



# AI#2 Appendix D3 PAT Modelling Results



## Technical note:

# Stornoway Wind Farm Additional Information (AI#2) – NatureScot Response to reducing impacts on Lewis Peatlands SPA qualifying features

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## 1. Overview

- 1.1.1 The purpose of this document is to respond to a request by NatureScot (formerly SNH) to investigate further options for reducing impacts on two Lewis Peatlands Special Protection Area (SPA) qualifying features, golden eagle and red-throated diver, following submission of the Additional Information (AI) for the proposed Stornoway Wind Farm. Specifically, NatureScot stated the following:
- *On the basis of the information provided for golden eagle, the proposal will adversely affect the integrity of the Lewis Peatlands SPA. It is possible that a breeding pair of golden eagles near the Proposed Development will be displaced, potentially leading to range abandonment, due to a reduction in the level of available habitat within the territory. Further analysis of the data by the applicant through PAT modelling could inform consideration of which, and how many, turbines would need to be addressed to achieve the mitigation necessary to overcome this issue. There should be no additional loss on the eagle territory beyond that from all current consented sites; and*
  - *On the basis of the information provided for red-throated diver, the proposal will adversely affect the integrity of the Lewis Peatlands SPA. It is possible that a breeding pair of divers will be displaced, compromising the size and distribution of the diver population on the SPA. This impact arises from the proximity of turbine 24 to a successful red-throated diver breeding site within the SPA. We consider that the only alternatives are to remove this turbine or reposition it beyond the recommended disturbance distance. Note that turbine 24 is likely to be one of the turbines referred to above as impacting upon the golden eagle range usage within the SPA.*
- 1.1.2 PAT modelling was undertaken to investigate the implications of removing various turbines from the layout (see Annex A<sup>1</sup> for PAT Model Report).

## 2. PAT modelling

### 2.1 Approach

- 2.1.1 The PAT (Predicting Aquila Territories) model is a Geographical Information System (GIS) tool that can be used to predict the range use of resident pairs of golden eagles and can also be used to

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<sup>1</sup> Annex A is a confidential annex which will be issued separately to Comhairle nan Eilean Siar, NatureScot, Energy Consents Unit, NatureScot and RSPB Scotland but not to other consultees.

predict the extent of range loss and, therefore, contribute to the design of wind farms (assuming that eagles are displaced from their vicinity). PAT modelling applies a 500m buffer around turbine locations and assumes that where this footprint overlaps with an eagle territory would be lost as potential range use.

- 2.1.2 The PAT model calculates a value of eagle ranging potential in each 50 m x 50 m pixel within the territory, based upon distance from the territory centre, proximity to convex terrain, allocating greater values to more central locations in the territory and along the ridges that occur within the territory. The sum of eagle ranging potential of all pixels equals 100 for any single model.
- 2.1.3 However, monitoring of golden eagle has shown that the displacement from the 500m buffer is partial with golden eagle still regularly flying close to operational wind farms. Although the reduction in activity levels is marked (approximately 67% - Fielding & Haworth 20102) there remains the potential that golden eagle may continue to choose to forage close by or commute through an operational wind farm. As the habitat loss is incomplete it is possible to modify the range loss to account for this by applying a correction factor (CF). Note that this approach was undertaken when calculating range use overlap for the original consented Stornoway wind farm.
- 2.1.4 Although the PAT model report considers the impacts upon three eagle territories, this technical note (TN) only considers those impacts upon a single pair located within the SPA (Territory 1 in the attached PAT model report).
- 2.1.5 In order to establish a baseline, **Model 1** predicted the range use of Territory 1 with no additional influence from any wind farm developments. From this model, the extent of range use overlap within a 500m buffer of the constructed wind farms at Pentland Road and Beinn Grideag and the consented single turbine at Beinn Thulabaigh was calculated. The location of the latter site is c100m south-east from the location of T25 in the Proposed Development.
- 2.1.6 **Model 2** predicted the range use based on the assumption that the 500m buffers of the constructed Pentland Road and Beinn Grideag wind farms and the 500m buffer of the consented single turbine at Beinn Thulabaigh identified in Model 1 were now excluded, assuming these areas will not be used by Territory 1. For Model 2, as it is assumed that the consented single turbine at Beinn Thulabaigh will be built, should the Proposed Development be consented, T25 will not be built given their proximity. A range of layouts were then applied to Model 2 in order to calculate the following additional range use values:
- Firstly, range use overlap was calculated for the existing consented Stornoway Wind Farm to establish the cumulative total range use overlap from all consented sites (the range use loss from this layout plus that from Model 1). This would provide the range use overlap for all consented sites that NatureScot have previously considered as an acceptable level of range use loss;
  - A series of layouts were then identified, the aim being to identify a suitable layout that met the cumulative total range use overlap whilst still keeping the number of turbines removed to a minimum and taking into account wind yield data on proposed turbine locations. The range use overlap of each layout was combined with the output of Model 1 to arrive at a cumulative total for comparison to that from all consented sites.
- 2.1.7 **Model 3** predicted the range use overlap of Territory 1, excluding the areas of the 500m buffers of the constructed Pentland Road and Beinn Grideag wind farms only but did not include the 500m buffer of the consented single turbine at Beinn Thulabaigh. Condition 3 of the consent for the Beinn Thulabaigh scheme (Annex B) states that this turbine can only be constructed should the consented Stornoway Wind Farm be built. For this model, it is assumed that should the Proposed Development be consented, T25 will be built in place of the consented single turbine at Beinn Thulabaigh. A single layout was identified and the range use overlap combined with the range use

