and
 - Greenshank.
- 2.17 The key recreational interests in this area are walking, hillwalking and hiking, cycling, deer stalking and fishing. There are no Core Paths or long distance routes within the site, although there are core paths in the area, including SU21.10 and SU07.01 located to the west and south of the proposed development. The A836 between the A9 and the A836 / A838 junction is part of National Cycle Route 1 (NCR 1). The NCR 1 follows the A836 from the south of the Dornoch Firth before joining the B864 on the west side of the River Shin passing the Falls of Shin Visitor Centre. The closest section of the NCR 1 lies approximately 9.7km to the east of the proposed development site. The A837 passes the north of the site, that provides a connection between the northeast and northwest coasts. The key access routes used by touring

cyclists and motorists, is the A836, A838 and A839 all to the east of the site which connects the north and south of Lairg and beyond. These routes are collectively promoted as the Moray Firth Tourist Route by Visit Scotland. In addition, the popular and promoted Inverness to Wick trainline follows roughly the same route as the A839 from the Dornoch Firth northward through Achany Glen before heading east from Lairg though Strath Fleet.

2.18 In terms of landscape sensitivities, there are no international or regional landscape designations on the site however the turbines are within 25km to the following national and local designations:

National Scenic Areas

- Assynt-Coigach (13.2km northwest)
- Dornoch Firth National Scenic Area (12.5km southeast)

Special Landscape Areas

- Ben Wyvis (19.7km)
- Fannichs, Beinn Dearg and Glencalvie (3km south)

The distances as given above are approximate and are measured from the nearest turbine.

- 2.19 The following Wild Land Areas (WLAs) are within proximity of the application site:
 - WLA 29 Rhiddoroch Beinn Dearg Ben Wyvis (0.9km)
 - WLA 32 Inverpolly Glencanisp (20km)
 - WLA 34 Reay Cassley (3.9km)

The applicant has provided WLA assessments within the Environmental Impact Assessment Report for these WLAs. The distances as given above are approximate and are measured from the application site boundary, as such the separation distances from the nearest turbines to the designated area are greater.

2.20 There are a number of turbine developments in proximity of the proposal, which must be taken into account by the assessment for cumulative landscape and visual impacts (LVIA). Windfarms beyond a 40km radius of the application site have been scoped out of the assessment of cumulative effects, so the list below sets out windfarm projects within 25km that are operational, approved or have been submitted but not yet determined.

Built and consented / under construction

Between 3km and 20km

- Achany (9km, 19no turbines, tip height 100m);
- Beinn Tharsuinn (18km, 17no turbines, tip height 80m);
- Braemore (9km, 18no turbines, tip height 126m, hub height 81m, rotor diameter 90m);
- Coire na Cloiche (17km, 13no turbines, tip height 99.5m);
- Lairg (16km, 3no turbines, tip height 100m)

- Lairg II (15km south-east, 10no turbines, tip heights 150(3) /190(2) /200(5)m, hub heights 83.5/115/125.5m, rotor diameters 133/133/149m);
- Rosehall (8km, 19no turbines, tip height 90m);
- Sallachy (17.9km, 9no turbines, tip height 149.9m); and
- Strath Tirry (18.2km, 4no turbines, tip height 135m).

Under consideration

- Chleansaid (20km, northwest 20no turbines, 12 x tip height 200m and 4 x tip height 180m)
- Garvary (11.4km, 37no turbines, tip height 180m)

The distances as given above are approximate and are measured from the nearest turbine.

PLANNING HISTORY

3.1	13.12.2018	18/03856/PREAPP Wind farm and associated infrastructure (18/03611/SCOP)	Case Closed
3.2	17.07.2017	17/02797/SCOP Development of 21 turbine windfarm	Scoping Decision Issued
3.3	18.09.2018	18/03611/SCOP Windfarm including associated infrastructure - Meall Buidhe wind farm	Scoping Decision Issued
3.4	17.09.2018	18/03613/SCRE Windfarm including associated infrastructure	EIA required
3.4	27.04.2020	20/01040/PAN Erection of wind farm and associated infrastructure with overall generating capacity	Reported to NPAC

exceeding 20MW - Meall Buidhe Wind Farm

4. PUBLIC PARTICIPATION

4.1 Advertised: Unknown NN, Schedule 3 (Bad Neighbour) and EIA Adverts
Date Advertised: 04.9.2020 and 21.5.2021
Representation deadline: 20.06.2021

Timeous representations: 300 (280 No. of Households) objections 6 support comments (6 No. Households) 3 general comments (3 No. Households)

4.2 Material considerations raised are summarised as follows:

Objections

a) Contrary to Development Plan;

- b) Contrary to Scottish Planning Policy and the National Planning Framework 3;
- c) Adverse visual impact (individual, cumulative, sequential impacts, encirclement (particularly of Kyle of Sutherland) and visual amenity);
- d) Adverse impact on landscape, including landscape character (including designated land areas and wildness), mountaineering assets;
- e) Siting and design of turbines (sited on ridge side away from prevailing wind, south-westerly wind) (including pattern of development);
- f) Adverse impact on Natural Heritage, including forestry, Special Areas of Conservation, Special Protection Areas, Sites of Scientific Interest, Ramsar and wild land areas (in particular WLA 29 Rhiddoroch – Beinn Dearg – Ben Wyvis);
- g) Adverse impact on socio-economics, recreational users and tourism (including depopulation);
- h) Adverse impacts on aviation;
- i) Adverse impact on cultural heritage;
- j) Adverse impact on ecology (including net biodiversity loss), habitat loss (including peat loss), protected species, butterflies, fish, ornithological interests and plants;
- k) Adverse transport impacts including on road safety and condition; and
- I) Adverse residential and community amenity impacts, including from noise (including infrasound), lighting and pollution (including decommissioning);
- m) Conflict of interest with provision of 'green power' when impacting Class 1 peat, this is not a renewable development nor is green, nor clean or sustainable;
- n) Adverse impact on private water supply that serves 20 properties;
- o) Limited capacity generation for the demand required by the National Grid, and the capacity anticipated is optimistic;
- p) Concerns over the location of the selected visualisations within the EIAR;
- q) Concerns over public consultation process during the pandemic and lack of information (everything done online);
- r) Concerns over consultation process with the Creich Community Council not informed of changes to the application; (reconsulted on 12.5.21)
- s) Industrialisation of the area;
- t) Adverse impact on hydrology including soil erosion and sitation;
- u) Concerns over the carbon calculations provided within the EIAR;
- v) Developments should be close to energy sinks to reduce the losses through transmission, no details of grid connection provided;
- w) Lack of need for the project in energy generation terms;
- x) Impact on ornithology;
- y) Insufficient information provided with application.
- 4.3 Non-material considerations raised are summarised as follows:

Objections

- a) Adverse impact in health and wellbeing;
- b) Alternative renewable energy generation would be more appropriate;
- c) Wind turbines expensive from of renewable energy;
- d) Lack of economic benefit locally
- e) Community benefit
- f) Food poverty;
- g) Constraint payments;

- h) Lack of need for the project
- i) Reduction in property values;
- j) Concern in relation to the standard format of the support comments;
- k) Concerns over process of consultation by the developer.
- 4.4 Material considerations raised in support are summarised as follows:

Support

- a) Socio-economic benefits (including depopulation);
- b) Advance in technologies available to make surplus electricity available for local people ('smart' networks);
- c) Minimal impact on natural heritage;
- d) Decarbonising of energy, contributing to working towards net zero society;
- e) Community ownership;
- f) Provide clean energy;
- g) Turbines do not overwhelm the view;
- 4.5 Non-material considerations raised are summarised as follows:

Support

- a) Community benefit payments;
- b) Scandinavian models' utilise local energy to support new local initiatives producing myriad 'green' employment opportunities.
- 4.4 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet <u>www.wam.highland.gov.uk/wam</u>.

5. CONSULTATIONS

- 5.1 **Ardgay Community Council** note the application but do not offer any comment. It neither supports or objects to the proposed development.
- 5.2 **Creich Community Council** object to the application due to cumulative impacts on the community and visitors to the area. It considers that another windfarm will turn the landscape into an industrial estate and that the scale of the development will dominate the landscape with the turbines visible for some distance. It highlights that the proposed development will be visible to Rosehall, Altass and the upper Kyle of Sutherland. It has concerns in relation to noise pollution in terms of cumulative noise and the socio-economic effects on the community, including recreational users and tourism. It notes concerns in relation to ecology, hydrology and peat. It also raised concerns in relation to the consultation process as being inadequate during the pandemic, as many people do not have online access or the skills to look at documents via the internet.
- 5.3 **Access Officer** does not object to the application. It notes that the application proposes to use part of core path SU21.10 to access the proposed development site from the public road at Oykel Bridge, which is well used and provides a link through to Ullapool and Croick and access to to the Schoolhouse bothy at Duag Bridge and hills Seana Bhraigh and Carn Ban. It has highlighted that there is a lack of detail on how the access track and bridge over the River Einig will be used or upgraded to allow

the proposed development to take place. It requests further information on how the access track, which is used by SU21.10, will be managed during the construction or operation of the proposed development be secured by planning condition requiring a Recreational Access Management Plan. In doing so the condition should highlight that the core path shall remain open at all times for public recreational use during the construction works. If a replacement or alternative bridge is proposed then a plan to retain public recreational access over the River Einig will be required. It also notes that there is a public right of way recorded in the Scotways catalogue (HS32) that leads from Amat over the shoulder of Cnoc non Caorach towards Strath Cuileannach. This should be safeguarded in any Recreational Access Management Plan for the development.

- 5.4 **Development Plans Team** do not object to the proposed development.
- 5.5 **Environmental Health Officer** does not object to the application subject to conditions to limit operational noise output and to protect private water supplies. It notes that the noise levels from this development will be well below the ETSU simplified standard of 35dB LA90. The highest levels at properties in the Croick area are around 26dB. It considered that the cumulative effect with existing and consented wind farm development is acceptable. It recommends a conditions to restrict noise levels to 2dB above current predictions as per table 8.9 in the EIAR: Chapter 8.

He notes that a thorough survey of private water supplies in the area has been undertaken and has identified one supply at Corriemulzie which is situated about 300m from the proposed access track that could conceivably be hydrologically connected. It explains that full details of the proposed construction methods and mitigation measures will be required in a Construction Environmental Management Plan (CEMP) to be secured by planning condition. A condition will also be required to secure mitigation and monitoring proposals to be implemented in order to ensure no impact on any private water supply.

- 5.6 **Flood Risk Management Team** do not object to the application.
- 5.7 **Forestry Officer** does not object to the application, as the developments is focussed entirely on the open ground of the hill.
- 5.8 **Historic Environment Team (Archaeology)** do not object to the application subject to Conditions. It agrees with the EIAR's assessment on impacts to the historic environment from the proposed development. It considers that Indirect impacts on designated sites are minimal, therefore no mitigation is required. In addition, no historic assets have been identified within Area A that would be directly impacted and, in this case, the potential for unrecorded buried features or deposits to survive (that would be impacted) is low enough that no mitigation is considered to be justified.
- 5.9 **Landscape Officer** does not object to the principle of the development on the basis of landscape and visual impacts. Overall it considers that the proposal relates well to the landscape in which it sits and demonstrates a clear underlying design concept which allows it to be read as a strong and legible visual composition. In terms of landscape impacts, there are no unacceptable impacts that arise from the proposed scheme.

- 5.10 **Transport Planning** do not object to the application subject to conditions to secure further detail and agreement on matters related to the development's impact on Council maintained roads, including: access on to and from the public road; general construction traffic; abnormal loads; a Construction Traffic Management Plan; Road Mitigation Schedule of Works; and, a Section 96 Wear and Tear Agreement.
- 5.11 **Highlands and Islands Airports Limited** do not object to the application. It notes the proposal does not affect the safeguarding area for Inverness Airport.
- 5.12 **Historic Environment Scotland** do not object to the application. It sets out that at the EIA scoping stage two heritage assets were identified where there was the potential for significant effects. Their details are:
 - Strathcarron Croick Parish Church (Church of Scotland) and Burial Ground (LB7181)
 - Langwell, fort and dun 500m WSW of (SM5302)

It explains that while the proposed turbines are approximately 30m taller than those proposed at scoping stage, it notes from the EIA Report and supporting materials that neither of these assets will have visibility of the proposed turbines. Historic Environment Scotland are satisfied that significant impacts for their interests are not likely.

5.13 Kyle of Sutherland District Salmon Fishery Board (KSDSFB) and Kyle of Sutherland Fisheries Trust (KSFT) object to the application due to the contradictory and vague information provided in the ecological assessment. KSDSFB and Kyle of Sutherland Fisheries Trust (KSFT) have a statutory duty to protect salmon and sea trout, and the associated fisheries for those species, in the Kyle of Sutherland catchment. Both KSDSFB and KSFT consider that it is vitally important that the aquatic ecology of all watercourses in the catchment is not put at risk by any proposed development. Fish species present within the district are of considerable conservation and economic value. Waterbodies which are potentially affected by the development are part of the River Oykel SAC, designated for freshwater pearl mussels (FWPM) with Atlantic Salmon as a gualifying feature. The EIAR appears to be initially confused in respect of its site description as it mentions watercourses draining into the River Carron (which drains into the Oykel SAC) but neglects to mention the Oykel catchment in the first instance which we suggest is most at risk from the proposed development. Atlantic Salmon are a qualifying feature of the River Oykel SAC, which extends to Bonar Bridge, however little or no consideration is apparently given to potential impacts upon this species. The EIAR notes that the headwaters assessed for suitable substrate for freshwater pearl mussels "did not have direct connectivity with the River Oykel itself". This statement as misleading as the watercourses are hydrologically linked to the Oykel SAC which includes the Kyle of Sutherland to Bonar Bridge and therefore represent a vector for pollution.

Data from electrofishing and seine netting shows Atlantic Salmon to be present in Kyle of Sutherland itself, the River Oykel, the River Einig and Brae Burn (Allt a' Bhraigh). Surveys have not been conducted in all reaches of the Kilmachalmack burn. Atlantic Salmon migrate through these areas to other important areas of habitat such as the Corriemulzie River and the Rappach water. It consideres that as a consequence, any impacts on water quality due to construction activities would potentially have significant impacts on Atlantic salmon and pearl mussel populations

outwith the immediate area of the development. The applicant states "Land access constraints prevented the assessment of main tributaries Einig, Allt a' Bhraigh and Kilmachalmack Burn. However, the applicant then states that the habitat within these tributaries can support FWPM. Furthermore, all of the turbines, with the exception of Turbine 2, are situated on deep peat which raises concerns in relation to release of organic carbon into watercourses and, additionally, peat slide risk. Turbine 1 is at a high risk of peat slide and Turbine 3 is a medium risk (pre-mitigation) according to the supporting information. A peat slide in these areas has the potential to enter the headwaters of the Brae and Kilmachalmack burns, and in turn to enter the River Oykel and the Kyle of Sutherland. As such have concerns over the risk to water quality and any effects being avoided.

It notes that the Assessment of Construction Effects, even assuming that mitigation if successful, effects on water quality for the Kilmachalmack Burn and Einig are predicted to be minor/moderate and moderate for soils, geology and hydrology. These potential effects are considered to constitute unacceptable levels of risk to the aquatic ecology and fisheries of the rivers involved.

- 5.14 **Ministry of Defence (Defence Infrastructure Organisation)** do not object to the application subject to pre-commencement conditions being attached to any permission to secure appropriate aviation lighting and data regarding exact turbine and anemometer siting, construction and operation commencement dates, as well as final structure heights.
- 5.15 **National Air Traffic Services Safeguarding (NATS)** do not object to the application. It notes that the proposal does not conflict with its safeguarding criteria.
- 5.16 **NatureScot** object the application will have a significant adverse effect on the special qualities 1, 3 and 4 of WLA 29: Rhiddoroch – Beinn Dearg – Ben Wyvis and special qualities 1 and 4 of WLA 34: Reay – Cassley. The Meall Buidhe turbines, being larger and occupying a prominent position on the north eastern side of WLA 29, will amplify the presence of human artefacts, reducing the sense of remoteness, perceived extent, and risk across parts of WLA 29 (and to a lesser extent southerly parts of WLA 34). It considers that the Meall Buidhe wind farm will form a prominent addition to the existing wind energy development in this north easterly section. NatureScot consider it will reduce the strength of wild land qualities within the north east of WLA 29 and from some elevated locations within the interior. It notes due to the prominent location of the proposal and the proposed turbine height (149.5m to blade tip) and proximity to WLA 29 there will be significant adverse effects on the qualities of WLA 29. It has set out that it has considered other interests including the potential economic benefits of the development and have taken this into account in reaching their conclusion on this proposal.

It notes that the proposal may have a significant effect on the interests of River Oykel Special Area of Conservation (SAC) unless any consent is made subject to conditions so that works are done strictly in accordance with the mitigation detailed. The River Oykel SAC is protected for its freshwater pearl mussel and Atlantic salmon. The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, The Highland Council, as the competent authority, is required to consider the effect of the proposal on the SAC before it can be consented (commonly known as Habitats

Regulations Appraisal). NatureScot have advised if the proposal is carried out in accordance with the following mitigation, the proposal will not affect the quality of the integrity of the site:

 Production of a population prevention plan and species protection plan for freshwater pearl mussel (as recommended in Technical Appendix 10:6 Freshwater Pearl Mussel (FWPM) Survey Report.

This will protect the River Oykel SAC tributaries from impacts from construction activities. The appraisal NatureScot carried out considered the impact of the proposals on the following factors:

• There is a risk of the proposed development affecting the hydrological environment during the construction phase (in particular: effects on erosion and sedimentation; effects on baseflow; and changes to drainage patterns and pollution risk). This has the potential to affect freshwater pearl mussel in the River Oykel SAC which lies downstream from the development. This is also applicable to Atlantic salmon.

It is satisfied that the level of survey work carried out in relation to Annex 1 birds in the wider countryside is appropriate. It agrees with the summary presented in the ornithological chapter of the EIAR and recommend that a Breeding Bird Protection Plan (BBPP) should be produced prior to works commencing.

In terms of carbon-rich soil, deep peat and priority peatland habitat it explains that, Scottish Planning Policy identifies 'carbon rich soils, deep peat and priority peatland habitat' as nationally important interests. It explains that it is important that any landuse change with the potential to result in loss and damage to peatlands, is either diverted to other areas or, if appropriate, adequately mitigates or compensates for that loss. The initial information as presented in the EIAR suggested habitat losses will be greater than will be gained through habitat restoration. This information is summarised in Table 10.10: Loss of NVC Communities Recorded within the Survey Area (Chapter 8 Ecology) and the potential benefits from habitat restoration shown in the Outline Habitat Management Plan (OHMP). In addition the habitat polygons presented as Management Units 1 and 2 are 18ha (of blanket bog) and 110 ha (of wet heath) respectively, but no indication was given as to the extent of the restoration proposed. NatureScot consider the descriptions of these areas are not sufficient to determine their restoration requirements, if any. It is possible that the peatland habitat is of national importance, as per Scottish Planning Policy, and potentially of national interest, but we cannot determine this from the EIAR. Further information was sought and NatureScot welcomed the analysis of habitat losses and the commitment to improved restoration targets. It noted that the current proposal is to restore 46 ha of blanket bog and 65 ha of wetheath; 111 ha in total. A revised Outline Habitat Management Plan (OHMP) dated December 2021 was submitted, this recognises the value and extent of the blanket bog to be lost to, and affected by, the construction and operation of the proposed development. NatureScot are content that any future issues with blanket bog restoration can be addressed within the final draft of the Habitat Management Plan.

5.17 **Scottish Environment Protection Agency (SEPA)** do not object subject to conditions to ensure the development: minimises its impact on peat and carbon loss; protects and enhances, where possible, wetland and peatland habitats, and improves carbon sequestration; protects the water environment by using appropriate

watercourse crossings; is constructed in a manner in line with the Schedule of Mitigation; and, is decommissioned in a manner sensitive to the environment by adhering to an agreed finalised Decommissioning and Restoration Plan.

- 5.18 **Scottish Water** do not object to the application. The application site does not appear to be within a Scottish Water drinking water catchment or water abstraction source area, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity. The turbines fall outwith the ground water risk zone.
- 5.19 **Transport Scotland** do not object subject to conditions to secure information regarding abnormal loads including route and accommodation measures along the trunk road network, and, information regarding construction traffic and traffic management including construction materials, additional signage and temporary control measures in relation to the trunk road network.

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

6.1 Highland Wide Local Development Plan 2012

- 28 Sustainable Design
- 29 Design Quality & Place-making
- 30 Physical Constraints
- 31 Developer Contributions
- 51 Trees and Development
- 52 Principle of Development in Woodland
- 53 Minerals
- 54 Mineral Wastes
- 55 Peat and Soils
- 56 Travel
- 57 Natural, Built and Cultural Heritage
- 58 Protected Species
- 59 Other important Species
- 60 Other Important Habitats
- 61 Landscape
- 63 Water Environment
- 64 Flood Risk
- 65 Waste Water Treatment
- 66 Surface Water Drainage
- 67 Renewable Energy Developments
 - Natural, Built and Cultural Heritage
 - Other Species and Habitat Interests
 - Landscape and Visual Impact
 - Amenity at Sensitive Locations
 - Safety and Amenity of Individuals and Individual Properties
 - The Water Environment
 - Safety of Airport, Defence and Emergency Service Operations
 - The Operational Efficiency of Other Communications
 - The Quantity and Quality of Public Access

- Other Tourism and Recreation Interests
- Traffic and Transport Interests
- 72 Pollution
- 73 Air Quality
- 77 Public Access 43 Tourism
- 64 Flood Risk
- 65 Waste Water Treatment
- 66 Surface Water Drainage
- 67 Renewable Energy Developments
- 78 Long Distance Routes

Caithness and Sutherland Local Development Plan 2018 (CaSPlan)

6.2 There are no site-specific policies covering the application site therefore the application requires to be assessed against the general policies of the Highland-wide Local Development Plan referred to above. It is noted, however, that the CaSPlan does identify Special Landscape Areas (SLA) within the plan area. In this instance, the development has potential to impact Fannichs, Beinn Dearg and Glencalvie SLA. These Special Landscape Areas do however also extend into the Inner Moray Firth Local Development Plan area.

Highland Council Supplementary Planning Policy Guidance

- 6.3 The Onshore Wind Energy Supplementary Guidance provides additional guidance on the principles set out in Policy 67 of the Highland-wide Local Development Plan for Renewable Energy Developments. The Guidance sets out the Council's agreed position on onshore wind energy matters, and reflects current Scottish Planning Policy. This document is a material consideration in the determination of onshore wind energy planning applications following its adoption as part of the Local Development Plan in November 2016.
- 6.4 The document includes the Council's Spatial Framework, which, in line with Table 1 of SPP, identifies the areas that are likely to be most appropriate for onshore wind energy development. The current application site lies mainly within a Group 2 Area of Significant Protection with pockets of Group 3. The Group 2 feature present is Carbon Rich Soils, Deep Peat and Priority Peatland Habitat (CPP). Class 2 peat is protected for the nationally important CPP and areas of potentially high conservation value and restoration potential. Priority peatland habitat is land covered by peat-forming vegetation or vegetation associated with peat formation. As such, CPP is a nationally important mapped environmental asset that indicates where the resource is likely to be found and that detailed peat assessments will be required to guide development away from the most sensitive areas and help inform potential mitigation. CPP is a nationally important mapped environmental asset that indicates where the resource is likely to be found and that detailed peat assessments will be required to guide development away from the most sensitive areas and help inform potential mitigation. CPP is a nationally important mapped environmental asset that indicates where the resource is likely to be found and that detailed peat assessments will be required to guide development away from the most sensitive areas and help inform potential mitigation.
- 6.5 The document also contains the Loch Ness Landscape Sensitivity Study, the Black Isle, Surrounding Hills and Moray Firth Coast Sensitivity Study, and, the Caithness Sensitivity Study. The site does not fall within an area covered by a Landscape Sensitivity Study at this time; however the proposed site sits within the Landscape

Character Type (LCT) of Rounded Hills – Caithness and Sutherland (NatureScot LCT 135) with the very north of the site located within the Strath LCT 142 as noted in para 2.3 of this report.

- 6.6 The following Supplementary Guidance also forms an integral and statutory part of the Local Development Plan and is considered pertinent to the determination of this application:
 - Developer Contributions (November 2018)
 - Flood Risk & Drainage Impact Assessment (Jan 2013)
 - Highland Historic Environment Strategy (Jan 2013)
 - Highland's Statutorily Protected Species (March 2013)
 - Highland Renewable Energy Strategy & Planning Guidelines (May 2006)
 - Managing Waste in New Developments (March 2013)
 - Physical Constraints (March 2013)
 - Special Landscape Area Citations (June 2011)
 - Standards for Archaeological Work (March 2012)
 - Sustainable Design Guide (Jan 2013)

7. OTHER MATERIAL POLICY CONSIDERATIONS

- 7.1 The Highland-wide Local Development Plan is currently under review and is at Main Issues Report Stage. It is anticipated the Proposed Plan will be published following publication of secondary legislation and National Planning Framework 4.
- 7.2 In addition to the above, The Highland Council has further advice on the delivery of major developments in a number of documents, which include the Construction Environmental Management Process for Large Scale Projects; and, The Highland Council Visualisation Standards for Wind Energy Developments.

Scottish Government Planning Policy (SPP) and Guidance

- 7.3 Scottish Planning Policy (SPP) advances principal policies on Sustainability and Placemaking, and subject policies on A Successful, Sustainable Place; A Low Carbon Place; A Natural, Resilient Place; and A Connected Place, which relate national planning policy to the Scottish Government's National Outcomes.
- 7.4 SPP sets out continued support for onshore wind energy developments, requiring Planning Authorities to progress, as part of the Development Plan process, a spatial framework that identifies the most appropriate areas for potential onshore wind farms as a guide for developers and communities. SPP also lists considerations in respect of the scale of proposals in relation to area characteristics, to be taken into account in the assessment of wind energy proposals (Para. 169 of SPP).
- 7.5 Paragraph 170 of SPP sets out that areas identified for windfarms should be suitable for use in perpetuity. This means that even though the consent is time limited the use of the site for a wind farm must be considered as, to all intents and purposes, a permanent one. The implication of this is that operational effects should be considered as permanent, and their magnitude should not be diminished on the basis that the specific proposal will be subject to a time limited consent.

- 7.6 National Planning Framework 4 will, in due course, supersede Scottish Planning Policy and form part of the Development Plan. Draft National Planning Framework 4 was published in November 2021. It comprises four parts, summarised below:
 - Part 1 sets out an overarching spatial strategy for Scotland in the future. This includes priorities, spatial principles and action areas.
 - Part 2 sets out proposed national developments that support the spatial strategy.
 - Part 3 sets out policies for the development and use of land that are to be applied in the preparation of local development plans; local place plans; masterplans and briefs; and for determining the range of planning consents. It is clear that this part of the document should be taken as a whole, and all relevant policies should be applied to each application.

Part 4 – provides an outline of how Scottish Government will implement the strategy set out in the document.

7.7 The Spatial Strategy sets out that we must embrace and deliver radical change so we can tackle and adapt to climate change, restore biodiversity loss, improve health and wellbeing, build a wellbeing economy and create great places. It makes it clear that new development and infrastructure will be required to meet the net zero targets by 2045. To facilitate this, it sets out that we must rebalance our planning system so that climate change and nature recovery are the primary guiding principles for all our decisions. It sets out that significant weight should be given to the global climate emergency when considering development proposals. The draft sets out that the planning system should support all forms of renewable energy development in principle. Specific to this proposal it states that development proposals to extend and expand existing wind farms should be supported unless the impacts identified (including cumulative effects) are unacceptable. It continues to highlight a range of considerations for renewable energy applications, similar to the existing provisions of Scottish Planning Policy.

Other Relevant National Guidance and Policy

- 7.8 A range of other national planning and energy policy and guidance is also relevant, including but not limited to the following:
 - National Planning Framework for Scotland 3, NPF3
 - Scottish Energy Strategy (Dec 2017)
 - Historic Environment Policy for Scotland (HEPS, 2019)
 - PAN 1/2011 Planning and Noise (Mar 2011)
 - Circular 1/2017: Environmental Impact Assessment Regulations (May 2017)
 - PAN 60 Planning for Natural Heritage (Jan 2008)
 - 2020 Routemap for Renewable Energy (Jun 2011)
 - Onshore Wind Energy (Statement), Scottish Government (Dec 2017)
 - Onshore Wind Energy (Statement) Refresh Consultation Draft, Scottish Government (October 2021)
 - Siting and Designing Wind Farms in the Landscape, SNH (Aug 2017)
 - Wind Farm Developments on Peat Lands, Scottish Government (Jun 2011)
 - Energy Efficient Scotland Route Map, Scottish Government (May 2018)

- Assessing Impacts on Wild Land Areas, Technical Guidance, NatureScot (Sep2020)
- Scotland's Third Land Use Strategy 2021-2016 (Scottish Government 2021)

8. PLANNING APPRAISAL

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

Determining Issues

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

- 8.3 The key considerations in this case are:
 - a) Development Plan
 - b) Onshore Wind Energy Supplementary Guidance
 - c) National Policy
 - d) Energy and Socio-Economic Benefits, Impact on Tourism
 - e) Construction
 - f) Roads, Transport and Access
 - g) Water, Flood Risk, Drainage and Peat
 - h) Natural Heritage (including Ornithology)
 - i) Built and Cultural Heritage
 - j) Design, Landscape and Visual Impact (including Wild Land Areas)
 - k) Noise, Vibration and Shadow Flicker
 - I) Telecommunications
 - m) Aviation
 - n) Forestry
 - 0) Other Material Considerations

Development Plan

8.4 The Development Plan comprises the adopted Highland-wide Local Development Plan (HwLDP), Caithness and Sutherland Local Development Plan and all statutorily adopted supplementary guidance. If the Council is satisfied that the proposal is not significantly detrimental overall, then the application will accord with the Development Plan. The HwLDP was in place at the time of consideration and determination of the original application.

Highland-wide Local Development Plan

8.5 With no site-specific allocations or policies within the CaSPlan at the application location, the proposal is principally assessed against HwLDP Policy 67 for Renewable Energy developments Policy 67 sets out that renewable energy development should be well related to the source of the primary renewable resource needed for its operation. Proposals are required to be judged according to their contribution in

meeting renewable energy targets and positive/negative effects on the local and national economy as well as against all other relevant policies of the Development Plan and other relevant guidance. In that context the Council will support proposals where it is satisfied they are located, sited, and designed such as they will not be significantly detrimental overall, either individually or cumulatively with other developments, having regard to the 11 specified criteria (as listed in para. 8.1). Such an approach is consistent with the concept of Sustainable Design (Policy 28) and aim of Scottish Planning Policy to achieve the right development in the right place; it is not to allow development at any cost.

8.6 If the Council is satisfied that the proposal is not significantly detrimental overall, either individually or cumulatively with other developments, then the application will accord with the Development Plan.

