

Appendix 4.2 EIA Scoping Opinion

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The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

Scoping Opinion.

Application reference:	22/080/SCO
Complete application received:	3 March 2022
Consultation expiry:	12 April 2022
Expiry date:	9 May 2022
Development description:	Scoping opinion request to erect 4 x 6.6MW wind turbines (maximum height 180m)
Location of development:	Hundland Hill (Land Near), Birsay, Orkney
Applicant:	Nisthill Wind Farm Limited
Agent:	ITPEnergised

1. Introduction

Under the provisions of Regulation 17 of The Town and Country Planning (Environmental Impacts Assessment) (Scotland) Regulations 2017 ('The Regulations'), this Scoping Opinion has been adopted by Orkney Islands Council, as planning authority.

2. The Scoping Opinion

Orkney Islands Council adopts this Scoping Opinion having taken into account the information provided by the Applicant in the request dated 3 March 2022 in respect of the specific characteristics of the proposed development and representations received in response to the consultation undertaken.

Orkney Islands Council considers that sufficient information has been submitted in order for a Scoping Opinion to be issued to meet the requirements of Regulation 17(2) of the EIA Regulations. That is, a request must include:

- (a) a description of the location of the development, including a plan sufficient to identify the land;
- (b) a brief description of the nature and purpose of the development and of its likely significant effects on the environment; and

- (c) such other information or representations as the developer may wish to provide or make.

The Proposed Development falls within Schedule 2 (Paragraph 3 (j) (i)) of the EIA (Scotland) Regulations 2017. The Proposed Development has the potential to have significant environmental effects due to its size, location and the nature of the impact (e.g. the magnitude and spatial extent) as set out in Schedule 3 of the EIA (Scotland) Regulations 2017.

This Scoping Opinion sets out the information that Orkney Islands Council considers should be included in the EIA and EIA Report for the proposed development. In formulating this Scoping Opinion, Orkney Islands Council has taken account of the requirements of the EIA Regulations 2017, the nature and scale of the proposed development, the nature of the receiving environment, current best practice in the preparation of EIA Reports, and the views expressed by the organisations and bodies that responded to the consultation.

This Scoping Opinion is based on information contained in the Applicant's written request for a Scoping Opinion and information available at today's date. The adoption of this Scoping Opinion by Orkney Islands Council does not preclude Orkney Islands Council from requiring of the Applicant information in connection with any Environmental Impact Assessment (EIA) Report submitted in connection with its application for planning permission for the development. This Scoping Opinion will not prevent Orkney Islands Council from seeking additional information at the application stage.

3. Consultation on proposed scope of the EIA

Orkney Islands Council has a duty under Regulation 17(4) of the EIA Regulations 2017 to consult before adopting a Scoping Opinion. The below listed bodies were all consulted, as either statutory consultation bodies or other bodies which Orkney Islands Council considers likely to have an interest in the proposed development by reason of their specific environmental responsibilities or local and regional competencies.

- Roads Services – No response received.
- Scottish Water – Received 27 April 2022
- Planning Unit (North Region) SEPA – Received 31 March 2022
- Nature Scot – Received 12 April 2022
- The Royal Society for The Protection of Birds (RSPB) – Received 12 April 2022
- Environmental Health – Received 20 April 2022
- MoD (Ministry of Defence) – Received 24 May 2022
- NATS (National Air Traffic Services) – Received 24 March 2022
- Orkney Archaeologist – Received 27 April 2022
- Development & Marine Planning – Environment – Received 22 April 2022
- Development & Marine Planning – No Response received.
- Historic Environment Scotland – Received 11 April 2022

- Wind@jrc.co.uk – Received 25 March 2022
- Windfarm.management@arqiva.com – No Response received.
- Orkney Heritage Society (West) – No Response received.
- Highlands & Islands Airports Ltd – Received 22 March 2022
- Kirkwall Airport - Senior Pilot – Received 27 April 2022
- Airfield Superintendent – No Response received.
- Engineering Services – Received 22 April 2022

The full list of consultation responses received is attached to this Scoping Opinion at Appendix 1. Each should be read in full for detailed requirements from individual consultation bodies and for comprehensive guidance, advice and, where appropriate, templates for preparation of the EIA Report.

Unless stated to the contrary in this Scoping Opinion, Orkney Islands Council expects the EIA Report to include all matters raised by the consultees.

4. Procedure

4.1. Consideration of alternatives

Schedule 4, paragraph 2 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 requires that all EIAs should include information on the main alternatives studied and an indication of the main reasons for choosing the selected option, with reference to the environmental effects. The EIA Report should therefore contain details of considered alternative approaches and why the proposed development was selected, focussing on the specific extent, direction and phasing proposed, reasons for discounting other sites. This will be particularly important to help address cumulative impact.

The following scoping responses provide specific requirements in respect of the alternatives assessment:

NatureScot recommends that, as part of any design iteration, the scale of development proposed should be reduced to avoid significant cumulative impacts with other wind turbine developments in this area.

The Royal Society for The Protection of Birds (RSPB) Scotland advise that the EIA Report should include an assessment of reasonable alternatives including site location, development scale and design of the proposed development. An indication as to the main reasons for selecting the chosen option, including a comparison of the environmental effects should also be provided within the EIA Report. If no alternatives sites are to be considered, the reasons why alternative sites are not feasible should be explained (see the full consultation response at Appendix 1).

4.2. Schedule 4 – Information for inclusion in an EIA Report

As stated in Schedule 4 of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and confirmed in Planning Circular

1/2017: Environmental Impact Assessment regulations, the EIA report must include the following information.

1.

A description of the development, including in particular:

(a) Description of the location of the development.

(b) Description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases.

(c) Description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used.

(d) An estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.

2.

A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3.

A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

4.

A description of the factors specified in Regulation 4(3) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.

5.

A description of the likely significant effects of the development on the environment resulting from, inter alia:

- (a) the construction and existence of the development, including, where relevant, demolition works;
- (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;
- (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;
- (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);
- (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;
- (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;
- (g) the technologies and the substances used.

The description of the likely significant effects on the factors specified in Regulation 4(3) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project [including in particular those established under Council Directive 92/43/EEC and Directive 2009/147/EC].

6.

A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

7.

A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which

significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.

8.

A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/ EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

9.

A non-technical summary of the information provided under paragraphs 1 to 8.

10.

A reference list detailing the sources used for the descriptions and assessments included in the EIA report.

5. Matters proposed to be considered within the Scoping Opinion Request

The Applicant proposes to scope in the following matters:

- Landscape and Visual
- Ecology and Nature Conservation
- Ornithology
- Traffic and Transportation
- Noise
- Cultural Heritage
- Geology, Peat, Hydrology and Hydrogeology
- Shadow Flicker
- Socio-economics, Tourism and Recreation
- Aviation and Radar

The Applicant proposes to scope out the following matters:

- Air Quality and Human Health
- Risk of Major Accidents and/or Disasters
- Water Environment and Coastal Processes
- Telecommunications

6. Site-Specific Issues

In order to make the scope of the EIA Report acceptable, in conjunction with consideration of the above general information requirements, it is considered that the following should be addressed in accordance with the details set out in the remainder of this Scoping Opinion:

Flood risk – The Scoping Report does not outline mitigation of the impact of the proposed development in relation to flood risk. Orkney Islands Council's **Engineering Services** has therefore requested that Flood Risk should not be scoped out of the EIA. See section 6.8 below and Engineering Services full consultation response at Appendix 1.

NatureScot encourages the Applicant to think about how they will deliver positive effects for biodiversity net gain. Whilst this will not form an individual topic chapter in itself within the EIA, consideration may be given to integrating biodiversity net gain within the assessment, such as through the Ecology and Landscape/Visual chapters.

HIAL also requires that the applicant commissions an Aviation Impact Feasibility Study to understand any impact on the infrastructure and operation of Kirkwall Airport. This should form part of the Aviation assessment and the requested study provided as an appendix to inform this.

MoD has stated concerns, as the development proposed would cause a potential obstruction hazard to these military low flying training activities. To address this impact, it would be necessary for the development to be fitted with MoD accredited aviation safety lighting in accordance with the requirements of the Air Navigation Order 2016.

Below we review each topic; the scope proposed by the Applicant and any additional requirements for the EIA identified by consultees to the scoping opinion request.