overlap of the constructed wind farms at Pentland Road and Beinn Grideag only that were provided in Model 1 to arrive at a cumulative total for comparison.

## 2.2 Results

2.2.1 The results of Model 1 are summarised in Table 2.1. Given there was overlap between Pentland Road and Beinn Thulabaigh, the combined figures taking account of this overlap are also presented.

Table 2.1 Model 1 results

Development area	Area of overlap (ha)	Range use overlap (%)
Pentland Road	235.75	4.8
Beinn Thulabaigh	76.25	1.6
Beinn Grideag	0.00	0
Combined	306.00	6.3

2.2.2 The results of the PAT modelling for Model 2 and 3, including cumulative totals taking account of the outputs of Model 1 are summarised in Table 2.2.

Table 2.2 Model 2 and 3 results

Model	Layout	Number turbines dropped	Details	Baseline range use overlap %	Layout range use overlap %	Cumulative range use overlap %	CF range use overlap %
Model 2*	Consented site	-	Original consented site	6.3	3.8	10.1	6.77
	Layout 1	2	Proposed less T24, 25	6.3	4.2	10.5	7.04
	Layout 2	5	Proposed less T24, 25, 30, 31 and 34	6.3	2.9	9.2	6.16
	Layout 3	4	Proposed less T23, 24, 25 and 26	6.3	3.7	10	6.7
	Layout 4	3	Proposed less T24, 25 and 34	6.3	3.7	10	6.7
	Layout 5	3	Proposed less T23, 24 and 25	6.3	4.1	10.4	6.97
	Layout 6	3	Proposed less T24, 25 and 26	6.3	4.1	10.4	6.97
	Layout 7	3	Proposed less T24, 25 and 27	6.3	4	10.3	6.90
Model 3**	Layout 1	2	Proposed less T24 and 34	4.8	5	9.8	6.57

\* Baseline range use overlap for Model 2 takes account of combined range use overlap from consented Pentland Road and Beinn Thulabaigh wind farms in Model 1;

\*\*Baseline range use overlap for Model 3 takes account of range use overlap from consented Pentland Road wind farm only in Model 1.

2.2.3 The cumulative total for Model 1 and Model 2 consented sites (after applying the correction factor of 0.67) results in a range use overlap of 6.77%. This figure represents the range use overlap for all

consented sites that NatureScot have previously considered being an acceptable level of range use loss.

2.2.4

From the various layouts applied to Model 2 and Model 3, four layouts provide cumulative range use overlaps that fall below the threshold level of 6.77%:

- Model 2 Layout 2 6.16%: This was based on modelling the impacts of Pentland Road, Beinn Grideag and Beinn Thulabaigh and considered the additional impacts of the proposed site less five turbines (T24, 25, 30, 31 and 34);
- Model 2 Layout 3 6.7%: This was based on modelling the impacts of Pentland Road and Beinn Thulabaigh and considered the additional impacts of the proposed site less four turbines (T23, 24, 25 and 26);
- Model 2 Layout 4 6.7%: This was based on modelling the impacts of Pentland Road and Beinn Thulabaigh and considered the additional impacts of the proposed site less three turbines (T24, 25 and 34).
- Model 3 Layout 1 6.57%: This was based on modelling the impacts of Pentland Road only and considered the additional impacts of the proposed site less two turbines (T24 and 34).

## 2.3 Conclusion

2.3.1

PAT modelling predicted that the cumulative range loss for Territory 1 from all current consented sites is 6.77%. Four variations of the Proposed Development fall below this threshold, three of which assume that the single turbine Beinn Thulabaigh scheme will be built in place of T25. The fourth layout assumes that T25 would be built, and that Beinn Thulabaigh would not.

2.3.2

Whilst all four layout options provide a cumulative range loss that falls below the threshold for all current consented sites, in terms of minimising the number of turbines lost to the Proposed Development and taking account of wind yield data, Model 3 Layout 1 (dropping Turbine 24 and 34) is the preferred option to take forward. This is based upon the understanding that should this proposed layout be consented, Condition 3 of the planning consent for the single turbine scheme at Beinn Thulabaigh means that this scheme will not be built.