Caithness and Sutherland Local Development Plan

8.7 The Caithness and Sutherland Local Development Plan does not contain any specific land allocations related to the proposed development. Paragraph 74 of the CaSPlan sets out that the Special Landscape Area boundaries have been revised for the CaSPlan to ensure 'key designated landscape features are not severed and that distinct landscapes are preserved.' The boundaries set out in the CaSPlan are supported by a background paper that includes citations for each of the Special Landscape Areas. Policies 28, 57, 61 and 67 of the HwLDP seek to safeguard these regionally important landscapes. The impact of this development on landscape is primarily assessed in the Design, Landscape and Visual Impact (including Wild Land) section of this report.

Onshore Wind Energy Supplementary Guidance (OWESG)

- 8.8 The Council's Supplementary Guidance for Onshore Wind Energy is a material consideration in the determination of planning applications. It should be noted that the guidance does not provide additional tests to assess development proposals against over and above the Development Plan policy. Rather, the guidance compliments the policy by ensuring a consistent and robust methodology is adopted in the assessment of all applicable applications, in particular (although not exclusively) for consideration of landscape and visual impacts. In that way, the guidance provides a clear indication of the approach the Council takes towards the assessment of proposals.
- 8.9 To assist with the assessment, the OSWESG contains a Spatial Framework for onshore wind energy as required by SPP. The framework applies to individual turbines of ground to tip height of 50m and above, as well as developments of two or more turbines of ground to tip height of 30m and above. The framework sets out the requirement for safeguarding areas in three groupings, 1, 2, and 3. In this instance the site falls within an area designated as Group 2 'area with significant protection'. The Group 2 feature present is Carbon Rich Soil, Deep Peat and Priority Peatland Habitat (CPP). CPP is a nationally important mapped environmental asset that indicates where the resource is likely to be found with a detailed peat assessment being required to guide development away from the most sensitive areas and help inform potential mitigation. The site also contains pockets of areas designated as Group 3 'Area with potential for windfarm development'. There are no areas of Group 1 'Areas where windfarms will not be acceptable' within the site. The nearest

Group 1 areas are Assynt – Coigach NSA, approximately 13.2km to the northwest and the Dornoch Firth NSA, approximately 12.5km to the southeast, which are designated by virtue of being National Scenic Areas as noted in para 2.19.

- 8.10 Wild land covers large areas of Scotland but mainly in the north and west, these include semi-natural landscapes that have very little human influence. Wild land is protected as it is considered to include Scotland's wildest landscapes that are a nationally important asset. CPP is a nationally important mapped environmental asset that indicates where the resource is likely to be found with a detailed peat assessment being required to guide development away from the most sensitive areas and help inform potential mitigation. The closest Wild Land Area are WLA 29 Rhiddoroch Beinn Dearg Ben Wyvis approximately 0.9km to the south and WLA 34 Reay Cassley approximately 3.9km to the north as noted in para 2.6.
- 8.11 The OSWESG also provides strategic considerations that identify sensitivities and potential capacity for windfarm development called the Landscape Sensitivity Appraisals (LSA). The Black Isle, Surrounding Hills and Moray Firth Coast Sensitivity Study, along with the Caithness Sensitivity Study were published in 2017, and now form an integral part of the statutorily adopted OWESG. East and Central Sutherland Study Area, which would cover the area of the site, is one of the six areas still to be examined. The Study has been prepared in draft following the methodology and format of those studies already adopted, however has not yet been published for consultation. Nevertheless, the OWESG approach and methodology to the assessment of windfarm proposals is still applicable to the current application. Specifically, paragraphs 4.16 and 4.17 of the OWESG, which describe the 10 key design criterion that set the 'thresholds' developments should seek to achieve in order to ensure the development is appropriately sited and designed to avoid significant landscape and visual impacts, and comply with the applicable criteria of HwLDP Policy 67. The development's compliance or otherwise with the 10 criteria is discussed in the Design, Landscape and Visual Impact (including Wild Land) section of this report and described in detail in Appendix 3.

National Policy

- 8.12 National planning policy remains supportive of onshore wind energy development, requiring planning authorities to progress, as part of the Development Plan process, a spatial framework identifying areas that are most likely to be most appropriate for onshore wind farms. The Scottish Planning Policy (SPP) sets out a framework, which the OWESG provides, is also intended as a guide for developers and communities alike. National policy also lists likely considerations to be taken into account relative to the scale of the proposal and area characteristics (paragraph 169 of SPP).
- 8.13 The criteria outlined within SPP include landscape and visual impacts; effects on heritage and historic environment; contribution to renewable energy targets; effect on the local and national economy, tourism and recreational interests; benefits and disbenefits to communities; aviation and telecommunications; development within the peat environment; noise and shadow flicker; and, cumulative impacts. HwLDP Policy 67 for Renewable Energy reflects these criteria. It should be noted that a failure against one of these criteria does not automatically mean that a development fails, as

all these criteria must be given due consideration and weighted accordingly relative to the specific proposal.

- 8.14 Notwithstanding the overarching context of support, SPP recognises that the need for energy and the need to protect and enhance Scotland's natural and historic environments 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 that effective planning conditions can be used to overcome potential objections to development. A number of criteria are set out in SPP against which proposals for on-shore wind energy development should be assessed (paragraph 169). These criteria are primarily reflected in Policy 67 (Renewable Energy) of the Highland-wide Local Development Plan. A failure against one of these criteria does not necessarily mean that a development fails, all these criteria must be given consideration.
- 8.15 Where a development contributes toward sustainable development and the development plan is more than five years old, the concept of a tilted balance in favour of sustainable development applies as set out paragraph 33 of Scottish Planning Policy. With that said the policies of the Highland-wide Local Development plan are not out-dated and largely accord with Scottish Planning Policy. In considering this proposal, the Council have taken into considerations the principles set out in Scottish Planning Policy paragraph 29. In relation to the most applicable of these principles, the development can be seen both positively and negatively as follows:
 - Positives:
 - Net economic benefit;
 - Supporting the delivery of infrastructure (energy);
 - Supporting climate change mitigation
 - Negatives:
 - Protecting, enhancing and promoting natural heritage, including green infrastructure, and landscape.
- 8.16 As a statement of the Government's approach to spatial planning in Scotland, National Planning Framework 3 (NPF3) is a material consideration that should be afforded significant weight in the planning balance. NPF3 considers that onshore wind has a role in meeting the Scottish Government's targets to achieve at least an 80% reduction in greenhouse gas emissions by 2050, and to meet at least 30% overall energy demand from renewables by 2020, including generating the equivalent of at least 100% of gross electricity consumption from renewables. However, it should be noted that the targets set out in NPF3 have now been superseded by legislation which sets the legally binding target of net zero by 2045.
- 8.17 As set out above, National Planning Framework 4 (NPF4) was published in draft form in November 2021. This document is still going through the parliamentary process and consultation, therefore the weight to be attached to the document is not the same as the adopted Scottish Planning Policy, National Planning Framework 3 or the Development Plan. However, it can be given weight in the process of determining applications. It will be up to Scottish Ministers to determine the weight to be afforded

to it in reaching their determination depending on the status of the document at the time of reaching their determination on this application.

- 8.18 The Draft NPF4 identifies electricity generation from renewable sources of, or exceeding 50MW as national developments, as such this application is not considered to be of national importance. As such developments below 50MW would normally not be of national importance. However, given that the capacity of the proposed developed falls just below the threshold some weight can be given to the increase in renewable energy production to meet net zero targets. NPF4 (draft) also highlights that Generation is for consumption domestically as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. It notes that this has the potential to support jobs and business investment, with wider economic benefits.
- 8.19 For the first time in a planning policy document, confirmation has been provided that when considering all developments significant weight should be given to the Global Climate Emergency. As a development that generates renewable energy this proposal has inherent support from this aspect of NPF4, however the impact on the carbon resource as a result of the development will require further consideration to determine whether the impact of the proposed development is positive or negative in this regard. This aspect is outlined later in this report, the overall carbon payback period is considered to be acceptable.
- 8.20 Recognising the Ecological Emergency, the draft NPF4 also sets out that proposals should contribute to the enhancement of biodiversity. The proposed development includes provision for peatland restoration and compensatory woodland planting which meet with the provisions of the proposed approach in draft NPF4 for the restoration of degraded habitats and the strengthening of nature networks.
- 8.21 Considerations for green energy applications have been updated and there is no longer an explicit spatial framework for onshore wind energy developments. Instead, it sets out that proposals for new development, extensions and repowering of existing renewable energy developments should be supported. However, it goes on to set out that such proposals should be supported unless the impacts identified (including cumulative effects), are unacceptable. Draft NPF4 also highlights a number of matters which must be taken into account in reaching a determination on an application for renewable energy. Subject to some minor wording changes, this is largely reflective of the considerations set out in SPP paragraph 169.
- 8.22 Indeed, the Scottish and UK Governments have published a number of reports in recent years relating to national energy policy and climate change. In short, none indicate a distinct policy change but rather indicate a direction of travel in terms of future policy. Most relevant to this application are as follows:
 - Scottish Energy Strategy: The future of energy in Scotland, December 2017;
 - Onshore Wind Policy Statement, December 2017;
 - Scottish Government, Securing a Green Recovery on a Path to Net Zero: Climate Change Plan 2018–2032 update, December 2020;
 - Committee on Climate Change, The Sixth Carbon Budget, The UK's Path to Net Zero. (including Policy and Methodology) December 2020;
 - National Audit Office, Net Zero Report, December 2020;

- HM Government, Energy White Paper, Powering our Net Zero Future, December 2020; and,
- Department for Business, Energy and Industrial Strategy 'Enabling a High Renewable, Net Zero Electricity System: Call for Evidence'
- 8.23 Furthermore, in late 2019 the Scottish Government's targets for reduction in greenhouse gases were amended by The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. This sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, 90% by 2040.
- 8.24 The statements of continued strong support relating to onshore wind energy contained within these documents are acknowledged. Support for onshore wind is anticipated to meet with the continued aspiration to decarbonise the electricity network, enable communities to benefit more directly in their deployment and to support the renewables industry and wider supply chain. Larger, more optimal turbines are anticipated as is the expectation that landscapes already hosting wind energy schemes will continue to do so beyond the lifetime of current consents/permissions.
- 8.25 However, it is also recognised that such support should only be given where justified. In the context that larger, more optimal turbines are anticipated the Onshore Wind Policy Statement sets out the need for a more strategic approach to new development that acknowledges the capacity that landscapes have to absorb development before landscape and visual impacts become unacceptable. Further Scotland's Third Land Use Strategy 2021-2026 sets out that there is a need for balance between different land uses and that there is a need to strike the balance between environmental impacts, local support, benefits and economic benefits for communities. With regard to planning policy, these statements largely reflect the existing position outlined within the National Planning Framework and Scottish Planning Policy, a policy framework that supports development in justified locations where there is an expectation that landscapes already hosting wind energy schemes will continue to do so beyond the lifetime of current consents. In addition, it must be recognised that the greenhouse gas reduction targets and the targets in the Energy Strategy are related not just to production of green energy but also related to de-carbonisation of heat and transport.
- 8.26 The Scottish Government published Onshore Wind Policy Statement Refresh 2021: Consultative Draft in October 2021. This set out that onshore wind remains vital to Scotland's future energy mix and that we will need additional onshore wind energy toward the target of net zero. However, in doing so it was clear that additional capacity is not at any cost and it needs to be balanced and aligned with protection of natural heritage, native flora and fauna. The document also highlights the challenges and opportunities faced by the deployment of additional onshore wind energy capacity as well as consulting on a target of an additional 8-12GW of onshore wind energy capacity being delivered. Importantly it notes that the matter of landscape and visual impacts of onshore wind development remains an evolving area. As part of this evolution, it considers that while decisive action to tackle climate change will change how Scotland looks Scotland's most cherished landscape are a key part of natural and cultural heritage and must be afforded the necessary protection.

8.27 The Highland Council recognises the Scottish Government's declaration of the climate emergency and related biodiversity crisis and has indeed also declared a climate and ecological emergency, the response to this and manner in which policy will be modified has been indicated through the Bute House Agreement, draft NPF4 and the consultative draft of the Onshore Wind Energy Statement.

Energy and Socio-Economic Benefits, Impact on Tourism

- 8.28 The Highland Council continues to respond positively to the Government's renewable energy agenda. The government's recent Onshore Wind Energy Statement Consultation Draft states that there is currently 8.4 GW of installed capacity in Scotland, with a further 4.69 GW in the planning/consenting process, 4.64 GW are awaiting construction and 0.43 GW under construction. Highland onshore wind energy projects currently have an installed capacity of 2.5 GW, there is a further 1.18 GW of generation permitted but not yet built and 1.3 GW currently under construction. Onshore wind in Highland therefore accounts for around 29.8% of the national installed onshore wind energy capacity. There is also a further 1.326GW of onshore wind farm proposals pending consideration in Highland, and 1.7GW of off-shore wind when accounting for all installed, under-construction or consented schemes around the coast of Highland.
- 8.29 While Highland Council has effectively met its own target, as previously set out in the Highland Renewable Energy Strategy, it is acknowledged that such targets are not a cap and may be exceeded. Equally, however, the Council recognises the balance that is called for in both national and local policy and it remains the case that there are areas of Highland capable of absorbing renewable developments without significant effects. Nevertheless, both national and local policy set out the expectation that the Council takes a selective approach to determining which windfarm developments can be supported.
- 8.30 It is in this context that the Meall Buidhe development's indicative maximum capacity of 40MW with each turbine expected to have the potential to generate up to 5MW. As noted in para 8.17, whilst the indicative maximum capacity does not meet the threshold of exceeding 50MW, it is considered that the yield would make a modest yet valuable contribution to renewable energy targets. Therefore, notwithstanding any significant impacts that this proposal may have upon the landscape resource, amenity and heritage of the area, the development could be seen to be compatible with Scottish Government policy and guidance and increase its overall contribution to the Government, UK and European energy targets. The EIAR Chapter 6: Carbon Balance projects that the development is anticipated to 'pay back' the carbon emissions associated with its construction, operation, and decommissioning within 5 years of operation, with a net gain of saving an estimated 38,458 tons of CO₂ every year.
- 8.31 In terms of economic benefits, the proposed development anticipates a construction period of 18 months, grid connection, and 25 years of operation prior to several months of decommissioning. Such a project has potential to offer some investment / opportunities to the local, Highland, and Scottish economies including for businesses ranging across construction, haulage, electrical and service sectors through the supply chain, with opportunities in research and development, design, project management, civil engineering, component fabrication / manufacture, installation, and

maintenance. The applicant is committed to utilising the local supply chain wherever possible. The largest spending proportion is expected to be on turbine procurement, transport, and installation related contracts, followed by balance of plant, grid connection, and pre-construction.

- 8.32 The economic benefits of the development are disputed by those making representations to the application. Research by RenewablesUK (2015) is cited in the applicant's assessment to predict that up to 47% of the average construction costs are spent in the UK, with 12% spent in the local area, and 35% spent in the region. This equates to a UK total of £27.5M based on £1.3M per MW installed. The applicant estimates that approximately £58.5 million Gross Value Added (GVA) could be invested into the proposed development in capital expenditure during the construction. It is further predicted that the construction phases of the development could support a total of 72.4 job years in Scotland and a further 158.2 job years in Highland. This equates to around 8 direct full-time equivalent jobs per year of the development's lifetime in the Highlands. In addition, there will be a GVA economic impact of approximately £6.5M in the region. Considering multiplier effects and indirect/induced jobs have not been included in the calculation this figure is expected to be higher, and of a moderate positive impact to the regional construction market. The magnitude of change at this stage is considered to be minor and positive. This results in an overall significance of a moderate effect in relation to the economy and employment of the area.
- 8.33 In terms of the operation and maintenance phase the value of the annual expenditure is based on average UK costs per MW of £59,86712. The RenewableUK research revealed that, on average, over 87% of the operational spend was in the UK. Approximately 58% of the total spend would be in Scotland, with 42% in the Highland region. The applicant estimates that £1.5M per annum would be spent in Scotland, with £1.1M spent in Highland. In addition, there would be an annual community benefit fund of up to £200,000 distributed to local communities. During this period it is estimated that the proposed development would generate around £4.73m GVA and would provide around 3 jobs per year. The EIAR concludes that the socio-economic benefits during construction and operation of the proposed development as of minor beneficial and not significance. It is estimated that 33 'job years' and £1.4M GVA will be created annually during the 25 year operational life of the proposed development. Given the 4,100 employees and £264.7M turnover in this subsector, and the consistent expenditure for the life of the development, it is reasoned this represents a moderate positive magnitude of impact and a moderate economic impact overall.

Construction

8.34 There are likely to be some adverse impacts caused by construction traffic and disruption, which are most likely to be within the service sector particularly during the construction phase when abnormal loads are being delivered to site, this has been highlighted in the representations. It is anticipated that the construction period for the development would take 18 months. Working hours on site would usually be restricted to be 07.00 – 19.00 Monday to Friday, 08.00 – 13.00 on Saturday with no Sunday of Bank Holiday working. The EIAR has requested working hours extended on a Saturday to 14.00 as this differs from normal site working hours, an appropriate informative will be attached to any planning permission. The EIAR confirms that there may be a requirement to extend the working hours to accommodate component

delivery and turbine erection which may take place outwith these hours. Given the location of the development this may be considered acceptable. It is recommended that the applicant continues to keep noise to a minimum on the site and a construction noise assessment will be required as part of the Construction Environment Management Document. Construction updates will be provided on the project website and a newsletter will be distributed to residents within an agreed distance to the site.

- 8.35 The project anticipates the deployment of a Construction Environmental Management Plan (CEMP) in association with the successful contractor engaged. This should include a site specific environmental management procedures which can be finalised and agreed through appropriate planning conditions with the Planning Authority and relevant statutory consultees. Such submissions are expected to be "plan based" highlighting the measures being deployed to safeguard specific local environmental resources and not simply re-state best practice manuals. Due to the scale of the development SEPA will control pollution prevention measures relating to surface water run-off via a Controlled Activities Regulations Construction Site Licence.
- 8.36 In addition to the requirement for submission and agreement on a CEMP, the Council will require the applicant to enter into legal agreements and provide financial bonds with regard to its use of the local road network (Wear and Tear Agreement) and final site restoration (Restoration Bond). In this manner the site can be best protected from the impacts of construction and for disturbed ground to be effectively restored post construction and operational phases.
- 8.37 Developers must also comply with reasonable operational practices with regard to construction noise so as not to cause nuisance. Section 60 of the Control of Pollution Act 1974 sets restrictions in terms of hours of operation, plant and equipment used and noise levels, amongst other factors, which is enforceable via Environmental Health. The applicant has submitted a construction noise assessment that indicates predicted construction noise levels will be well below maximum permitted levels. It is also expected that the developer and contractors would employ the best practicable means to reduce the impact of noise from construction activities at all times.
- 8.38 The applicant has sought a micro-siting allowance of 50m. Micro-siting is acceptable within reason to address unforeseen onsite constraints, anything in excess of 50m may have a significant effect on the composition of a development. Further if matters are identified during the application stage which require movement of infrastructure, it is considered that this is best addressed during the application stage rather than relying on micro-siting. A micro-siting limit of no more than 50m, should be secured by condition.
- 8.39 Should the development be granted consent, a Community Liaison Group should be set up to ensure that the community council and other stakeholders are kept up to date and consulted before and during the construction period.

Roads, Transport and Access

8.40 During construction the Proposed Development will be accessed from the A837 turning south at Oykel Bridge onto Oykel Bridge Road (U3581) where the site will be accessed via a private track to the north of the site boundary.

- 8.41 The Port of Entry of the turbines is likely to be Lochinver, where the turbine components will be delivered to. They will then follow Culag Road/A837 to Oykel Bridge, turn south at junction before Oykel Bridge on to the minor road to Oykel Terrace, follow the private road across Einig Bridge to the site entrance. The section of A837 road between Ledmore junction to Oykel Bridge is in parts constructed as a floating road. A structural survey of this section of the road prior to construction is therefore proposed to ensure that the road can accommodate the transportation of the wind turbine components. Where necessary, reinforcements to the road using materials, such as geogrid, may be required to ensure that carriageway subsidence does not occur. Other traffic in the form of gravel lorries and pre-mix concrete deliveries will travel to site via the A835 & A837, other site related HGV deliveries will travel via the A839, A836 & A949 from the A9 and wider road network. Once a contractor has been appointed the final quarry and material sourcing will be confirmed in the Construction Traffic Management Plan (CTMP).
- 8.42 The EIAR provides an assessment of the development's impact on the surrounding road network during the construction, operation, and decommissioning phases, as well as an Abnormal Indivisible Load (AIL) Route Assessment from the Port of Entry to the site. The Study Area for the Traffic Assessment includes the routes between Lochinver Harbour (A837) and the site as well as between the site and the A835, A839, A836 and A949. Whilst the EIAR notes that there will be an increase in traffic flow associated with the construction, operation and decommissioning of the proposed development along the A835, A837 and A839, it determines that the likely effect using IEMA guidelines would be minor-moderate, non-significant on these routes.
- 8.43 The construction traffic would result in a temporary increase in traffic flows on the road network surrounding the Proposed Development. The maximum traffic effect associated with construction of the Proposed Development is predicted to occur in Month 7 (to construct the access track) of the programme. During this month, an average of 25 HGV movements is predicted per day and it is estimated that there would be a further 15 car and light van movements per day to transport construction workers to and from the site. The HGV increase during the busiest phase of construction equates to a peak of approximately 25 additional trips per day for a single month of the 18 month schedule. This is not considered significant in real terms and is likely to be much lower in actuality. Furthermore, 2% of the HGV traffic increase is in the form of AIL's, these vehicle movements will be escorted by Police vehicles and conducted to ensure minimum impact to other road users.
- 8.44 Whilst Lochinver harbour has not been the preferred port of entry for wind farm development in Caithness and Sutherland, it is not considered that it could successfully accommodate turbine component deliveries. Transport planning have not objected to this route for abnormal indivisible loads (AIL's), subject to detailed assessment and the provision of appropriate mitigation measures on the A837 from Lochinver to accommodate the movement of AIL's. Transport Planning have highlighted that sections of the road are on peat and without extensive mitigation may be susceptible to damage. The U3581 will similarly require appropriate mitigation to this temporary mitigation to the load road network out of this area may also be required due to the size of the components being transported. A detailed up-to-date

structural assessment of bridges, culverts and any other affected structures along the route would be required, in consultation with the Council's Structures Section, along with an unladen AIL run. Following on, a programme of Road Mitigation Schedule of Works should be agreed and carried out by the developer in consultation with the roads authorities. Full details can be included within the CTMP should the development be granted consent.

- 8.45 It is anticipated that the following traffic will require access to the site during construction works:
 - Staff transport, either cars or staff minibuses;
 - Construction equipment and materials, deliveries of machinery and supplies such as crushed rock and concrete; and
 - Abnormal loads consisting of the wind turbine sections and also a heavy lift crane, transported to site in sectional loads.

The maximum traffic flow calculations are a worst-case scenario and consider all development traffic flow at the busiest month of the construction programme. The maximum traffic increase is temporary and the percentage increase will be considerably lower following the construction phase. It is anticipated the total number of vehicle movements associated with the operational phase of the development will be approximately 80 per year.

- 8.46 There are no residual effects associated with the operational phase of the Proposed Development. Any effects during construction are reduced by mitigation proposals including a Construction Traffic Management Plan (CTMP). The decommissioning phase of the development is similar in scale of undertaking to the construction phase, although traffic movements are likely to be far fewer. There would also be no movement of AILs and no quarrying activity. The majority of vehicle trips would be worker traffic and HGVs involved in the dismantling and recycling of the turbines. The decommissioning effects as these can be fully assessed closer to that period, that being said, it is considered that the traffic flows associated with the decommissioning works will be lower than those associated with the construction phase as elements of the proposed development may remain in-situ (such as cable trenches, access tracks, etc).
- 8.47 Transport Planning in their response have noted that the following points that should be taking into consideration in relation to construction traffic when preparing the CTMP:
 - The A837, between Invershin and its junction with the A839, includes several retaining walls, the condition of which is uncertain. This section of the route is currently excluded for timber transport.
 - The Council's preferred route to site from the east would be the A839 via Lairg.
 - The route from Ardgay via Carbisdale is not considered suitable for construction traffic.
- 8.48 Both Trunk Road Authority and the Council Transport Planning Team has confirmed that development traffic can be accommodated on the road network, subject to conditions and a requirement for a legal agreement to address "wear and tear" provisions. These will be consistent with current best practice. These need to highlight

potential cumulative impacts arising with other major developments. The conditions are to secure:

- A Construction Traffic Management Plan for approval and implementation as agreed highlighting all mitigation / improvement works required for general construction traffic and abnormal load movements, including the timing of such works and appropriate reinstatement / restoration works.
- An un-laden trial run between the Port of Entry and the site access will be required in liaison with the police and both roads authorities.
- Structural assessment of bridges, culverts and any other affected structures along the route in consultation with the Council's Structures Team.
- Community liaison to ensure the project construction minimises impact on the local community, that construction traffic takes place outwith peak times on the network, including school travel times, and avoids identified community events.
- All traffic management being undertaken by a quality assured contractor.
- 8.49 As part of the Council's Health and Prosperity Strategy 2021-22 published in March 2021, the Council committed to establish the further localised Strategies for the delivery of co-ordinated action by the Council, working with partners such as Transport Scotland, BEAR Scotland and the private sector across the Council area in relation to delivery of proportionate mitigation of the impacts on the local road network. There is a strategy to be prepared for the area around Lairg given the development pressures for large scale renewable energy and associated grid projects. In advance of that being in place, a scheme for the delivery of improvements to the local road network will be secured by condition to ensure that there is no net detriment to the local road network and that a robust local road network is secured along the routes to be utilised for the development of the wind farm.
- 8.50 The site, like most land in Scotland, is subject to the provisions of the Land Reform (Scotland) Act 2003. There are significant recreational access resources within the proposed site boundary, these are a series of core paths. There are also rights of way, heritage path, hill tracks, cycle and other recreational routes within the study area. The EIAR confirms that public access to the site during the construction and decommissioning stages of the development will be locally restricted and managed by the principle contractor for Health and Safety reasons, and in accordance with the requirements of the Construction (Design and Management) Regulations (CDM, 2017). The site will be equipped with public information signage in order to communicate access restrictions to the site. The site entrance will be secured by locked gate outside of working hours to prevent unauthorised vehicular site access and the construction compounds will be link fenced and secured by locked gates. However, as noted in para 5.3 the Access Officer has advised that core paths shall be open at all times for public recreational use during the construction works. As such a Recreational Access Management Plan (RAMP) will be secured through planning condition and it is accepted that there will be a need to restrict access to the site during construction works at key times. However, where feasible accesses should be made available for a wide variety of users during the construction phase. Access tracks to the proposed development should be accessible to a wide variety of users. All access gates should be "easy open" accesses and be unlocked to responsible access takers. To ensure access is provided throughout the construction period and that enhanced recreational access opportunities are provided during the operational phase, a Recreational Access Management Plan will be required. This will also be required to

include details of signage to be included on the site to warn users of the paths within the wind farm of any hazards such as maintenance or potential ice throw during winter. The RAMP should also detail how onsite infrastructure will allow public access through the site and any other plans to improve recreational access across the site including signage and car parking provision. The visual impact of the development from recreational routes is considered later in this report.

Water, Flood Risk, Drainage and Peat

- 8.51 The EIAR is clear that a Construction Environmental Management Plan (CEMP) will be in place, and as mentioned in paragraph 8.33. The document would ensure that potential sources of pollution on site can be effectively managed throughout construction and in turn during operation; albeit there will be fewer sources of pollution during operation.
- 8.52 The CEMP needs to be secured by planning condition to ensure the agreement of construction methodologies with statutory agencies following appointment of the wind farm balance of plant contractor and prior to the start of development or works.
- 8.53 The application site has identified flood risks from fluvial and pluvial sources. The main fluvial sources are from River Oykel, River Einig, Loch nam Buidheck, Lochan Dubh and Allt a'Ghuail. Flood information available on the SEPA Flood Map indicates that Lochan Dubh and Loch nam Buidheag have a high – 10 % (1 in 10 year) likelihood of fluvial (watercourse) flooding in any given year. The areas indicated do not extend much beyond the boundaries of these water bodies. The Einig Bridge used for accessing the site at Corriemulzie is also within the high-risk area. The overall fluvial derived flood risk within the proposed development area is considered to be low. However, it should be acknowledged that the amount of headwater channels within the proposed development area means that there is a risk element associated from the potential fluvial flooding impacts of the proposed development to areas further downstream. The water bodies of Lochan Dubh and Loch nam Buidheag also have a noted as a high likelihood of surface water flooding, otherwise pluvial risk is negligible. The Council's Flood Risk Management Team has no specific concerns regarding that constraint.
- 8.54 The hydrological desktop study and site visits have identified a typical upland hydrological environment with open moorland. This steep upland topography and coverage across one general catchment presents several hydrological pathways and features associated with it. A series of buffer distances have been adopted to help reduce effects of the proposed development on the hydrological environment. A 50m buffer was utilised on all identified natural hydrological features. The EAIR confirms that all turbines associated with the proposed development are located outside the buffer limits. The design of the infrastructure has also meant that the associated access tracks are generally located greater than 50 m from natural hydrological features. However, where access necessitates essential watercourse crossing, construction features have been limited in these buffers as far as possible, for example, minimising tracks running parallel to watercourses and trying to avoid track junctions being constructed in these zones. The exceptions to this are where access tracks must cross watercourses or when other constraints have resulted in the tracks

having to infringe upon the edges of the buffers of ephemeral headwater drainage channels.