6.1 Details

The EIA Scoping Report provides a brief summary of the proposed development. The full parameters of the proposed development should be described in the introductory chapters of the EIA Report. This should include a description of the application site and surrounding area, the proposed phases of development, a description of the proposed development and details as to how it will operate. Details of traffic movements for all vehicular traffic and plant required for the construction phase and eventual operation of the proposed development should also be estimated and set out in the introductory chapters of the EIA Report.

With regards to the phases of the development, this should include any demolition requirements, the construction phase, operational phase and the decommissioning phase (if applicable).

The EIA Report should clarify the overall methodological approach, including how significance will be determined.

The EIA Report should be clearly structured and should include the main technical assessment, Non-Technical Summary and relevant appendices.

The Developer must ensure that the EIA report is prepared by competent experts and the EIA report must be accompanied by a statement from the Developer outlining the relevant expertise or qualifications of such experts.

6.2. Landscape and Visual

6.2.1.

The Scoping Report identifies that the Landscape and Visual Chapter of the EIA Report will consider the effects of the proposed development during the construction and decommissioning stages and during operation. The following aspects of landscape and visual resource will be considered:

- Landscape character typology;
- Landscape-related planning designations;
- Wild Land Areas;
- Potential cumulative wind farms;
- Routes (including roads, national cycle routes and long-distance walking routes); and
- Views from various locations such as settlements, routes, hilltops and other sensitive locations.

The Scoping Report states that, in accordance with guidance and with a proposed turbine height of up to 180 m, the Study Area for the Landscape and Visual Impact Assessment (LVIA) of the proposed development will cover a radius of 45 km from the nearest turbine. This is considered to be the maximum radius within which a significant landscape and / or visual effect could arise given the height of the turbines that are being considered.

The Scoping Report confirms that a number of areas within the 45 km Study Area have been attributed a landscape planning designation, as shown in conjunction with the Zone of Theoretical Visibility (ZTV) provided at Figure 4.3 of the Scoping Report. These include one nationally important National Scenic Area and three Gardens and Designed Landscapes. It states that there are no regionally designated landscapes on Orkney. The site itself is not subject to any national landscape designations intended to protect landscape quality or scenery considered to be of national importance.

6.2.2. Hoy and West Mainland National Scenic Area (NSA)

NatureScot welcomes the intention to assess impacts on the Hoy and West Mainland NSA in line with their draft guidance for assessing effects on special landscape qualities. Due to the scale of the turbines proposed and the predicted visibility across the NSA, **NatureScot** informs that the proposal could result in significant adverse effects on the NSA's special qualities. On this basis, while **NatureScot** is in broad agreement with the viewpoints proposed within the Scoping Report to assess impacts on the NSA, it is recommended that the approach

remains flexible to allow for additional viewpoints and confirms that it would be happy to provide advice on the final list of viewpoints and the scope of the NSA assessment. It is recommended that the final viewpoints chosen for the assessment are agreed with NatureScot as well as Orkney Islands Council.

NatureScot also advise that a night-time assessment is included within the LVIA, given the requirement for lighting turbines over 150m to blade tip, noting the requirements of **MoD**. Early mitigation by design to reduce impacts is encouraged, including consideration of smaller turbines that do not require lighting.

6.2.3. Hoy Wild Land Area

The Scoping Report states that a Wild Land Assessment will be scoped-out of the EIA. From the submitted ZTV map, some limited visibility of the proposal will extend into the Hoy Wild Land Area. The effects of this could be heightened given the requirement for lighting of turbines larger than 150m. Notwithstanding this, given the separation distance from the Hoy Wild Land Area, **NatureScot** agrees that the proposal would be unlikely to introduce significant effects.

It will be important for the assessment to also take into consideration cumulative impacts with recently approved developments including the nearby approved Costa Head Wind Farm. The off-shore West of Orkney Wind Farm is currently at scoping, and the Applicant should consider whether this is also taken into consideration in the cumulative assessment.

6.3. Ecology and Nature Conservation

It is noted from the EIA Scoping Report that separate Ecology and Ornithology chapters will be provided in the EIA Report.

The Ecology chapter will assess the potential significant effects on non-avian ecology and nature conservation features during the construction, operation and decommissioning phases of the Proposed Development.

The Scoping Report states that an extended Phase 1 habitat survey of the site and surrounding area was undertaken in September 2021 to assess the baseline conditions. The study concluded that the site and its surroundings supports several important habitats, particularly blanket bog and wet heath, which are priority habitats the Scottish Biodiversity List and the Orkney Local Biodiversity Plan.

NatureScot confirms that the proposal lies adjacent to the Orkney Mainland Moorlands Special Protection Area (SPA), protected for its hen harriers, and breeding short-eared owls and red-throated divers. The site also lies adjacent to the West Mainland Moorlands Site of Special Scientific Interest (SSSI), protected for its upland habitats and breeding birds. The EIA Report should as a result assess the direct and indirect impacts on the SPA and SSSI and their qualifying interests and notified features in the context of their conservation objectives and management statements.

The assessment should also consider the impact of the proposal as both a single development and cumulatively with other proposals affecting these protected areas.

Further guidance is provided in **NatureScot's** consultation response which is provided at Appendix 1.

The **Policy Officer (Environment)** provides the following observations on the information provided in the Scoping Report:

- Designated sites: Table 6.1 of the Scoping report lists several internationally, nationally, and locally designated sites that are located within a 5km radius of the proposed development site. Peerie Water and North Mainland Evie to Finstown Coast LNCSs should also be included.
- Nationally and internationally designated sites: The proposed development borders the West Mainland Moorlands SSSI which forms part of the Orkney Mainland Moors SPA. The qualifying features of the SSSI and SPA should be taken into consideration in the assessment. These are set out in the consultation response provided at Appendix 1.
- Locally designated sites: Part of the proposed development site lies within the Loch of Swanney Local Nature Conservation Site (LNCS) which comprises the loch itself, fringing marshy grassland along parts of the shore, and some rough grassland. An assessment should be undertaken of the likely direct and indirect effects of the proposed development on the qualifying interests of these sites, and any other designated site with qualifying species whose foraging range includes the proposed development site. The assessment should address the effects of all parts and phases of the proposal on the bird species present in each site, including collision risk, displacement due to disturbance, and loss of foraging habitat. It should also consider the cumulative impact of the proposal with other wind turbine developments (existing and proposed).
- Vantage Point surveys: These should be undertaken in line with current NatureScot guidance. The scope and frequency of these surveys, as well as potential vantage point locations should be agreed with NatureScot.
- Habitats and vegetation: The Scoping Report states that a targeted NVC survey, concentrating on areas of blanket bog and wet heath, was to be carried out. The findings of these surveys should inform assessment of the likely effects of the proposed development on the habitats and ecosystems in this and the wider area and should take account of the effects of the proposal on Groundwater Dependent Terrestrial Ecosystems (GWDTEs). Appropriate mitigation measures should be identified that will avoid or minimise the potential for adverse impacts.

The EIA Report should quantify the area of natural and semi-natural habitat that would be damaged or lost as a result of the development. Where possible, opportunities to incorporate benefits for biodiversity should be identified – these should not be restricted to the development site and may include options for compensatory biodiversity enhancement in other areas managed by the applicant.

- European Protected Species – Otter: The scoping report notes that a full otter survey is not proposed. However, otters are known to be present alongside the Loch of Swanney and the animals can travel a considerable distance overland. On this basis, a full otter survey is requested and the

findings should be presented in the EIA Report. If evidence of otter presence is detected, the findings of the survey should inform preparation of a species protection plan for otters, which should be agreed with NatureScot and the Planning Authority.

6.4 Ornithology

The Scoping Report identifies that the Ornithology Chapter of the EIA Report will consider the potential for significant effects on avian ecology which may result from the construction and operation of the proposed development.

The report describes the baseline for the site as predominantly agricultural grassland, wet heath and blanket bog used to rear livestock, mainly cattle. There is a single existing wind turbine in the centre of the site.

Guidance on the scope of the Ornithology chapter of the EIA Report has been provided by **The Royal Society for the Protection of Birds (RSPB) Scotland** and **NatureScot**. These consultation responses are provided at Appendix 1 and should be taken into account in the preparation of the Ornithology chapter of the EIA Report. Key points arising from the consultation responses are provided below.