## 3. Lewis Peatland SPA red-throated diver

3.1.1

By removing Turbine 24 from the Proposed Development, the potential impacts of displacement arising from the proximity of Turbine 24 to a successful red-throated diver breeding site within the SPA has been removed. Therefore, the concerns of NatureScot have been addressed, and there will be no adverse effects on the integrity of the Lewis Peatlands SPA red-throated diver population.

## Issued by

## Approved by

.....  
**Colin Ormston**

.....  
**Ian Simms**

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# **Annex A**

## **Confidential Annex**

# **Annex B**

## **Beinn Thulabaigh Decision Notice**



## COMHAIRLE NAN EILEAN SIAR

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Date	21 May 2020

Knock And Swordale Community Company Ltd  
c/o Mr Graham Donnachie  
Green Cat Renewables Ltd  
Stobo House  
Midlothian Innovation Centre  
Roslin  
EH25 9RE

Dear Sir/Madam

### APPROVAL OF PLANNING PERMISSION (DETAILED) - EIA DEVELOPMENT

APPLICATION REFERENCE NO: **19/00209**

TYPE OF APPLICATION: **Planning Permission Wind energy**

LOCATION OF DEVELOPMENT: **Wind Turbine, Beinn Thulabaigh, Pentland Road To Achmore**

PROPOSAL: **Erection of a single wind turbine, up to 150m in tip height, (max hub height of 81m and max rotor diameter 128m) and associated infrastructure.**

Please find attached the Decision Notice relating to the above proposal.

Please note that under planning legislation, once Planning Permission has been granted, and it is intended to commence development, the Comhairle must be informed of the start date, as soon as is practicable. Failure to provide this notification is a 'Breach of Planning Control' under Section 123(1) of the Town and Country Planning (Scotland) Act 1997. A 'Notice of Initiation of Development' form is provided for your assistance in complying with this requirement. If you wish to clarify any matter relating to the planning permission, please contact the Planning Service by telephone or by email to [planning@cne-siar.gov.uk](mailto:planning@cne-siar.gov.uk).

It would be appreciated if you would take the time to complete the [Customer Satisfaction Survey](#). All responses are completely anonymous.

Yours faithfully

*MC Ferguson*

Morag Ferguson  
Planning Manager (Development Management)  
Communities Department



## GRANT OF PLANNING PERMISSION

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (THE ACT)  
AS AMENDED BY THE PLANNING ETC (SCOTLAND) ACT 2006

APPLICATION REFERENCE NO:	19/00209
TYPE OF APPLICATION:	Planning Permission Wind energy
VALID APPLICATION RECEIVED:	8 May 2019
PROPOSED DEVELOPMENT:	Erection of a single wind turbine, up to 150m in tip height, (max hub height of 81m and max rotor diameter 128m) and associated infrastructure.
LOCATION OF DEVELOPMENT:	Wind Turbine, Beinn Thulabaigh, Pentland Road To Achmore, Achmore
APPLICANT:	Knock and Swordale Community Company Ltd

Comhairle nan Eilean Siar having examined the relevant Environmental Information and taken into account the results of the consultations and information gathered, has prepared a Report, attached as Appendix 1, which sets out the findings of its examination and its reasoned conclusion of the significant effects of the development on the environment. Comhairle nan Eilean Siar is satisfied that its reasoned conclusion remains up to date at the date of issue of this Notice.

Comhairle nan Eilean Siar grants Planning Permission for the development described above subject to the development being undertaken in accordance with:

- a) the **Conditions** stated in **Schedule 1** to this Notice;
- b) the details submitted subject to any approved variation(s);
- c) the **plans approved** and if applicable the terms of any Section 75 agreement or Direction, all identified on **Schedule 2** to this Notice;
- d) the **Environmental Mitigation** measures identified in **Schedule 3** to this Notice; and
- e) any measures, for future **monitoring** of the significant adverse effects of the development on the environment, identified in **Schedule 4** to this Notice.

Date: 21 May 2020

Signed:



Planning Manager (Development Management)

**This Planning permission will expire after 5 years from the date on which it is granted unless the development to which it relates has been commenced.**

**A 'Notice of Initiation of Development', must be submitted to Comhairle nan Eilean Siar prior to commencement of the development.**

A copy of this notice is available on-line at: <http://planning.cne-siar.gov.uk/publicaccess/>. An electronic copy of the notice can be saved from this location.

DECISION NOTICE SENT TO:

Knock And Swordale Community Company Ltd  
c/o Mr Graham Donnachie  
Green Cat Renewables Ltd  
Stobo House  
Midlothian Innovation Centre  
Roslin  
EH25 9RE

## SCHEDULE 1: CONDITIONS

APPLICATION REFERENCE NO: 19/00209

The following legally enforceable conditions are imposed on the grant of this planning consent for the reasons stated after each condition.