- 8.55 Groundwater flow within the superficial geology is likely to be heterogenous due to the varying permeability of the mapped superficial deposits, namely peat underlying the site. It is expected that the hydrogeological conditions of the superficial deposits do not significantly limit the movement of groundwater within the valleys of the watercourses, but movement may be restricted in the summit and plateau areas across the proposed development.
- 8.56 SEPA had raised concerns as many of the watercourse are located just south east of Amat where the proposed access track crosses small watercourses seven times, some features more than once. Much of this section of the access track was located within the 50 m buffer of the watercourses where the potential for runoff and pollution is high, especially since the ground is sloped. The applicant reviewed this and within the EIAR-SI confirmed that this (as noted in para 8.53) was no longer the case and as such SEPA removed their objection.
- 8.57 No Scottish Water drinking water catchments or water abstraction sources, which are designated as Surface Drinking Water Protected Areas under the WFD, were indicated in the area that may be affected by the proposed development. According to the records there is no public Scottish Water infrastructure or wastewater infrastructure within the vicinity of the purposed development. However, the proposed development is within a Groundwater Drinking Water Protected Area; Northern Highlands. The EIAR has recorded 9 private water abstractions within 3km of the proposed development. These PWS source locations were identified to serve thirty properties with a water supply. In order to determine the potential risks to PWS, a source-pathway-receptor approach has been adopted to initially screen whether a pollutant linkage could exist between the proposed development and the water supply. Where PWS sources could be conceivably "hydrologically connected" (either by means of overland or groundwater flow) then further, more detailed assessment will be undertaken to qualify the level of risk. Based on the hydrological and hydrogeological setting of the proposed development area, it is considered that only PWS sources within the development area or on its periphery could be hydrologically connected. It will be expected that the Corriemulzie PWS (and any other PWS that may be affected) is protected. A detailed Method Statement will be produced and agreed with the Council, to confirm measures for monitoring, maintaining and protecting the supply and/or providing alternative supply during construction, with reinstatement of the pipework (if applicable) following construction.
- 8.58 As the development would entail works in connection with the water environment measures should be included in the CEMP to mitigate localised flood risks as well as protect the water environment. Mitigation measures should include:
 - the adoption of sustainable drainage principles to control the rate, volume, and quality of run off from the development, in particular in relation to maintaining flow paths to specific habitats sustained by rainfall and surface water runoff;
 - turbine 7 and related hard standing to be constructed using a piling technique;
 - 50m development free buffer zones to be maintained around all water bodies;
 - Monitoring proposals and potential action should impact be observed. The extent of the monitoring will be dependent on the final location of the

infrastructure in relation to groundwater dependant habitats and developer to shall use micrositing to minimise the amount of infrastructure within the buffers outlined in SEPA's guidance;

- access tracks and turbine hard standings will be designed to have adequate cross fall with runoff designed to side cast to a swale which will offer one level of treatment in removing silts and sediment;
- new and replacement watercourse crossings to be constructed to accommodate 1:200 year flood event flows;
- watercourse crossings (EIAR-SI notes 13 in total) shall be oversized bottomless arched culverts or traditional style bridges;
- Tracks over peat > 0.5 m to be floated, as outlined in Table A4 of the Peat Management Plan;
- Cut tracks to be designed to allow flow of groundwater (made up of permeable material, use of cross drains and check dams);
- Clay stoppers/dams used at regular intervals in any cable trenches; and,
- pollution prevention measures to mitigate against effects of potential chemical contamination, and sediment release.
- 8.59 SEPA support this approach and conditions are sought to secure further details, including construction works undertaken in line with the measures prescribed in the EIAR and a requirement to produce and then adhere to a schedule of mitigation. Works in or in the vicinity of inland surface waters and wetlands, as well management of surface water runoff (including access tracks) will require authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR).
- The wider site is home to potential Ground Water Dependent Terrestrial Ecosystems 8.60 (GWDTEs). The majority of potentially groundwater dependent habitats identified were wet heath (M15) occasionally found within a wider mosaic containing blanket peatland (M19), rush (U6) and dry heath (H12) as well as marsh grassland (MG10) and acid / neutral flush (M6c), which was occasionally found with M6a / H12. In addition to the NVC communities with the potential for groundwater dependence, additional communities were identified including those directly associated with ombrotrophic habitat such as blanket sphagnum bog (M17). The EIAR-SI notes that the design of infrastructure has been situated to avoid areas of potential GWDTE, with respective buffer distances of 100m and 250m applied to GWDTE locations that are moderately or highly dependent. In circumstances where infrastructure falls within these buffers, efforts will be made to ensure the continuity of groundwater flows within the peat and near surface soils. This will be achieved through both considerate construction design and/or the use of appropriate diversion drainage channels to ensure groundwater dependent recharge areas are not hydrogeological severed from reliant habitats. A number of embedded mitigation measures will be adopted during the operational phase of the proposed development to help protect GWDTE including more location specific mitigation that will be provided post consent as part of the detailed design. This will be secured through planning conditions.
- 8.61 SEPA are content with the detailed assessment of GWDTE provided in EIA Appendix 13.4 and are content with its conclusions that twenty clusters of M6 and MG10 habitats are likely to be moderately or highly groundwater dependant. The locations of the turbines themselves and related supporting infrastructure have been sited to
avoid direct impacts on these habitats. SEPA are also content with the principle of crossing linear habitats at a perpendicular angle as is proposed for the access track.

- 8.62 The EIAR has considered the hydrological regime, highlighting that the principal effects will occur during the construction phase. Assuming the successful design and implementation of mitigation measures, the significance of construction effects on all identified receptors is considered to be of minor or no significance. The assessment of predicted ongoing and operational effects has also been determined that the significance of effects on all receptors to be of minor or no significance. Both SEPA and the Flood Risk Management Team are satisfied with the applicant's findings.
- 8.63 The majority of the site contains peat, with around 65% of the peat probing recording areas of deep peat of over 1m. A total of 1715 peat probes were taken across the application site to identify impacts of the proposed development on the peat resource. The resultant information has been used to inform the site layout taking into account other environmental constraints such as sensitive habitats, ornithology, and the water environment amongst others. One third (34.7%) of the locations surveyed exhibited peat thickness of 1.0m or less, with 13.5% of those being <0.5m in thickness. Approximately 44% of the locations surveyed were 1.0 to 2.0 m in thickness with 21% being >2.0m up to a maximum depth of 3.9 m in thickness. The deepest areas of peat are situated in the far east of the proposed development area, north of Meall Dheirgidh.
- 8.64 The findings of the peat depth survey (Section 13.7.1 and Figure 13.6) show that the infrastructure has, as far as possible, considering other environmental and engineering constraints, been sited outside areas of the deepest peat. A summary of specific considerations with regards to optimising the layout to avoid sensitive peat habitats is presented below;
 - Avoidance of pockets of deeper peat during the positioning of the access track along Carn na Bo' Maoile. Track positioned downslope of an area of peat surveyed as ~3.9 m thick at the headwater of an unnamed tributary south of Cnoc nan Caorach as well as other closer to Coire Buidhe;
 - Positioning of infrastructure out of the deepest areas of peat in the basin north of Meall Dheirgidh within the upper Kilmachalmack Burn;
 - Positioning of turbines in shallow areas of peat (<1.0 m thickness) if peat cannot be avoided;
 - Positioning of the tracks along flat ground where possible to enable it to be floated and therefore minimise the requirement for cut track construction types; and
 - Position of the substation in shallower peat.
- 8.65 Most of the proposed development avoids infrastructure being sited on deep peat (areas with a peat depth of less than 1m). However, since some habitats will be disturbed during the construction process, habitat restoration techniques such as ditch blocking should be implemented in other areas of the proposed development where habitats are not class 1 & 2 peat. Further details on habitat restoration have been outlined in the applicant's Peat Management Plan. To protect and where possible enhance wetland and peatland habitats and to improve carbon sequestration (and as requested previously) a finalised Habitat Management Plan is also required

that will deliver peatland restoration to an area of no less than 128 hectares and following the proposal outlined in Figure SI10.2b and SI10.3b.

- 8.66 The Outline Habitat Management Plan (OHMP) proposes restoring two areas: one of blanket bog and one of wet heath, of 18 hectares and 110 hectares respectively. However, blanket bog is the more extensive of the two habitats on the site (Table 10.1: Loss of NVC Communities Recorded within the Survey Area) and a higher proportion of it will be lost and damaged by the proposed development (Table 10.1: Loss of NVC Communities Recorded within the Survey Area). As it is the more highly valued in terms of Scottish Planning Policy and peatland restoration is a key objective for Scottish Government in its Climate Change Plan Update NatureScot advise that the focus for restoration should be on blanket bog, i.e. a larger area of blanket bog to be restored. Section 10.3.1.1 Habitat Management Unit 1 advises that there is an area of degraded blanket bog extending to 13.1 ha within HMU1. There is no commitment to restoring the whole area, although "it is considered that the area that will be restored will be greater in size than that lost as a result of the proposed development." It should also be recognised that to compensate for areas lost requires restoration of a significantly larger area given the habitat fragmentation that will result from the proposed development, the effect on the hydrology of adjacent habitat and the time (potentially decades) that it will take for restored habitat to function in the same way as intact habit lost. Having considered the community extent data provided in Table 10.1, NatureScot advise that the habitat restoration proposals as currently presented are insufficient to compensate for the planned losses of 'carbon rich soil, deep peat and priority peatland habitat'. In order to compensate for these losses the final HMP needs to consider total losses, in terms of both habitat extent and quality. NatureScot advise that the Applicant should commit to compensatory habitat restoration that is significantly larger than currently proposed, this will be secured through planning condition.
- 8.67 The applicant submitted a revised Outline Habitat Management Plan (OHMP) dated December 2021, that NatureScot welcomed and recognised that as it is an 'outline' plan further revisions of the detail are likely. The revised OHMP recognises the value and extent of the blanket bog to be lost to, and affected by, the construction and operation of the proposed Meall Buidhe wind farm. In addition to the measures proposed, NatureScot advise that Unit 4 should include any working areas/batters adjacent to wind turbines bases, hardstandings and any infrastructure, as well as either side of the access track, that are located within areas of blanket bog. NatureScot note that using 'bog turves, cut from nearby areas of access track works' carries a risk of damaging the intervening habitat while collecting turf from and transporting turf to areas of Unit 1. Any areas thus damaged would also need to be restored. 'Borrowing' turf from areas adjacent to restoration areas would reduce this risk. NatureScot therefore advise they are content with the revised OHMP and that these issues can be addressed by the applicant in a future revision of the OHMP. It should be noted that the HMP should always aim to restore more habitat than the minimum required due to the likelihood of failure and loss of quality habitat. As such NatureScot advise that further peatland restoration should be identified and proposed by the applicant, this should be secured through planning conditions.
- 8.68 SEPA note that the baseline peat probing survey information does not quite follow recognised best practice. However, the reason for the approach taken is explained,

and SEPA are content that enough information has been collected to inform the layout. The access track onto the site is mostly on shallow peat, however due to its current length the volume of peat estimated to be disturbed by tracks is 41,502 m3, which is approximately two-thirds of the total expected peat excavation. As this figure does not include peat less than 0.5 m deep the total quantity of peaty soils disturbed will be significantly greater. A shorter alterative, or one which makes use of more existing infrastructure should be pursed as a way of demonstrating that the development has avoided unnecessary disturbance of peat and carbon. Through the EAIR-SI the turbines have been positioned to shallower areas of peat as recommended by NatureScot and RSPB.

- 8.69 The applicant is committed to upon completion of the construction phase of the development a programme of site restoration to improve the appearance of the development and to restore areas of peat that has been disturbed. Reinstatement will include the use of peat for access track edgings, crane hardstanding edgings, infill around turbine bases, and for profiling the temporary construction compound. The design brief took account of minimising peat extraction, and it is considered that there will be more than enough capacity for the re-use of peat as part of the infrastructure reinstatement. Site restoration will therefore contribute to reducing the Carbon payback of the development
- 8.70 A revised draft Peat Management Plan and a Peat Stability Risk Assessment are submitted as part of the EIAR SI, which have also helped to inform the design of the proposal. The risk ratings are a combination of the likelihood and the effect of a peat landslide event. With increased proximity to watercourses the effect or exposure of such an event is vastly increased as watercourses act as a sensitive off-site receptor. This consequently increases the risk ranking for these locations but is not indicative of conditions conducive to peat instability on this site. Applied mitigations and appropriate control measures including best practice construction shall ensure the residual hazard rankings are insignificant across these areas. Only the main on-site watercourse has factored into the applicant's assessment with minor and ephemeral watercourses removed in order not to overstate the stability risks at the proposed infrastructure locations. The derived risk rankings are based on the risk of peat failure occurring without appropriate mitigation and control measures during construction. It should be highlighted that through geotechnical risk management, strict construction management and implementation of relevant control measures shall reduce the risk of peat failure across the development to negligible / low levels. The qualitative risk assessment should be reviewed prior to construction and further refined as part of future intrusive ground investigation. When more accurate data is available at the preconstruction stage the analysis should be reviewed and updated accordingly. The respective risk ratings should be central to development of the Construction Method Statement (CMS) in order to ensure that extra care is taken with respect to the contributory factors at the time of the construction process and that geotechnical risk is adequately managed. When the more detailed ground investigations are available then a finalised Peat Management Plan, will be required forming a part of the CEMP, this will be secured by condition prior to works commencing on site. The Peat Management Plan should specify how micrositing and other mitigation measures are deployed to minimise peat disturbance (taking account of other environmental sensitivities), including prioritising the use of pre-disturbed land for cable trenches.

8.71 The significance of effects on the proposed development hydrological, hydrogeological and geological conditions have been assessed as not significant.

Natural Heritage (including Ornithology)

- 8.72 The EIAR has identified and assessed the development's likely impacts on designated sites, ornithology, protected species, and ecology. The development is not situated within any sites designated for ecological interests but is close to, and has potential connectivity with, a number of sites that are designated at national and international level. As there is potential for the proposal to impact connected sites designated at a European level (River Oykel SAC) the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, the Highland Council as the competent Authority is required to consider the impact of the proposal on Natura2000 sites through Habitats Regulations Appraisals (Appropriate Assessment). NatureScot have advised that there is a risk of the proposed development affecting the hydrological environment during the construction phase (in particular: effects on erosion and sedimentation; effects on baseflow; and changes to drainage patterns and pollution risk). As such this has the potential to affect freshwater pearl mussel and Atlantic salmon in the River Oykel SAC which lies downstream from the development.
- 8.73 The River Oykel qualifies as an SAC for supporting freshwater pearl mussels and Atlantic salmon. The EIAR reports that the proposed site and adjacent lands observed that the watercourses within the proposed turbine envelope held low to negligible nature conservation potential for freshwater pearl mussel and Atlantic salmon due to the lack of suitable habitat to support a sustainable population of these species.
- 8.74 The EIAR surveyed the length of all headwater tributaries within the wind farm boundary which discharge to the River Oykel for Freshwater Pearl Mussels. The headwaters were considered to be within the zone of influence for any indirect effects of construction on downslope watercourses. The walkover survey also confirmed that all the minor tributaries leading from the slopes of the turbine development envelope were very minor, considered unsuitable to support freshwater pearl mussels due to their steep slope and lack of fish accessibility, and did not have direct connectivity with the River Oykel itself. The minor channels also had little flow, lacked width and lack suitable substrate for Freshwater Pearl Mussel. The survey did find that the potential for suitability for freshwater pearl mussels, including substrate composition (using the Wentworth scale), width and depth of channel, influence of shading on the channel, adjacent land-use, and signs of pollution impact with the main tributaries Einig, Allt a' Bhraigh and Kilmachalmack Burn considered to have potential to support freshwater pearl mussel; the habitat in these tributaries is much more suitable than the headwater burns surveyed within the wind turbine developable area. Therefore, habitat within the aforementioned tributaries, which has potential to support freshwater pearl mussel, should be considered to be of high nature conservation value. The habitat also provides suitable conditions for salmonid fish and should also be considered to be of high nature conservation value for these species.
- 8.75 NatureScot has provided advice in relation to each of the Natura2000 sites including the likelihood of significant effects and subsequent mitigations that may be required.

In terms of the River Oykel SAC, NatureScot advise that the qualifying interests (freshwater pearl mussel and Atlantick salmon) are not expected to be significantly affected by the proposed development subject to appropriate mitigation that should be secured through planning condition. This includes the proposed development being carried out in accordance with the following mitigation, to ensure that the quality of the integrity of the site is not effected and that the River Oykel SAC tributaries are protected from the impacts from construction activities:

 Production of a population prevention plan and species protection plan for freshwater pearl mussel (as recommended in Technical Appendix 10:6 Freshwater Pearl Mussel (FWPM) Survey Report.

Given the distance from the proposal to other designated sites it is not considered that the proposed development will result in significant effects on the qualifying interests. It is considered that the production and implementation of such a plan would mitigate the impacts in relation to water quality which have been highlighted by the Fisheries Trust.

- 8.76 In terms of ornithology NatureScot are generally content with the level of survey work carried out and agree with the results presented within the EIAR and recommend that a Breeding Bird Protection Plan (BBPP) should eb produced prior to works commencing.
- 8.77 The EIAR and the EIAR-SI found that breeding or foraging golden eagles may be displaced from the site during construction, either by disturbance or direct habitat loss. Golden eagle is an Annex I (EU Birds Directive) and Schedule 1 (Wildlife and Countryside Act) species, and therefore classified as being of Medium Nature Conservation Concern. The Natural Heritage Zone (NHZ) 5 population (The Peatlands of Caithness and Sutherland) has a favourable conservation status. Overall sensitivity is therefore considered to be Medium. Given the slight increase in the separation of the closest wind turbines to known eyries as a result of the removal of Turbine 2 and the movement of T9, the magnitude and significance of any impacts arising from the construction phase will still result in an effect of Low Spatial and Shortterm Temporal magnitude. The unmitigated effect on the NHZ golden eagle population from construction is classified as at worst Minor Adverse and is therefore Not Significant in the context of the EIA Regulations. Given the reduction in the number of wind turbines and the micrositing of Turbines 7, 8 and 9, the EIAR-SI still predicts impacts from disturbance/displacement during the operational phase will result in an effect of low spatial and long-term temporal magnitude. The unmitigated effect from displacement is classified as minor adverse and is therefore not significant.
- 8.78 Foraging hen harrier, Merlin and red-throated diver may be displaced from the site during construction, either by disturbance or direct habitat loss. Hen harrier, Merlin is an Annex I (EU Birds Directive) and Schedule 1 (Wildlife and Countryside Act) species, and therefore classified as being of Medium Nature Conservation Concern. Given the negligible change in the separation between the wind turbines and the closest nesting sites, it is predicted that impacts from the construction phase will at worst result in an effect of negligible spatial and short-term temporal magnitude. The unmitigated effect on the NHZ hen harrier, merlin and red-throated diver population from construction is classified as at worst, minor adverse and is therefore not significant. Foraging or breeding hen harrier or merlin may be at risk of displacement from habitat around turbines or other infrastructure, thereby impacting on productivity

or survival rates. Given the reduction in the number of wind turbines and the limited movement of Turbines 7, 8 and 9, it is still predicted impacts from disturbance/displacement during the operational phase will result in an effect of low spatial and long-term temporal magnitude. The unmitigated effect from displacement is classified as minor adverse and is therefore not significant

- 8.79 Foraging or commuting white-tailed eagle may be displaced from the site during construction, either by disturbance or direct habitat loss. White-tailed eagle is an Annex I (EU Birds Directive) and Schedule 1 (Wildlife and Countryside Act) species, and therefore classified as being of Medium Nature Conservation Concern. Given the reduction in the number of wind turbines and the limited movement of Turbines 7.8 and 9, it is still predicted that impacts from the construction phase will at worst result in an effect of Negligible Spatial and Short-term Temporal magnitude. The unmitigated effect on the NHZ white-tailed eagle population from construction is classified as at worst minor adverse, and is therefore not significant in the context of the EIA Regulations. Foraging or commuting white-tailed eagle may be at risk of displacement from habitat around turbines or other infrastructure, thereby impacting on productivity or survival rates. Again given the reduction in the number of wind turbines and the limited movement of Turbines 7, 8 and 9, the EIAR-SI predicts impacts from disturbance/displacement during the operational phase will result in an effect of low spatial and long-term temporal magnitude. The unmitigated effect from displacement is classified as minor adverse and is therefore not significant.
- 8.80 Breeding or foraging black grouse may be displaced from the application site and adjacent land during construction, either by disturbance or direct habitat loss, potentially affecting the breeding and survival rates of the NHZ population. Black grouse is an Annex I (EU Birds Directive) and Schedule 1 (Wildlife and Countryside Act) species, and are therefore classified as being of medium nature conservation concern. Given that there have been no amendments to the sections of the access track in closest proximity to leks, it is predicted that impacts from the construction phase will still result in an effect of low spatial and short-term temporal magnitude. The unmitigated effect on the NHZ black grouse population from construction is classified, at worst, as minor adverse and is therefore not significant. Breeding or foraging black grouse may be displaced from the Application Site and adjacent land during construction, either by disturbance or direct habitat loss. Foraging or breeding black grouse may be at risk of displacement from habitat around turbines or other infrastructure, thereby impacting on productivity or survival rates. Given that the access track sections closest to leks have not been amended, it is still predicted that impacts from disturbance/displacement during the operational phase will result in an effect of negligible spatial and long-term temporal magnitude. The unmitigated effect from displacement is classified as minor adverse and is therefore not significant.
- 8.81 Foraging or breeding golden plover may be displaced from the site during construction, either by disturbance or direct habitat loss. Golden plover is an Annex I (EU Birds Directive) species and therefore classified as being of medium nature conservation concern. Given the reduction in the number of wind turbines and the limited movement of Turbine 7, it is still predicted that impacts from the construction phase will at worst result in an effect of negligible spatial and short-term temporal magnitude. The unmitigated effect on the NHZ golden plover population from construction is classified as at worst minor adverse and is therefore not significant.

Foraging or breeding golden plover may be at risk of displacement from habitat around turbines or other infrastructure, thereby impacting on productivity or survival rates. Given the reduction in the number of wind turbines and the limited movement of Turbines 7, 8 and 9, it is still predicted impacts from disturbance/displacement during the operational phase will result in an effect of low spatial and long-term temporal magnitude. The unmitigated effect from displacement is classified as Minor adverse and is therefore not significant. Foraging or breeding golden plover may be at risk of displacement from habitat around turbines or other infrastructure, thereby impacting on productivity or survival rates. Given the reduction in the number of wind turbines and the limited movement of Turbines 7, 8 and 9, it is still predicted impacts from disturbance/displacement during the operational phase will result in an effect of Low Spatial and Long-term Temporal magnitude. The unmitigated as Minor Adverse and is therefore Not Significant in the context of the EIA Regulations.

- 8.82 Potential threats of displacement and collision risk from the windfarm are mutually exclusive. Birds which are displaced from the windfarm air space will no longer be at risk of collision. However, for many species the degree of risk of either impact is not fully understood. As such, where both potential risks have been identified for particular species or species groups1, both risks have been considered below. The likelihood or significance of risk is discussed in relation to individual species where relevant information is available. Studies undertaken within operational windfarms have revealed that different species of birds have a different level of collision risk with wind turbines. The potential for bird species colliding with the turbine varies depending on wind turbine dimensions and location.
- 8.83 Although RSPB accept that there are no predicted impacts on designated nature sites, they did raise some concerns in the applicant's assessment. RSPB are of the opinion that the applicant's assessment presented may have significantly underestimated the potential impacts on priority species and habitats (on the Scottish Biodiversity List1) and has also not adequately assessed cumulative impacts on them. In summary, RSPB believe that the further surveys works are required to inform an accurate assessment of ecological effects, this additional information can be secured through the HMP.
- 8.84 RSPB are concerned that impacts on golden eagle have been underestimated. Full details about the two closest territories to the site have not been provided in order to inform the assessment. It understands that the pair occupying Territory A have already been struggling to survive and they have a long history of laying and failing. They last successfully fledged chicks in 2010, in recent years it is believed that they have been using another nest site approximately 4km to the south (mapped '2' on Figure 11.2.1 Golden Eagle Nest Sites). If it is these birds that are using the site to forage and roost, then RSPB are concerned about the additional impact of their displacement from the site.
- 8.85 In terms of white-tailed eagles, RSPB notes that they are aware that there have been breeding attempts in recent years in the local area. It therefore recommends that the applicant contacts the Highland Raptor Study Group for up to date breeding locations for these species within 10km of the site in order to assess possible impacts. In addition, RSPB note the location of an osprey nest approximately 1km from the proposed access track entrance and a barn owl nest within a few hundred metres. It

is not mentioned in the documents how these sites will be protected from disturbance. It is therefore recommended that works on the access track entrance be undertaken outwith the bird breeding season (April to July inclusive).

- 8.86 RSPB have recommended that restrictions of access track use, construction and felling should be implemented where black grouse leks are within 1km. Furthermore, the HMP should include the requirement for a report detailing the post construction monitoring to be submitted to the Planning Authority in year 1, 3, 5 and 10. Works on the access track entrance should be undertaken outwith the birth breeding season (April to July inclusive).
- 8.87 The EIAR includes an assessment of the impact on protected species. The Phase 1 Habitat Survey identified an otter holt, a potential couch and two old spraints within the survey area. Furthermore, there was evidence of water vole activity within several locations within the survey area. This included an above ground shelter located approximately 28m from the nearest part of the proposed development, and burrows recorded between 50m and 195m from the footprint of the proposed development
- 8.88 Whilst bat surveys recorded four species of bats, common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (P.pygmaeus), brown long-eared bat and Myotis sp. bats. the EIAR states that overall bat activity in the area is low. Overall, the habitats present within the turbine envelope were of low suitability for bats, with the most suitable features consisting of small upland watercourses and very occasional scattered trees. These watercourses are sub-optimal habitat due to the lack of significant riparian vegetation (trees and scrub). Under calm conditions the watercourses and adjacent vegetation are likely to support suitable foraging resources. The suitability of the habitats within the Access Track corridor was comparatively high, but only within the lowland sections of the site close to the River Einig. The EIAR reports that no significant roost features within the Turbine Envelope were identified, with only a small number of trees offering potential roost features within the Access Track. The Turbine Envelope supported very low activity rates, especially during spring and autumn. Species assemblage was dominated by common pipistrelle, although soprano pipistrelle, Myotis sp. and brown long-eared bat were also recorded. Bat activity was mainly concentrated at the outflow of Loch nam Buidheag. Bat activity within the Access Track was concentrated on the lower slopes, with areas higher up within open habitats supporting very low activity, also dominated by common pipistrelle. Any micrositing allowance agreed still maintains a minimum 50m separation from watercourses and other features suitable for commuting bats. Any impacts on Bats may still require a Protected Species License from NatureScot, which would be subject to the development passing the three licensing tests for protected species in the event the application is approved.
- 8.89 The estate has a significant number of both red (C. elaphus) and sika deer (Cervus nippon) with lesser numbers of roe deer. In 2015, a helicopter count recorded a total population of 480 deer across the estate. Given that disturbance during the construction phase may result in displacement of deer, a Deer Management Plan would be required.
- 8.90 Final Species Protection Plans (SPP) will be required which outlies further preconstruction Protected Species Surveys would be required, along with an Ecological Clerk of Works (ECoW), as part of a CEMD condition. Surveys for legally

protected species should be carried out at an appropriate time of year for the species and as close to the commencement of construction as possible, but no greater than 8 months preceding commencement of construction. A watching brief should then be implemented by the ECoW during construction. The ECoW's remit would include the authority to stop works where impacts on Protected Species are identified, as well as to oversee that works are undertaken in accordance with the CEMD and Schedule of Mitigation. Given the above, the development is not expected to have a detrimental impact on ecology.

- 8.91 In terms of forestry, woodland, and tree impacts, these are likely to occur as a result of felling within the proposed development site. In order to construct the short bypass track north of the Einig Bridge, a wooded area of approximately 0.56ha, consisting primarily of silver birch saplings, would be required to be clear felled. It is proposed that following the construction phase, this area, excluding the access track and a suitable buffer, would be replanted with similar native tree species. The EIAR sets out a loss of 0.56ha of broadleaf woodland with 0.41ha replanted. As such, 0.15ha would be permanently lost. This area is mainly scattered broadleaf woodland consisting of silver birch and other varieties and is very dissimilar to densely planted forestry plantation. However, it would be expected that the full 0.56ha of forestry is replanted. If it is not possible to deliver onsite then delivering an equal area of off-site compensatory planting may be accepted. It is the Council's preference that this is delivered as close to the site of woodland removal as possible, this will be secured through a planning condition. The applicant would be expected to commit to provide 0.56ha compensatory planting subject to the submission of a Compensatory Planting Plan approved by the Planning Authority prior to works commencing on site, and all compensatory planting to be delivered prior to the windfarm becoming operational under the supervision of a suitably qualified forestry consultant which should be conditioned.
- 8.92 Whilst it is recognised that there will be impacts on natural heritage as a result of the proposed development both through the construction and operations phases of the development. There is, as with other successfully accommodated wind farm development in Highland, workable and practical mitigation that can be put in place to minimise these effects.

Built and Cultural Heritage

8.93 Scottish Planning Policy (paragraph 145) states, that 'where there is potential for a proposed development to have an adverse effect on a scheduled monument or on the integrity of its setting, permission should only be granted where there are exceptional circumstances.' Further to this Historic Environment Scotland (HES) published the Historic Environment Policy for Scotland (HEPS) in 2019. This includes a series of policies which are supported by the Managing Change guidance series. Of particular relevance for this application is Policy HEP2 which states: "'decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations." And HEP4 that states "changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate. If detrimental impact on the historic environment is unavoidable,

it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place."

8.94 The EIAR has identified 13 heritage assets with heritage assets within the study area as set out in para 2.7 – 2.10. The proposed development site is located in a wider area that is rich in archaeological remains from prehistory through to more recent times. The Council's Archaeology Officer agrees with the findings of the EIAR and advices that no additional mitigation is required. Similarly Historic Environment Scotland agrees with the EIAR and EIAR-SI that the proposed development will not have a significant effect on any nationally important interests and as such the proposal is likely to meet the threshold of Criterion 3 of the OSWESG, which requires development to not diminish the prominence of landmarks or disrupt their relationship to their setting.

Design, Landscape and Visual Impact (including Wild Land Areas)

- 8.95 The applicant has presented a number of submissions to illustrate the landscape and visual impact of the development both singularly and cumulatively with existing and consented windfarm developments. To this end, the EIAR includes a description of the design process, along with assessments against Landscape Character Areas, National Scenic Areas, Special Landscape Areas, and Areas of Wild Land. A total of 18 viewpoints and 2 wild land viewpoints across a study area of 40km have also been assessed, however all viewpoints are within 35km of the development. These viewpoints are representative of a range of receptors including communities, recreational users of the outdoors, and road users. The expected bare earth visibility of the development can be appreciated from the ZTV to Blade Tip with Viewpoint Locations in the EIAR (Figure 7.2). The viewpoints have been selected to represent visibility from landscape character types, landscape designations and principal visual receptors. These include points of specific importance such as recognised viewpoints, designated landscapes, settlements and routes.
- 8.96 The methodology for the Landscape and Visual Impact Assessment (LVIA) is sufficiently clear, being generally in accordance with the Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3), with the assessment's methodology being provided at EIAR Appendix 6.1. As set out in para 3.32 of GLVIA 3 the "LVIA should always clearly distinguish between what are considered to be significant and non-significant effects." The applicant judges significant effects following the combination of judgements based on the Sensitivity of the Receptor as defined by the receptor's susceptibility against the importance of the view / landscape, which it distinguishes between national, regional, and local, against the Magnitude of Change. According to the definitions provided in the EIAR at Table 7.A.1 (Appendix 7A) in the submitted EIAR, impacts of Substantial, Substantial / Moderate and Moderate correspond to significant effects. Where Moderate effects are predicted, the EIAR advises that professional judgement has been applied to ensure that the potential for significant effects arising has been 'thoroughly' considered with a reasoned justification provided. Those effects classified as Slight, Slight / Negligible and Negligible are considered to be Not Significant. The Council is of the view that based on the methodology presented within the EIAR Moderate effects are more generally significant but this needs to be considered on a viewpoint by viewpoint basis using professional judgement.