Table 5.1 of the Scoping Report outlines the statutory designated sites within 5km and the non-statutory sites within 2km of the site. **The RSPB Scotland** confirms that the site overlaps the Hundland Hill RSPB Reserve and lies inside and adjacent to Loch of Swannay Local Nature Conservation Site (LNCS). It is also adjacent to Orkney Mainland Moors SPA, West Mainland Moors SSI and 40 meters away from Loch of Hunland Local Nature Conservation site. There are a further six designations (either SPA, SSI or LNCS) within 5km. It is noted from the Scoping Report that the two Local Nature Reserves on Orkney (Mull Head in the East Mainland parish of Deerness and Happy Valley in the West Mainland parish of Stenness) are located beyond the 2km search distance and are considered to be beyond the potential connective distance of the site.

With regards to the proposed methodology, the Scoping Report states that the ornithology surveys will cover the proposed development site and appropriate survey buffers according to the established and recommended guidance. The report notes that the following surveys have been completed at the site:

1. Vantage Point survey: The Scoping Report states that 18 months of Vantage Point surveys had been completed at the time of writing (commencing in September 2020) which is noted to have covered two non-breeding and one breeding season from two Vantage Point locations. NatureScot guidance recommends a typical survey period covering two years (SNH, 2017), but given that the site is located adjacent to the Orkney Mainland Moors SPA, for which a considerable body of monitoring data exists, the Applicant proposes that a full two years of survey is not required.
2. Breeding bird survey (2021 season): consisting of four site visits during the breeding months following an adapted Brown & Shepherd method (Gilbert et al., 1998) and with a survey Study Area extending 500 m beyond the potential turbine area; and,

3. Breeding raptor survey (2021 season): following methods described in Hardey et al. (2013), consisting of four survey visits during the breeding months. The survey Study Area extended 2 km beyond the potential turbine area.

With regards to Vantage Point surveys, it is noted from the **RSPB Scotland** consultation response that due to the absence of precise information as to what data already exists and the quality and the age of that data, it is considered that the developer has not demonstrated that a shorter period of data is sufficient to support the application. Use of the Orkney Mainland Moors SPA data is welcomed for additional context, but it is not site specific and predominantly dates from between 2004 and 2013. It is therefore unsuitable to be relied upon as recent data. In addition, given the proximity of the SPA and SSSI, it is likely that 2 full years of survey will be required in line with **NatureScot's** consultation response.

The Scoping Report states that the following steps are proposed to inform the collision risk assessment, in accordance with **NatureScot's** 'Collision Risk Model' (SNH, 2000):

- Review all digitised flight lines and recorded characteristics for target species (species, number of birds, start time of flight, etc.) from the survey work;
- Define a turbine envelope and identify all flights which are at any point within the dimensions of the rotor height and which intersect the boundary of the turbine envelope;
- Calculate the number of transits through the turbine envelope per unit of observation time and extrapolate to determine total predicted transits over the period of interest at risk height; and,
- Run the collision model with relevant turbine and ornithological parameters, taking as input the total transits calculated previously.

NatureScot agree with the scoping report that an assessment of potential impacts to the Orkney Mainland Moorlands SPA should include collision risk (to birds using the wind farm site and moving through it) and disturbance/displacement impacts (to birds nesting or roosting within the wind farm site and the adjacent SPA). They further advise that the potential for barrier effects to birds (e.g. divers) using normal routes to and from feeding/breeding areas should also be considered within the assessment. Furthermore, depending on the activity identified during survey work, connectivity with other SPAs in this area may also need to be considered.

In addition to the above, **RSPB Scotland** state that the EIA report must demonstrate that the survey data is adequate, robust, and accurate. The following should be included:

- Full information on the Vantage Point Survey work undertaken, including dates, times, and weather conditions
- Maps showing Vantage Point locations that also denote viewsheds (it is noted that this is included at Figure 5.2 of the Scoping Report)
- Maps showing diver and raptor foraging areas and flights

- Worked example(s) of collision risk calculations
- Provision of raw data for independent verification of collision risk calculations.

RSPB Scotland also highlight that Greenland white-fronted geese are particularly sensitive to disturbance at the roost. It is therefore recommended to include wintering goose and swan roost surveys on any lochs and waterbodies within the application site and zone of influence.

6.5 Traffic and Transportation

The Scoping Report outlines that the Transport and Access Chapter of the EIA Report will be supported by a Transport Assessment report, Abnormal Load Route Survey and technical figures.

The study area is identified at section 10.4 of the Scoping Report. This is proposed to include:

- The A965 between Hatson Pier and the junction with the A986;
- The A986 between its junction with the A965 through to Birsay; and
- Wattle Road.

It is noted that the Applicant proposes to obtain existing traffic count data from the Department for Transport database for the A965, A986 and A697 to inform the EIA Assessment. New automated Traffic Count surveys for the public road running between Boardhouse and Birsay will be commissioned and deployed for one week to record classified traffic data for a neutral month. Three years of traffic accident data will be collected using the online resource crashmap.co.uk for the study area to inform the baseline review.

No consultation response has been received from **Roads Services**.

6.6 Noise

The Scoping Report states that the Noise chapter of the EIA Report will assess the potentially significant effects of noise during the site preparation and construction, operation and decommissioning of the proposed development.

A description of the baseline is provided in the Scoping Report (Chapter 8). It states that a review of maps and aerial images identifies that the site and surroundings comprise a mixture of farmland, moorland and open water lochs with scattered farms and houses, with one existing wind turbine. It is also expected that background noise levels will be comparatively low and mostly unaffected by anthropogenic noise, with the noise environment likely to be dominated by the wind, wildlife and livestock.

Feedback on the scope of the Noise chapter of the EIA was provided by Orkney Islands Council's **Environmental Health Officer**. The consultation response is enclosed at Appendix 1.

The **Environmental Health Officer** requests that the baseline be properly quantified as there are around 24 residential properties and more than one wind turbine within the area of scope.

Their consultation response confirms that they agree with the proposed assessment methods set out in Chapter 8 of the Scoping Report, provided that the following matters are addressed:

Preliminary Modelling: Paragraph 8.4.1 of the Scoping Report states that preliminary modelling has been undertaken to inform the study area for the assessment. No further information regarding the scope or methodology for this modelling is provided in the Scoping Report. The EIA Report should therefore provide this information within the methodology section of Chapter 10.

Construction: Hours of construction should be included in the assessment for the potential impacts from construction noise, and where appropriate, vibration, from the proposed development.

Operation: The approach to day and night-time operational noise limits across a range of wind speeds is agreed. It is also requested that the candidate turbine should be similar in hub height and power rating to that proposed.

Mitigation: The assessment should adhere to BS5228 which will highlight any exceedances that will require appropriate mitigation.

6.7 Cultural Heritage

It is noted that a Cultural Heritage Chapter is to be provided in the EIA Report which will consider the potential for significant effects on heritage assets arising from the proposed development and highlight where mitigation measures may be required.

The Scoping Report describes the baseline for the site as follows:

- Three scheduled monuments are located within the proposed development site boundary and that there are no other assets, designated or non-designated within the boundary. There are however 14 non-designated heritage assets within 1km of the proposed development, as outlined at Figure 9.1 of the Scoping Report.
- Four Scheduled Monuments are situated within 1km of the proposed development, 42 Scheduled Monuments within 5km (Figure 9.2) and a further 71 Scheduled Monuments within 10km.
- No Listed Buildings are located within the site boundary or within 1km of the proposed development. Eleven Listed Buildings of Category B and C status are situated within 5km and there are no Category A Listed Buildings within 5km. Three Listed Buildings of Category A status are located within 10km of the proposed development. Eynhallow Conservation Area is located within the 5km study area.
- The proposed development is located within the Heart of Neolithic Orkney World Heritage Site Sensitive Area. The World Heritage Site buffer is located 6.6km from the site boundary and is the buffer around the Skara Brae

element of the WHS. The nearest element of the World Heritage Site is located 10.5km from the proposed development boundary.

- There are no Inventoried Gardens and Designed Landscapes within 5km of the proposed development and no Inventoried Battlefields within 10km.

Historic Environment Scotland advice (set out at Appendix 1) confirms that the proposed scope of the cultural heritage assessment is agreed, as set out in Chapter 9 of the Scoping Report.