### GENERAL

**Condition 1** The consent is for a period of 25 years from the date of first commissioning (being the date on which electricity is first exported to the grid on a commercial basis). Written confirmation of the date of first commissioning shall be provided to the Comhairle as Planning Authority no later than one calendar month after the date of first commissioning.

*Reason* To define the duration of the consent.

**Condition 2** The wind turbine shall be constructed in location Eastings 136387 Northings 935081. Micro-siting of the wind turbine, ancillary infrastructure or tracks will require the prior written approval of the Comhairle as Planning Authority (in consultation with SNH, SEPA, HIAL, MoD, NATS, Met Office and/or licence holders of microwave Fixed Links, as determined by the Comhairle as Planning Authority).

*Reason* To allow flexibility to microsite based on ground conditions, while managing impacts on social, economic and environmental assets.

**Condition 3** The development to which this planning permission relates shall only be implemented in conjunction with the Stornoway Wind Farm Generating Station. (consented by Scottish Ministers on 7 September 2012 under Section 36 of the Electricity Act 1989 (ECU reference EC00005238) and varied on 22 March 2016, under Section 36C of the Electricity Act 1989).

*Reason* The environmental impacts of the development in terms of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulation 2017 have only been submitted and examined in arriving at a determination on the basis of cumulative impacts with the Stornoway Windfarm Generating Station (and not the alternative proposals located within the site boundary of the consented Stornoway Windfarm).

**Condition 4** Throughout the life of the development turbine blades shall rotate in the same direction as the adjacent wind farms.

*Reason* In the interests of visual amenity.

**Condition 5** There shall be no borrow pits created within the development site.

*Reason* There is an existing borrow pit with adequate capacity to supply the development located within close proximity to the development site.

**Condition 6** If the operation of any wind turbine, hereby approved, causes interference to domestic television reception, the developer shall submit to the Comhairle as Planning Authority, for approval, a mitigation scheme for the remediation of the interference. The scheme approved in writing by the Comhairle shall be implemented, at the cost of the developer, and retained throughout the life of the development to the satisfaction of the Comhairle as Planning Authority.

*Reason* In order to ensure the security and quality of television signal reception in the area.

**Condition 7** All of the transmission lines relating to the turbine shall be underground and all land disturbed by the insertion of underground cables shall be reinstated within six months of the completion of the said works to the satisfaction of the Comhairle as Planning Authority, unless otherwise agreed in writing.

*Reason* In the interests of visual amenity.

## **TURBINE AND SUBSTATION DETAILS**

**Condition 8** There shall be no commencement of development unless full details of the proposed wind turbine (including, but not limited to, the power rating and sound power levels, the size, type, external finish and colour which should be non-reflective, pale grey, semi-matt); the full details of the sub-station including the colour and finish of the sub-station; and full details of all associated apparatus; have been submitted to and approved in writing by the Comhairle as Planning Authority. The turbine shall be consistent with the candidate turbine or range assessed in the Environmental Impact Assessment, and the tip height shall not exceed 150 metres above ground level. The development shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust, staining or discolouration, until such time as the turbine is decommissioned.

Neither the wind turbine or any 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 Comhairle as Planning Authority.

**Reason** *To ensure the turbine, sub-station and associated apparatus' environmental, noise, landscape and visual impacts conform to the assessed Environmental Impact Assessment and in the interests of the visual amenity of the area.*

## **AVIATION AND RADAR**

**Condition 9** The wind turbine to which this planning permission relates shall not be erected until the Radar Mitigation Scheme required by condition 6 of the consent for the Stornoway Wind Farm Generating Station (consented by Scottish Ministers on 7 September 2012 under Section 36 of the Electricity Act 1989 (ECU reference EC00005238) and varied on 22 March 2016, under Section 36C of the Electricity Act 1989, has been fully implemented in accordance with the requirements of that condition.

**Reason** *To mitigate the adverse impacts of the Development on the provision of meteorological radar services by the Met Office from the Isle of Lewis.*

**Condition 10** There shall be no commencement of development until the Company has provided the Ministry of Defence, Civil Aviation Authority (CAA), Highlands and Islands Airports Ltd (HIAL) and NATS with the following information, and has provided evidence to the Planning Authority of having done so:

- the date of the expected commencement and end 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 turbine in latitude and longitude.

**Reason** *In the interests of aviation safety.*

**Condition 11** There shall be no commencement of development until the details of aviation safety lighting has been approved in writing by Comhairle as Planning Authority, in consultation with the Ministry of Defence and Highlands and Islands Airports Ltd (HIAL) and where the turbine tip is 150m the Civil Aviation Authority (CAA). The aviation safety lighting shall be fitted according to the approved details and will remain operational throughout the duration of this permission, unless otherwise agreed in writing by the Comhairle as Planning Authority.