- 8.97 In the assessment of each viewpoint, the applicant has come to a judgement as to whether the effect is significant or not. In assessing visual impacts in particular, it is important to consider that the viewpoint is representative of particular receptors i.e. people who would be at that point and experiencing that view of the landscape not just in that single view but in taking in their entire surroundings.
- 8.98 A key consideration in the effects on receptors of wind energy development is the sequential effect when travelling through an area on the local road network both by individuals who live and work in the area and tourists. Those travelling scenic routes, whether designated as such or not, have a higher sensitivity to views. While a driver of a vehicle is likely to be concentrated on the view immediately in front, passengers have a greater scope for looking at their surroundings. As such it is considered that road users are usually medium, medium-high or high sensitivity receptors, a similar approach has been taken by the applicant.
- 8.99 THC's final visual assessment for each viewpoint (alongside a reasoned guess of the applicant's viewpoint analysis) is provided in Appendix 2 of this report below.

Siting and Design

- 8.100 Chapter 4 of the EIAR sets out the reasons for the site selection, as well as the design evolution from the initial iteration through the Scoping stage in 2017 for up to 21 turbines, through the pre-planning application request for a development of up to 9 turbines in 2018 to the current submission for 8 turbines.
- 8.101 The applicant was advised at the pre-application stage that the key considerations for the design process would be to mitigate the development's impacts on the A837, natural resources, peat, recreational, residential and visual amenity for the scheme to be supported by the Council. The site was selected after taking into consideration a number of issues such as the cumulative developments, grid connection, access, environmental designations, landscape designations, wind speed and visual receptors. This process resulted in the site being selected as having potential for wind development with minimal environmental constraints.
- 8.102 Although there are no protected areas designated for nature conservation, landscape quality, or cultural heritage within the site, there is in proximity. These designated areas lie within the study area and have been considered as they may be affected due to potential visibility of the proposed development. The nearest residential receptors are located adjacent to the site access, however the closest turbine is over 2km from the closest residential property. The site is also located relatively close to the existing road network and would be visible from a range of angles from this network. It is anticipated that the wind farm would connect into the existing network infrastructure at the Shin GSP substation, which will be laid underground, where possible, albeit that this connection does not form part of the planning application.
- 8.103 The proposed development has been designed to reduce landscape, visual and cumulative effects and to reflect the landscape characteristics and special qualities identified in the Caithness and Sutherland Landscape Character Assessment, including consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of other wind farm developments. The proposed turbines and much of the associated infrastructure would be located in

the open, moorland, slopes and ridges between Beinn Ulbhaidh 494m AOD, and Meall Dheirgidh 506m AOD, which 'bookend' the proposed turbines when viewed from the Kyle of Sutherland and limit visibility to the northwest and southeast. The proposed development site area is surrounded by large areas of mixed and coniferous plantation to the southwest, west, north, and east which limit both the potential for visibility and the numbers of likely visual receptors or people within 5km of the proposed turbines. At further distance, beyond the forestry, mountains and other landform notably restrict the visibility to the south and west.

- 8.104 In addition to the opportunities afforded by the site location, the design and layout of the proposed development provides further mitigation. The turbine layout creates a simple, gently curved line of turbines that reflects the underlying landform and simple landscape character of the Moorland Slopes and Hills LCT as identified in the Caithness and Sutherland landscape character assessment (SNH, 1998) that has been utilised within the EIAR and EIAR-SI to assess the landscape effects. Although this document is useful to inform planning consultations or inquiries it was reviewed in 2019 and updated with Scottish Landscape Character Types Map and Descriptions (NatureScot) and this is the document that has been used to assess the landscape effects from the proposed development.
- 8.105 It is considered that the scale of the turbines is suitable to its location, creating a simple, balanced and clear design and visual composition that avoids excessive 'turbine clutter' in the form of uneven gaps / overlaps and outlying turbines. This has the following design advantages:
 - The proposed Development would appear as a clearly recognisable scheme that 'fits' with the scale and simplicity of the local landscape character, such that the aesthetics and visual composition of the turbines can be appreciated in their own right.
 - The Proposed Development would appear 'set back' from the Kyle of Sutherland to the northeast and associated receptor locations, appearing in the background. Through design, the 'visual weight' of the proposed turbines would appear 'slight' and not 'dominating' being set back approximately 6km from this area.

The simple visual composition of the turbines reflects the simple character of the rounded hills, flowing out from the Wild Land Area (WLA) to the southwest. The site infrastructure is also discretely located to mitigate the effects on the special qualities. The landscape is principally forested which will be removed prior to commencement of development. The removal of forestry will in itself bring about a landscape and visual change, but this is not unusual in the Highland landscape and not expected to significantly alter the visual effects.

- 8.106 Furthermore, through the EIAR-SI the reduction from 9 to 8 turbines (removal of Turbine 2), the amended locations of Turbines 7, 8 and 9 and the reduction in blades (127m to 115m) with the exception of Turbine 9 has further improved the composition of turbines. The improved design has resulted in the slight reduction in the extent of the amended proposal.
- 8.107 The EIAR / EIAR-SI bases the design principles on an environmental assessment process, taking into account potential environmental, landscape and visual impacts and their effects, physical constraints, and health and safety considerations while

maximising the generating capacity. The 8 turbine layout has, were possible, been designed to avoid habitats of highest ecological importance and with the highest sensitivity to impacts. The Design and Access Statement confirms that either a meteorological mast or Lidar would be used to confirm the wind speeds post planning permission, this does not form part of this application.

- 8.108 The site is located within an 'area of significant protection' as defined by The Highland Council OWESG. Across the immediate landscape of the study area there are several distinctive groups of wind turbines/wind farms with heights ranging from Achancy and Lairg I with 100m to tip and Lairg II Redesign with tips of up to 200m. More recently the approved schemes of Sallachy 149.9m and Strath Tirry with height tips of 135m.
- 8.109 During the design iterations the proposal was reduced from 21 turbines to 8 turbines to not only minimise the landscape and visual effects, the access track was modified to reduce the disturbance to areas of peat. Where the proposed development occurs in areas of peat at depth of greater than 1m, the track construction should generally be of a floating design in order to minimise the disturbance to peat. Measures already taken into account during design include track micro-siting to avoid most areas of deep peat and, where required, features will be incorporated into the track, such as hydrological culverts to minimise the potential effects on the hydrological characteristics of mire and wet heath habitats.
- 8.110 It has become increasingly important to consider the context in which wind farm development is seen and subsequent cumulative effects. Of particular importance is how developments relate to each other in design and relationship to their surroundings; their frequency when moving through the landscape; and their visual separation to allow experience of the character of the landscape in between. Care and attention are therefore required regarding design, siting and location to avoid detrimental visual impacts. NatureScot's Siting and Designing Wind Farms in the Landscape Guidance notes that it can be particularly challenging to accommodate multiple wind farms in an area, and so advances windfarm design objectives of limiting visual confusion and reinforcing the appropriateness of each development for its location. In this instance the proposed site is in an area which is attracting several development proposals, with some of the largest turbines in Highland, as such this can lead to extensive visual impacts.
- 8.111 This approach is consistent with NatureScot's (then SNH) guidance, Siting and Designing Wind Farms in the Landscape which sets out (paragraph 4.2) that relating further development to a complex patter of development will be challenging but the focus should be on improving the overall pattern and character of development rather than exacerbating existing conflicts between design. The applicant has highlighted that they designed the scheme based on key designed viewpoint locations to provide views towards the proposed development from different directions and receptors.
- 8.112 The current application site sits principally within the Landscape Character Area (LCA) Rounded Hills Caithness (LCT 135), with only the north of the site located within the Strath (LCT 142). However, the EIAR/EIAR-SI refers to the host LCA (Rounded Hills LCT) as Moorland Slopes and Hills LCA. However, it is noted that the proposed turbines would be located on land that has characteristics of the open, moorland lying between the summits of Beinn Ulbhaidh and Meall Dheirgidh which limit visibility to the northwest and southeast. In addition, the proposed development

site is surrounded by large areas of mixed and coniferous woodland plantation to the southwest, west, north, and east which limit both theoretical visibility and the numbers of likely visual receptors or people within 5km of the proposed turbines. Within approximately 6km theoretical visibility is mainly concentrated to the northeast covering parts of Strath LCT which includes Oykel and the Kyle of Sutherland between Rosehall and Linsidemore. At either side of the Strath LCT theoretical visibility extends over areas of forestry and open moorland and includes the existing wind farms at Achany and Rosehall. To the southwest, much of the northwest facing slopes above Strath Cuileannach, between Croick and the hill summit of Carn á Choin Deirg (Viewpoint 8) would have theoretical visibility of the proposed development. At further distance, beyond 10km the mountain landform notably restricts theoretical visibility to the north, south and west. The ZTV pattern is very fragmented and limited to hill summits and sloping land orientated towards the proposed development that is not otherwise screened by intervening mountains. More extensive theoretical visibility is indicated by the ZTV on higher ground along the eastern side of Glen Cassley (approximately 6-27km distance); on high ground and southeast facing slopes along Strath Tirry / A836 to the south (approximately 20-40km distance); on high ground to the east beyond Glen Achany (approximately 15-20km distance); and along the Kyle of Sutherland to the east, as far as the Dornoch Firth and the edge of the Study Area.

- 8.113 In this case, although the proposed development is visible from an area of Rugged Mountain Massif Caithness and Sutherland LCT 139 (which the applicant refers to as Irregular Massive LCA), the perceived experience of this area may be altered as visibility of the proposed development introduces different external, contextual characteristics despite its physical location in another, separate area. As noted above the current application sits principally within the Landscape Character Area (LCA) of Rounded Hills Caithness and Sutherland (NatureScot LCT 135). As such the interrelationship with other landscape characters should be considered. It is clear that the area does have its own character, but this does not form one contiguous mass but is enclosed to the north south and east by Strath LCT. As such the proposed development has to be considered in terms of the existing and emerging pattern of wind energy development, together with cumulative and sequential effects. Whilst the amended design has some positive aspects there are still some negatives ones that need to be understood.
- 8.114 It is accepted that the design of the wind farm has had to balance landscape character and visual amenity; environmental constraints; topography and ground conditions; and technological and operational requirements. The applicant has explained for each viewpoint how the design has sought to address the receptor(s) at the viewpoint. In this case, it is considered that the development has been appropriately designed to address most of the constraints, with the turbines presented in a simplistic cohesive line from a number of key viewpoints. This simplistic design has had a positive impact in terms of key views particularly when viewed from some of the more elevated views and from the A837. The amended design has seen a reduction in the extent of turbines and there are slight improvements in composition from a number of viewpoints. By reducing the number of turbines, the result has led to a reduction of the impacts even though there are complex landscapes within the study area.
- 8.115 In terms of design of the other infrastructure on the site (control building / substation and tracks), these appear to be sited to principally avoid deep peat. The substation

are both located to the southern boundary and will likely be visible to travellers on the A837. The turbines have been sited approximately 1.7km back from the A837, some screening is afforded by the topography and forestry. It is likely that the infrastructure (control building / substation and tracks) on the lower ground will be afforded the most screening from the residual forestry and topography. However, the design of this requires to be progressed from the standard uninspiring designs as shown indicatively in the EIAR. This could be secured by condition. The applicant has confirmed that the transformers will be contained within the turbine nacelle.

- 8.116 The relationship with other wind energy schemes in the area, can be seen from the more distant and elevated viewpoints as seen from VP8 (Carn a Choin Deirg), VP10 (Carn Chuinneag), VP14 (Lairg, Fire Station), VP16 B9176 (Struie Viewpoint), VP17 (Ben More Assynt) and from the Wild Land Viewpoints WL1 (Beinn a Chaisteil) and WL2 (Beinn Sgeireach). It is considered that, the location, design and scale of the scheme is similar to the surrounding wind farms. The proposed development's relationship with other wind energy schemes in the area has generally been well considered with the wind farm maintaining its own distinctive setting in accordance with the criterion set out in the OWESG. There are limited receptors who would experience the visual effects of existing wind farms to the south, southeast and west unless on higher ground. Similar to the existing wind energy developments in the area the proposed development would be located in an elevated position within the Rounded Hills LCT. Although the much of the existing wind energy in the area is generally located within the Rounded Hills LCT they are each within different landscape features resulting in each scheme appearing as a distinctly separate scheme. In this instance the proposed development, similar to Sallachy Wind Farm presents as a simplistic linear scheme with the most significant visual effects limited to within 5 - 6.5km.
- 8.117 The relationship between settlements/key locations and the wider landscape is considered against Landscape and Visual Assessment Criteria contained within Section 4 of the OWESG, Criterion 1. The nearest settlements identified within the Local Development Plan are Ardgay located approximately 13.5km southeast, Bonar Bridge, located approximately 14.5km southeast, Lairg, located approximately 16km to the northeast and Rosehall, located 5km to the north. The views from the northeast and around the settlement of Lairg, will be limited to the higher ground VP14 (Lairg Fire Station). The views from Ardgay and Bonar Bridge are limited to blades / blade tips as they are screened by the topography. The views from the lower ground within the settlements are also screened by the topography, landform and manmade features. The proposed development is considered to meet the threshold of Criterion 1 as set out in Appendix 3 of this report.

Landscape Impact

8.118 Whilst the EIAR (and subsequent EIAR-SI) predicts that in the most part the proposed development will not have a significant impact on the landscape resource within the study area, it does identify some localised effects on the areas that are closer in proximity to the site, and mostly contained to 2km from the proposed development. Whilst significant cumulative effects would occur on the Strath LCT as a result of the existing Rosehall and Achany wind farms, the consented Braemore wind farm, and the proposed development being sequentially visible from this part of the strath. As

such, the EIAR identifies the potential for these significant effects to arise on the landscape character of the site and some parts of its surroundings.

- 8.119 There are several aspects to consider in determining whether this development represents an acceptable degree of impact on landscape character, including:
 - impacts on the local landscape composition closer to the development;
 - impacts on the Landscape Character Area (LCA) as a whole and on neighbouring LCAs; and,
 - compliance with THC Onshore Wind Energy Supplementary Guidance as it relates to Landscape Sensitivity.
- 8.120 The assessment undertaken by the applicant has identified the additional following LCAs within a 40km study area:
 - 135 Rounded Hills Caithness and Sutherland (Moorland Slopes and Hills as referred to within the EIAR/EIAR-SI);
 - 139 Rugged Mountains Massif Caithness and Sutherland (Irregular Massive as referred to within the EIAR/EIAR-SI);
 - 142 Strath Caithness and Sutherland; and
 - 145 Farmed and Forested Slopes within Crofting (Small Farms and Crofts as referred to within the EIAR/EIAR-SI).

All other LCTs were not assessed due to distance and limited theoretical visibility of the proposed development.

- 8.121 The applicant also notes Coniferous Woodland Plantation that although is not identified in either Caithness and Sutherland landscape character assessment (SNH, 1998) or Scottish Landscape Character Types Map and Descriptions (NatureScot, 2019) as an LCT or LCA, it considers the applicant considers it to be a landscape element (a component part of landscape character) that is unlikely to be unaffected by the proposed development which is not located within forestry.
- 8.122 The host landscape character of the Rounded Hills LCT would be directly affected by the proposed development. Moving away from the site area, other areas of landscape character could be indirectly affected by views of the proposed development (notably the turbines) and through effects on their key perceptual characteristics and qualities such as 'wildness' or 'naturalness'. The Rounded Hills LCT is extensive and covers large parts of the 40km study area looping around the Strath LCT at the River Oykel. Within the Rounded Hills LCT there is a host of characteristics, of most significant is that there is the rolling hills forming broad, subtly rounded summits and fragments of broadleaf woodland in inaccessible locations. Another key characteristic of this LCT is that wind farms are generally located in more accessible and generally lower rolling hills, either close to extensive forestry or the high voltage transmission line.
- 8.123 Significant effects on the Rounded Hills LCT would be limited to within 2km from the proposed development. Beyond 2km inter-visibility with the turbines is largely restricted by landform and / or forestry and magnitude of change on the remaining areas of this part of the LCT would reduce to between Medium and Zero leading to a Moderate effect or less that would not be significant. The combined cumulative effect would be similar with both the additional and the combined cumulative magnitude

being High within up to 2km distance from the proposed development, leading to a Substantial / Moderate and significant effect. Other existing and consented wind farm development has a Low, indirect magnitude of change on this LCT, characterising the eastern views towards other areas of the LCT.

- 8.124 The EIAR considered each of the surrounding LCTs located within 10km of the proposed development and found that none of these landscapes would be directly affected by the proposed development as the turbines and associated infrastructure would not be located within them, and there would be no change to their physical characteristics. Potential effects on these landscapes would be limited to indirect effects on the key visual or perceptual characteristics of these landscapes, resulting from views of wind turbines. The assessment considered the likely change to landscape character and as such it is different from the visual assessment of particular views, experienced by people.
 - 8.125 Strath LCAs are generally known for creating linear spaces, with open floors typically containing a river or loch. The degree of enclosure of the strath is dependent on the height and steepness of containing hill slopes with many straths strongly contained by steep-sided Rounded Hills Caithness & Sutherland, although a few are more open where they border the lower and more gently undulating Sweeping Moorland and Flows or are associated with larger loch basins. The EIAR found that there would be a Moderate and significant cumulative effect on the eastern end of the Strath LCT, within 6.5km of the proposed development, due largely to the combined effects of the existing, consented and proposed development that would be visible from within this area. No other areas of landscape character would be significantly affected.
- Another principle LCT in the close vicinity is Rugged Mountain Massif Caithness and 8.126 Sutherland LCT (139) and the closest summit is Cam Salachaidh (649mAOD) and Viewpoint 8: Carn a Choin Deirg (701mAOD) to the south of the proposed development site and Beinn Dearg (1084mAOD) to the southwest that the proposed development has been assessed against. The mountains are contiguous with the north eastern edge of the Beinn Dearg range (although that summit is approximately 24km distanced from the proposed turbines). This area extends southwest and south from Viewpoint 8 at Carn á Choin Deirg and is within the Fannichs, Beinn Dearg and Glencalvie SLA and the WLA 29 which indicate a High landscape sensitivity. The ZTV pattern within this area is limited to north facing slopes and summits (Carn á Choin Deirg 701m AOD and Carn Alladale 636m AOD) at 6-10km distance, with much of this overlapping with the ZTV for other existing and consented wind farms further north. Visibility of the proposed Development would not significantly alter or affect the landscape character of this area and the magnitude of change would range from Low to Negligible with large areas of Zero magnitude. The level of effect on the landscape character of this area would be Moderate to Slight and not significant. The addition of the proposed development would introduce a further wind farm that would align with the general background of other existing and consented wind farm development as shown in Viewpoint 8 (Carn a Choin Deirg). The presence of the existing and consented wind farms (Low to Negligible magnitude), although further away, would partly reduce the additional cumulative effects of the proposed development to Slight and not significant. The combined cumulative effects would however remain Moderate to Slight and not significant, taking account of all wind farm development.

- 8.127 The settlements closest to the proposed development are generally contained with the landscape character Farmed and Forested Slopes with Crofting LCT. This forms enclosed bowls surrounded by elevated hill and upland moorland landforms. This LCT represents a key area in terms of landscape transition as routes from the south and east emerge from Strath landscapes and converge into northwards routes which disgorge from the Farmed and Forested Slopes with Crofting to the more expansive moorland and rounded hills and lochs landscapes to the north and west. Although there is no theoretical visibility from much of the lower distant ground there is some theoretical visibility as seen from VP11 (Ardgay Church) and VP13 (Bonar Bridge, Migdale Road). It is therefore agreed that the applicant's assessment of effects to be not significant is accurate.
- 8.128 In terms of Criterion 10 of the OWESG the proposed development will have some localised adverse effects principally on the host LCT, however these effects are not considered to significantly affect key characteristics of the LCT or the experience from within LCAs. Furthermore, the interplay of different LCAs which come together to from the local composite landscape character would not be undermined by the proposed development interrupting the relationship between them.
- 8.129 As well as assessing the effect of the proposed development itself, the LVIA assesses the cumulative effect that may arise when the proposed development is added to various scenarios of operational, under-construction, consented and applicationstage wind farms. The cumulative assessment concludes that when the proposed development is added to operational and under-construction wind energy developments, there will be some significant cumulative effects that will arise.
- 8.130 Most significant cumulative effects occur when the proposed development is viewed with other wind energy development. In this case there are localised significant effects predicted on the Strath LCT around the Kyle of Sutherland due to the addition of the proposed development to Rosehall, Achany, Braemore and Sallachy wind farms, resulting in influential development to the north and south of the LCT. That being said it is considered that the existing pattern of development of wind energy also generally occupies sites in elevated positions within the Rounded Hills LCT with the exception of Strath Tirry. As such the proposed development is not out of character for the area around Central Sutherland.

Dornoch Firth NSA and Fannichs, Beinn Dearg and Glencalvie SLA

8.131 NSAs represent Scotland's finest landscapes and areas of outstanding scenery and as such have been assessed as of High sensitivity. SPP, paragraph 212 requires that the proposed development should not affect the objectives and overall integrity of these designations or that any "significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance." Similarly, Policy 57 of the HwLDP states: "For features of national importance, we will allow developments that can be shown not to compromise the natural environment, amenity and heritage resource. Where there may be any significant adverse effects, these must be clearly outweighed by social or economic benefits of national importance. It must also be shown that the development will support communities in fragile areas who are having difficulties in keeping their population and services."

- 8.132 The development lies approximately 12.5km from the Dornoch Firth NSA (VP18 A9, Dornoch Bridge and VP16 B9176, Struie Viewpoint) and approximately 3km from Fannichs, Beinn Dearg and Glencalvie SLA (VP8 Carn a Choin Deirg and VP10 Carn Chuinneag). The applicant has assessed the effects that the proposed development may have on the 'special landscape qualities' (SLQs) of the NSA in line with NatureScot's 'Guidance for Assessing the Effects on Special Landscape Qualities' (SNH, November 2018).
- 8.133 The NatureScot (formerly SNH) guidance, 2010, outlines 7 Special Landscape Qualities (SLQ) of the Dornoch Firth NSA as:
 - The contrast between the enclosed west and the expansive east
 - Inhabited surrounds within a wilder backdrop of hills and moors
 - A wide diversity of woodland cover
 - A rich variety of alluvial lands, dunes and links
 - The ever-changing firth
 - The tranquillity of an undeveloped coastline
 - Migdale, a microcosm of the wider Dornoch Firth
- 8.134 The proposed development is located outwith the NSA, with the nearest turbine lying approximately 14km to the northeast of the western NSA boundary. There is very little visibility of the proposed development from land within the NSA. The proposed development as shown on the blade tip ZTV (Figure 7.8) the proposed development has very limited visibility the key viewpoints are VP16 (B9176, Struie Viewpoint) and VP18 (A9, Dornoch Bridge). Viewpoints 11 (Ardgay, Church Street) and 13 (Bonar Bridge, Midgdale Road) are also important as they both lie just to the west of the NSA boundary. However, as no part of the proposed development is located within the NSA, and predicted effects on its SLQs would be the result of visibility of the proposed development. The EIAR assessed each viewpoint as a Negligible magnitude of change and a Slight visual effect that would not be significant. The proposed development would appear within the wilder backdrop of rounded hills and or on the horizon from within the NSA and as such it is agreed that the effects on the special qualities would not be significant.
- 8.135 Special Landscape Areas (SLA) represent landscapes and features of local / regional importance and value within THC area. Policy 57 of the HwLDP states: "For features of local/regional importance we will allow developments if it can be satisfactorily demonstrated that they will not have an unacceptable impact on the natural environment, amenity and heritage resource." The Fannichs, Beinn Dearg and Glencalvie SLA covers an extensive area of mountains and moorland (52,000 ha) on both sides of the A835 Garve-Ullapool road and includes the mountain peaks of the Fannichs, Beinn Dearg and the peaks of Freevater, upper Strath Vaich, Dibidale, Glencalvie and Amat as well as the Corrieshalloch Gorge and most Strath More. The main special quality, likely to be affected by the proposed development is the 'powerful sense of isolation and wildness'.
- 8.136 The SLA although locally designated is indicative of High to Medium value and overlaps with WLA 29 which is of High value. The landscape is of High susceptibility to wind farm development due to the wild land qualities of remoteness, wildness, naturalness and the general lack of settlement or other development within this area.

As a result, the SLA is assessed as of High landscape sensitivity. More than half of the SLA is located beyond 20km distance from the proposed development with theoretical visibility limited to 1-3 blade tips from a few mountain summits. At between 10-20km distance the ZTV is still very limited affecting the views from mountain summits that include Seana Bhraigh (Munro 927m AOD), Beinn á Chaisteil (Corbett 787m AOD, see Viewpoint 19) and Beinn Tharsuinn (Graham 714m AOD), none of which would be significantly affected (all Low to Negligible magnitude). A small proportion of the SLA is located within 10km (13.9%) and the nearest point on the SLA boundary to the proposed turbines is 4km. Within 10km the SLA is overlapped by the ZTV affecting the north and northeast facing slopes and minor summits within the Glencalvie Forest and the northeast facing slopes of Carn á Choin Deirg (Viewpoint 8 Carn a Choin Deirg, Low magnitude) at 6km distance.

- 8.137 Viewpoint 8 Carn á Choin Deirg: This summit is not well walked and the visual effects, although significant (Moderate) relate to views outwith the SLA towards other existing and consented wind farm development, such that the landscape effect on the special qualities of the SLA would be Slight (Negligible magnitude) and not significant. A similar assessment is made in respect of other minor summits in this area such as Carn Alladale.
- 8.138 Viewpoint 10 Carn Chuinneag: The estate track along Glen Calvie leads beyond the estate landscape south to access the Carn Chuinneag (Corbett) and passes evidence of past settlement. The screening effects of landform, trees and mixed woodland, along with the intervening distance mean that views from this area would be partial (Low to Negligible), limited in extent and Moderate to Slight and not significant. The main estate lodges including Alladale, Glencalvie and Glencalvie Falls and many of the glens and straths in this area are all outwith the ZTV and would have no visibility of the proposed development. In this case it is not considered that the introduction of the proposed development would significantly detract from the expansive panoramas obtained from the mountain summits beyond that of the consented and operational development. Furthermore, the proposed development is located approximately 4km beyond the SLA boundary. None of the main features or locations of importance would be significantly affected. The magnitude of change affecting this part of the SLA (within 10km) and in particular it's special qualities of 'isolation and wildness' would be Low to Zero and the level of effect Moderate to Slight and not significant. In terms of cumulative effect the proposed development would to the introduce a further wind farm to the baseling that would align with the general background of other existing and consented wind farm development as shown in Viewpoint 8 (Carn a Choin Deirg). The presence of the existing and consented wind farms (Low to Negligible magnitude), although further away, would partly reduce the additional cumulative effects of the proposed development to Slight and not significant. The combined cumulative effects would however remain Moderate to Slight and not significant, taking account of all wind farm development.
- 8.139 In terms of this SLQ of both the NSA and SLA it is considered that the proposed development presents as a compact, well-balanced, simple designed wind farm that ensures it relates well to the landform setting and avoids eye-catching effects of gapping and clustering or overlapping from key views. The ZTV (Figure 7.8) to have very intermittent visibility, 1 3 turbines which is mostly blade only. Subsequently,

NatureScot have not raised any concerns in relation to NSAs or SLAs special qualities.

Wild Land Areas

- 8.140 Wild Land Areas (WLA) are of national importance with High sensitivity and as such have been assessed as of High sensitivity. Scottish Planning Policy (SPP), para. 200, advises that WLAs are "very sensitive to any form of intrusive human activity and have little or no capacity to accept new development". Accordingly, and in relation to renewable energy development, WLAs fall into the SPP, Spatial Framework 'Group 2: Areas of Significant Protection' which advises that although significant protection is needed, wind farm development, within WLAs, may only be appropriate in some circumstances, as follows:
 - "Recognising the need for significant protection, in these areas wind farms may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation."
- 8.141 No element of the proposed development is within a Wild Land Area; however it is in relative proximity at 4.5km to Wild Land Areas WLA29 Rhiddoroch Beinn Dearg Ben Wyvis located to the southwest of the proposed development and 6km to WLA34 Reay Cassley located to the north of the proposed development. There are no other WLAs within 25km from the proposed development, therefore there are unlikely to be significantly affected, as indicated by the ZTV (Figure 7.8) and were scoped out as agreed by NatureScot.

WLA34 Reay – Cassley

- 8.142 The applicant's study area for this wild land assessment considers the whole of the WLA34, but it is specifically focused on 2 areas of ZTV coverage, located closest to the proposed development. The study areas and the associated WLA assessment viewpoints with the EIAR are listed as follows:
 - Area A: West of Glen Cassley:
 - Closest area of ZTV coverage within 7-14km of the Proposed Development, assessment viewpoints include:
 - Beinn an Eion, Beinn Rosail and Carn Beag along the WLA boundary.
 - Area B: East of Glen Cassley:
 - ZTV coverage within 10-27km of the Proposed Development, assessment viewpoints include:
 - Viewpoint WL2: Beinn Sgeireach; and
 - Carn Nam Bò Maola and Aonach a' Choire Bhuig along the WLA boundary.
 - Remaining Area: Smaller fragments of ZTV coverage beyond 20km from mountain summit areas of Ben More Assynt, mainly within the Assynt – Coigach NSA to the north of the Proposed Development:
 - Viewpoint 17: Ben More Assynt;
 - Conival (Munro); and
 - 3 Corbetts: Breabag, Glas Bheinn and Beinn Leoid

A total of 2 wild land assessment viewpoints are illustrated in Figures 7.10a-f and 7.34 and include Viewpoints 17: Ben More Assynt and 20 / WL 2: Beinn Sgeireach.

- WLA 34: Reay Cassley extends over 560km2 to the north of the proposed 8.143 development within northwest Scotland that appear to extend uninterrupted into each other, creating a larger expanse of wild land when viewed from mountain summits. WLA 34 extends as a large linear area beyond the 40km Study Area boundary and comprises the mountain complex of Ben More Assynt and the Assynt – Coigach NSA in the north and two long lobes of peatland slopes and rounded hills between Glen Cassley and Strath Oykel (Area A) and between Glen Cassley and Loch Shin (Area B). The WLA Description notes that this WLA is often viewed from the A837 (views from the A837 are assessed later in the report which would not be significantly affected) and the A838 and A894 both of which are outwith the ZTV. The Assynt -Coigach NSA description notes that the "Assynt and Coigach present a landscape unparalleled in Britain..." and "the landscape presents a stark but harmonious juxtaposition of rocky landscapes of mountain, moorland and coast". Key attractions within the WLA are noted as the Eas a' Chùal Aluinn waterfall and the Bone Caves near Inchnadamph, both of which are outwith the ZTV and would have no view of the proposed development.
- 8.144 The 4 wild land qualities identified in the WLA Description are listed as follows:
 - 1. "A range of large, irregular, rocky mountains with steep, arresting slopes and a variety of lochs and lochans, possessing a strong sense of naturalness, remoteness and sanctuary."
 - 2. "An awe-inspiring, broad scale expanse of cnocan in which there is a complex pattern of features at a local level that contribute to the sense of naturalness and sanctuary."
 - 3. "A variety of spaces created by irregular landforms in which there is perceived naturalness, as well as a strong sense of sanctuary and solitude."
 - 4. "Extensive, elevated peatland slopes whose simplicity and openness contribute to a perception of awe, whilst highlighting the qualities of adjacent mountains."
- 8.145 The proposed development could affect the strong perceptual responses of 'naturalness', 'remoteness' 'sanctuary' and 'solitude' that relates to 3 of the wild land special qualities (Nos.1-3) and wild land special quality 4 which relates to Study Areas A and B: "Extensive, elevated peatland slopes whose simplicity and openness contribute to a perception of awe, whilst highlighting the qualities of adjacent mountains." The closest wind farm development is Rosehall and Achany, which are located 2km from the edge of the WLA boundary in the south of Study Area B (area east of Glen Cassley). Others are visible at Lairg (and the Lairg Extension application) to the southeast and the Braemore consent to the south beyond Rosehall and Achany. Beinn Tharsuinn, Coire na Cloiche and Novar and Extension may also be visible in the far distance to the south from some locations.
- 8.146 WLA 34: Reay Cassley contains 2 Munros and 3 Corbetts and the effect of the proposed development on the views from each of these has been assessed within the EIAR. In all cases the visual effect would be Slight to No View and not significant. The proposed development would not make a significant contribution to any cumulative effects. The Cape Wrath Trail is part routed through WLA 34 and there would be no view of the proposed development from that section of the route.