It is however important to note that **Historic Environment Scotland** considers that the proposal may give rise to significant adverse impacts on the setting of a large number of heritage assets located within the vicinity of the proposed development and that it may raise issues in the national interest that may warrant an objection. This includes scheduled monuments within the proposed site boundary, as follows:

- Nisthouse, burial mound 270m ENE of (SM1318)
- Hundland Hill, enclosure 500m NE of Nisthouse (SM13451)

Several other scheduled monuments are located within the immediate vicinity, including:

- Hundland, settlement mound 270m SW of (SM1284)
- Mittens, two mounds 11m NE of, Swannay (SM1350)
- Park Holm, artificial island and causeway, Loch of Swannay (SM1362)
- Stoney Holm, crannog, Loch of Swannay (SM1394)

The proposals are also located within the sensitive area of the Heart of Neolithic Orkney World Heritage Site.

The **County Archaeologist** also confirms that the proposed development has the potential to negatively impact archaeology due to changes to setting, not only by itself, but cumulatively with other large and small wind developments already in place or planned. On this basis, the EIA should include:

- Consideration of the potential impacts on setting on the Heart of Neolithic Orkney World Heritage Area;
- A cumulative assessment in relation to Scheduled monuments;
- A sequential cumulative impact assessment should be sought in relation to the St Magnus pilgrimage route and its cultural elements; and
- Consideration of the physical impact on scheduled and non-scheduled archaeology. Physical damage can occur not only at the site of the turbines but can occur at many other places associated with their construction e.g. borrow pits, tracks, lay down areas and connections to the grid.

These issues require detailed assessment and proposals for mitigation, where unavoidable adverse changes are likely.

As noted above, no consultation response was received from **Orkney Heritage Society (West)**.

6.8 Geology, Peat, Hyrdrology and Hydrogeology

A chapter in the EIA Report will be provided which assesses the potential for significant effects on surface water, groundwater, the potential risk of flooding, and the drainage requirements that may result from the proposed development. It is noted that this chapter will also consider the potential effects on geological receptors such as peat.

Consultation responses have been received in respect of these aspects from Orkney Islands Council's **Policy Officer (Environment), Engineering Services** and **SEPA**. It is recommended that these consultation responses are read in full at Appendix 1.

SEPA in their consultation response state that the following key information must be provided in the EIA Report:

- Map and assessment of any engineering activities in or impacting on the water environment including proposed buffers and details of any related CAR applications.
- Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems (GWDTE) and buffers.
- Map and assessment of impacts upon groundwater abstractions and buffers.
- Peat depth survey and table detailing re-use proposals.
- Map and site layout of borrow pits.
- Schedule of mitigation including pollution prevention measures.
- Map of proposed surface water drainage layout.
- Map of proposed water abstractions including details of the proposed operating regime.
- Decommissioning statement.

SEPA confirms that they agree with the receptors to be scoped in and out of the assessment. Further detailed guidance is provided in their consultation response, provided at Appendix 1.

In relation to the water environment, the **Policy Officer (Environment)** requests that the potential effects of all stages of the development on the water environment should be assessed and addressed, in line with the requirements of the relevant policies of the Orkney Local Development Plan 2017. Careful consideration should be given to any planned onsite storage of excavated peat and soil, as stockpiles are vulnerable to erosion, particularly during wet weather. Poorly sited stockpiles may pose a risk to watercourses in this area, including the Loch of Swanney and the Loch of Hundland.

Engineering Services confirms that the Scoping Report is correct that no flood risk is identified in the SEPA flood maps. However, it is noted that the development has

potential to create or contribute to flooding within the development site and elsewhere, if the impact of the development is not mitigated.

The Scoping Report does not outline mitigation in relation to Flood Risk. On this basis, it is requested that Flood Risk is scoped in to the assessment.

With regards to peat and carbon-rich soils, paragraph 7.2.8 of the Scoping Report confirms that north-central and eastern parts of the site are indicated to have peat deposits overlying bedrock, with more extensive peat recorded off-site to the south-east. The potential effects of all stages of the development on peat and carbon-rich soils should therefore be assessed and addressed in line with the requirements of the relevant policies of the Orkney Local Development Plan 2017.

To minimise disturbance to peat/carbon-rich soils and the release of stored carbon, the **Policy Officer (Environment)** in their consultation response requests that mitigation in the form of a Peatland / Soil Management Plan is provided and that this is agreed with the planning authority. This should include the following information:

- the quantity of peat/carbon-rich soil that will be excavated. the timing of excavation of peat/carbon-rich soil and vegetation.
- the type of machinery that will be used.
- how and where the peat/carbon-rich soil and overlying vegetation will be stored prior to its reinstatement.
- how and when the excavated areas and overlying vegetation will be reinstated.
- identification of an appropriate area locally for the relocation of any surplus peat/carbon-rich soil and vegetation.

Scottish Water does not object to the proposal. It is requested that the Applicant take note of the guidance provided in their consultation response, provided at Appendix 1.

6.9 Shadow Flicker

The Scoping Report outlines that the potential for shadow flicker impacts will be assessed at all residential receptors within the proposed study area. This study area is proposed to include an area within a distance of 10 times the rotor diameter and 130 degrees either side of north for each turbine.

The Applicant proposes to confirm the receptors that fall within the study area with Orkney Islands Council and this should be confirmed at the earliest opportunity.

It is noted that no consultee responses have provided comments on Shadow Flicker.

6.10 Socio-economics, Tourism and Recreation

The Applicant proposes to include an assessment of the potential land-use, socio-economic, recreation and tourism effects of the proposed development in the EIA Report. This will include consideration of existing land uses within the site, local

recreation and tourism activity, employment generation and any indirect or induced economic effects from the proposed development.

Section 11.8 of the EIA Scoping Report sets out the potential socio-economic effects of the proposed development. This includes the following potential direct effects:

- temporary effects on the local and national economy due to expenditure during the construction phase; and
- permanent effects on the local and national economy due to expenditure associated with the operational phase.

The potential indirect socio-economic effects are identified as follows:

- permanent effects as a result of any additional public expenditure that could be supported by the additional tax revenue that would be generated during the operational phase; and
- permanent effects on the local economy that could be supported by any community funding or shared ownership proposals during the operational phase.

The Scoping Report also states that the direct and indirect effects of the proposed development on tourism and recreation assets, such as accommodation providers and visitor attractions, will also be considered.

No response has been received from the Orkney Islands Council **Policy Officer**.

6.11 Aviation and Radar

The Scoping Report states that Chapter 15 of the EIA Report will assess the potential effects of the construction and operation of the proposed development on aviation.

Section 12.2 of the Scoping Report states that there are no apparent aviation impacts and no objections are anticipated as the site is over 25km north west of Kirkwall Airport and is beyond the limits of physical safeguarding surfaces. The Scoping Report also does not identify any potential impacts to key military or civil radar installations as it is located within an area identified as low priority for military low flying.

However, it is noted that the **Highlands & Islands Airport** consultation response notes that the position and height of the proposed development may infringe on the safeguarding criteria for Kirkwall Airport. In this context, it is requested that the applicant commission an Aviation Impact Feasibility Study (AIFS), of the proposed Nisthill Wind Farm to understand any impact on the infrastructure and operation of Kirkwall Airport. This assessment should include an assessment of:

- Instrument Flight Procedures (IFPs) (see CAP785) requirement. (Ref CAP764 Preplanning & consultation, 4.2, point 2).
- Crane and Lifting equipment use during construction (see CAP1096) requirement.

The results of this assessment should be presented as an appendix within the EIA Report and considered as appropriate in the Aviation and Radar Chapter (Chapter 15). Where necessary, mitigation measures should be outlined in the EIA Report to address aviation safety.

JRC (Wind) has not identified any issues based on known interference scenarios and the data provided in the Scoping Report. It is however recommended that the Applicant consults JRC again prior to the submission of a Planning Application to negate the possibility of an objection being raised at that time.

NATS Safeguarding has confirmed that the proposed development does not conflict with their safeguarding criteria and they have no objection to the proposal.

The **Kirkwall Airport - Senior Pilot** confirms in their consultation response that the proposed development is not located near any of the Loganair inter island routes and will have no material impact on the service they operate on behalf of Orkney Islands Council.

The **Ministry of Defence (MoD)** has been identified that the development would have the impacts upon Military Low Flying Training (as included in Appendix 1). The proposed development will occupy Low Flying Area 14 (LFA 14) within which military fixed wing aircraft are permitted to fly down to 250 feet (76.2 metres) above terrain features. The development would cause a potential obstruction hazard to these military low flying training activities. To address this impact, it would be necessary for the development to be fitted with aviation safety lighting. Therefore, in the interests of air safety, **MoD** requests that the development be fitted with **MoD** accredited aviation safety lighting in accordance with the requirements of the Air Navigation Order 2016.