**Reason** *In the interests of aviation safety.*

## **ARCHAEOLOGY**

**Condition 12** A written scheme for a program of archaeological works of the site shall be submitted for approval by the Comhairle as Planning Authority. Such scheme shall indicate how:

- a) the extent, character and significance of any archaeological remains within the site will be identified and evaluated;
- b) any archaeological remains would be preserved in situ or, where their preservation in situ cannot be achieved, how they would be investigated, recorded and recovered and the findings published;
- c) access to the development site to enable archaeological works and investigation recording and recovery of finds would be achieved; and

- d) notification of the commencement of development and access by an archaeologist to the site would be given.

No part of the development to which this planning permission relates shall commence until the Comhairle as Planning Authority has issued, in writing, its approval of the scheme; any consequential programme of archaeological works to be undertaken; and terms for the submission of a Data Structure Report that includes an assessment of the impact of the development on the archaeological remains.

This scheme and programme (or any subsequent variation to it that may be agreed in writing by the Comhairle as Planning Authority) shall then be implemented to the satisfaction of the Comhairle as Planning Authority.

*Reason* To ensure proper recording and protection of items of archaeological interest.

#### **NOISE**

**Condition 13** Unless agreed otherwise in writing by the Comhairle, as Planning Authority, throughout the life of the development to which this planning permission relates, access to the site by heavy goods vehicles shall be restricted to 0700 to 1900 hours on Mondays to Fridays and from 0700 to 12 noon on Saturdays with no such access on Sundays.

*Reason* To protect amenity at noise sensitive premises.

**Condition 14** Unless agreed otherwise in writing beforehand by the Comhairle as Planning Authority, construction work, (including any form of quarrying, blasting, crushing or batching) shall take place only within the hours of 0700 to 1900, Mondays to Fridays and from 0700 to 12 noon on Saturdays and not at all on Sundays. Any construction activity involving audible noise at the nearest noise sensitive property, from cutting, hammering or welding shall be subject to the foregoing hours, unless specific exceptions have received the prior approval of the Comhairle as Planning Authority in writing.

*Reason* To protect amenity at noise sensitive premises.

**Condition 15** Noise from activities involved in the construction of the development hereby permitted shall be limited to a level of 55dB LAeq 10hr at any time at any residential property. This condition shall only apply to dwellings or other Noise Sensitive Premises existing at the date of this permission.

*Reason* To protect amenity at noise sensitive premises.

**Condition 16** Unless otherwise specified below, all construction activities shall be undertaken in accordance with good practice as set out in BS5228 (1997) Noise and Vibration Control on Construction and Open Sites.

*Reason* To protect amenity at noise sensitive premises.

**Condition 17** At the request of the Comhairle as Planning Authority, following a valid complaint to the Comhairle relating to noise emissions from the construction phase, the developer shall measure, at its own expense, the level of noise emissions from the site, by the methodology in Annex E of BS 5228 (1997) Noise and vibration control on construction and open sites.

*Reason* To protect amenity at noise sensitive premises.

**Condition 18** At wind speeds not exceeding 10m/s, the wind turbine noise level at the façade of any dwelling or other noise sensitive premises as identified within Table 9.8, Chapter 9 - Noise - Volume 1 of the EIA Report shall not exceed 20dB LA90, 10min or the Background Noise Level plus 5 dB(A), whichever is the greater.

In this condition:

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

- "wind speeds" means wind speeds measured or calculated at a height of 10 metres above ground level on the wind farm site at the wind monitoring mast nearest to the premises of interest.
- "Noise Sensitive Premises" means premises, the occupants of which could be exposed to noise from the wind farm and includes hospitals, residential homes, nursing homes, etc.

*Reason* To protect the amenity at noise sensitive premises.

**Condition 19** If a complaint relating to noise emissions from the wind turbine(s) is made to the Comhairle as Planning Authority and the Comhairle considers that it merits investigation, the operator of the turbine(s) will, on written notice by the Comhairle, be required to measure, at their own expense, the level of noise emissions from the wind turbine(s). Noise monitoring shall be carried out by a suitably qualified noise expert or consultant previously agreed in writing by the Comhairle as Planning Authority and shall be carried out in accordance with the method statement stated in section 2.0 'Procedure to be followed in the event of a complaint' page 102 of the publication 'The Assessment and Rating of Noise from Wind Farms' (ETSUR-97, Department of Trade and Industry, September 1996). A protocol prepared by the appointed noise expert including a timetable for the collection, analysis and reporting of the noise data gathered shall be submitted to the Comhairle for approval within two months of the Comhairle having given notice of monitoring being required. The noise monitoring assessment report shall then be submitted to the Comhairle in accordance with the approved timetable.

*Reason* To quantify the loss of amenity at noise sensitive premises resulting from the operation of the windfarm.

**Condition 20** Should any noise monitoring undertaken in accordance with Condition 19 above demonstrate that the noise thresholds in Condition 18 are being exceeded, the developer shall submit a scheme of mitigating measures to the Planning Authority for written agreement within three months of the breach being identified. The agreed mitigating measures shall be implemented within three months of the written agreement or within any alternative timescale agreed in writing by the Comhairle as Planning Authority and thereafter retained throughout the life of the development unless otherwise agreed in writing by the Comhairle as Planning Authority.