- 8.147 Given that other wind farms are viewed from a large portion of the southern 'legs' the overall effect of reducing the strength of WLQ1 and 4 is reduced, and therefore would not affect the integrity of this key characteristic. The proposed development is outwith the WLA and 7km distance from its nearest boundary. The effect would be limited to effects on the perceptual responses and related special qualities ('naturalness', 'remoteness', 'sanctuary', 'solitude' and 'simplicity' and 'openness') that would indirectly affect the WLA. The effect of the proposed development on WLA 34: Reay Cassley would not be significant due to the location of the proposed turbines at least 7km distance from the WLA boundary and the simple design and layout of the proposed turbines that reflects and 'fits' with the underlying simplicity of the Rounded Hills LCT and landform within which it is situated.
- 8.149 The Proposed Development would be viewed out from the WLA, appearing in a location that is often clearly beyond the WLA boundary and other existing wind farm development (Rosehall and Achany, wind farms, which appear closer to the boundary) and viewed in the context of higher levels of other development and contemporary landuse in the south around Loch Shin, Lairg, Strath Oykel and along the Kyle of Sutherland. Although appearing slightly to the right, the proposed development would be clearly associated with this cluster of wind farm development, appearing simultaneously in the view with other existing wind farm development.
- 8.149 NatureScot have advised that the proposed turbines would have adverse effects on wild land qualities in the south eastern end of WLA 34. However, areas close enough to experience significant adverse visual effects are also affected by existing human artefacts and contemporary land use albeit the proposed turbines are larger than the existing turbines and would lie further west between WLAs 34 and 29, affecting the sense of WLA 34 being extensive. Other areas in WLA 34 with views of the turbines are more limited or distant such that effects would be negligible to none. NatureScot consider therefore that in the areas to the south around Areas A and B the wild land qualities 1 and 4 would be adversely affected, but that this effect would modified by distance and so would not be significant.

WLA 29 Rhiddoroch – Beinn Dearg – Ben Wyvis

- 8.150 The Study Area for this wild land assessment considers the whole of the WLA 29, but it is specifically focused on 3 areas of ZTV coverage, located closest to the proposed development. The study areas and the associated WLA assessment viewpoints are listed as follows:
 - Area A: Carn á Choin Deirg: Closest area of ZTV coverage to the southwest within 4.5-10km of the Proposed Development, includes assessment viewpoints:
 - Viewpoint 8: Carn á Choin Deirg.
 - Area B: Glencalvie:

ZTV coverage to the south within 5-12km of the Proposed Development, includes assessment viewpoints:

- Viewpoint 10: Carn Chuinneag; and
- Glencalvie Forest at Cnoc na Tuppart.

• Area C: Rhiddoroch Forest:

ZTV coverage to the west within 12-20km of the Proposed Development, includes assessment viewpoints:

- Cnoc Damh.
- Remaining Area: Smaller fragments of ZTV coverage beyond 10km mainly from mountain summit areas, including the views from 3 Munros and 5 Corbetts.
- 8.151 WLA 29: Rhiddoroch Beinn Dearg Ben Wyvis is one of Scotland's larger WLAs (905km2) within northwest Scotland that appear to extend uninterrupted into each other, creating a larger expanse of wild land when viewed from mountain summits. WLA 29 extends across an 'oval-shaped' area, approximately 55km in length between Ullapool in the northeast and Ben Wyvis in the southeast. The area is approximately 25km wide, extending from the route of the A835 to the northeast and focuses on 3 areas as follows:
 - Rhiddoroch Forest: Located in the north the WLA and is lower lying (no Munros or Corbetts) and composed of cnocan and open peatland hills. The Landscape Character Types (LCT) within this area are High Rocky Moorland and Plateau, Rounded Hills and Moorland Slopes and rounded Hills. The North Coast 500 follows its western boundary and paths are indicated on the OS 1:50,000 scale map. The area lacks any features of tourist or visitor interest, being used mainly for stalking and fishing.
 - Beinn Dearg: This is the central and highest area of the WLA, focused on the Beinn Dearg mountain complex which includes the Rugged Mountain Massif and Rounded Hills LCTs. Much of this area is overlapped by the Fannichs, Beinn Dearg and Glencalvie Special landscape Area (SLA) and contains 6 Munros and 4 Corbetts. The area is used for hill walking / mountain biking, stalking and fishing and the route of the North Coast 500 follows its western boundary. The Cape Wrath Trail is routed through Glen Douchary and Glen Einig to the north (outwith the ZTV) and there are several hills tracks and paths routed through the straths and glens in this area.
 - Ben Wyvis: The Ben Wyvis area forms a smaller area of the WLA to the south, focused on the Ben Wyvis mountain (a Munro) and Little Wyvis (a Corbett) which is set apart from the Beinn Dearg complex and composed of Rounded Mountain Massif and Rugged Mountain Massif LCTs. Much of this area is overlapped by the Fannichs, Beinn Dearg and Glencalvie SLA and the area is used for hill walking / mountain biking, stalking and fishing.

The WLA Description notes that this WLA is often viewed from the A835 in the south and west (outwith the ZTV) and the A837 in the north (views from the A837 are assessed later in this report but would not be significantly affected). The SLA description is noted as "a powerful sense of isolation and wildness amidst physically challenging terrain …" and a "series of quite uninhabited glens … where solitude and isolation are key characteristics".

- 8.152 The 4 wild land qualities identified in the WLA Description are listed as follows:
 - 1. "A range of awe-inspiring massive, high rounded hills and plateaux, as well as steep rocky peaks and ridges, offering elevated panoramas.

- 2. Long and deep penetrating glens with steep, arresting side slopes that limit views, some containing access routes and clearly influenced by estate management.
- 3. A very large interior with a strong sense of remoteness and sanctuary that seems even more extensive where appearing to continue into neighbouring wild land areas.
- 4. Rocky hills, cnocan and peatland slopes that appear simple and awe-inspiring at a broad scale, but harbour intricate features at a local level, as well as a strong sense of sanctuary and solitude." (additional emphases in bold).
- 8.153 The EIAR reports that proposed development could affect 3 of the Wild Land special qualities (qualities 1, 3 and 4) and the associated perceptual responses which include the 'elevated panoramas', and the 'strong sense of remoteness and sanctuary and solitude' that is experienced from the interior of the WLA (the Beinn Dearg complex) and rocky hills, cnocan and peatland slopes that occur in the north (Rhiddoroch Forest) and southeast (Glencalvie area). The WLA Description notes "extensive conifer plantations and settlement forms an arc around from the north to the east and south, creating a more defined edge in these directions" which is in contrast to the north, west and south where the views extend over wild mountain areas, extending into neighbouring WLAs further in these directions. The proposed development would be viewed in the context of this more 'defined edge 'of the WLA and viewed in the context of "extensive areas of human elements and contemporary land use which can be seen beyond the margins of the WLA.
- 8.154 Although views of other wind farms are not mentioned within the WLA Description, they do occur as illustrated in the visualisations. The closest wind farm development is Novar and Extension, 3km from the edge of the WLA boundary and others are visible in the eastern hemisphere to the south, east and northeast. The WLA Description advises in relation to wind farms as follows:
 - "elements that extend up onto elevated slopes or tops are more prominent and can appear to encroach more directly upon the experience of the WLA where intervening development within the straths is screened. This may be the case even if the elements themselves lie outside the WLA; for example wind farms, masts, conifer plantations and fences. If cumulative effects occur, these may also appear more encroaching, especially if they seem to collectively encircle part of the wild land area."

Although the proposed development is elevated from the straths, its elevation is relatively low compared to other parts of the WLA and as indicated by the ZTV there are some locations where it would be visible as the only wind farm in the view. It would not however add to 'encirclement' as the proposed turbines would generally be viewed in the same 60° sector of view as other existing and consented wind farms, often overlapping with Rosehall, Achany and / or Braemore, sufficiently to reduce its additional cumulative effect. Visibility of existing and consented are visible wind farms from most of the mountain summits within the WLA 29 affecting the eastern views in an arc from the north to the east. The main wind farms that are visible include the Rosehall, Braemore and Achany wind farms to the northeast; Beinn Tharsuinn, Coire na Cloiche and Novar and Extension to the east; and the Corriemollie and Lochluichart and Extension to the south. A number of these wind farms are located closer to the boundaries of WLA's (4 are within 1-3km) and in the case of the Creag Rhiabach and Sallachy windfarms are partly within the boundary of WLAs.

- 8.155 The EIAR reports that overall theoretical visibility of the proposed development, and the likelihood that it would affect the perceptual responses and special qualities of the WLA is limited. This is particularly the case in respect of central Beinn Dearg mountain area and the Ben Wyvis. Patches of ZTV coverage are located along the closest part of the WLA boundary to the Proposed Development (Study Area A), the Glencalvie Forest (Study Area B) and the Rhiddoroch Forest area (Study Area C).
- 8.156 NatureScot note that the impacts of the proposal would be largely concentrated in the northeast and east of this WLA. However, there would be limited visibility in the south and west of this WLA due to screening by eastern landforms. The eastern part of the WLA faces toward the east coast containing views of operational wind farms with which the proposed turbines would often be seen. As the description notes '…extensive areas of human elements and contemporary land use can be seen around the outside edge of the WLA in all directions except to the north west... These elements indicate the edge of the area, but their effects on wild land qualities within the WLA itself are limited where they appear concentrated within neighbouring low-lying strath floors.' NatureScot considers that he proposed turbines would bring wind energy development considerably closer to the northeast and east of the WLA with the next nearest wind farm being twice as far away and, due to their larger size and location on higher ground, would be more prominent than existing wind farm and would therefore exert a greater effect on the following wild land qualities: .
 - WLQ. 1 A range of awe-inspiring massive, high rounded hills and plateaux, as well as steep rocky peaks and ridges, offering elevated panoramas

NatureScot considers there will be significant adverse effects on the sense of remoteness from the wide open elevated panoramas to the east and north and from the easternmost summits and east-facing outer slopes within this WLA. In these areas it considers that the proposed turbines would not benefit from the screening which benefits other developments, and the turbines would appear closer. While this is the case officers considered that the scheme sits within the same visual envelope as existing development which is a mitigating factor to the effect;

• WLQ. 3 A very large interior with a strong sense of remoteness and sanctuary that seems even more extensive where appearing to continue into neighbouring wild land areas

NatureScot consider that despite the vast scale of the interior and the distance to the scheme from the interior of the WLA that the turbines would have an adverse impact on the perceived extent as well as the sense of remoteness and sanctuary of the WLA. In doing so it considers that the proposed development's contrasting scale of turbines will add complexity to the view, partially due to the way the turbines lie in an elevated position between wild land areas. It has also highlighted that the turbines appear above Strath Cuileannach on land that appears to be part of the WLA. Officers acknowledge the impact that the proposals may have on this wild land area quality given the turbines will appear more prominent than those existing turbines but consider the presence of existing turbines largely within the same visual envelope is a mitigating factor. WLQ. 4 Rocky hills, cnocan and peatland slopes that appear simple and awe-inspiring at a broad scale, but harbour intricate features at a local level, as well as a strong sense of sanctuary and solitude: NatureScot considers that views of turbines will allow people to orientate themselves, reducing both a sense of remoteness and resulting risk. In addition it also sets out that it is also difficult to perceive distance within most of the interior, where there is an absence of human artefacts to provide scale indicators. It considers that the visibility of the Meall Buidhe turbines would provide scale indicators reducing the perceived extensiveness of this area. Officers consider that there would be an affect in relation to this matter but do not consider it to be significant due to the intervening distance and the way in which the turbines relate to the landform.

NatureScot have advised that there would be no effect on wild land quality 2 - Long and deep penetrating glens with steep, arresting side slopes that limit views as there would be no visibility of the proposed turbines from these enclosed features. No impacts are anticipated on other Wild Land Areas.

- 8.157 The EIAR finds that as the proposed development is outwith the WLA and 4.5km from the nearest boundary the effect would be limited to effects on the perceptual responses and related special qualities that would indirectly affect the WLA. It notes that there would be no significant effects on the special qualities of WLA 34 or on the Munros, Corbetts, the Cape Wrath Trail or other visitor attractions within the WLA. The simplistic design and layout of the proposed turbines conforms with the landscape character and landform. It is considered that this reduces any potential for adverse effects on the special qualities of the WLA It is recognised that there could be effects but these are not considered to be significant.
- 8.158 The proposed development would overlap with the other wind farm development or appear simultaneously within the same sector to the view and would not significantly extend the potential for wind farm development to 'encircle' the WLA. The proposed development would appear in front of other wind farms, closer to the WLA boundary, but still experienced at sufficient distance, such that the magnitude of change affecting the special qualities and perceptual responses would, in part be mitigated.
- 8.159 The proposed site is located in an area with potential for wind farm development, that is made more suitable by the existing landscape character, forestry and landform of the area. These factors act to reduce the sensitivity of the site area and limit both the visibility of the scheme and number of people close to the site who might be impacted view the proposed turbines. Significant landscape effects are restricted to an undesignated area of Rounded Hills LCT and views of the proposed development from the A837, a minor road, 3 local footpaths and part of Rosehall, within the Kyle of Sutherland. Due to the intervening distances there would be no instances of a 'substantial' landscape or visual effect, and the proposed turbines would generally be viewed at 5-6km distance or more and seen within a landscape setting that is able to accommodate the scale of the development.
- 8.160 There would be no significant effects on any landscape planning designations. There are however residual effects, albeit not significant, in relation to the impacts on the special qualities of the Wild Land Areas. These effects on the special qualities of the Wild Land Areas are considered to be acceptable given the intervening distance between receptors in the Wild Land Areas and the proposed turbines, as well as the

visibility and influence of existing wind farm development in the area.. Significant visual effects would be limited to views from within a small area affecting part of Rosehall, the A837 and local footpaths. Overall, the design mitigation secured by officers along wit the mitigation by design brought forward by the applicant has reduced the landscape based impacts of the Proposed Development are reduced as far as possible and through the simple and clear design of the Proposed Development the proposed turbines, where visible, can be viewed as acceptable in landscape terms.

Visual Impacts

- 8.161 The applicant's assessment has indicated that significant visual effects are likely to be contained within approximately 6.5km of the proposed development. It does however consider that in some circumstances it may extend beyond those distances.
- 8.162 The Council considers visual impact using the Criterion set out in Section 4 of the Onshore Wind Energy Supplementary Guidance (OWESG), with the Council's assessment against the criterion and view as to whether the threshold set out in the guidance is met or not, contained in Appendix 3 to this report. There is a difference between the applicant's assessment and the appraisal of the Planning Authority. This is to be expected because a visual impact assessment is dependant on professional judgement while largely dependent on the application of professional judgement. The information in Appendices 2 and 3 combined with matters as set out below, explain the difference between the outcomes of the assessments.
- 8.163 The visual receptors for the development have been assessed in the EIAR. The applicant has undertaken a detailed visual impact assessment at each of the 18 viewpoints, focussing on the effect on the receptors at the viewpoint. The EIAR states that receptors at 5 of the 18 viewpoints would have the potential to be significantly affected by the proposed development. These viewpoints range in their proximity to the site and in most cases a new element is not introduced into the view and the cumulative impact with the consented development is taken into consideration. The views from the remaining viewpoints have not been assessed as significant by the applicant. It is considered that the intervening distance between the viewpoint and the scheme, the more limited magnitude of change. In this case, the baseline of a range of wind energy developments limits the effects as being assessed as significant.
- 8.164 The Zone of Theoretical Visibility (ZTV) contained in the EIAR indicates that the development would have limited visibility beyond 30 40km of the study area to the north, east and west. To the south there is very limited visibility beyond 10km with only small pockets of visibility beyond 10km. The development will be more visible between 10 20km to the north, east and west but visibility is limited due to the intervening topography. Within 10km, the development becomes visible from most areas. As would be expected, visibility of hub heights generally contracts to higher ground following the pattern as described above (Figure 7.2).
- 8.165 Whilst a large-scale wind energy scheme would be expected to result in Significant visual impact effects, the Council, through the OSWESG, also acknowledges that s significant effects does not automatically translate to unacceptable acceptable effects. Following a review of the applicant's assessment the main points of difference, in the Council's view, is in relation to the applicant's assessment on Scale of Change

appears to under-represent the change to the baseline view that would be introduced by the development as a single development whereby a larger potential Scale of Change was noted at several viewpoints. Similarly, the same appears to be true for the applicant's assessment of the scale of extent of impact for a number of viewpoints, which leads to minor disagreement on the magnitude of change and significance of effect experienced by receptors VP3 (A837 Kyle of Sutherland), VP9 (A839 Rosehall – Lairg), VP16 (B9176 Struie Viewpoint), VP17 (Ben More Assynt) and VP18 (A9 Dornoch Bridge). There are some minor disagreements in relation to Sensitivity of Receptor at VP2 (A837 Edge of Rosehall), VP5 (A837 Linsidemore), VP8 (Carn a Choin Deirg), VP10 (Carn Chuinneage). However, there is only a difference in level of effect assessed in relation VP10 (Carn Chuinneage) and VP17 (Ben More Assynt) where the Level of Effect was found to be significant.

- 8.166 A summary of the applicant's assessment and the Council Officer's appraisal of the assessment which highlights the differences and any concerns with regard to visual impact can be found in Appendix 2 of this report. It is clear from the EIAR and the Design and Access Statement that the applicant has tried, where possible, to reduce any potential landscape and visual effects through the proposed design and layout of the turbines. It is considered that in doing so they have created a wind farm which appears to be appropriately designed for the landscape it would sit within and takes account of visual features of the area.
- 8.167 In coming to an opinion on the acceptability of this development, the design changes secured by officers have played an important factor and should be given some weight. The changes negotiated have resulted in the development having an improved composition from several viewpoints, with the turbines now appearing more evenly spaced, presenting a more balanced scheme. The simplistic design of a single, even row of turbines has also mitigated some visual effects. It is considered that these changes are most noticeable in Viewpoints 3 (A837 Kyle of Sutherland), 5 (A837 Linsidemore), VP6 (Inveroykel Bailey Bridge), VP7 (Altass), VP8 (Carn a Choin Deirg), VP9 (A839 Rosehall Lairg) and VP16 (B9176 Struie Viewpoint), despite some significant effects still predicted. The proposed development has reduced the level of visibility from sensitive receptors, key locations and routes. The amended scheme has also reduced the extensive spread of turbines across the Rounded Hills LCT.
- 8.168 What follows is a summation of the visual impacts from specific viewpoints which represent a range of residential receptors, recreation users of the outdoors and road users:
 - Viewpoint 1 A837 Tuiteam. This viewpoint is representative of road users and is approximately 4.9km from the nearest turbine. The turbines would be largely screen by topography but those limited turbines which are in view tend to be limited to blade tips with the exception of one turbine which is visible with a full rotor and part of the tower. The modifications secured by officers are not so apparent from this view, but do lead to some reduction in horizontal extent of the development through the removal on two turbines from view. It is not considered that the effect from this location is significant by either the applicant or Officers.
 - Viewpoint 2 A837 Edge of Rosehall. This viewpoint is representative of views experienced by road users and the settlement of Rosehall. The turbines would

present as an evenly spread array of turbines between two landforms at a distance of 5.3km to the nearest turbines. The turbines progressively rise up from behind the landform and forestry, with the towers, blade and hubs of six out of eight turbines being visible. The removal of turbine 2 and the repositioning of other turbines has led to a reduced horizontal extent and a wind farm which would not dominate or overwhelm the view. It would however be a prominent feature. It is considered that there would be significant visual impact on road users and the settlement of Rosehall from this location.

- Viewpoint 3 A837 Kyle of Sutherland This viewpoint is representative of road users, and also recreational users of the outdoors on the A837 to the north of Lairg. Much of this route includes road-side vegetation which would screen the wind farm but a section of the route north of Inveran where this viewpoint is located is largely open with the wind farm sitting to your left as travelling north and right as travelling south. The wind farm would be at a distance of 5.9km and all eight turbines would be visible to almost their full heights. With that said, forestry provides a level of screening to three of the turbines. Following the changes secured to the development, the development would present as an evenly spaced array of turbines on the horizon largely following the landform and in scale with the surrounding landscape. It is considered that although the applicant has underplayed the magnitude of change which will be experienced by receptors at this viewpoint, that the significant effects identified can be considered acceptable.
- Viewpoint 7 Altass The viewpoint represents residential receptors and road users in vicinity of Altass at a distance of 6.5km from the nearest turbine. The changes sought by officers have reduced the horizontal spread of turbines in the view, improved the composition of the wind farm with the development now presenting a simple array against the underlying landform. With that said, the position on the horizon will mean it is a prominent feature at this location leading to a significant visual impact for receptors at this viewpoint. Rosehall and Achany Wind Farms are also visible from this area but in much closer proximity of around 3.5km, leading to significant cumulative impacts from this viewpoint.
- Viewpoint 8 Carn a Choin Deirg This viewpoint is located at the eastern edge of the Rhiddoroch, Beinn Dearg and Ben Wyvis Wild Land Area (WLA) at a distance of 6.4km. From this elevated viewpoint looking down toward the development, the scheme would present as a relatively compact and simple array bookended by the landforms adjacent to the scheme. In the view you would also see the Achany and Rosehall wind farms and the proposed Braemore and Achany Extension wind farms, turning around you would also see the operational Beinn Tharsuinn, Novar and Coire na Cloiche wind farms, which mean the magnitude of change from this viewpoint would be not be as significant given the presence of existing development. Albeit this increases the cumulative visual impact. The cumulative visual impact on receptors from this location would be moderate and significant but the individual impact would be moderate and not significant, largely as a result of siting and design. The impact on wild land qualities are discussed earlier in this report.
- Viewpoint 9 A839 Rosehall Lairg This viewpoint is located on the A839 between Rosehall and Lairg at a distance of 8.9km to the nearest turbine. The moorland between the receptor and the development foreshortens the view given the intervening strath floor can not be seen. This makes some of the

turbines appear closer than they area and affecting the viewers perception of depth and scale of the landscape. The turbines would present as a simple layout, related to the landform where it can be seen, however some of the turbines to the right hand side of the view would dwarf the landform which sits to the rear. With that said, the impact on the road based receptors at this viewpoint is considered to have a moderate but not significant effect.

- 8.169 Despite the scale of the proposed development, the turbines have limited visibility from the larger settlements of Ardgay, Bonar Bridge and Lairg. There is however theoretical visibility from the closest settlement of Rosehall and other dispersed communities around Strath Oykel. In terms of residential properties there are properties within 5km of the proposed development. However, as there are no residential properties within 2km of the proposed turbines the applicant has not undertaken a Residential Visual Amenity Assessment (RVAA). It is agreed that the proposed development would not have an overbearing effect at residential properties located outwith 2km distance from the development. Although there are no settlements within 2km of the proposed development the applicant has provided a visual assessment of views from key settlements (Rosehall, Lairg, Ardgay and Bonar Bridge), however no significant effects are predicted. It is therefore accepted that the effects would not render the properties within the key settlements as unattractive places to live. It should be noted that residential amenity also should consider other factors such as noise and shadow flicker. These are covered elsewhere in this report.
- 8.170 The applicant has provided an assessment on the following recreational routes:
 - Cape Wrath Trail;
 - North Coast 500 (Viewpoint 18, Dornoch Bridge);
 - National Cycle Route 1, also the A836 Altnaharra to Tain (Viewpoints 11; Ardgay Church, 14: Lairg Fire Station and 15: A836 Easter Fearn; and
 - Core Paths (within the study area)

The EIAR found that there were no significant effects on any recreational routes due to distance and limited visibility. The principal core paths were around Rosehall where visibility was limited to short views, or the proposed development was not in the direction of the view. Cape Wrath Way, one of Scotland's National Trails, located in the wider study area. This route is shown on the ZTV to gain very limited visibility of the proposed development and where there is visibility the proposed development is well screened by forestry, as such it is not considered that there would be significant effects either individually or cumulatively on this route. Similarly, core paths in the study area are primarily located around settlements and are largely located outwith the 20 km study area. Within the 20 km radius, core paths are largely concentrated around Lairg and Rosehall, with three isolated paths also found to the west and northwest of the proposed development. The Rosehall paths are shown on the ZTV, however there is limited visibility of the proposed development due to the direction of the view and the screening afforded by forestry, however there may be some localised significant effects on these routes. The EIAR found that there were no significant effects on any recreational routes due to distance and limited visibility.

8.171 In terms of transport routes there would be some localised significant visual effects, principally experienced from part of the A837 between Oykel Bridge and Linsidemore, affecting approximately 10% of the route and part of the minor road through Altass

Moor, both within the western end of the Kyle of Sutherland. There would be no significant visual effects on the views from the minor roads through Glen Cassley; Inveroykel; and Strathcarron, or the A839 as a whole. The viewpoint analysis has also confirmed that the views from the A837 Loch Assynt / Oykel Bridge to Invershin, A836, A949, A839, A9, the B9176 and the North Coast Railway line Dingwall to Golspie via Lairg, would not be significantly affected. All or most of the A9, A838, A835, A832 and the A862 would be outwith the ZTV and would have no view of the proposed development and would not otherwise be significantly affected.

Noise, Vibration and Shadow Flicker

- 8.172 The applicant has carried out a noise assessment which did not find any significant effects in relation to construction activities, construction traffic, operation of wind turbines and operation of other non-turbine fixed plant. The EIAR found that the predicted wind turbine noise levels associated with the operation of the proposed development would be below the ETSU simplified standard of 35dB LA90 both individually and cumulatively. The applicant has confirmed following first operation of the proposed development a noise compliance test will be commissioned to determine compliance with the consented noise limits. Should there be any exceedances of noise limits attributable to the proposed development identified then an operational noise management plan would be implemented to ensure noise limits are met. The Highland Council's Environmental Health officer does not raise any concerns in relation to the applicant's noise assessment but does recommend that a noise limit of 2dB above predicted levels is attached to any consent.
- 8.173 The EIAR assessed that there would be no impact on any properties within the shadow flicker study area. The study area in respect of the shadow flicker analysis was applied equating to 11 x rotor diameter, which adheres to guidance set out in the OSWEG to take account of the northerly latitudes. Although no shadow flicker effects are predicted, the turbine model developed will be installed with a programmable module which can control the operation of each wind turbines under specific parameters. The programme can therefore shut down a problematic wind turbine during specific time periods, if necessary.
- 8.174 As the applicant does not anticipate any vibration effects, they were therefore scoped out and not assessed within the EIAR.

Telecommunications

8.175 There are no unresolved objections with regard to aviation interests, with no outstanding concerns being raised by the Civil Aviation Authority, Highlands and Islands Airports Limited, Ministry of Defence or National Air Traffic Services. Should the proposal be granted permission, a condition can be applied to secure suitable mitigation in terms of aviation lighting and notification to the appropriate bodies of the final turbine positions.

Aviation

8.176 There are no unresolved objections with regard to aviation interests, with no outstanding concerns being raised by the Civil Aviation Authority, Highlands and Islands Airports Limited, Ministry of Defence or National Air Traffic Services. Should

the proposal be granted permission, a condition can be applied to secure suitable mitigation in terms of aviation lighting and notification to the appropriate bodies of the final turbine positions.

Other Material Considerations

- 8.177 Given the complexity of wind farm developments, and to assist in the discharge of conditions, the Planning Authority seek that the developer employs a Planning Monitoring Officer (PMO). The role of the PMO, amongst other things, will include the monitoring of, and enforcement of compliance with, all conditions, agreements and obligations related to this permission (or any superseding or related permissions) and shall include the provision of a bi-monthly compliance report to the Planning Authority.
- The applicant has advised that at the end of their operational life, if the decision is 8.178 made to decommission the wind farm, all turbine components, transformers, substation and associated buildings and infrastructure will be removed from the site. The Planning Authority also requires that any foundations remaining on site; the exposed concrete plinths would also be removed to a depth of 1m below the surface, graded with soil and replanted. Cables also require to be cut away below ground level and sealed. Whilst the applicant has indicated a preference to retain the new site tracks for landowner use, this is yet to be agreed as the Planning Authority expects all new tracks areas constructed during development of the wind farm to be reinstated to the approximate pre-wind farm condition, unless otherwise agreed with the landowner and/or Highland Council. The material used to construct the tracks to be taken up, removed to areas identified in a site restoration scheme, backfilled with suitable material and covered with topsoil/reseeded. Backfilling of access tracks would be carefully planned in advance to avoid having to move plant machinery and equipment on freshly reinstated land.
- 8.179 These matters will not be confirmed until the time of the submission of the Decommissioning and Restoration Plan (DRP). The DRP would be submitted to and approved in writing by the Planning Authority in consultation with NatureScot and SEPA no later than 12 months prior to the final decommissioning of the wind farm. The detailed DRP would be implemented within 18 months of the final decommissioning of the development unless otherwise agreed in writing with the Planning Authority.
- 8.180 The requirements to decommission and restore a wind farm site at its end of life is relatively standard and straight forward, with any request for re-powering to be considered with the submission of a relevant future application. It is important to ensure that any approval of this project secures by condition a requirement to deliver a draft decommissioning and restoration plan for approval prior to the commencement of any development and ensure an appropriate financial bond is put in place to secure these works.
- 8.181 In line with SPP, Highland Council policy and practice, community benefit considerations are undertaken as a separate exercise and generally parallel to the planning process. For this application it would include the financial contribution and the in-kind contribution to upgrade of broadband infrastructure.

- 8.182 The applicant has not shown a scheme to manage grid capacity during high and low demand times.
- 8.183 There are no other relevant material factors highlighted within representations for consideration of this application.