No consultation response has been received from the **Airfield Superintendent**

7. Cumulative Effects

Paragraph 2.3.1 of the Scoping Report highlights that the cumulative effects of the proposed development with other developments will be considered.

The EIA Report should include details of the cumulative impacts of the development. The Applicant should undertake a thorough assessment of all consented and forthcoming proposals, noting that the 2017 Regulations require the information contained within the EIA Report to be up to date at the point of determination (previously it was taken to be submission).

Cumulative impacts should be considered in terms of both operational cumulative effects as well as the cumulative effects during the construction phase. As per the Scoping Report, the assessment should consider the cumulative effects of different elements of the proposed development on environmental media and sensitive receptors and in particular, the cumulative effects of different effects upon individual and groups of receptors.

The following types of projects should be included in such an assessment, (subject to available information):

- existing completed projects;
- approved but uncompleted projects;
- ongoing activities;
- plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

The cumulative effects chapter must contain consideration of intra-project and synergistic effects as well as inter-project effects.

It is acknowledged that Figure 4.6 of the Scoping Report (in relation to the Landscape and Visual Chapter of the EIA Report) identifies the 'known' cumulative wind farms within a 45km study area. A preliminary list of developments for inclusion in the Cumulative Effects Assessment has also been provided by Orkney Islands Council and is attached to this Scoping Opinion at Appendix 2.

NatureScot highlight that they are aware of the approval of the planning application for the nearby Costa Head Wind Farm, which comprises of 4 turbines at 125m to blade tip. Given the proximity of the proposed development, careful consideration of turbine height and proportion will therefore be very important to avoid cumulative impacts.

In addition, **NatureScot** are aware that the offshore West of Orkney Wind Farm (ref. 22/081/SCO) is currently at the EIA Scoping stage. Although the implications of this proposal are not currently known, it may influence the cumulative study area for this proposal and the Applicant should consider this further.

The **County Archaeologist** requests that the potential for cumulative impacts:

- on the setting of the Heart of Neolithic Orkney World Heritage Area;
- in relation to Scheduled Monuments; and
- in relation to the St Magnus pilgrimage route and its cultural elements

is also undertaken, in the context of other large and small wind developments already in place or planned.

A sequential cumulative impact assessment should be sought in relation to the St Magnus pilgrimage route and its cultural elements; and

8. Mitigation

Orkney Islands Council is required to make a reasoned conclusion on the significant effects of the proposed development on the environment as identified in the EIA. The mitigation measures suggested for any significant environmental impacts identified

should be presented as a conclusion to each chapter or in another clearly identified section of the chapter. Each chapter should seek to clearly identify relevant embedded (primary/tertiary) mitigation and monitoring measures and additional/secondary mitigation.

Applicants are also asked to provide a consolidated schedule of all mitigation measures proposed in the environmental assessment, provided in tabular form, where that mitigation is relied upon in relation to reported conclusions of likelihood or significance of impacts, how any mitigation would be secured and who is responsible for implementing the mitigation.

9. Next Steps

It is acknowledged that the EIA process is iterative and should inform the final layout and design of proposed developments. Elements of the proposed development may change and evolve as the planning application progresses. It is a matter for the Applicant, in preparing an EIA Report, to ensure these changes are captured effectively.

Orkney Islands Council notes that further engagement between relevant parties in relation to the refinement of the design of this proposed development will be required and would request that Orkney Islands Council is kept informed of on-going discussions in relation to this.

Orkney Islands Council encourages the use of digital EIA techniques to present the information in the EIA Report in ways that make understanding of the impacts and mitigation accessible to all readers. The Applicant may wish to refer to the digital EIA primer document published by IEMA (Digital Impact Assessment – Primer for embracing innovation and digital working, 2020). To facilitate uploading to the planning portal, the EIA Report and its associated documentation, when submitted, should be accompanied with a CD containing the EIA Report and its associated documentation divided into appropriately named separate files of sizes no more than 5 MB. This will also assist consultees.

Applicants are reminded that there will be limited opportunity to materially vary the form and content of the proposed development post submission.

Orkney Islands Council recommends that the EIA Report be produced in line with the Institute of Environmental Management and Assessment (IEMA) best practice:

- The EIA Report should be a standalone and self-contained document - not be a collection of disparate reports. It should be clearly and coherently structured with a narrative of assessment drawn through the document.
- The EIA Report should have clear and consistent chapter, section and paragraph naming and numbering for ease of understanding. Technical appendices should be clearly referenced throughout the EIA Report and numbered and presented in a way that affords ready access to the supporting information for specialist and non-specialist readers alike.
- The EIA Report should be as concise as possible, in line with the principle of proportionate EIA, with supporting technical information placed in logically

ordered and clearly labelled appendices. The Applicant should provide sufficient figures, drawings photographs or other visual representations required to clearly illustrate the proposed development and any other information needed to understand the potential effects associated with its construction. These should also be logically ordered and labelled clearly.

- A common approach to the use of terminology should be adopted throughout the EIA Report, to ensure consistency and ease of understanding for all users of the document. A glossary of technical terms and a list of abbreviations and acronyms should be included in the EIA Report, covering all of the technical chapters and appendices.
- The EIA Report should provide an objective and realistic description of the likely significant impacts of the proposed development, both beneficial and adverse. The information presented should be comprehensible to both technical specialists and non-specialists alike.
- The Non-Technical Summary should comprise a summary of the assessment in plain language, and should be supported by appropriate plans graphics, photographs, photomontages and other visual representations as necessary. This should be a standalone document and not a chapter within, or an appendix to, the EIA Report.
- When finalising the EIA Report, Applicants are asked to provide a summary in tabular form of where within the EIA Report each of the specific matters raised in this scoping opinion has been addressed.

Notes

The EIA Report must be prepared by competent experts and contributors, outlining relevant expertise or qualifications of such experts. The detail of which should be included within or accompany the EIA Report, along with a statement from the developer.

Please note Scottish Planning Policy:

<https://www.gov.scot/Publications/2014/06/5823>

This Opinion is hereby adopted under the provisions of Regulation 17(10) of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and shall be placed on the register in accordance with Regulation 28.

It will be important to ensure that, in taking the EIA process through to the completion of the EIA Report, the information contained within the Scoping Report is accurately reflected within the main text of the EIA Report. For example, the information provided in response to the items to be scoped out, should be taken through to the main EIA Report. Under the 2017 EIA Regulations the Scoping Opinion issued by Orkney Islands Council is binding to the Applicant.

Date

27 May 2022

Signed

Jamie Macvie MRTPI, Planning Manager, Development Management

Scoping Opinion sent to:

Emma Bathgate, ITP Energised, 4th Floor, Centrum House, 108-114 Dundas Street, Edinburgh, EH3 5DQ.

Appendix 1

Consultation Responses.

Appendix 2

Cumulative Schemes.

Appendix 1

Consultation Responses

From: Sam Walker <Sam.Walker@orkney.gov.uk>
Sent: 20 April 2022 12:39
To: planningconsultation <planningconsultation@orkney.gov.uk>
Subject: Re: 22/080/SCO

Classification: OFFICIAL

**22/080/SCO Scoping opinion request to erect 4 x 6.6MW wind turbines (maximum height 180m)
Hundland Hill (Land Near), Birsay, Orkney**

Having undertaken an overview of the scoping document provided by the applicant Environmental Health note the following:

- 8.1.3 We would query who the consultant spoke to. According to our records said dialogue has not been undertaken but it welcomed.
- 8.2.1 We note scattered farms and houses and one existing wind turbine have been noted and, having visited the area, we believe that this needs to be correctly assessed. There are around 24 properties and more than one wind turbine within the area of this scope. All of the current wind turbines will need to be discounted when determining the background noise.
- 8.3 It is not known if there will be any fixed mechanical services plant to support the proposed turbines. If there is, this should be assessed in accordance with BS4142:2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound, which is referenced in the TAN that supports PAN 1/2011. BS4142 is applicable for use in the assessment of a control building, substation, and transformer noise. It sets out a method for rating and assessing sound of an industrial and/or commercial nature, including “sound from fixed installations which comprise mechanical and electrical plant and equipment”.

You would need to comply with the documents referenced, but these must also include the Environmental Protection Act 1990.
- 8.4.1 There is no explanation of what the preliminary modelling is based on.