*Reason* To ensure adequate mitigation is in place to protect amenity at noise sensitive premises.

#### **MANAGEMENT PLAN**

**Condition 21** There shall be no commencement of development unless a Habitat Management Plan has been submitted to and approved in writing by the Comhairle as Planning Authority, in consultation with SNH. The plan shall set out proposed management of the wind farm site during the period of construction, operation, decommissioning, restoration and aftercare of the site, and shall provide for the measures to be taken to avoid disturbance to otters, disturbance to breeding red-throated divers, hen harriers and golden eagle. It shall include:

- provisions to ensure all construction work takes place outwith the breeding season for the qualifying species of the Lewis Peatlands SPA;
- proposals for vegetation clearance, the use of local seed (if any) for reinstatement,
- consider appropriate grazing intensity by livestock and wild red deer for healthy blanket bog habitats and ground nesting birds such as hen harrier and wader species;
- measures and policies to prevent peatland erosion and encourage restoration;
- specify the scope of surveys to be undertaken to monitor the effects of the development on key wildlife and habitats;
- provisions for areas of compensation habitat for breeding hen harriers and waders should studies show the developments are leading to significant displacement; and,
- provide details for the appointment of an Ecological Clerk of Works to advise, oversee and ensure the agreed mitigation measures are implemented.

Unless otherwise agreed in advance in writing with the Comhairle as Planning Authority, the measures in the approved plan shall be implemented in full.

The developer shall submit details of measures it has taken to secure collaboration with other wind turbine/wind farm developers and operators in the Pentland Road Area in the formulation of the Habitat Management Plan.

*Reason* In the interests of the protection of qualifying species of the Lewis Peatlands SPA.

#### **WILDLIFE MANAGEMENT PLAN**

**Condition 22** There shall be no commencement of development unless a Wildlife Management Plan as detailed in the Environmental Impact Assessment has been submitted to and approved in writing by the Comhairle as Planning Authority, in consultation with SNH. The developer shall submit details of measures it has taken to secure collaboration with other wind turbine/wind farm developers and operators in the Pentland Road Area in the formulation of the Wildlife Management Plan.

*Reason* In the interests of the protection of wildlife and the qualifying species of the Lewis Peatlands SPA.

#### **CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN**

**Condition 23** There shall be no commencement of development unless a Construction and Environmental Management Plan ("CEMP") outlining site specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with details of their timetabling, has been submitted to and approved in writing by the Comhairle as Planning Authority in consultation with SNH and SEPA.

The CEMP shall include (but shall not be limited to):

- a) a Site Waste Management Plan (SWMP) dealing with all aspects of waste produced during the construction period other than peat, including details of contingency planning in the event of accidental release of materials which could cause harm to the environment;
- b) details of the formation of the construction compound, welfare facilities, contractor parking, material stockpiles and fuel storage;
- c) a Dust Management Plan;
- d) a Pollution Prevention and Drainage Plan (PPDP) which shall include:
  - Pollution prevention and mitigation measures for all construction works potentially capable of giving rise to pollution to prevent run-off and water pollution of watercourses and associated ecology;
  - Design details of culverts to be installed over any water-crossings;
  - Arrangements for the storage of fuels, oils or chemicals and arrangements for refuelling of vehicles within the site;
  - A construction phase and post construction Site Drainage Management Plan, to include details of management of surface and sub-surface run off, specific measures to be employed in periods of heavy rainfall and methods to be employed in any dewatering operations required during turbine base excavation and development;
  - Mitigation measures to minimize impacts on any groundwater dependent terrestrial ecosystems (GWDTEs).

*Reason* To ensure manage the risks of pollution and environmental impacts on the water environment and ground water dependent habitats during construction and in the subsequent operation of the wind farm.

#### **PEAT MANAGEMENT PLAN**

**Condition 24** The access track and construction compound forming part of the development to which this planning permission relates shall be floated over the peat sub soil as illustrated by the approved plan detailing a typical Cross Section through a Floating Road.

*Reason* In order to minimise disturbance to peat, a carbon rich soil.

**Condition 25** There shall be no commencement of development unless a Peat Management Plan (PMP) has been submitted to and approved in writing by the Comhairle as Planning Authority, in consultation with SEPA. The PMP will include the following:

- a) A peat probe survey and any proposed micro-siting of turbines, ancillary infrastructure or access tracks to avoid as far as possible areas of deep peat;

- b) A habitats survey to identify any areas hosting GWDTEs;
- c) Extent and method of peat/soil stripping including methods and procedures for handling excavated soils;
- d) Proposed locations for storage and estimated quantities of peat and other soils together with any management and mitigation measures to be employed to protect the peat and soils for re-use, including details of temporary storage should it be required;
- e) Detail of the physical nature of the peat and confirmation of its suitability for the reuses proposed;
- f) Proposals for re-use of peat and other soils including proposed locations and estimated quantities for re-use and proposals in respect of residual excavated peat and soils;
- g) A peat slide hazard assessment and failure contingency plan.