Matters to be secured by Legal Agreement / Upfront Payment

8.184 A wear and tear agreement for the impact on the local road network and a decommissioning and restoration financial guarantee can be secured by condition therefore no legal agreement is required prior to planning permission being granted.

Non-material considerations

8.185 The issues of constraint payments, impact on electricity prices of renewable energy development and community benefit are not material planning considerations.

9. CONCLUSION

- 9.1 The Scottish Government gives considerable commitment to renewable energy and encourages planning authorities to support the development of wind farms where they can operate successfully and situated in appropriate locations. The project has the potential to contribute to addressing the climate emergency through an additional 40MW of renewable energy being produced and through peatland restoration. However, as with all applications, the benefits of the proposal must be weighed against potential drawbacks and then considered in the round, taking account of the relevant policies of the Development Plan.
- 9.2 The application has attracted a large number of representation in objection and a number of representation in support. There are also outstanding objections from statutory consultees, this includes Rogart Community Council, NatureScot and Kyle of Sutherland District Salon Fisheries. In terms of the latter their concerns can be addressed through planning conditions.
- 9.3 Whilst the Planning Authority do recognise and acknowledge the potential significant impacts in relation to visual impacts and the adverse albeit not significant effects on wild land qualities, these are considered on balance to be acceptable when all matters are taken into account. The design iterations made during the application stage by the applicant in response to the Council's concerns are considered to have significantly improved the scheme through reduction in the horizontal extent and in presenting a more appropriately designed wind farm for the site. Further mitigation of the impacts will be secured by the recommended planning conditions, which includes peatland habitat restoration and road improvements. It is however considered that a scheme of a larger scale, either in terms of turbine numbers or turbine scale which would undermine the mitigation secured by officers, would not be appropriate in this location.
- 9.4 The Council has determined its response to this application against the policies set out in the Development Plan, principally Policy 67 of the Highland-wide Local Development Plan with its eleven tests which are expanded upon with the Onshore Wind Energy Supplementary Guidance. This policy also reflects policy tests of other

policies in the plan, for example Policy 28 and those contained within Scottish Planning Policy. In addition, the Council have considered the presumption in favour of development which contributes towards sustainable development, as per the requirements of Scottish Planning Policy. Given the above analysis, the application is, on balance, considered acceptable in terms of the Development Plan, national policy and is acceptable in terms of all other applicable material considerations.

9.5 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

10. IMPLICATIONS

- 10.1 Resource: Not applicable
- 10.2 Legal: Not applicable
- 10.3 Community (Equality, Poverty and Rural): Not applicable
- 10.4 Climate Change/Carbon Clever: If approved the proposed development has the potential to produce renewable energy and make a meaningful contribution to a net zero electricity network.
- 10.5 Risk: Not applicable
- 10.6 Gaelic: Not applicable

11. RECOMMENDATION

Action required before decision issued Y Committee Decision

Subject to the above actions, it is recommended to

GRANT the application for the following reasons

1. The Planning Permission is granted for a period of 28 years from the date of Final Commissioning, comprising an operational period of up to 25 years from the date of Final Commissioning and a period of up to 3 years for decommissioning and site restoration to be completed in accordance with a scheme to be approved under Condition 27 of this permission. Written confirmation of the Date of Final Commissioning must be provided to the planning authority no later than one calendar month after the event.

Reason: To clarify the terms of the permission as the permission sought is temporary and to define the duration of the consent.

- 2. There shall be no Commencement of Development until:
 - i. Full details of a guarantee, 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 27 of this permission have been submitted to, and approved in writing by, the planning authority. For the avoidance of doubt the bond must be able to be called upon by The Highland Council and be enforceable against the operator and landowner and/ or leaseholder; 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 guarantee, 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 financial provision is satisfactory has been issued by, the planning authority.

Thereafter, the Operator, and Leaseholder and/or Landowner, shall:

- i. Ensure that the guarantee, bond or other financial provision is maintained throughout the duration of this permission; and
- ii. Pay for the guarantee, 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 my 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 guarantee, 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 Operator, and Leaseholder and/or Landowner 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.
- 4. No development shall commence on site until a detailed scheme for the following mitigation (including scale plans as necessary), inclusive of timescales for delivery has been submitted to, and approved in writing by, the Planning Authority:
 - i. A visual and structural ondition survey of the A836, A837, A839 and A949 and Oykel Bridge Bridge shall be undertaken to establish a baseline for any widening and strengthening of the local road network and additional passing places required to facilitate the wind farm. Any widening or strengthening of the local road network shall be to a minimum width of 3.5m, a full width surface course overlay (with regulating to achieve appropriate camber and crossfall) to enhance structural integrity and provision. The scheme for widening and strengthening shall be based on current topographical surveys and shall include any necessary road drainage to allow the safe transport of the wind farm components. For the avoidance of doubt unless a greater width is required and agreed such as at passing places, junctions or for curve widening the width of permanent surfacing provided for the single track carriageway sections of the local road network shall be 3.5m. For two lane sections the width shall be a minimum of 6m. Any additional running width for the abnormal load movements shall be provided by strengthening of the verges and provision of a temporary running course. Within three months of completion of the abnormal load movements for the development the verges shall be reinstated;
 - ii. Widening works at junctions on the abnormal load route to remove horizontal and vertical constraints on the network for the delivery of turbine components and abnormal loads. The widening works at junctions shall be based on current topographical surveys and shall include any necessary road drainage to allow the safe transport of the wind farm components. Provision of an engineering assessment of the carriageway strength of the proposed HGV construction traffic routes and their suitability to support the significant increase in loading for all the proposed HGV construction traffic routes where the increase in HGV usage above existing HGV flows is greater than 10%. A scheme to provide suitable full width strengthening and any necessary re-shaping of the carriageway based on any shortfall identified in the agreed assessment;
 - iii. Stage 2 RUSA undertaken; and
 - iv. Details of Provision of road markings and signage to accompany the proposed works.

Thereafter the upgrades and other work approved under parts i-iii above shall be completed to the satisfaction of the Planning Authority before commencement of construction, or as otherwise agreed in writing with the Planning Authority.

Reason: To increase the structural integrity of the road to ensure that it is adequate to serve this development and to address the cumulative change in character of the existing road network as a result of this development and in the interests of road safety.

5. No development or works shall commence until the detailed design of the access junction, visibility splays, road markings and its associated infrastructure and signage has been submitted to and approved in writing by the Planning Authority.

Reason: In the interests of safe access and egress from the site.

6. Design and operation of turbines

No turbines shall be erected until 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;
- ii. The external colour and/or finish of the turbines to be used (including towers, nacelles and blades) which should be non-reflective pale grey semi-matt;
- iii. The maximum height of the turbine from base to tip not exceeding 149.9m;
- iv. The maximum blade diameter on each turbine no greater than 115m;
- v. A maximum tower height of 92m on all turbines, with the exception of Turbine 9 which shall have a maximum tower height of 87m; and
- vi. The turbines must have internal transformers.

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.

Reason: To ensure that only the turbines as approved are used in the development and are acceptable in terms of visual, landscape, noise and environmental impact considerations.

7. Advertisement on Infrastructure

None of the wind turbines, anemometers, power performance masts, switching stations or transformer buildings / enclosures, ancillary buildings or above ground fixed plant shall display any name, logo, sign or other advertisement (other than health and safety signage) unless otherwise approved in advance in writing by the Planning Authority

Reason: To in the interests of the visual amenity of the area and compliance with Town and Country Planning (control of advertisements) (Scotland) regulations 1984.

8. Design of ancillary development

No development shall commence on the control building, substation and or ancillary infrastructure until final details of the location, layout, external appearance, dimensions and surface materials of all buildings, compounds, parking areas, as well as any external lighting, fencing, walls, paths and any other ancillary elements of the development, have been submitted to, and approved in writing by, the planning authority. Thereafter, development shall progress in accordance with these approved details.

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

9. Micro-siting

All wind turbines, buildings, masts, areas of hardstanding and tracks shall be constructed in the location shown on plan reference Figure SI5.1B. Wind turbines, buildings, masts, areas of hardstanding and tracks may be adjusted by micro-siting within the site. However, unless otherwise approved in advance in writing by the Planning Authority (in consultation with SEPA and NatureScot, micro-siting is subject to the following restrictions:

- a. No wind turbine foundation shall be positioned higher, when measured in metres Above Ordinance Datum (Newlyn), than the position shown on Figure SI5.1B;
- b. No wind turbine, building, mast or hardstanding shall be moved more than 50m from the position shown on the original approved plans;
- c. No access track shall be moved more than 50m from the position shown on the original approved plans or be located within areas of peat of greater depth than the original location;
- d. Micro-siting shall take place to avoid sensitive peatland habitat;
- e. No micro-siting shall take place within areas hosting Ground Water Dependent Terrestrial Ecosystems;
- f. No wind turbine or associated infrastructure will be microsited to areas with peat depths greater than 1m;
- g. No element of the proposed development should be located closer than 50m to the top of the bank of any watercourse; and
- h. All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works (ECoW).

No later than one month after the date of First Commissioning, an updated site plan must be submitted to the Planning Authority showing the final position of all wind turbines, masts, areas of hardstanding, tracks and associated infrastructure forming part of the Development. The plan should also specify areas where micro-siting has taken place and, for each instance, be accompanied by copies of the ECoW or Planning Authority's approval, as applicable.

Reason: To control environmental impacts while taking account of local ground conditions.

10. Blasting

Blasting shall only take place on the site between the hours of [10.00 to 16.00 on Monday to Friday inclusive and 10.00 to 12.00 on Saturdays], with no blasting taking place on a Sunday or on national public holidays, unless otherwise approved in advance in writing by the planning authority.

Ground vibration from blasting shall not exceed a peak particle velocity of 6mm/second at agreed blasting monitoring locations. The measurement shall be the maximum of three mutually perpendicular directions taken at the ground surface.

Reason: To ensure that blasting activity is carried out within defined timescales to control impact on amenity and in accordance with best current practice.

- 11. No development shall commence until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent ("PMO"). The terms of appointment shall;
 - a. Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent;
 - b. Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
 - c. Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

Reason: To enable the development to be suitably monitored to ensure compliance with the consent issued.

12. Ecological Clerk of Works

There shall be no Commencement of Development unless the Planning Authority has approved in writing the terms of appointment by the Company of an independent Ecological Clerk of Works (ECoW) in consultation with NatureScot and SEPA. The terms of appointment shall;

- a. Impose a duty to monitor compliance with the ecological and hydrological commitments provided in the environmental statement and other information lodged in support of the application, the Construction and Environmental Management Plan, the Habitat Management Plan approved in accordance with condition 13, [any species or habitat management plans identified in the Environmental Statement] and other plans approved ("the ECoW works");
- b. Require the EcoW to report to the Company's nominated construction project manager any incidences of non-compliance with the ECoW works at the earliest practical opportunity;
- c. Require the ECoW to submit a monthly report to the Planning Authority summarising works undertaken on site;
- d. Have power to stop to the job / activities being undertaken within the development site when ecological interests dictate and/or when a breach or potential breach of environmental legislation occurs to allow for a briefing of the concern to the Company's nominated construction project manager; and
- e. Require the ECoW to report to the Planning Authority any incidences of non-compliance with the ECoW Works at the earliest practical opportunity.

The EcoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post construction restoration works approved.

No later than 18 months prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier), the Company shall submit details of the terms of appointment by the Company of an independent ECoW throughout the decommissioning, restoration and aftercare phases of the Development to the Planning Authority for approval in consultation with NatureScot and SEPA. The ECoW shall be appointed on the approved terms throughout the decommissioning, restoration and aftercare phases of the Development.

Reason: To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development.

- 13. No development shall commence until a finalised Construction Environmental Management Document is submitted to and agreed in writing by the Planning Authority in consultation with SEPA and other appropriate consultees as appropriate. The document shall include provision for:
 - a. An updated construction stage Schedule of Mitigation (SM);
 - b. Processes to control / action changes from the agreed Schedule of Mitigation; and

- c. The following specific Construction and Environmental Management Plans (CEMPs):
- I. Details of the construction works, construction methods and surface treatment for all hard surfaces and tracks;
- II. Method of construction of the crane pads;
- III. Method of construction of the turbine foundations;
- IV. Method of working cable trenches;
- V. Method of construction and erection of the wind turbines;
- VI. details of watercourse crossings designed to 1 in 200 year flood risk event plus 20% for climate change;
- VII. Details of the temporary site compounds, for the storage of materials and machinery, including the areas designated for offices, welfare facilities; fuel storage and car parking;
- VIII. Peat Management Plan to include details of all peat stripping, excavation, storage and reuse of material in accordance with best practice advice published by SEPA and NatureScot. This should also highlight how sensitive peat areas are to be marked out on-site to prevent any vehicle causing inadvertent damage;
 - IX. Water Quality Management Plan highlighting drainage provisions including monitoring / maintenance regimes, water crossings, surface water drainage management (SUDs) and development and storage of material buffers (50m minimum) from water features, unless otherwise agreed in writing by SEPA and The Highland Council's Flood Risk Management Team;
 - X. Public and Private Water Supply Protection Measures Plan;
- XI. Pollution Prevention Plan;
- XII. Site Waste Management Plan;
- XIII. Construction Noise Mitigation Plan; and
- XIV. Species Protection Plan(s): including badger, pine marten, bat, otter, water vole and reptile.

The pre construction survey for legally protected species is carried out at an appropriate time of year for the species, at a maximum of 12 months preceding commencement of construction, and that a watching brief is then implemented by the Ecological Clerk of Works (ECOW) during construction. The species that should be surveyed for include, but are not limited to, breeding birds, bat, badger, electrofishing surveys, otter, reptiles and water vole for example.

Provision of a communication plan to ensure all contractors are aware of the possible presence of protected species frequenting the site and the laws relating to their protection;

The notification and a stop the job commitment requirements set out below:

Should an otter holt, or badger sett be found during construction, all works within 250m of the holt or sett shall stop immediately and the NatureScot Golspie office be notified and asked for advice.

Should any water vole activity be found during construction, all works within 10m of the nearest burrow shall stop. Work may progress if it is in excess of 10m of the nearest burrow, otherwise work shall stop immediately and the NatureScot Golspie office be notified and asked for advice.

- XV. Site Construction Decommissioning Method Statement highlighting restoration/ reinstatement of the working areas not required during the operation of the Development, including construction access tracks, borrow pits, construction compound, storage areas, laydown areas, access tracks, passing places and other construction areas. Wherever possible, reinstatement is to be achieved by the careful use of turfs removed prior to construction works. Details should include all seed mixes to be used for the reinstatement of vegetation;
- XVI.A Construction Method Statement for the approval of the Planning Authority in consultation with NatureScot and SEPA incorporating the mitigation measures set out in the Peat Landslide Hazard and Risk Assessment; and
- XVII. A Construction Environment Management Plan incorporating appropriate mitigation for the Ground Water Dependent Terrestrial Ecosystems as outlined in the EIAR Chapter 7 and Chapter 15.

Unless otherwise agreed in writing by the Planning Authority the development shall then proceed in accordance with the approved CEMD.

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

14. Traffic Management Plan

No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and approved by, the Planning Authority in consultation with the relevant Roads Authority(s) and Transport Scotland. The CTMP, which shall be implemented as approved during all period of construction and decommissioning, must include:

- i. A schedule of structures on the local road network which form part of the HGV construction traffic routes and the abnormal load traffic routes which require structural assessment to be carried undertaken;
- ii. A load assessment of the A837, A836, A839 and A949 structures, which shall include an assessment of any and all loads which will be transported (inclusive of construction vehicles, plant and machinery) which may be used in the construction of the development;
- iii. A description of all measures to be implemented by the developer in order to manage traffic during the construction phase (incl. routing strategies), with any additional or temporary signage and traffic control undertaken by a recognised suitably qualified traffic management consultant;

- iv. A scheme of mitigation to safeguard the safety and the condition of the structures during the period of construction traffic has been submitted to and agreed in writing by the Planning Authority. The scheme of mitigation shall be informed by the load assessment and it shall include a pre-start inspection; arrangements for undertaking regular inspection of the structures; arrangements for reporting any deterioration and for carrying out maintenance due to the extraordinary level of traffic; consideration of Traffic Management measures for Heavy Goods Vehicles during construction of the development; and details of any necessary works to the bridge and the road over the bridge and the immediate approach to the bridge in order to facilitate the safe passage of the proposed construction traffic;
- v. The identification and delivery of all upgrades to the public road network, including but not limited to upgrades to the local and trunk road network to make it suitable for construction traffic, to ensure that it is to a standard capable of accommodating construction related traffic (including the formation or improvement of any junctions leading from the site to the public road) to the satisfaction of the Roads Authorities, including;
 - a. A detailed review of the routes to site for general construction traffic;
 - b. A review of the access route from final Port of Entry at either Lochinver or Invergordon ;
 - c. An initial route assessment report for abnormal loads and construction traffic, including swept path analysis and details of the movement of any street furniture, any traffic management measures and any upgrades and mitigations measures as necessary;
 - d. An assessment of the capacity of existing bridges and other structures along the construction access routes to cater for all construction traffic, with upgrades and mitigation measures proposed and implemented as necessary;
 - e. A videoed trial run to confirm the ability of the local road network to cater for turbine delivery. Three weeks notice of this trial run must be made to the local Roads Authority who must be in attendance;
 - f. No deliveries by abnormal indivisible loads shall take place until a final assessment of the capacity of existing bridges and structures along the abnormal indivisible load delivery route is carried out and submitted to and approved by the Planning Authority and full engineering details and drawings of any works required to such structures to accommodate the passage of

abnormal indivisible loads have been submitted to and approved by the planning authority, thereafter the approved works shall be completed prior to the abnormal indivisible load deliveries to the site.

- vi. A risk assessment for the transportation of abnormal loads to site during daylight hours and hours of darkness;
- vii. A contingency plan prepared by the abnormal load haulier. The plan shall be adopted only after consultation and agreement with the Police and the respective roads authorities. It shall include measures to deal with any haulage incidents that may result in public roads becoming temporarily closed or restricted;
- viii.A procedure for the regular monitoring of road conditions and the implementation of any remedial works required during construction / decommissioning periods;
- ix. A detailed protocol for the delivery of abnormal loads/vehicles, prepared in consultation and agreement with interested parties. The protocol shall identify any requirement for convoy working and/or escorting of vehicles and include arrangements to provide advance notice of abnormal load movements in the local media. Temporary signage, in the form of demountable signs or similar approved, shall be established, when required, to alert road users and local residents of expected abnormal load movements. All such movements on Council maintained roads shall take place outwith peak times on the network, including school travel times, and shall avoid local community events;
- A detailed delivery programme for abnormal load movements, which shall be made available to Highland Council and community representatives;
- xi. Details of any upgrading works required at the junction of the site access and the public road. Such works may include suitable drainage measures, improved geometry and construction, measures to protect the public road and the provision and maintenance of appropriate visibility splays;
- xii. Details of appropriate traffic management which shall be established and maintained at the site access for the duration of the construction period. Full details shall be submitted for the prior approval of Highland Council, as roads authority;
- xiii.Wheel washing measures to ensure water and debris are prevented from discharging from the site onto the public road;
- xiv.Appropriate reinstatement works shall be carried out, as required by Highland Council, at the end of the turbine delivery and erection period;

- xv. Measures to ensure that construction traffic adheres to agreed routes;
- xvi.A concluded agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 under which the developer is responsible for the repair of any damage to the local road network that can reasonably be attributed to construction related traffic. As part of this agreement, prestart and post-construction road condition surveys must be carried out by the developer, to the satisfaction of the Roads Authority(s). It will also require the submission of an appropriate financial bond acceptable to the Council in respect of the risk of any road reconstruction works.

Thereafter the approved scheme of mitigation shall be implemented to the satisfaction of the Planning Authority.

Reason: To maintain safety for road traffic and ensure the structural integrity of the structures on the road is adequate to serve this development and to address the cumulative change in character of the existing road network as a result of this development and in the interests of road safety.

15. Community Liaison Group

No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and affected 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 co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments. The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the wind farm construction has been completed and is fully operational.

Reason: To assist project implementation, ensuring community dialogue and the delivery of appropriate mitigation measures for example to minimise potential hazards to road users, including pedestrians, travelling on the road networks.

16. Outdoor Access Management Plan

No development shall commence until an Access Management Plan, has been submitted to, and agreed in writing by, the Planning Authority. The plan should ensure that public access is retained in the vicinity of Meall Buidhe Wind Farm during construction, and thereafter that suitable public access is provided during the operational phase of the wind farm. The plan as agreed shall be implemented in full, unless otherwise approved in writing with the Planning Authority. **Reason:** In the interests of securing and enhancing public access rights.

17. Habitat Management Plan

There shall be no Commencement of Development unless a habitat management plan has been submitted to and approved in writing by the Planning Authority in consultation with NatureScot and SEPA. The habitat management plan be based on the principles of the outline Habitat Management Plan (December 2021) shall set out proposed habitat management of the wind farm site during the period of construction, operation, decommissioning, restoration and aftercare of the site, and shall provide for the maintenance, monitoring and reporting of habitat management across the wind farm site. Specifically this shall include details of enhancement to peatland and blanket bog across the application site for an area of no less than 111ha.

The approved habitat management plan will include provision for regular monitoring and review to be undertaken to consider whether amendments are needed to better meet the habitat plan objectives. In particular, the approved habitat management plan will be updated to reflect ground condition surveys undertaken following construction and prior to the date of Final Commissioning and submitted to the Planning Authority for written approval in consultation with NatureScot and SEPA.

Unless otherwise agreed in advance in writing with the Planning Authority, the approved habitat management plan shall be implemented in full.

Reason: In the interests of good land management and the protection of habitats.

18. Deer Management Statement

No development shall commence until a deer management statement has been submitted to and approved in writing by the Planning Authority in consultation with NatureScot. The deer management statement shall set out proposed long term management of deer using the wind farm site and shall provide for the monitoring of deer numbers on site from the period from Commencement of Development until the date of completion of restoration.

The approved deer management statement shall thereafter be implemented in full.

Reason: In the interests of good land management and the management of deer.

19. No trees within the application site, shall be cut down, uprooted, topped, lopped (including roots) or wilfully damaged in any way, without the prior written permission of the Planning Authority.

Reason: In order to ensure the protection of retained trees, which are important amenity assets, during construction.

20. Peat Landslide Management

No development shall commence until a detailed peat landslide risk assessment, addressing construction phase of the development and post-construction monitoring, has been approved in writing by the Planning Authority.

The peat landslide risk assessment shall comply with best practice contained in "Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments" published by the Scottish Government in January 2007, or such replacement standard as may be in place at the time of submission of the peat landslide risk assessment for approval. The peat landslide risk assessment shall include a scaled plan and details of any mitigation measures to be put in place.

The approved peat landslide risk assessment shall thereafter be undertaken in full prior to Commencement of Development.

Prior to Commencement of Development, the Company shall appoint and pay for an independent and suitably qualified geotechnical engineer acceptable to the Planning Authority, the terms of whose appointment (including specification of duties and duration of appointment) shall be approved by the Planning Authority.

The Company shall undertake continuous monitoring of ground conditions during the construction and deforestation phases of the Development. Continuous analysis and call out services shall be provided by the geotechnical engineer throughout the construction phase of the Development. If a risk of peat failure is identified, the Company shall install such geotechnical instrumentation to monitor ground conditions as is recommended by the geotechnical engineer and shall monitor ground conditions. Any remediation work considered necessary by the geotechnical engineer shall be implemented by the Company to the satisfaction of the geotechnical engineer. Monitoring results shall be fed into risk analysis reports to be submitted to the planning authority on a quarterly basis during the construction and deforestation phases of the Development.

Reason: To minimise the risk of peat failure arising from the Development.

21. Shadow Flicker

No development shall commence until a scheme for the avoidance or mitigation of any shadow flicker experienced by residential and commercial properties situated within 11 rotor diameters of any turbine forming part of the Development and which lawfully exist or for which planning permission has been granted at the date of this consent has been submitted to and approved in writing by the Planning Authority. The approved mitigation scheme shall thereafter be implemented in full.

Reason: To offset impacts of shadow flicker on residential and commercial property amenity.

22. Television Reception

There shall be no Commencement of Development unless a Television Reception Mitigation Plan has been submitted to, and approved in writing by, the Planning Authority. The Television Reception Mitigation Plan shall provide for a baseline television reception survey to be carried out prior to the installation of any turbine forming part of the Development, the results of which shall be submitted to the Planning Authority.

For the avoidance of doubt the scheme shall include, but not be limited to:

- Details of publication and publicity for the scheme;
- Timescale for investigation of any claims within a reasonable timescale;
- details for reporting mechanism to the planning authority the number of complaints / claims;
- details of the length of the operation of the mitigation scheme. This shall be no less than 18 months of the first export of electricity from the site; and
- details of the bond to be placed with the planning authority to ensure funds are available to deliver the mitigation plan.

The approved Television Reception Mitigation Plan shall thereafter be implemented in full.

Any claim by any individual person regarding television picture loss or interference at their house, business premises or other building, made during the period from installation of any turbine forming part of the Development to the date falling twelve months after the date of Final Commissioning, shall be investigated by a qualified engineer appointed by the Company and the results shall be submitted to the Planning Authority. Should any impairment to the television signal be attributable to the Development, the Company shall remedy such impairment so that the standard of reception at the affected property is equivalent to the baseline television reception.

Reason: To ensure local television services are sustained during the construction and operation of this development.

- 23. Private Water Supplies
 - (1) No development shall commence unless and until a private water supplies method statement has been submitted to and approved in writing by the Planning Authority, detailing all mitigation measures to be delivered to secure the quality, quantity and continuity of water

supplies to properties which are served by private water supplies at the date of this consent and which may be affected by the Development.

- (2) The method statement shall include water quality sampling methods and shall specify abstraction points.
- (3) The approved method statement shall thereafter be implemented in full.

Reason: To maintain a secure and adequate quality water supply to all properties with private water supplies which may be affected by the development.

24. Redundant turbines

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 the site as a whole and electricity generated by each individual 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 unless otherwise agreed, 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.

Paragraph (i) and (ii) shall not apply if such outages are out with the operator's control or as a consequence of any emergency or requirement of National Grid. In these instances the planning authority shall be informed of the turbine shutdowns, reasons for the turbine shut downs and timescales for the outages within 5 working days of the turbines being switched off.

All decommissioning and reinstatement work required by this condition shall be carried out in accordance with the approved detailed Decommissioning and Reinstatement Plan (DRP), or, should the detailed DRP 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.

25. Aviation Safety

No development shall commence until the Company has provided the Planning Authority, Ministry of Defence, Defence Geographic Centre and NATS with the following information, and has provided evidence to the Planning Authority of having done so:

- the date of the expected commencement of each stage of construction;
- the height above ground level of the tallest structure forming part of the Development;
- the maximum extension height of any construction equipment; and
- the position of the turbines and masts in latitude and longitude.

Reason: In the interests of aviation safety.

26. Aviation Lighting

No development shall commence until the Company has submitted a scheme for aviation lighting for the wind farm to the Planning Authority for written approval. The scheme shall include details of infra-red aviation lighting to be applied. No lighting other than that described in the scheme may be applied at the site, other than as required for health and safety, unless otherwise agreed in advance and in writing by the Planning Authority.

No turbines shall be erected on site until the scheme has been approved in writing. The Development shall thereafter be operated fully in accordance with the approved scheme.

Reason: In the interests of aviation safety.

27. Site Decommissioning, Restoration and Aftercare

No development or works (excluding preliminary ground investigation which shall be permitted) shall commence until an Interim Decommissioning and Restoration Plan (IDRP) for the site has been submitted to, and approved in writing by, the Planning Authority in consultation with SEPA. Thereafter:

i. not later than 3 years prior to the decommissioning of the Development, the IDRP shall be reviewed by the Developer, to ensure that the IRDP reflects best practice in decommissioning prevailing at the time and ensures that site specific conditions, identified during construction of the site, and subsequent operation and monitoring of the Development are given due consideration. A copy shall be submitted to the Planning Authority for its written approval, in consultation with NatureScot and SEPA; and

ii. not later than 12 months prior to the decommissioning of the Development, a detailed Decommissioning and Restoration Plan (DRP), based upon the principles of the approved interim plan, shall be submitted to, and approved in writing by, the Planning Authority, in consultation with NatureScot and SEPA. The IDRP and subsequent DRP shall include, unless otherwise agreed in writing with the Planning Authority and in accordance with legislative requirements and published best practice at time of decommissioning details about the removal of all elements of the Development, relevant access tracks and all cabling, including where necessary details of (a) justification for retention of any relevant elements of the Development, b) the treatment of disturbed ground surfaces, c) management and timing of the works, d) environmental management provisions and e) a traffic management plan to address any traffic impact issues during the decommissioning period. The DRP shall be implemented as approved. In the event that the Final DPR is not approved by The Highland Council in advance of the decommissioning, unless otherwise agreed by the Planning Authority the Interim IDRP shall be implemented.

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

28. Water Quality and Fish Population Monitoring

No Development shall commence until an integrated hydrochemical and macroinvertebrate scheme for water quality monitoring and monitoring fish populations has been submitted to and approved in writing by the planning authority.

This shall include, but not necessarily be limited to:

- i. Frequency of monitoring, not less than once a month;
- ii. Reporting mechanism to the Planning Authority, Marine Scotland and SEPA being not less than quarterly;
- iii. Proposed method for agreeing mitigation required.

Thereafter, any mitigation identified shall be implemented.

Reason: In the interests of water quality management and protection and enhancement of the water environment.

29. Sustainable Drainage Systems

No development shall commence until full details of all surface water drainage provision within the application site (which should accord with the principles of Sustainable Urban Drainage Systems (SUDS) and be designed to the standards outlined in Sewers for Scotland Third Edition, or any superseding guidance prevailing at the time) have been submitted to, and approved in writing by, the Planning Authority. Thereafter, only the approved details shall be implemented and all surface water drainage provision shall be completed prior to the first occupation of any of the development.

Reason: To ensure that surface water drainage is provided timeously and complies with the principles of SUDS; in order to protect the water environment.

30. Noise

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

- A) Prior to the First Export Date, the wind farm operator shall submit to the Local Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Authority. No electricity shall be exported until the wind farm operator has submitted to the planning authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the planning authority.
- B) Within 21 days from receipt of a written request of the Local Authority, following a complaint to it alleging noise disturbance at a dwelling, the wind farm operator shall, at its expense, employ an independent consultant approved by the Local Authority to assess the level of noise immissions from the wind farm at the complainant's property (or a suitable alternative location agreed in writing with the Local Authority) in accordance with the procedures described in the attached Guidance Notes.

The written request from the Local Authority shall set out at least the date, time and location that the complaint relates to. Within 14 days of receipt of the written request of the Local Authority made under this paragraph (B), the wind farm operator shall provide the information relevant to the complaint to the Local Authority in the format set out in Guidance Note 1(e).

C) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Authority for written approval the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken.

Where the proposed measurement location is close to the wind turbines, rather than at the complainants property (to improve the signal to noise ratio), then the operators submission shall include a method to calculate the noise level from the wind turbines at the complainants property based on the noise levels measured at the agreed location (the alternative method). Details of the alternative method

together with any associated guidance notes deemed necessary, shall be submitted to and agreed in writing by the Local Authority prior to the commencement of any measurements.