We welcome agreement on NSRs.
- 8.5.1 The construction hours will need to be considered.
- 8.5.3 Agreed.
- 8.5.4 Agreed. But existing on-site turbines must be shut down during the baseline survey to avoid potential effects caused by their operation affecting the measured results.
- 8.5.5 Agreed.
- 8.5.7 If the actual turbine is not known at time of assessment, the candidate turbine must be similar in hub height and power rating to that proposed.

- 8.6.1 An assessment using BS5228 would highlight any exceedances and the need for mitigation.
- 8.6.3 Agreed.
- 8.8.1 Agreed.
- 8.9 We agree with the proposed assessment methods, and it appears to cover the worst affected noise sensitive receptors, but please refer to the comments made above to the specific items.

Regards

Sam Walker
Environmental Health Officer
Neighbourhood Services and Infrastructure

Scoping Application Consultation

Planning Authority Name	Orkney Islands Council
Date of Consultation	22nd March 2022
Response required by	12th April 2022
Planning Authority Reference	22/080/SCO
Nature of Proposal (Description)	Scpoing opinion request to erect 4 x 26.4MW wind turbines (maximum height 180m)
Site	Hundland Hill (Land Near), Birsay, Orkney
Site Postcode	N/A
Site Gazetteer UPRN	
Proposal Location Easting	330318
Proposal Location Northing	1027114
Area of application site (Metres)	1204023
Clarification of Specific Reasons for Consultation	
Development Hierarchy Level	N/A
Supporting Documentation URL	http://planningandwarrant.orkney.gov.uk/online-applications/ Please enter - 22/080/SCO
List of Available Supporting Documentation	As above URL
Offline Documents available?	N/A
Date of Validation by Planning Authority	3rd March 2022
Governing Legislation	THE TOWN AND COUNTRY PLANNING ENVIRONMENTALIMPACT ASSESSMENT (SCOTLAND) REGULATIONS 2017
Consultation Type	Scoping
Consultation Stage	N/A
Is this a re-consultation of an existing application?	No
EIA Required	Yes
EIA Regulations	Yes
Use Class (Current)	
Use Class (Proposed)	
Does the application conform with the Structure Plan / Local	

Plan Land Use	
Additional Comments relating to Structure Plan / Local Plan Use	N/A
Transport Assessment or Travel Plan	N/A
Applicant Name	Nisthill Wind Farm Limited
Applicant Organisation Name	
Applicant Address	
Agent Name	ITPEnergised
Agent Organisation Name	
Agent Address	C/o Emma Bathgate 4th Floor Centrum House 108-114 Dundas Street Edinburgh EH3 5DQ
Agent Phone Number	N/A
Agent Email Address	N/A
PA Office	Development Management
Case Officer	Mr Jamie Macvie
Case Officer Phone number	01856 873535 EXT 2529
Case Officer email address	jamie.macvie@orkney.gov.uk
PA Response To	planningconsultation@orkney.gov.uk

Flood Risk

We are not aware of any existing flooding associated with the proposed development site and it is correctly noted in the Scoping Report that there is no flood risk identified in SEPA mapping. However, the development does have potential to create or contribute to flooding within the development site and elsewhere if the impact of the development is not mitigated.

In accordance with the SEPA document WAT-RM-08 the development should be served by a sustainable drainage system (SuDS) designed and maintained in accordance with Ciria C753, *The SuDS Manual*, 2015. Treated runoff from all roads, hardstandings and structures should be discharged as close to source as possible.

In addition, care should be taken to ensure that cable tracks, and other infrastructure routes do not serve to drain the site.

The Scoping Report does not outline mitigation of the impact of the proposed development with regard to flood risk. We therefore do not agree that flood risk can be scoped out.

PW

Scoping Application Consultation

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PA Response To	planningconsultation@orkney.gov.uk

The environmental effects of the proposed Hundland Hill development should be assessed and addressed, in line with the requirements of Orkney Local Development Plan Policy 9 Natural Heritage and Landscape, and the Supplementary Guidance Natural Environment. These documents are available on the Council's website at https://www.orkney.gov.uk/Files/Planning/Development-and-Marine-Planning/Local-Plan/OLDP_2017/Orkney_Local_Development_Plan_2017_2022.pdf

and

https://www.orkney.gov.uk/Files/Planning/Development-and-Marine-Planning/Adopted_PPA_and_SG/Natural_Environment_SG/Nat_Env_SG.pdf

Detailed advice on the recommended scope of the Environmental Impact Assessment is provided in the following paragraphs.

Designated sites

Table 5 of the Scoping report lists several internationally, nationally, and locally designated sites that are located within a 5km radius of the proposed development site. Please note that this table should also include Peerie Water and North Mainland Evie to Finstown Coast LNCs.

Nationally and internationally designated sites

The proposed development site borders the West Mainland Moorlands SSSI which forms part of the Orkney Mainland Moors SPA.

The qualifying features of the SSSI are breeding hen harrier, breeding red-throated diver, breeding short-eared owl, blanket bog, assemblage of upland habitats and a breeding bird assemblage which includes merlin, kestrel, Arctic skua, golden plover, whimbrel, wigeon, lapwing, dunlin, snipe, curlew, stonechat, wheatear, and raven.

The qualifying features of the SPA are breeding hen harrier, breeding red-throated diver, and breeding short-eared owl.

Red-throated divers nest on the banks of the upland lochans of the Orkney Mainland Moors SPA/SSSI, from where they routinely fly to feed in the marine environment. Hen harrier and short-eared owl may use the area within and around the proposed development site as foraging habitat.

Locally designated sites

Part of the proposed development site lies within the Loch of Swanney Local Nature Conservation Site (LNCS) which comprises the loch itself, fringing marshy grassland along parts of the shore, and some rough grassland. Red-throated diver has nested alongside the loch and a variety of waders also nest on the LNCS, including oystercatcher, lapwing, ringed plover, curlew, common sandpiper, and redshank. There are mute swans and small colonies of black-headed and common gulls. Smaller birds nesting here include skylark, meadow pipit, twite, sedge warbler, reed bunting and pied wagtail. The loch is also important for wintering wildfowl, especially Greenland white-fronted geese.

An assessment should be undertaken of the likely direct and indirect effects of the proposal on the qualifying interests of these sites, and any other designated site with qualifying species whose foraging range includes the proposed development site. The assessment should address the effects of all parts and phases of the proposal on the bird species present in each site, including collision risk, displacement due to disturbance, and loss of foraging habitat. It should also consider the cumulative impact of the proposal with other wind turbine developments, including any wind energy proposals which are currently in the planning system.

Vantage Point surveys should be undertaken in line with current guidance which may be accessed from the NatureScot website at www.nature.scot, and advice should be sought from NatureScot on the scope and frequency of these surveys, as well as potential vantage point locations.

Habitats and vegetation

I note that the proposed development site was subject to a Phase 1 habitat survey in September 2021, and that this is scheduled to be followed up with a targeted NVC survey concentrating on areas of blanket bog and wet heath during mid-late April 2022. Please note that Table 3: Ecological survey calendar in the Council's Supplementary Guidance Natural Environment provides information on the optimal times for a range of survey types.

Surveys should not be restricted to the proposed development site area and should consider the potential for impact on surrounding areas of natural or semi-natural habitat, in particular those of the adjacent West Mainland Moorlands SSSI.

The findings of these surveys should inform assessment of the likely effects of the proposed development on the habitats and ecosystems in this and the wider area and should take account of the effects of the proposal on Groundwater Dependent Terrestrial Ecosystems (GWDTEs). The applicant should seek advice from NatureScot and the Scottish Environment Protection Agency (SEPA) on areas of GWDTE to be included in these surveys. Appropriate mitigation measures should be identified that will avoid or minimise the potential for adverse impacts.

The Environmental Report should quantify the area of natural and semi-natural habitat that would be damaged or lost because of the development. Where possible, opportunities to incorporate benefits for biodiversity should be identified – these should not be restricted to the development site and may include options for compensatory biodiversity enhancement in other areas managed by the applicant.

European Protected Species – Otter

The scoping report notes that, as no signs of otter presence were detected in September 2021 when the extended Phase 1 habitat survey was undertaken, a full otter survey is not proposed. However, otters are known to be present alongside the Loch of Swanney and the animals can travel a considerable distance overland. Therefore, I recommend that a full otter survey should be undertaken, and the findings presented in the Environmental Report. If evidence of otter presence is detected, the findings of the survey should inform preparation of a species protection plan for otters, which should be agreed with NatureScot and the Planning Authority.