*Reason* To minimise peat excavation and disturbance and resultant carbon losses, manage the risks of peat failure and pollution of the water environment, prevent the unnecessary production of waste soils and peat and satisfactorily manage the re-use or disposal of excavated soil and peat.

#### **TRAFFIC MANAGEMENT PLAN**

**Condition 26** At least two months prior to the commencement of the development to which this planning permission relates, a Traffic Management Plan, and Route Management Plan shall be submitted for the approval of the Comhairle as Planning Authority. The Traffic Management Plan shall include:

- a) a detailed route for the transportation of all abnormal loads including the transport of materials, components or heavy plant or cranes required in relation to construction works;
- b) the proposed methods and plant to be employed in transportation;
- c) for all routes identified, an assessment of loads to be transported against the loading capacity of ferry pier linkspan(s), bridges, box culverts or any other spanning structures to be crossed along the route(s);
- d) the capacity of junctions along the route(s) for manoeuvring and turning;
- e) a pre-construction public road condition survey of all transportation and haul route(s);
- f) a programme of regular inspections to be undertaken during construction to ensure any damage to the public road is identified in a timely manner;
- g) proposed parking arrangements for and the estimated number of movements of construction site traffic;
- h) measures to be taken to prevent loose or deleterious material being deposited on the public road network;
- i) proposals for sweeping and cleaning of any debris that may be deposited on the public road network during construction;
- j) measures for the protection of buried services when excavating;
- k) measures to prevent surface water from flowing onto the public road during construction.

No development shall commence on the site to which this planning permission relates until the Traffic Management Plan and Route Management Plan has been approved in writing by the Comhairle as Planning Authority. The development shall thereafter be operated only in full accordance with the approved Traffic Management Plan unless agreed otherwise in writing by the Comhairle as Planning Authority.

*Reason* In the interests of road and public safety and to finalise traffic management measures.

**Condition 27** At least one month before development commences, the developer shall, in conjunction with a representative of Comhairle nan Eilean Siar (Roads, Bridges and Street lighting), carry out a detailed review of the pre-construction public road condition survey prepared for all transportation and haul route(s). The developer shall provide a written guarantee to fund the cost of repairs, along the transportation and haul route(s), to the satisfaction of the Comhairle as Roads Authority.

*Reason* In order to secure an agreed record of the condition of the public road prior to commencement of the development and maintain the condition.

## REINSTATEMENT, DECOMMISSIONING AND SITE RESTORATION

**Condition 28** At least two months prior to the commencement of the development to which this planning permission relates a scheme for the reinstatement of the site post construction stage shall be submitted for the approval of the Comhairle as Planning Authority. Such scheme shall include for the landscaping around the turbine base, substation and crane hardstanding; and shall include for reinstatement of the edges of the access tracks and bellmouth junction to leave them at the minimum width needed to allow necessary service access during the operational period. No part of the development to which this planning permission relates shall commence until the Comhairle has issued approval of the scheme in writing. The development approved shall be carried out in accordance with the approved details and shall be carried out within 12 months of commissioning of the turbines unless any variation of the approved scheme has been agreed in writing by the Comhairle as Planning Authority beforehand. The approved reinstatement scheme shall then be maintained throughout the life of the development.

*Reason* To minimise the visual impact of the development post construction and during operation.

**Condition 29** Prior to the commencement of the development to which this planning permission relates, a draft decommissioning, restoration and aftercare strategy shall be submitted to and approved in writing by the Comhairle as Planning Authority. The draft decommissioning strategy shall include proposals for the removal of the development, the treatment of ground surfaces, the management and timing of the works, and environmental management provisions. No later than one year prior to decommissioning of the development or the expiration of this permission (whichever is the earlier) a detailed decommissioning, restoration and aftercare plan, based upon the principles of the approved draft decommissioning, restoration and aftercare strategy, shall be submitted to the Planning Authority for written approval in consultation with SNH and SEPA. The detailed decommissioning, restoration and aftercare plan will provide updated and detailed proposals for the removal of the development, the treatment of ground surfaces, the management and timing of the works and environment management provisions. The development shall be decommissioned, site restored and aftercare thereafter undertaken in accordance with the approved plan, unless otherwise agreed in writing in advance with the Comhairle as Planning Authority in consultation with SNH and SEPA.

*Reason* To ensure satisfactory restoration of the site in the interests of visual amenity and protection of the water environment and any ground water dependent habitats on cessation of the development.