Measurements to assess compliance with the noise limits of this condition shall be undertaken at the measurement location approved in writing by the Local Authority.

- D) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Authority for written approval a proposed assessment protocol setting out the following:
 - i) the range of meteorological and operational conditions (the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions.
 - ii) a reasoned assessment as to whether the noise giving rise to the complaint contains or is likely to contain a tonal component.

The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the information provided in the written request of the Local Authority under paragraph (B), and such others as the independent consultant considers necessary to fully assess the noise at the complainant's property. The assessment of the rating level of noise immissions shall be undertaken in accordance with the assessment protocol approved in writing by the Local Authority and the attached Guidance Notes.

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

- F) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c) of the attached Guidance Notes, the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (E) above unless the time limit for the submission of the further assessment has been extended in writing by the Local Authority.
- G) The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d) of the attached Guidance Notes. The data from each wind turbine shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) of the attached Guidance Notes to the Local Authority on its request within 14 days of receipt in writing of such a request.
- H) Where it is proposed to operate any turbine in a reduced running mode in order to meet the limits, no turbine shall be erected until a curtailment plan for the turbines has been submitted and approved in writing by the local planning authority. The curtailment plan shall demonstrate how the limits will be complied with and shall include the following:
 - i. Definition of each noise reduced running mode including sound power data;
 - ii. The wind conditions (speed & direction) at which any noise reduced running mode will be implemented;
 - iii. Details of the manner in which the running modes will be defined in the SCADA data or how the implementation of the curtailment plan can be otherwise monitored and evidenced.

The Curtailment Plan shall be implemented in accordance with the approved details.

I) Prior to the First Export Date, the wind farm operator shall submit to the Local Authority for written approval, a scheme of mitigation to be implemented in the event that the rating level, after adjustment for background noise contribution and any tonal penalty, is found to exceed the conditioned limits. The scheme shall define any reduced noise running modes to be used in the mitigation together with sound power levels in these modes and the manner in which the running modes will be defined in the SCADA data.

J) The scheme referred to in paragraph I above should include a framework of immediate and long term mitigation measures. The immediate mitigation measures must ensure the rating level will comply with the conditioned limits and must be implemented within seven days of the further assessment described in paragraph F being received by the Local Authority. These measures must remain in place, except during field trials to optimise mitigation, until a long term mitigation strategy is ready to be implemented.

Table 1 — Noise limits expressed in dB LA90,10 minute as a function of the measured wind speed (9 m/s) at 10 metre height as determined within the site averaged over 10 minute periods

Noise Sensitive Receptor	Easting	Northing	Noise Limit (2b above predicted levels)		
Lubachoinnich	241486	895472	28.2		
The Old Manse	245417	891423	28.3		
Croick Church	245677	891465	28.5		
Croick House	245906	891408	28.4		
Stalkers Cottage	246062	891383	28.4		
The Craigs	247590	891091	26.6		
Old Free Church	248641	891433	26.0		
East Amat	248803	891569	26.0		
Sgodachail Cottage	249228	892685	26.8		
The Schoolhouse	250387	892685	35.1		
Strathkyle Properties	252648	897552	22.7		
Badarach Properties	252253	898148	22.9		
Old Schoolhouse	251572	898168	24.1		
Old Croft / Wester Achnahanat	251194	898207	25.1		
Easter Kilmachalmack Properties	251009	898147	25.2		

Easter Kilmachalmack Properties 2	250693	898118	25.8		
Wester Kilmachalmack	250330	989324	26.3		
Birchfield	249365	899123	23.9		
Inveroykel Properties	246494	900882	23.8		
Tigh A Rhos	245858	900820	24.3		
River House	245497	900875	24.3		
Oape	245300	900725	24.7		
Carn Mholloch	245121	900740	25.3		
Easter Oape	244848	900713	24.7		
Upper Doune / Doune Properties	244374	900750	24.5		
Brae	243607	900997	23.4		
Lower Brae	243686	901025	23.4		
Langwell Baeg	243453	900703	24.0		
Langwell Lodge Properties	241644	901009	21.4		
Oykel Terrace 1-6	238903	900372	18.5		
Amat Cottage	239053	900065	19.1		
Keepers Cottage	239071	900000	19.2		

Guidance Notes for Noise Condition

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Note 3 with any necessary correction for residual background noise levels in accordance with Note 4. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Note 1

(a) Values of the L_{A90,10-minute} noise statistic should be measured at the complainant's property (or an approved alternative representative

location as detailed in Note 1(b)), using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated before and after each set of measurements, using a calibrator meeting BS EN 60945:2003 "Electroacoustics – sound calibrators" Class 1 with PTB Type Approval (or the equivalent UK adopted standard in force at the time of the measurements) and the results shall be recorded. Measurements shall be undertaken in such a manner to enable a tonal penalty to be calculated and applied in accordance with Guidance Note 3.

- (b) The microphone shall be mounted at 1.2 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone shall be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative representative measurement location.
- (c) The L_{A90,10-minute} measurements should be synchronised with measurements of the 10-minute arithmetic mean wind speed and wind direction data and with operational data logged in accordance with Guidance Note 1(d) and rain data logged in accordance with Note 1(f).
- (d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine, arithmetic mean power generated by each turbine and any data necessary to define the running mode as set out in the Curtailment Plan, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. Each 10 minute arithmetic average mean wind speed data as measured at turbine hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements determined as valid in accordance with Note 2(b), such correlation to be undertaken in the manner described in Note 2(c). All 10-minute periods shall commence on the hour and in 10-minute increments

thereafter synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary.

- (e) Data provided to the Local Authority shall be provided in comma separated values in electronic format with the exception of data collected to assess tonal noise (if required) which shall be provided in a format to be agreed in writing with the Local Authority.
- (f) A data logging rain gauge shall be installed in the course of the independent consultant undertaking an assessment of the level of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d). The wind farm operator shall submit details of the proposed location of the data logging rain gauge to the Local Authority prior to the commencement of measurements.

Note 2

- (a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b).
- (b) Valid data points are those measured during the conditions set out in the assessment protocol approved by the Local Authority but excluding any periods of rainfall measured in accordance with Note 1(f).
- (c) Values of the L_{A90,10-minute} noise measurements and corresponding values of the 10-minute standardised ten metre height wind speed for those data points considered valid in accordance with Note 2(b) shall be plotted on an XY chart with noise level on the Y-axis and wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) shall be fitted to the data points to define the wind farm noise level at each integer speed.

Note 3

- (a) Where, in accordance with the approved assessment protocol noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty shall be calculated and applied using the following rating procedure.
- (b) For each 10-minute interval for which LA90,10-minute data have been determined as valid in accordance with Note 2, a tonal assessment shall be performed on noise immissions during 2-minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure shall be reported.
- (c) For each of the 2-minute samples the tone level above audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.

- (d) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
- (e) A least squares "best fit" linear regression shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line fitted to values within ± 0.5m/s of each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Note 2.
- (f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below derived from the average tone level above audibility for each integer wind speed.





- (a) If a tonal penalty is to be applied in accordance with Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Note 3 at each integer wind speed within the range set out in the approved assessment protocol.
- (b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Note 2.
- (c) If the rating level lies at or below the noise limits approved by the Local Authority then no further action is necessary. In the event that the rating level is above the noise limits, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

- (d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:
 - i. Repeating the steps in Note 2, with the wind farm switched off, and determining the background noise (L₃) at each integer wind speed within the range set out in the approved noise assessment protocol.
 - ii. The wind farm noise (L_1) at this speed shall then be calculated as follows where L_2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left[10^{L_2/10} - 10^{L_3/10} \right]$$

- iii. The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L₁ at that integer wind speed.
- iv. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty lies at or below the noise limits approved by the Local Authority then no further action is necessary. If the rating level at any integer wind speed exceeds the noise limits approved by the Local Authority then the development fails to comply with the conditions.

Reason: In the interest of amenity.

31. Ornithological Monitoring

No development shall commence until the Planning Authority has approved in writing a scheme for the ongoing monitoring of Ornithology, including flight paths within and adjacent to the wind farm site. This shall include regular reporting to NatureScot and RSPB of the findings of the monitoring.

Reason: To enable the flight patterns of birds to be suitably monitored.

32. Biodiversity

No development shall commence until a scheme for the delivery of biodiversity net gain has been submitted to and approved in writing by the Planning Authority. This shall include mechanism for the delivery of the scheme. Thereafter the scheme shall be implemented prior to first export of electricity from the site and maintained throughout the operation and decommissioning of the development.

Reason: To ensure that the development secures positive effects for biodiversity.

33. Archaeology

- (1) No development shall commence unless and until a programme of archaeological works to be carried out during construction of the Development has been submitted to, and approved in writing by, the Planning Authority.
- (2) The programme of archaeological works shall include measures to be taken to protect and preserve any features of archaeological interest in situ and the recording and recovery of archaeological features which cannot be protected or preserved.
- (3) The approved programme of archaeological works (as amended from time to time with written approval of the Planning Authority) shall be implemented in full.

Reason: To ensure the protection or recording of archaeological features on the site.

Compensatory Woodland Planting Scheme

- (1) No development shall commence unless and until a woodland planting scheme to compensate for the removal of 0.56 hectares of existing woodland ("the Replanting Scheme") has been submitted for the written approval of the Planning Authority in consultation with Scottish Forestry.
- (2) The Replanting Scheme shall include:
 - (a) details of the location of the area to be planted;
 - (b) the nature, design and specification of the proposed woodland to be planted;
 - (c) the phasing and associated timescales for implementing the Replanting Scheme;
 - (d) proposals for reporting to the Planning Authority on compliance with timescales for obtaining the necessary consents and thereafter implementation of the Replanting Scheme; and
 - (e) details demonstrating compliance with The UK Forestry Standard and the Scottish Government's Policy on Control of Woodland Removal (as amended or replaced from time to time).
- (3) The approved Replanting Scheme (or, as the case may be, an approved amended Replanting Scheme) shall be implemented in full, unless otherwise agreed in writing by the Planning Authority in consultation with Scottish Forestry.

Reason: To secure replanting to mitigate against effects of deforestation arising from the Development.

Freshwater Pearl Mussel

- (1) No development shall commence unless and until a pollution prevention plan and species protection plan for freshwater pearl mussel in accordance with the recommendations of Technical Appendix 10.6: Freshwater Pearl Mussel (FWPM) Survey Report has been submitted to and approved in writing by the Planning Authority in consultation with NatureScot. Thereafter the Pollution Prevention Plan ans Species Protections Plan shall be implemented.
- (2) No development, construction or works in relation to decommissioning shall commence unless and until a pollution prevention plan and species protection plan for freshwater pearl mussel in accordance with the recommendations of Technical Appendix 10.6: Freshwater Pearl Mussel (FWPM) Survey Report has been submitted to and approved in writing by the Planning Authority in consultation with NatureScot. Thereafter the Pollution Prevention Plan ans Species Protections Plan shall be implemented.

Reason: To avoid an adverse impact on the integrity of the River Oykel Special Area of Conservation.

Schedule of Mitigation

No development shall commence unless and until as Schedule of Mitigation has been submitted to and approved in writing by the Planning Authority. The Schedule of Mitigation shall include:

- i. all mitigation identified in the Environmental Impact Assessment, Supplementary Environmental Information and the conditions of this planning permission;
- ii. a breakdown of timescales for implementation of each element of mitigation identified. This shall detail mitigation for the following stages of the development:
 - a) Pre-commencement;
 - b) Construction;
 - c) Operation;
 - d) Decommissioning; and
 - e) Site restoration and aftercare.

Thereafter the mitigation set out in the Schedule of Mitigation shall be implemented in full to the satisfaction of the Planning Authority.

Reason: to ensure the timeous delivery of all mitigation outlined in support of the application and in the interests of environmental protection.

REASON FOR DECISION

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained

within the Development Plan and is acceptable in terms of all other applicable material considerations.

REASONED CONCLUSION

The Council is in agreement with the findings of the Environmental Impact Assessment Report and Supplementary Environmental Information that Meall Buidhe Wind Farm will give rise to significant visual impacts but is not likely to lead to other significant adverse impact on the environment. The Council is satisfied that all environmental effects of this development can be addressed by way of mitigation. The Council has incorporated the requirement for a schedule of mitigation within the conditions of this permission. Monitoring of operational compliance has been secured through Conditions 11 and 12 that secure environmental mitigation and monitoring of this permission.

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

INFORMATIVES

Initiation and Completion Notices

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

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

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

Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (paragraph 259), planning permission does not remove the liability position of developers or owners in relation to flood risk.

Scottish Water

You are advised that a supply and connection to Scottish Water infrastructure is dependent on sufficient spare capacity at the time of the application for connection to Scottish Water. The granting of planning permission does not guarantee a connection. Any enquiries with regards to sewerage connection and/or water supply should be directed to Scottish Water on 0845 601 8855.

Septic Tanks and Soakaways

Where a private foul drainage solution is proposed, you will require separate consent from the Scottish Environment Protection Agency (SEPA). Planning permission does not guarantee that approval will be given by SEPA and as such you are advised to contact them direct to discuss the matter (01349 862021).

Local Roads Authority Consent

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

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at: <u>http://www.highland.gov.uk/yourenvironment/roadsandtransport</u>

Application forms and guidance notes for access-related consents can be downloaded from:

http://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_work ing_on_public_roads/2

Mud and Debris on Road

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

Construction Hours and Noise-Generating Activities

You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact <u>env.health@highland.gov.uk</u> for more information.

Protected Species – Halting of Work

You are advised that work on site must stop immediately, and NatureScot must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected developer responsibilities is available from species and NatureScot: https://www.nature.scot/professional-advice/protected-areas-and-species/protectedspecies

Signature:	Dafydd Jones						
Designation:	Area Planning Manager - North						
Author:	Claire Fa	armer / Simon Hinds	on				
Background Papers:	Docume	nts referred to in rep	oort and in case file.				
Relevant Plans:	Plan 1	- Location Plan	Figure SI5.1A				
	Plan 2	- Site Layout Plan	Figure SI5.1B				

Appendix 2 – Viewpoint Assessment Appraisal – Visual Impact

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
VP1 – A837 Tuiteam	APP	Medium (road users) Medium (road users)	Low	Slight (Not Significant) Slight (Not Significant)	Medium - Low Low	Slight (Not Significant) Slight (Not Significant)	Viewpoint 1 is located on the A837 approximately 4km west of Rosehall and Invercassley, viewing south and perpendicular from the road towards the proposed development. The viewpoint is not within an area designated for its scenic qualities or views, although the general scenic quality of Strath Oykel is of value. The viewpoint has open views south, across Strath Oykel and the river from this section of the road, where they are not screened or blocked by trees and vegetation. Elsewhere along the road, the route is often screened by intervening trees, further west the ZTV coverage reduces resulting in less visibility, whilst further east the extent of the turbine array increases, and a wider extent of turbine visibility would be possible, subject to the screening effects of intervening trees. The view south is perpendicular across Strath Oykel, rather than more typically viewing along its length, in the direction of travel. The low-lying area of the Strath is clearly visible as a river valley (River Oykel) with pasture fields, some arable and ribbons of deciduous woodland and trees growing along the river banks and roadside. Higher up, along the sides to the Strath there is rough pasture with sporadic groups of trees and woodland

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							restricted to the gullies and rocky outcrops. Large swaths of forestry and open moorland enclose the strath and are visible beyond this along the simple, smooth horizon. A total of 5 turbines would be partly visible (1 hub and 4 blades) affecting a small extent of the view with the turbines seen within the Rounded Hills LCT. The turbines would appear as a minor feature on the horizon, beyond the hills and forestry. It is therefore considered that the proposed development would not have a significant effect on this view. Braemore would be visible at 5.8km distance to the east, but not seen in the same view, as such it is not considered that there would be a significant cumulative effect.
VP2 – A837 Edge of Rosehall	APP	Medium (road users)	Medium	Significant	Medium	Moderate and Significant	This viewpoint is located approximately 5.4km from the proposed development on the A837 on the southern edge of Invercassley and Rosehall and would be experienced
	THC	Medium – High (road users)	Medium	Significant	Medium	Moderate and Not Significant	by road users travelling south and would be experience by road users travelling south and west, having left the settlement. The viewpoint represents the greatest like visual effect from this stretch of the road to the south Invercassley and Rosehall. Elsewhere along the road, the route is often screened by intervening trees, and furth west the ZTV coverage reduces resulting in less visibilit of the proposed turbines. The view south across Stra

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							Oykel, takes in pasture on the flat valley floor with a mix of rough pasture, woodland beyond. Inveroykel Lodge (part of the Balnagown Estate, used for tourist / leisure accommodation) is visible on the other side of the strath within woodland. Large swaths of forestry and open moorland enclose the strath and are visible beyond this along a simple horizon. The minor hill summits of Beinn Ulbhaidh and Meall Dheirgidh are visible on the horizon and enclose or 'bookend' the proposed development. A total of 8 turbines would be visible that would appear beyond the horizon behind the rounded hills LCT. As the turbines are seen in the horizon, there may be some localised effects as the turbine blades would be seen as moving structures on the horizon. However, the proposed scheme presents as a simple design which follows the gradient of the slope giving a relatively balance scheme. As such it is not considered that the proposed scheme would dominate or overwhelm the view but would introduce noticeable and prominent features on the horizon. It is therefore considered that the proposed scheme would have a significant effect on the view. Although not in the same part of the view Achany, Braemore and Rosehall have theoretical visibility. These

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							windfarms would be partly screened by landform, it is not considered that the cumulative effect would be significant.
VP3 – A837 Kyle of Sutherland	APP	Medium (road users)	Medium	Moderate and Significant	Zero	Not Significant	This viewpoint is located on the A837, approximately 5.9km from the proposed development. It is further to the south of Invercassley and Rosehall and is closest, to and
	THC	Medium (road users)	High	Substantial / Moderate and Significant	Zero	No View and Not Significant	the south of the small settlement at Atlass (Viewpoint 6). The viewpoint is one of a series located along the A837 and is not representative of the general character of this road as much of it is well wooded (and screened by intervening trees, and further east the ZTV coverage reduces resulting in less visibility of the proposed turbines as seen at Viewpoint 5). This viewpoint is illustrative of the greatest likely visual effect from an open stretch of this route. The view south takes in the open water of the Kyle of Sutherland (and Strath LCT), on the flat valley floor with a mix of rough pasture and woodland beyond. Some derelict cottages / farm buildings are visible at Birchfield on the other side of the strath within woodland. Large swaths of forestry and open rounded hills enclose the strath and are visible beyond this along a simple horizon. The minor hill summits of Beinn Ulbhaidh and Meall Dheirgidh are visible on the horizon and enclose or 'bookend' the proposed

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							development. It is considered the applicant has slightly underestimated the magnitude of change. This has been assessed as slightly higher due to the scenic value associated with the Kyle of Sutherland, with a total of 9 turbines visible on the horizon. However, similarly to VP2 due to the scale of the turbines in this landscape setting and the simplistic linear layout although there are adverse effects that are considered significant this is expected from a development of this scale. There is no cumulative impact from this view.
VP4 – Rosehall (Invercassley Stores)	APP	High (road users / residents / tourists / walkers)	Medium	Substantial / Moderate and Significant	Medium	Substantial / Moderate and Significant	The viewpoint is located Viewpoint 4 is located in Rosehall, close to Invercassley Stores and the village Post Office, on the A837, through the village, approximately 5.8km from the proposed development. The viewpoint is illustrative of the visual effect from the village of Rosehall
	THC	High (road users / residents / tourists / walkers / outdoor	Medium	Substantial / Moderate and Significant	Medium	Substantial / Moderate and Significant	and illustrates that where visible, the proposed development would appear well beyond the growing settlement/village and partly screened by intervening buildings, trees and woodland. The view south from Rosehall includes a number of features that contain the village in the foreground, including stone walls, mature trees and buildings. Large farm buildings are visible on the left of the photograph and a telegraph pole as well as road

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
		recreational users)					signage and fencing is also unavoidably visible from most views within the village. Forestry and open moorland are visible in the distance beyond the village, although enclosing its setting within the strath and the minor hill summit of Beinn Ulbhaidh is visible beyond the large farm buildings / shed. All 8 turbines have theoretical visibility, however only 6 are visible due to the screening afforded by the woodland. The turbines would appear as a noticeable and prominent feature on the horizon, beyond the hills and forestry that define Strath Oykel and enclose the southern views from Rosehall. Although the turbines would appear as dominate features in the distance, due to the simplistic layout and intervening distance the turbines would appear as a cohesive line of turbines and therefore not overwhelm the view within the landscape setting. Despite this there would be some adverse effects and as such it is considered that these would lead to significant effects from this view. Achany and Rosehall wind farms are visible beyond landform, woodland and forestry, appearing relatively high on the horizon to the northeast. Achany / Rosehall would appear visible in opposite directions to the proposed development and not seen in the same view. The
Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
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							combined visibility would not be overwhelming or dominant, with both wind farms appearing of an appropriate scale and set back from the village. Nor would it lead to the encirclement of the village. However, due to the introduction of the proposed development it is considered that it would lead to significant effects.
VP5 – A837 Linsidemore	APP	Medium (road users)	Low	Slight and Not Significant	Zero	None / No View and Not Significant	The viewpoint is located on the A837, just over 9km to north east of the proposed development. It is illustrative of the visual effect from an open stretch of the road to the
	THC	High (road users / residents)	Low	Moderate and Not Significant	Zero	None / No View and Not Significant	southeast of Linsidemore. Elsewhere along the road, the route is often screened by intervening trees, and further southeast the ZTV coverage and visibility reduces. The viewpoint is located at the junction with a minor road, leading to a small number of properties at Linsidemore which are elevated above the road. The view south includes open water of the Kyle of Sutherland (left of photograph), pasture on the flat valley floor and a mix of rough pasture and woodland / forestry beyond. Forestry and open moorland enclose the strath and are visible beyond this with the minor hill summit of Beinn Ulbhaidh visible on the horizon. From the viewpoint 6 turbines have theoretical visibility, however due to the screening afforded by the forestry on

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							the blades of 2 turbines is visible. Whilst it is considered the applicant has underestimated the sensitivity of the receptor, it is agreed that the turbines would appear as a minor feature in the distance, beyond the forestry that defines the Kyle of Sutherland strath or valley and would appear reasonably well accommodated. It is therefore considered that although there will be some adverse visual effects, they are not considered to be significant. In terms of cumulative effects there are no other wind farms visible and therefore no cumulative effect.
VP6 – Inveroykel Bailey Bridge	APP	Medium (road users, including cyclists and walkers)	Low	Slight and Not Significant	Medium	Slight and Not Significant	The viewpoint is located on located on a minor road at Baliey Bridge, just off the A837 within Strath Oykel, approximately 4.7km from the proposed development. The viewpoint is illustrative of the visual effect from this location within Strath Oykel, and forms part of a series of

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
	THC	Medium (road users / cyclists / tourists)	Low	Slight and Not Significant	Medium	Moderate	viewpoints within Strath Oykel (Viewpoints 1, 2, 5 and 12) which demonstrate the range of visibility through the strath and is also representative of the visual effects likely to be experienced from the A837. For the most part, the majority of Strath Oykel is outwith the ZTV and would have no view of the proposed development. The view south includes part of the River Oykel, the flat valley floor and a mix of trees, woodland and forestry beyond which almost entirely encloses the view. Some white painted cottages and a flat roofed building are visible in the centre of the photograph on the other side of the strath. The minor hill summit of Beinn Ulbhaidh is just visible beyond this in the distance. All 8 turbines have theoretical visibility, however only 3 hubs would be visible. The turbines would appear as a noticeable feature in the background of this view but would not overwhelm or dominate the view. It is therefore not considered that the proposed development would give rise to signficant visual effects.
VP7 - Atlass	APP	High (residents / road users / walkers / tourists)	Medium	Substantial / Moderate and Significant	Medium	Substantial / Moderate and Significant	The viewpoint is located on a minor road above the Kyle of Sutherland within the scattered settlement of Atlass, approximately 6.5k from the proposed development. The viewpoint is illustrative of the greatest likely visual effect

Viewpoint App / THC	Receptor	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
THC	C High (residents / road users / walkers / tourists)	Medium	Substantial / Moderate and Significant	Medium	Substantial / Moderate and Significant	from an open stretch of the road viewing southwest, across the Kyle of Sutherland towards the proposed development. The view is also representative of similar views from an elevated section of the A837 close to the Rosehall Free Church. Elsewhere along the road, the view is often screened by intervening trees and woodland, although all of the minor road and the route of the A837 between Rosehall, Atlass and Linsidemore, within the Kyles of Sutherland is within the ZTV. The view southwest extends across the Kyle of Sutherland (the water of which is not visible) and views a mixture of rough pasture, trees, woodland, with large swathes of forestry and open moorland visible beyond. The derelict cottages and farm buildings at Birchfield (also visible in Viewpoint 3) are visible in the mid-distance. The minor hill summits of Beinn Ulbhaidh and Meall Dheirgidh are visible on the simple horizon and enclose or 'bookend' the proposed development. All 8 turbines are visible sitting principally on within the Rounded Hill LCT in the horizon. The proposed development would introduce prominent features on the horizon. However, the scheme would appear as a relatively cohesive, well balanced scheme from the view. From this viewpoint the scheme can be accommodated

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes comfortably within the landscape, however would still give rise to significant effects. In terms of cumulative effects Achany and Rosehall wind farms are visible on the horizon to the north at 3.5km distance, appearing beyond the hill and partly screened by landform. Achany and Rosehall would appear visible in opposite directions to the proposed development, although their combined visibility would not be
							overwhelming or dominant, there would be some significant cumulative effects.
VP8 – Carn a Choin Deirg	APP	Medium (hill wakers / stakers / estate workers)	Medium	Moderate and Significant	Medium	Moderate and Significant	Viewpoint 8 is located on the summit of Carn á Choin Deirg at the trig point (701m AOD), on the eastern edge of the Rhiddoroch, Beinn Dearg and Ben Wyvis Wild Land Area (WLA) 29 and the Fannichs, Beinn Dearg and Glencalvie
	THC	High (outdoor recreational users)	Medium	Substantial / Moderate and Significant	Medium	Substantial / Moderate and Significant	Special Landscape Area (SLA). The view northeast towards the proposed development extents across different LCAs and includes the minor hill summits of Beinn Ulbhaidh and Meall Dheirgidh which enclose or 'bookend' the proposed development, although they are 4.5km beyond the WLA boundary and 4km beyond the SLA boundary. Several existing and consented wind farms occupy this sector of the view and the landscape is divided by a series of straths and glens with intervening hills,

 App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
						extending into the far distance between the summit of Ben Kilbreck in the northeast (36km distance, beyond Anchany and Rosehall wind farms) and the Dornoch Firth National Scenic Area (NSA) on the edge of the study area to the east. Much of this sector of the view includes settled and developed landscapes that exclude it from the WLA. The remaining 360° views to the north, south and west take in an impressive expanse of mountains and wild land which includes the distinctive peaks and mountains of Ben More Assynt to the north, Canisp, Suiven, Cul Mor, Ben Mor Coigach and Beinn Deirg to the southwest. Carn Chuinneag (Viewpoint 10) is also visible to the southeast between Beinn Tharsuinn, Coire na Cloiche and Novar wind farms. The views are expansive and extend to the edge of the Study Area and beyond, into neighbouring WLAs including Reay – Cassley WLA 34, Inverpolly - Glencanisp WLA 32 and the associated Assynt – Coigach NSA; and Fisherfield - Letterewe - Fannichs WLA 28 and the associated Wester Ross NSA. All 8 turbines will be visible in front of other wind energy schemes, and although the proposed development brings wind turbines closer to the WLA it is already significantly impacted by the existing development. The turbines present as a cohesive line of turbines that the landscape

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							appears to be able to absorb. Despite this view perhaps representing a 'windfarm landscape' there would be significant effects with the introduction of the proposed turbines both on its own and cumulatively.
VP9 – A839 Rosehall - Lairg	APP	Medium (road users)	Medium to Low	Moderate / Slight and Not Significant	High	Substantial / Moderate and Significant	The viewpoint is located on the A839 which traverses an elevated area of moorland and forestry between Rosehall and Lairg, approximately 8.9km from the proposed development. The viewpoint is representative of the visual
	THC	Medium (road users)	Medium	Moderate and Not Significant	Medium	Moderate and Significant	effect from an open stretch of the road viewing southwest, towards the proposed development. Elsewhere along the road, the view is often screened by intervening trees and forestry. The view southwest extends across open moorland, between blocks of forestry and includes the A839, appearing as a minor single-track road with passing places and telegraph poles on the right of the photograph. The far horizon is foreshortened by the foreground moorland and appears as a simple, skyline, punctuated by the minor hill summits of Meall Dheirgidh and Breac – Beinn. All 8 would appear as a noticeable, introducing large moving structures in the landscape causing some minor concerns in relation to the perception of scale, with the turbines dominating the view and diminishing the scale of

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							the Rounded Hills LCT. However, these affects are reduced through the design of the scheme that presents a balanced, simplistic display of turbines in terms of elevation and spacing. The intervening distance also helps to reduce the effects. Therefore, although there will be some adverse effects these are not considered to give rise to a level that would introduce a significant effect to the view. Achany and Braemore windfarms have theoretical visibility from this viewpoint but not in the same direction it is therefore not considered that there would be a significant cumulative effect.
VP10 – Carn Chuinneag	APP	High (hill walkers accessing the Corbett)	Low	Moderate and Not Significant	Low	Moderate and Not Significant	The viewpoint is located on the western-most of Carn Chuinneag's twin summits (830m AOD) within the Rhiddoroch, Beinn Dearg and Ben Wyvis WLA 29 and on the southern edge of the Fannichs, Beinn Dearg and Clengelvie SLA, approximately 11 1 km from the proposed
	THC	High (hill walkers)	Medium	Substantial / Moderate and Significant	Low	Moderate – and Not Significant	Glencalvie SLA, approximately 11.1km from the proposed development. The view northeast towards the proposed development extents across the Rugged Mountain Massif, Rounded Hills and Strath LCTs. The hill tops which are split by Strathcarron (light settlement and estate landscapes at Croick) and the Kyles of Sutherland and the Achany and Rosehall wind farms beyond. Further mountains and hills are visible in the far distance including

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							Ben Klibreck (Ben Klibreck - Armine Forest WLA 35 and Ben Klibreck and Loch Choire SLA). Generally lower lying landscape is visible to the northeast and east with views across the Kyles of Sutherland and the Dornoch Firth NSA and views towards the Lairg, Kilbraur and Extension and Gordonbush and Extension wind farms in the far distance. The remaining 360° views to the south and west take in an impressive expanse of mountains and wild land which includes the distinctive peaks and mountains of Ben More Assynt to the north, Canisp, Suiven, Cul Mor, Ben Mor Coigach and Beinn Deirg to the southwest. Beinn Tharsuinn, Coire na Cloiche and Novar wind farms are also visible to the south and southeast. The views are expansive and extend to the edge of the Study Area and beyond, into neighbouring WLAs including Reay – Cassley WLA 34, Inverpolly - Glencanisp WLA 32 and the associated Assynt – Coigach NSA; and Fisherfield - Letterewe - Fannichs WLA 28 and the associated Wester Ross NSA. All 9 turbines would be visible backdropped by the wider landscape and affecting <10° of the horizontal FoV. It is considered that the proposed development would introduce turbines into a part of the view that is presently unaffected by turbines and as such the applicant has

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							underestimated the magnitude of change. This is a complex view with scenic value. However, due to the simple layout, intervening distance, and scale of the turbines would appear reasonably well accommodated within the landscape scale and setting of this view, albeit the proposed turbines would appear closer and larger than other wind energy development. Although it is considered that there would be significant effects, it is not considered that it would significantly affect the special qualities of the WLA or SLA due to the existing wind farm development in the view. A number of windfarms have theoretical visibility from this viewpoint. Although not part of the applicant's assessment it is highly likely that Sallachy and Strath Tirry wind farms would also be visible. The introduction of the proposed development but it is not considered that the effects would be significant when viewed together.
VP11 - Ardgay	APP	High (residents / tourists / visitors / road users / cyclists)	Negligible	Slight and Not Significant	Zero	None / No View and Not Significant	This viewpoint is located on Church Street within the village of Ardgay, viewing west across Strathcarron at 13.5km distance. The viewpoint is illustrative of the visual effect from this location within Ardgay and is not typical or representative of the general views from the village or

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
	THC	High (residents / tourists / visitors / road users / cyclists – NCR1)	Negligible	Slight and Not Significant	Zero	None / No View and Not Significant	likely visual effects. For the most part, the majority of the village would be outwith the ZTV and would have no view, or a limited view of the proposed development (Figure 7.5b). The view west includes a mixture of low-lying pasture, scattered residential properties and street lighting, telegraph poles and pylons on the western edge of Ardgay. Woodland and forested hill slopes enclose Strathcarron and curtail the view with limited visibility of the far horizon beyond. The hill summit of Meall Dheirgidh is visible beyond the forestry as a conical hill form. Only the blades of 3 turbines would be visible due to the topography and screening afforded by forestry and other vegetation. No other wind farms are visible from this view and as such it is not considered that there would be a significant visual effect either on its own or cumulatively.
VP12 – A837 South of Loch Craggie	APP	Medium (road users)	Negligible	Slight / Negligible and Not Significant	Zero	None / No View and Not Significant	Viewpoint 12 is located on the A837 in Strath Oykel, viewing southeast along the strath at 13.8km distance. The viewpoint is illustrative of the visual effect from this location within Strath Oykel and is not typical or
	THC	Medium (road users)	Negligible	Slight / Negligible and Not Significant	Zero	Non / No View and Not Significant	representative of the general views from the strath or likely visual effects. It is one of a series of viewpoints that illustrate the views and likely visual effects along the strath including Viewpoints 1, 2, and 6. The view southeast

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							 illustrates a remote strath and rounded hills LCT with few trees, forestry or settlement. The A837 (a single-track road at this point) and associated telegraph poles and fencelines are visible on the left of the photograph. In the middle distance, further along Strath Oykel there is more woodland, forestry and some light settlement at Oykel Bridge. It is likely that only one blade tip will be visible and as suce would appear as a very minor feature in the background of this view and would not give rise to significant visual effects. There are no cumulative effects.
VP13 – Bonar Bridge (Migdale Road)	APP	High (residents / tourists / visitors / road users / cyclists)	Negligible	Slight and Not Significant	Negligible	Slight and Not Significant	The viewpoint is located on Migdale Road, just above the settlement at Bonar Bridge, viewing west across the Kyles of Sutherland at 14.8km distance. The viewpoint is illustrative of the visual effect from this location within Bonar Bridge and is not typical or representative of the
	THC	High (residents / tourists / visitors / road users / cyclists)	Negligible	Slight and Not Significant	Negligible	Slight and Not Significant	general views from the settlement or likely visual effects. For the most part, the majority of Bonar Bridge have no view, or a limited view of the proposed development due to the screening effects of buildings and vegetation. The view west includes a houses, a stone wall, Migdale Road, trees and lamp-posts within the edge of the settlement.