Peat and carbon-rich soils

The Scoping Report confirms that north-central and eastern parts of the Site are indicated to have peat deposits overlying bedrock, with more extensive peat recorded off-site to the south-east. The potential effects of all stages of the development on peat and carbon-rich soils should therefore be assessed and addressed in line with the requirements of Local Development Plan Policy N9 Natural Heritage and Landscape, part E: Peat and Soils.

To minimise disturbance to peat/carbon-rich soils and the release of stored carbon, a peatland / soil management plan should be drawn up by the developer and agreed with the planning authority. It should include the following information:

- the quantity of peat/carbon-rich soil that will be excavated. the timing of excavation of peat/carbon-rich soil and vegetation.
- the type of machinery that will be used.
- how and where the peat/carbon-rich soil and overlying vegetation will be stored prior to its reinstatement.
- how and when the excavated areas and overlying vegetation will be reinstated.
- identification of an appropriate area locally for the relocation of any surplus peat/carbon-rich soil and vegetation.

The assessment process may also identify further issues, and these will require to be included and addressed in the environmental report.

The water environment

The potential effects of all stages of the development on the water environment should be assessed and addressed, in line with the requirements of Local Development Plan Policy N9 Natural Heritage and Landscape, part D: The Water Environment and part E: Peat and Soils.

Careful consideration should be given to any planned onsite storage of excavated peat and soil, as stockpiles are vulnerable to erosion, particularly during wet weather. Poorly sited stockpiles may pose a risk to watercourses in this area, including the Loch of Swanney and the Loch of Hundland. These assessments should be undertaken in line with guidance which is available from the SEPA website at www.SEPA.org.uk/.

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EIA Regulations	Yes
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Use Class (Proposed)	
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Additional Comments relating to Structure Plan / Local Plan Use	N/A
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PA Response To	planningconsultation@orkney.gov.uk

This windfarm has potential to negatively impact archaeology due to changes to Setting not only by itself, but cumulatively with other large and small wind developments already in place, or planned.

Any assessment should include:

- potential impacts on setting on the Heart of Neolithic Orkney World Heritage Area,
- cumulative assessment in relation to Scheduled monuments
- a sequential cumulative impact assessment should be sought in relation to the St Magnus pilgrimage route and its cultural elements.
- physical impact on scheduled and non-scheduled archaeology. Physical damage can occur not only at the site of the turbines but can occur at many other places associated with their construction e.g. borrow pits, tracks, lay down areas and connections to the grid.

These issues would require detailed assessment and proposals for mitigation where unavoidable adverse changes are likely.

Julie Gibson. Archaeologist for Orkney Islands Council.

I

Jamie Macvie
Orkney Islands Council
Department of Development Services
Council Offices
School Place
Kirkwall
KW15 1NY

Our Ref: 4739
Your Ref: 22/080/SCO

SEPA Email Contact:
planning.north@sepa.org.uk

31 March 2022

By email only to: planningconsultations@orkney.gov.uk

Dear Mr Macvie

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017
Planning Application: 22/080/SCO
Scoping opinion request to erect 4 x 26.4MW wind turbines (maximum height 180m) at Hundland Hill (Land Near), Birsay, Orkney

Thank you for consulting SEPA on the scoping opinion for the above development proposal by way of your email received on 22 March 2022. We would welcome engagement with the applicant at an early stage to discuss any of the issues raised in this letter.

Advice for the planning authority

Advice to the planning authority We consider that the following key issues must be addressed in the Environmental Impact Assessment process. To avoid delay and potential objection, the information outlined below and in the attached appendix must be submitted in support of the application:

- a) Map and assessment of any engineering activities in or impacting on the water environment including proposed buffers and details of any related CAR applications.
- b) Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems (GWDTE) and buffers.
- c) Map and assessment of impacts upon groundwater abstractions and buffers.
- d) Peat depth survey and table detailing re-use proposals.
- e) Map and site layout of borrow pits.
- f) Schedule of mitigation including pollution prevention measures
- i) Map of proposed surface water drainage layout.
- j) Map of proposed water abstractions including details of the proposed operating regime.
- k) Decommissioning statement.

Further details on these information requirements and the form in which they must be submitted can be found in the attached appendix. We also provide site specific comments in the following section which can help the developer focus the scope of the assessment.



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Acting Chief Executive
Jo Green

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Site specific comments

With regards to the specific questions in Section 7.9 of Nisthill Wind Farm, (V03 dated 2 March 2022), we have provided our responses to these below in relation to our interests. These should be read in conjunction with the information provided within the attached Appendix.

Do SEPA agree that, subject to further information coming to light from the field surveys, consultation and desk study, the scope of the assessment is appropriate?

We have provided further detailed guidance in the attached appendix but agree with the receptors to be scoped in/out of the assessment.

Do SEPA have any information not outlined in the Scoping report that would inform the impact assessment for geology, peat, hydrology and hydrogeology?

No.

Regulatory advice for the Applicant

Details of regulatory requirements and good practice advice, for example in relation to private drainage, can be found on the [regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the local compliance team at: nhni@sepa.org.uk

If you have queries relating to this letter, please contact planning.north@sepa.org.uk including our reference number in the email subject.

Yours sincerely

Zoe Griffin
Senior Planning Officer
Planning Service

Ecopy to: Case officer, jamie.macvie@orkney.gov.uk

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages - www.sepa.org.uk/environment/land/planning/](http://www.sepa.org.uk/environment/land/planning/).

Appendix to SEPA Response to 22-081-SCO - Detailed scoping requirements

This appendix sets out our scoping information requirements. There may be opportunities to scope out some of the issues below depending on the site. Evidence must be provided in the submission to support why an issue is not relevant for this site to avoid delay and potential objection.

If there is a delay between scoping and the submission of the application, then please refer to our website for our latest information requirements as they are regularly updated; current best practice must be followed.

We would welcome the opportunity to comment on the draft submission. As we can process files of a maximum size of only 25MB the submission must be divided into appropriately named sections of less than 25MB each.

1. Site layout

1.1 All maps must be based on an adequate scale with which to assess the information. This could range from OS 1: 10,000 to a more detailed scale in more sensitive locations. Each of the maps below must detail all proposed upgraded, temporary, and permanent site infrastructure. This includes all tracks, excavations, buildings, pipelines, cabling, site compounds, laydown areas, storage areas and any other built elements. Existing built infrastructure should be re-used or upgraded wherever possible. The layout should be designed to minimise the extent of new works on previously undisturbed ground. A comparison of the environmental effects of alternative locations of infrastructure elements may be required.

2 Engineering activities which may have adverse effects on the water environment

2.1 The site layout must be designed to avoid impacts upon the water environment. Where activities such as watercourse crossings, watercourse diversions or other engineering activities in or impacting on the water environment cannot be avoided then the submission must include justification of this and a map showing: a) All proposed temporary or permanent infrastructure overlain with all lochs and watercourses. b) A minimum buffer of 50m around each loch or watercourse. If this minimum buffer cannot be achieved each breach must be numbered on a plan with an associated photograph of the location, dimensions of the loch or watercourse and drawings of what is proposed in terms of engineering works. c) Detailed layout of all proposed mitigation including all cut off drains, location, number and size of settlement ponds.

2.2 If water abstractions or dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided.

2.3 Further advice and our best practice guidance are available within the water engineering section of our website. Guidance on the design of water crossings can be found in our Construction of River Crossings Good Practice Guide.

2.4 We agree flood risk can be scoped out of the assessment. However, watercourse crossings must be designed to accommodate the 0.5% Annual Exceedance Probability (AEP) flows, or information provided to justify smaller structures. If it is thought that the development could result in an increased risk of flooding to a nearby receptor then a Flood Risk Assessment must be submitted in support of the planning application. Our Technical flood risk guidance for stakeholders outlines the information we require to be submitted as part of a Flood Risk Assessment. Please also refer to Controlled Activities Regulations (CAR) Flood Risk Standing Advice for Engineering, Discharge and Impoundment Activities.