**Condition 30** There shall be no commencement of development unless the developer has delivered a bond or other form of financial guarantee in terms acceptable to the Comhairle as Planning Authority which secures the cost of performance of all decommissioning, restoration and aftercare obligations contained in Condition 29 to the Planning Authority. The financial guarantee shall thereafter be maintained in favour of the Planning Authority until the date of completion of all restoration and aftercare obligations. The value of the financial guarantee shall be determined by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning, restoration and aftercare obligations contained in Condition 29. The value of the financial guarantee shall be reviewed by a suitably qualified independent professional no less than every five years and increased or decreased to take account of any variation in costs of compliance with restoration and aftercare obligations and best practice prevailing at the time of each review.

*Reason* To ensure that there are sufficient funds to secure performance of the decommissioning, restoration and aftercare conditions attached to this planning permission in the longer term interests of the environment.

In addition to the above conditions, please note the following informatives. These are not planning conditions. They are given for your instruction and help only.

1. This Permission gives consent or approval under Town and Country Planning legislation ONLY. Depending on the nature of your proposals, you may also require to obtain other permissions from the Council, e.g. Building Warrant, Caravan Site licence, etc. Please ask if in doubt.
2. Existing services (such as water mains, electricity wires or telephone lines) shall be protected. You may be liable for any damage that is caused by any works or use associated with the development.
3. It would make sense for you to try to co-ordinate the installation of services. For example, BT could install a cable in the same trench as your water supply or drainage system. Contact the relevant service providers when work is about to commence.
4. Comhairle nan Eilean Siar in partnership with the Scottish Fire and Rescue Service recommends that consideration be given to the provision of enhanced fire safety measures in your premises.
5. Scottish Water, when providing a response to a planning consultation, make no commitment to servicing a future connection to their infrastructure. Scottish Water encourages and, on occasion, directs developers to complete a [Pre-Development Enquiry form](#) (PDE) for this purpose. Developers should refer to the full text of Scottish Water's consultation response which is available to view on-line.

## SCHEDULE 2: PLANS

### (AND AS APPLICABLE) DETAILS OF APPROVED VARIATIONS, PLANNING AGREEMENTS AND DIRECTIONS

APPLICATION REFERENCE NO:

19/00209

#### Details of Approved Plans

01A, 02A, 04, 05, 06, 07A, 08

#### Details of approved variation(s) (if applicable)

A re-siting of the turbine and hardstanding to the west of the initial position, in order to minimise impacts on areas of deep peat.

#### Terms of Section 75 Agreement (if applicable)

Not Applicable

#### Terms of Directions under Section 58(2) or 59(5) of the ACT (if applicable)

A Direction is made that Subsection 58(1) of the Act is not to apply. In terms of sub-section 58(2) of the Act this Planning Permission will expire after 5 years from the date on which it is granted unless the development to which it relates has been commenced.

## **SCHEDULE 3: ENVIRONMENTAL MITIGATION MEASURES**

The Environmental Mitigation measures are those set out in the submitted EIA Report and following examination and the input of consultation bodies shall be translated into the following:

- a Habitat Management Plan as required by Condition 21 of Schedule 1
- a Wildlife Management Plan as required by Condition 22 of Schedule 1
- a Construction and Environmental Management Plan as required by Condition 23 of Schedule 1
- a Peat Management Plan as required by Condition 25 of Schedule 1

**SCHEDULE 4:**  
**MEASURES FOR MONITORING THE SIGNIFICANT ADVERSE  
EFFECTS OF THE DEVELOPMENT ON THE ENVIRONMENT**

Monitoring the effects on ornithology the detail of which will be agreed as part of the following:

- a Wildlife Management Plan as required by Condition 22 of Schedule 1

## **SCHEDULE 5: PROCEDURE IF YOU FEEL AGGRIEVED**

If the applicant is aggrieved by the decision of the planning authority (i) to refuse permission for the proposed development (ii) to refuse approval required by a condition in respect of the proposed development or (iii) to grant permission or approval subject to conditions, the applicant may appeal to the Scottish Ministers under section 47 of the Town and Country Planning (Scotland) Act 1997 within three months from the date of this notice.

The notice of appeal should be addressed to:

Planning and Environmental Appeals Division  
4 The Courtyard  
Callendar Business Park  
Callendar Road  
Falkirk  
FK1 1XR

E-mail: [DPEA@gov.scot](mailto:DPEA@gov.scot)

Appeal Forms can be downloaded from:

<http://www.gov.scot/Topics/Built-Environment/planning/Appeals/howtosubmitanappeal>

If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town & Country Planning (Scotland) Act 1997.

## **APPENDIX 1**

The Report on Handling of Report to Committee is published under separate cover and comprises:

The Report to the Planning Applications Board dated 14 May 2020 and Appendices:

- 1 Schedule of Proposed Conditions
- 2 Plans – Location, Site, Contours, Elevation, Track Cross-section
- 3 Examination of the EIA Report
- 4 Habitats Regulations – Appropriate Assessment
- 5 Responses to Consultation
- 6 Representations
- 7 Local Development Plan and National Policy