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							The water and strath of the Kyles of Sutherland is visible in the middle distance beyond with a mixture of light settlement and pasture within the strath. Wooded and forested hills and hill slopes enclosed the strath with moorland clad hills appearing beyond. The conical summit of Meall Dheirgidh is visible on the horizon. A total of 3 blades / blade tips would be visible on the horizon in the distance affecting approximately 2° of the horizontal FoV. The turbines would appear as a very minor feature in the background of this view, beyond the foreground attractions of Bonar Bridge and the Kyles of Sutherland. It is not considered that the proposed development would have a significant effect. Whilst other wind development will be visible, it will not be
							in the same part of the view or contribute to the encirclement of Bonar Bridge. It is not considered that there would be significant cumulative effects.
VP14 – Lairg (Fire Station)	APP	High (residents / tourists / visitors / road users / cyclists)	Negligible	Slight and Not Significant	Low	Moderate and Not Significant	This viewpoint is located on Main Street (the A839), to the south of the Fire Station, viewing southwest towards Achany Glen at 16.8km distance. The viewpoint is illustrative of the visual effect from this location within Lairg and is not typical or representative of the general views

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
	THC	High (residents / tourists / visitors / road users / cyclists)	Negligible	Slight and Not Significant	Low	Moderate and Not Significant	from the settlement or likely visual effects. For the most part, the majority of Lairg would have no view, or a limited view of the proposed development due to a lack of ZTV coverage and the screening effects of buildings and vegetation. The view southwest includes a mixture of pasture and rough pasture, moorland, deciduous trees and, woodland and some forestry. The summit of Meall Dheirgidh is visible on the far horizon. A total of 5 turbine hubs and 1 blade tips would be visible due to the screening effects of woodland and forestry this would reduce to 4 hubs and 1 blade visible below the horizon. The turbines would be viewed behind Braemore and appears as cohesive progression of turbines in the distance. It is not considered that the proposed development would have either a significant effect on its own or cumulatively.
VP15 – A836 Easter Fearn	APP	High (road users / cyclists - NCR1)	Negligible	Slight and Not Significant	Negligible	Slight and Not Significant	Viewpoint 15 is located on the A836 within the Kyles of Sutherland and the Dornoch Firth NSA, viewing northwest towards the proposed development at 19.3km distance.
	THC	High	Negligible	Slight and Not Significant	Negligible	Slight and Not Significant	The viewpoint is illustrative of the visual effect from this location along the road and is not typical or representative of the general views the majority of which are outwith the ZTV (indicating no view) or screened by buildings and

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
		(road users / cyclists - NCR1 / tourists)					 vegetation. The view southwest includes a mixture of pasture deciduous trees and woodland along the Kyles of Sutherland which is contained by rounded hills. A total of 5 turbine hubs and 3 blades or blade tips have theoretical visibility. However, due to the distance and screening it is likely that only 3 blades would be visible. As such the proposed development would not have a significant effect. In terms of cumulative impacts, a number of wind energy developments are visible, including Braemore, Achany, Rosehall to the north west, however there is sufficient separation between these developments and the proposed development to ensure the proposed development retains its own character. It is not considered that there would significant cumulative effects.
VP16 – B9176 Struie Viewpoint	APP	High (road users / tourists)	Negligible	Not Significant	Low	Not Significant	Viewpoint 16 is located on the B9176 at the Strui Viewpoint overlooking the Kyles of Sutherland from withi the Dornoch Firth NSA, viewing northwest towards th proposed development at 20.4km distance. The viewpoir is specific to this tourist layby and viewpoint location an is not typical or representative of the general views fror the road. The view northwest takes in the water of the Kyl of Sutherland and the mixture of pasture, deciduous tree
	THC	High (road users / cyclists /tourists)	Low	Not Significant	Low	Not Significant	

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
							and woodland and settlement along the Kyles of Sutherland at Ardgay and Bonar Bridge. The Kyles are contained by wooded and forested rounded hills and the Ben More Assynt mountain complex is visible at the head of the Kyles in the far distance. The viewpoint itself is elevated about the Kyles and set firmly within the rounded hills landscape. A total of 3 turbine hubs and 4 blades or blade tips have theoretical visibility appearing on a small portion of the view and does not appear in the main direction of the view or distract from the Ben More Assynt complex. It is not considered that the proposed scheme would result in significant effects. In terms of cumulative impact there is other wind energy developments with theoretical visibility due and the distance. It is judged that due to the limited visibility due and the distance to them it would not give rise to significant cumulative effects.
VP17 – Ben More Assynt (997.2mAOD)	APP	High Hill walkers	Negligible	Slight and Not Significant	Negligible	Not Significant	This viewpoint is located on the summit of Ben More Assynt within the Reay – Cassley WLA 34 and the Assynt – Coigach NSA, viewing south towards the proposed development at 26.8km distance. It is a popular Munro with a summit of 997.2mAOD. The viewpoint is specific to this mountain summit and is not typical or representative
Munro Summit	THC	High (hill walkers / outdoor	Medium	Moderate and Significant	Low	Moderate and Not Significant	

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
		recreational users)					of the general views from the road. It represents views from the Rugged Mountain Massif LCT. The uplands – lone mountains, rounded hills and rocky hills and moorland - also extend to the south, east and west of the viewpoint, interspersed by smaller areas of sweeping moorland and flows and strath. From this viewpoint the proposed development presents as an unbalanced group small group of turbines within the complex landscape. It introduces large moving structures into a part of the view which appears to be remote and unaffected by wind turbines, as such gives rise to some significant effects. The view south takes in extensive areas of moorland, hills and mountains. There are a number of operational / consented schemes in the view, however they are not impacted by this development and appear as a scheme in their own right. Given the limited visibility and distance between the proposed development, it is agreed that the cumulative effect would not be significant.
VP18 – A9 Dornoch Bridge	APP	High	Negligible	Slight and Not Significant	Negligible	Slight and Not Significant	This viewpoint is located on the A9 road bridge over the Dornoch Firth, viewing west along the Kyles of Sutherland from within the Dornoch Firth NSA. The viewpoint is

Viewpoint	App / THC	Sensitivity of the Receptor (Susceptibility / value of the view)	Magnitude of change (Scale of Change / Extent / Duration)	Significance (Magnitude of Change / Sensitivity of Receptor)	Cumulative (Consented and Operational) Magnitude of Change (Scale of change / Extent / Duration)	Significance (Consented and Operational) Magnitude of Change / Sensitivity of Receptor	THC Notes
		(tourists / road users)					illustrative of the view from this location and is not typical or representative of the general views from the A9 or the
	THC	High (tourists / road users / outdoor recreational users / cyclists)	Low	Moderate and Not Significant	Negligible	Slight and Not Significant	Dornoch Firth NSA. The view northwest takes in the water of the Kyle of Sutherland. Struie Hill (with mast) appears as a prominent hill in the centre, middle distance and Benn Tharsuinn hill and wind farm are visible to the southwest (left of the photograph on the horizon). The viewpoint is located within the Dornoch Firth NSA which is designated for its scenic qualities and views and the value of the view is therefore considered to be High. 3 turbines and 3 blades have theoretical visibility from this viewpoint. The turbines appear to be contained within the landform and as such do not dominate or overwhelm. It is therefore considered that the proposed development would not detract from the qualities of the NSA or give rise to significant concerns either cumulatively or own its own.

Appendix 3 - Assessment against Landscape and Visual Assessment Criteria contained within Section 4 of the Onshore Wind Energy Supplementary Guidance

Criteria	Response to EIAR	Review of Design against Criteria in THC Onshore Wind Energy SG 2016
1	Relationship between Settlements/Key locations and wider landscape respected.	Turbines are not visually prominent in the majority of views within or from settlements/Key Locations or from the majority of its access routes.
2	Key Gateway locations and routes are respected	 Wind Turbines or other infrastructure do not overwhelm or otherwise detract from landscape characteristics which contribute the distinctive transitional experience found at key gateway locations and routes. The applicants' assessment has concluded that there are no key gateways or important areas of landscape transition identified in the EIAR/EIAR-SI. As such the proposed development would not detract significantly from any locations which may be considered important gateways. For instance the majority of road routes within the study area would not be significantly affected by the application, a significant effect has been identified for one main road route within the study area on a short section of the A837 but this is not considered to be a key gateway. As the proposed development would not reduce or detract from the transitional experience of key gateway locations and routes or overwhelm or otherwise detract from landscape characteristics which contribute the

3	Valued natural and cultural landmarks are respected	distinctive transitional experience found at key gateway locations and routes the criterion is met. Related to the extent to which the proposal affects the fabric and setting of valued natural and cultural landmarks.
		effects, however, the existing baseline, together with the design changes made since the initial application was received and the recommended mitigation advanced by officers through negotiations, the effects are considered to be acceptable on balance. The proposed development meets the threshold of Criterion 3
4	The amenity of key recreational	Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways.

	routes and ways is respected.	It is not considered that the proposed development would significantly impact the visual appeal of key recreational routes and ways. For this scheme this would include the A837, A839 and 3 core paths close to Rosehall. The visual effects although significant would not dominate or overwhelm the key focus or attractions along these routes.
5	The amenity of transport routes is respected	It is considered that the criterion is met. Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of transport routes on local network. Although the proposed development would have a significant effect on the views from some locations along the A837 at Rosehall. The level of effect would not be overwhelming or dominant, viewed at >6km distance such that the proposed development reflects the landscape character and 'fits' within the proposed landscape setting. The quality of the simplistic balanced wind farm design also limits the potential for adverse effects on the amenity and visual appeal of these routes, with the wind farm being capable of being appreciated as an object in the landscape in its own right. Furthermore, the location and topography allows for significant the screening from the main transport routes within the study area. It is considered that there would be limited sequential views, from the main routes within the EIAR/EIAR-SI from these routes with views of the development on the hills, these are not considered to overwhelm or otherwise significantly detract from the visual appeal of transport routes from most viewpoints due to the distance, topography and screening afforded. The criterion is met.
6	The existing pattern of Wind Energy Development is respected.	 The degree to which the proposal fits with the existing pattern of nearby wind energy development, considerations include: Turbine height and proportions, density and spacing of turbines within developments, density and spacing of developments, typical relationship of development to the landscape, previously instituted mitigation measures Planning Authority stated aims for development of area The pattern of development is discussed under Criteria 1 above in so far as it relates to encirclement of settlements. The pattern of wind energy development in this area is characterised by clustering of development to the west and south of Loch Shin within rounded hills LCT. The proposed development in terms of its scale and location within the Rounded Hills LCT, located away from the road and would form part of a loose group or cluster of development with Sallachy, Rosehall, Achany and Braemore windfarms.

		The proposed development would sit further to the south of Loch Shin than the other wind farms, however it would principally be viewed on its own from most routes within the study area. The closest consented cluster of turbines at Achany, Rosehall and Braemore are generally not viewed with the proposed scheme. Furthermore, from the majority of views the cumulative effect of windfarms is not problematic due to the wind farm design and sitting sufficiently apart from the both consented and operational developments ensuring the existing schemes and the proposed scheme retain their own setting and character.
7	The proposal contributes positively to existing pattern or objectives for development in the area.	The proposal maintains appropriate and effective separation between developments and/ or clusters
8	The perception of landscape scale and distance is respected	The perception of landscape scale and distance is respected While it is true that the turbines would be located in a very large landscape area, the degree to which separation from other landscapes would mitigate effects on scale and distance. As such the proposed development would not adversely affect the receptors' existing perception of landscape scale and distance, being located within a suitably large scale landscape (the Rounded Hills LCT) and designed to appear as a simple and balanced wind farm, set back from smaller scale straths and glens. Furthermore, it is clear from most viewpoints that the proposed development lies firmly within the rounded hills LCT and therefore would not diminish the scale of the landform which is situated in front of Rugged Mountain Massif LCT. It is considered that from the majority of the viewpoints there will not be an effect on the perception of scale and distance as such the criterion is met.
9	Landscape setting of nearby wind energy developments is respected	Proposal relates well to the existing landscape setting and does not increase the perceived visual prominence of surrounding wind turbines. The perception of landscape scale and distance is respected from most viewpoints and in a location where they are seen against the backdropping hills/mountains the turbines do not overwhelm the view. It is considered that the LCT has the capacity to absorb the proposed turbines. The threshold is met.

		Integrity and variety of Landscape Character Areas are maintained.
10	Distinctiveness of Landscape character is respected	There will be some localised adverse effects on the host LCT (Rounded Hills), however these effects are not considered to significantly affect key characteristics of the LCT or the experience from within the LCA. Furthermore, the interplay of different LCAs which come together to from the local composite landscape character would not be undermined by the proposed development interrupting the relationship between them.

Appendix 4 - Appropriate Assessment

Meall Buidhe Wind Farm - Erection of and Operation of a Wind Farm for a period of 25 years, comprising of 8 Wind Turbines with a maximum blade tip height 149.9m, access tracks, substation, control building, and ancillary infrastructure with a maximum output of 40 Megawatts20/00616/FUL

CONSIDERATION OF PROPOSALS AFFECTING EUROPEAN SITES

River Oykel Special Area of Conservation

The status of <u>River Oykel Special Conservation Area</u> means that the requirements of the Conservation (Natural Habitats, & c.) Regulations 1994 as amended (the 'Habitats Regulations') or, for reserved matters the Conservation of Habitats and Species Regulations 2017 as amended apply.

This means that 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 those sites, it must undertake an Appropriate Assessment of the implications for the conservation interests for which the areas have been designated. The need for Appropriate Assessment extends to plans or projects out with the boundary of the site in order to determine their implications for the interest protected within the site.

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.

The competent authority can only agree to the proposal after having ascertained that it will not have an adverse effect on the integrity of the sites. If this is not the case and there are not 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.

Screening of Likely Significant Effects

It is evident that the proposal is not connected with or necessary to site management for conservation, hence further consideration is required. The proposed wind farm has the potential to have a likely significant effect on the qualifying interests due to impacts arising from construction and decommissioning of the Proposed Development. The Council is therefore required to undertake an appropriate assessment of the implications of the proposal on the above named European designated sites.

River Oykel SAC

NatureScot have advised that the proposal is likely to have a significant effect on the following qualifying interests of the River Oykel SAC:

- Freshwater pearl mussel
- Atlantic salmon

The proposal has the potential to lead to impacts on the water quality of the River Oykel both the construction and decommissioning of the wind farm. NatureScot have highlighted that the particular effects are in relation to erosion and sedimentation; effects on baseflow and changes to drainage pattern and pollution risk.

As a result of the likely significant effects, as competent authority, The Highland Council is **<u>required</u>** to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests.

APPROPRIATE ASSESSMENT

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 from other agencies. In this case, the Appropriate Assessment is informed by information supplied by NatureScot, the applicant and various published information.

River Oykel SAC

In its response to the Council of 16 October 2020, NatureScot advised that the proposal is likely to have a significant effect on the qualifying interests of the SAC during construction. Their advice is set out below:

Our advice is that this proposal is likely to have a significant effect on freshwater pearl mussel and Atlantic salmon of the River Oykel SAC. Consequently, The Highland Council, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests. To help you do this, we advise that on the basis of the information provided, if the proposal is carried out strictly in accordance with the following mitigation, our conclusion is that the proposal will not affect the integrity of the site.

Further to the above advice SNH advised that the proposal should be conditions so that the works are undertaken strictly in accordance with the below mitigation:

	Mitigation	Reason
1.	Production of a pollution prevention plan and species protection plan for freshwater pearl mussel – as recommended in Technical Appendix 10.6: Freshwater Pearl Mussel (FWPM) Survey Report	SAC tributaries from impacts from construction

In its response to the Council of 16 October 2022, NatureScot advised that

The appraisal we carried out considered the impact of the proposals on the following factors:

There is a risk of the proposed development affecting the hydrological environment during the construction phase (in particular: effects on erosion and sedimentation; effects on baseflow; and changes to drainage patterns and pollution risk). This has the potential to affect freshwater pearl mussel in the River Oykel SAC which lies downstream from the development. This is also applicable to Atlantic salmon.

If the planning authority intends to grant planning permission against this advice without the suggested mitigation, you must notify Scottish Ministers.

We endorse and welcome the statement on page 24 of the geology, hydrology and hydrology chapter of the EIAR, that the site-specific Construction Environment Management Plan (CEMP) will ensure that drainage derived from the construction site will be treated in a scheme that is able to treat drainage during a 1:200 year event.

HIGHLAND COUNCIL APPRAISAL OF THE PROPOSAL

- The proposal is not directly connected with or necessary to site management for conservation;
- The proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; therefore;
- An Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives is provided below.

The impacts on the River Oykel SAC are considered in terms of the different phases of the development where different impacts would likely arise. i.e. the construction phase; operational phase and the decommissioning phase. The mitigation proposed by NatureScot will address any significant risk and avoid an impact on the integrity of the designated site and their qualifying features.

Overall, it can be therefore concluded that while likely significant effects have been identified during both the construction and decommissioning phases of the development, there will not be an adverse effect on site integrity of the River Oykel SAC if the mitigation set out within the appropriate assessment is applied.

Noise

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

- A) Prior to the First Export Date, the wind farm operator shall submit to the Local Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Authority. No electricity shall be exported until the wind farm operator has submitted to the planning authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the planning authority.
- B) Within 21 days from receipt of a written request of the Local Authority, following a complaint to it alleging noise disturbance at a dwelling, the wind farm operator shall, at its expense, employ an independent consultant approved by the Local Authority to assess the level of noise immissions from the wind farm at the complainant's property (or a suitable alternative location agreed in writing with the Local Authority) in accordance with the procedures described in the attached Guidance Notes.

The written request from the Local Authority shall set out at least the date, time and location that the complaint relates to. Within 14 days of receipt of the written request of the Local Authority made under this paragraph (B), the wind farm operator shall provide the information relevant to the complaint to the Local Authority in the format set out in Guidance Note 1(e).

C) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Authority for written approval the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken.

Where the proposed measurement location is close to the wind turbines, rather than at the complainants property (to improve the signal to noise ratio), then the operators submission shall include a method to calculate the noise level from the wind turbines at the complainants property based on the noise levels measured at the agreed location (the alternative method). Details of the alternative method

together with any associated guidance notes deemed necessary, shall be submitted to and agreed in writing by the Local Authority prior to the commencement of any measurements.

Measurements to assess compliance with the noise limits of this condition shall be undertaken at the measurement location approved in writing by the Local Authority.

- D) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Authority for written approval a proposed assessment protocol setting out the following:
 - i) the range of meteorological and operational conditions (the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions.
 - ii) a reasoned assessment as to whether the noise giving rise to the complaint contains or is likely to contain a tonal component.

The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the information provided in the written request of the Local Authority under paragraph (B), and such others as the independent consultant considers necessary to fully assess the noise at the complainant's property. The assessment of the rating level of noise immissions shall be undertaken in accordance with the assessment protocol approved in writing by the Local Authority and the attached Guidance Notes.

- E) The wind farm operator shall provide to the Local Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Authority made under paragraph (B) of this condition unless the time limit is extended in writing by the Local Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Authority with the independent consultant's assessment of the rating level of noise immissions.
- F) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c) of the attached Guidance Notes, the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (E) above unless the time limit for the submission of the further assessment has been extended in writing by the Local Authority.
- G) The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d) of the attached Guidance Notes. The data from each wind turbine shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) of the attached Guidance Notes to the Local Authority on its request within 14 days of receipt in writing of such a request.
- H) Where it is proposed to operate any turbine in a reduced running mode in order to meet the limits, no turbine shall be erected until a curtailment plan for the turbines has been submitted and approved in writing by the local planning authority. The curtailment plan shall demonstrate how the limits will be complied with and shall include the following:

- i. Definition of each noise reduced running mode including sound power data;
- ii. The wind conditions (speed & direction) at which any noise reduced running mode will be implemented;
- iii. Details of the manner in which the running modes will be defined in the SCADA data or how the implementation of the curtailment plan can be otherwise monitored and evidenced.

The Curtailment Plan shall be implemented in accordance with the approved details.

- I) Prior to the First Export Date, the wind farm operator shall submit to the Local Authority for written approval, a scheme of mitigation to be implemented in the event that the rating level, after adjustment for background noise contribution and any tonal penalty, is found to exceed the conditioned limits. The scheme shall define any reduced noise running modes to be used in the mitigation together with sound power levels in these modes and the manner in which the running modes will be defined in the SCADA data.
- J) The scheme referred to in paragraph I above should include a framework of immediate and long term mitigation measures. The immediate mitigation measures must ensure the rating level will comply with the conditioned limits and must be implemented within seven days of the further assessment described in paragraph F being received by the Local Authority. These measures must remain in place, except during field trials to optimise mitigation, until a long term mitigation strategy is ready to be implemented.

Noise Sensitive Receptor	Easting	Northing	Noise Limit (2b above predicted levels)
Lubachoinnich	241486	895472	28.2
The Old Manse	245417	891423	28.3
Croick Church	245677	891465	28.5
Croick House	245906	891408	28.4
Stalkers Cottage	246062	891383	28.4
The Craigs	247590	891091	26.6
Old Free Church	248641	891433	26.0
East Amat	248803	891569	26.0
Sgodachail Cottage	249228	892685	26.8
The Schoolhouse	250387	892685	35.1
Strathkyle Properties	252648	897552	22.7
Badarach Properties	252253	898148	22.9
Old Schoolhouse	251572	898168	24.1

Table 1 — Noise limits expressed in dB LA90,10 minute as a function of the measured wind speed (9 m/s) at 10 metre height as determined within the site averaged over 10 minute periods

Old Croft / Wester Achnahanat	251194	898207	25.1
Easter Kilmachalmack Properties	251009	898147	25.2
Easter Kilmachalmack Properties 2	250693	898118	25.8
Wester Kilmachalmack	250330	989324	26.3
Birchfield	249365	899123	23.9
Inveroykel Properties	246494	900882	23.8
Tigh A Rhos	245858	900820	24.3
River House	245497	900875	24.3
Oape	245300	900725	24.7
Carn Mholloch	245121	900740	25.3
Easter Oape	244848	900713	24.7
Upper Doune / Doune Properties	244374	900750	24.5
Brae	243607	900997	23.4
Lower Brae	243686	901025	23.4
Langwell Baeg	243453	900703	24.0
Langwell Lodge Properties	241644	901009	21.4
Oykel Terrace 1-6	238903	900372	18.5
Amat Cottage	239053	900065	19.1
Keepers Cottage	239071	900000	19.2

Guidance Notes for Noise Condition

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Note 3 with any necessary correction for residual background noise levels in accordance with Note 4. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Note 1

(a) Values of the LA90,10-minute noise statistic should be measured at the complainant's property (or an approved alternative representative location as detailed in Note 1(b)), using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time

of the measurements). This should be calibrated before and after each set of measurements, using a calibrator meeting BS EN 60945:2003 "Electroacoustics – sound calibrators" Class 1 with PTB Type Approval (or the equivalent UK adopted standard in force at the time of the measurements) and the results shall be recorded. Measurements shall be undertaken in such a manner to enable a tonal penalty to be calculated and applied in accordance with Guidance Note 3.

- (b) The microphone shall be mounted at 1.2 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone shall be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.
- (c) The L_{A90,10-minute} measurements should be synchronised with measurements of the 10minute arithmetic mean wind speed and wind direction data and with operational data logged in accordance with Guidance Note 1(d) and rain data logged in accordance with Note 1(f).
- (d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine, arithmetic mean power generated by each turbine and any data necessary to define the running mode as set out in the Curtailment Plan, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. Each 10 minute arithmetic average mean wind speed data as measured at turbine hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements determined as valid in accordance with Note 2(b), such correlation to be undertaken in the manner described in Note 2(c). All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary.
- (e) Data provided to the Local Authority shall be provided in comma separated values in electronic format with the exception of data collected to assess tonal noise (if required) which shall be provided in a format to be agreed in writing with the Local Authority.
- (f) A data logging rain gauge shall be installed in the course of the independent consultant undertaking an assessment of the level of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d). The wind farm operator shall submit details of the proposed location of the data logging rain gauge to the Local Authority prior to the commencement of measurements.

Note 2

- (a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b).
- (b) Valid data points are those measured during the conditions set out in the assessment protocol approved by the Local Authority but excluding any periods of rainfall measured in accordance with Note 1(f).
- (c) Values of the L_{A90,10-minute} noise measurements and corresponding values of the 10minute standardised ten metre height wind speed for those data points considered valid in accordance with Note 2(b) shall be plotted on an XY chart with noise level on the Y-axis and wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) shall be fitted to the data points to define the wind farm noise level at each integer speed.

Note 3

- (a) Where, in accordance with the approved assessment protocol noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty shall be calculated and applied using the following rating procedure.
- (b) For each 10-minute interval for which L_{A90,10-minute} data have been determined as valid in accordance with Note 2, a tonal assessment shall be performed on noise immissions during 2-minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure shall be reported.
- (c) For each of the 2-minute samples the tone level above audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.
- (d) The tone level above audibility shall be plotted against wind speed for each of the 2minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
- (e) A least squares "best fit" linear regression shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line fitted to values within ± 0.5m/s of each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Note 2.
- (f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below derived from the average tone level above audibility for each integer wind speed.



Note 4

- (a) If a tonal penalty is to be applied in accordance with Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Note 3 at each integer wind speed within the range set out in the approved assessment protocol.
- (b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Note 2.
- (c) If the rating level lies at or below the noise limits approved by the Local Authority then no further action is necessary. In the event that the rating level is above the noise limits, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.
- (d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:
 - i. Repeating the steps in Note 2, with the wind farm switched off, and determining the background noise (L₃) at each integer wind speed within the range set out in the approved noise assessment protocol.
 - ii. The wind farm noise (L₁) at this speed shall then be calculated as follows where L₂ is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left[10^{L_2/10} - 10^{L_3/10} \right]$$

- iii. The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L₁ at that integer wind speed.
- iv. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty lies at or below the noise limits approved by the Local Authority then no further action is necessary. If the rating level at any integer wind speed exceeds the noise limits approved by the Local Authority then the development fails to comply with the conditions.



PROJECT: MEALL BUIDHE WIND FARM CLIENT: MEALL BUIDHE RENEWABLES LLP

FIGURE SI5.1a Site

layout

SCALE: 1:20,000	DOCUMENT SIZE: A3
DRAWN BY: AE	DATE: 11/03/2021

<u>KEY:</u>

Site boundary
Access tracks
Foundations
Crane hardstanding
Installation area
Substation
Temporary construction compound







PROJECT: MEALL BUIDHE WIND FARM CLIENT: MEALL BUIDHE RENEWABLES LLP

FIGURE SI5.1b

Site layout

SCALE: 1:20,000 DRAWN BY: AE DOCUMENT SIZE: A3 DATE: 11/03/2021

<u>KEY:</u>

Site boundary
Access tracks
Foundations
Crane hardstanding
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Temporary construction compound