3. Disturbance and re-use of excavated peat and other carbon rich soils

- 3.1 Scottish Planning Policy states (Paragraph 205) that "Where peat and other carbon rich soils are present, applicants must assess the likely effects of development on carbon dioxide (CO₂) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO₂ to the atmosphere. Developments must aim to minimise this release."
- 3.2 The planning submission must a) demonstrate how the layout has been designed to minimise disturbance of peat and consequential release of CO₂ and b) outline the preventative/mitigation measures to avoid significant drying or oxidation of peat through, for example, the construction of access tracks, drainage channels, cable trenches, or the storage and re-use of excavated peat. There is often less environmental impact from localised temporary storage and reuse rather than movement to large central peat storage areas.
- 3.3 The submission must include: a) A detailed map of peat depths (this must be to full depth and follow the survey requirement of the Scottish Government's Guidance on Developments on Peatland - Peatland Survey (2017)) with all the built elements (including peat storage areas) overlain to demonstrate how the development avoids areas of deep peat and other sensitive receptors such as Groundwater Dependent Terrestrial Ecosystems. b) A table which details the quantities of acrotelmic, catotelmic and amorphous peat which will be excavated for each element and where it will be re-used during reinstatement. Details of the proposed widths and depths of peat to be re-used and how it will be kept wet permanently must be included.
- 3.4 To avoid delay and potential objection proposals must be in accordance with Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste and our Developments on Peat and Off-Site uses of Waste Peat.
- 3.5 Dependent upon the volumes of peat likely to be encountered and the scale of the development, applicants must consider whether a full Peat Management Plan (as detailed in the above guidance) is required or whether the above information would be best submitted as part of the schedule of mitigation. Any excavated peat should be reused in peat restoration rather than 'landscaping' and compensatory peatland restoration should be included as a mitigation measure.
- 3.6 Please note we do not validate carbon balance assessments except where requested to by Scottish Government in exceptional circumstances. Our advice on the minimisation of peat disturbance and peatland restoration may need to be taken into account when you consider such assessments.

4. Disruption to Groundwater Dependent Terrestrial Ecosystems (GWDTE)

- 4.1 GWDTE are protected under the Water Framework Directive and therefore the layout and design of the development must avoid impact on such areas. The following information must be included in the submission:
 - a) A map demonstrating that all GWDTE are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m and proposed groundwater abstractions. If micro-siting is to be considered as a mitigation measure the distance of survey needs to be extended by the proposed maximum extent of micro-siting. The survey needs to extend beyond the site boundary where the distances require it.

b) If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all GWDTE affected.

4.2 Please refer to Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems for further advice and the minimum information we require to be submitted.

5. Existing groundwater abstractions

5.1 We confirm our GIS shows no PWS ground water abstractions. However we agree investigation into the existing wells on site should be undertaken. If any PWS are found the following text will be relevant. Excavations and other construction works can disrupt groundwater flow and impact on existing groundwater abstractions. The submission must include:

a) A map demonstrating that all existing groundwater abstractions are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m and proposed groundwater abstractions. If micro-siting is to be considered as a mitigation measure the distance of survey needs to be extended by the proposed maximum extent of micro-siting. The survey needs to extend beyond the site boundary where the distances require it.

b) If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all existing groundwater abstractions affected.

5.2 Please refer to Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems for further advice on the minimum information we require to be submitted.

6. Borrow pits

6.1 Scottish Planning Policy states (Paragraph 243) that "Borrow pits should only be permitted if there are significant environmental or economic benefits compared to obtaining material from local quarries, they are time-limited; tied to a particular project and appropriate reclamation measures are in place." The submission must provide sufficient information to address this policy statement.

6.2 We note there is no mention of the requirement for borrow pits in the Scoping Report. Should these be required, in accordance with Paragraphs 52 to 57 of Planning Advice Note 50 Controlling the Environmental Effects of Surface Mineral Workings (PAN 50), a Site Management Plan should be submitted in support of any application. The following information should also be submitted for each borrow pit:

a) A map showing the location, size, depths and dimensions.

b) A map showing any stocks of rock, overburden, soils and temporary and permanent infrastructure including tracks, buildings, oil storage, pipes and drainage, overlain with all lochs and watercourses to a distance of 250 metres. You need to demonstrate that a site-specific proportionate buffer can be achieved. On this map, a site-specific buffer must be drawn around each loch or watercourse proportionate to the depth of excavations and at least 10m from access tracks. If this minimum buffer cannot be achieved each breach must be numbered on a plan with an associated photograph of the location, dimensions of the loch or watercourse, drawings of what is proposed in terms of engineering works.

- c) You need to provide a justification for the proposed location of borrow pits and evidence of the suitability of the material to be excavated for the proposed use, including any risk of pollution caused by degradation of the rock.
- d) A ground investigation report giving existing seasonally highest water table including sections showing the maximum area, depth and profile of working in relation to the water table.
- e) A site map showing cut-off drains, silt management devices and settlement lagoons to manage surface water and dewatering discharge. Cut-off drains must be installed to maximise diversion of water from entering quarry works.
- f) A site map showing proposed water abstractions with details of the volumes and timings of abstractions.
- g) A site map showing the location of pollution prevention measures such as spill kits, oil interceptors, drainage associated with welfare facilities, recycling and bin storage and vehicle washing areas. The drawing notes should include a commitment to check these daily.
- h) A site map showing where soils and overburden will be stored including details of the heights and dimensions of each store, how long the material will be stored for and how soils will be kept fit for restoration purposes. Where the development will result in the disturbance of peat or other carbon rich soils then the submission must also include a detailed map of peat depths (this must be to full depth and follow the survey requirement of the Scottish Government's Guidance on Developments on Peatland - Peatland Survey (2017)) with all the built elements and excavation areas overlain so it can clearly be seen how the development minimises disturbance of peat and the consequential release of CO₂.
- i) Sections and plans detailing how restoration will be progressed including the phasing, profiles, depths, and types of material to be used.
- j) Details of how the rock will be processed to produce a grade of rock that will not cause siltation problems during its end use on tracks, trenches and other hardstanding.

7. Pollution prevention and environmental management

- 7.1 One of our key interests in relation to developments is pollution prevention measures during the periods of construction, operation, maintenance, demolition, and restoration. A schedule of mitigation supported by the above site-specific maps and plans must be submitted. These must include reference to best practice pollution prevention and construction techniques (for example, limiting the maximum area to be stripped of soils at any one time) and regulatory requirements. They should set out the daily responsibilities of ECOWs, how site inspections will be recorded and acted upon and proposals for a planning monitoring enforcement officer. Please refer to Guidance for Pollution Prevention (GPPs).

8. Life extension, repowering and decommissioning

- 8.1 Proposals for life extension, repowering and/or decommissioning must demonstrate accordance with SEPA Guidance on the life extension and decommissioning of onshore wind farms. Table 1 of the guidance provides a hierarchical framework of environmental impact based upon the principles of sustainable resource use, effective mitigation of environmental risk (including climate change) and optimisation of long-term ecological restoration. The submission must demonstrate how the hierarchy of environmental impact has been applied, within the context of latest knowledge and best practice, including justification for not selecting lower impact options when life extension is not proposed.
- 8.2 The submission needs to demonstrate that there will be no discarding of materials that are likely to be classified as waste as any such proposals would be unacceptable under waste management licensing. Further guidance on this may be found in the document *Is it waste - Understanding the definition of waste*.

BY E-MAIL

Jamie Macvie
Orkney Islands Council
planningconsultation@orkney.gov.uk

12 April 2022

Our ref: CEA166408
Your ref: 22/080/SCO

Dear Mr Macvie,

Environmental Impact Assessment (EIA) (Scotland) Regulations 2017
Scoping opinion for the proposed Hundland Hill Wind Farm (4 x 180m to blade tip) near Birsay, Orkney

Thank you for your consultation dated 22 March 2022 requesting a scoping opinion for the above proposal.

1. Scoping advice – key issues

The proposal raises the following key issues, which will need to be carefully considered as part of the Environmental Impact Assessment (EIA):

- **Impacts on protected areas:** The proposal lies adjacent to the **Orkney Mainland Moorlands Special Protection Area (SPA)**, protected for its hen harriers, and breeding short-eared owls and red-throated divers. It also lies adjacent to the **West Mainland Moorlands Site of Special Scientific Interest (SSSI)**, protected for its upland habitats and breeding birds¹.

The Applicant should assess the direct and indirect impacts on the SPA/SSSI and their qualifying interests/notified features in context of their conservation objectives/management statements. The assessment should also consider the impact of the proposal as both a single development and cumulatively with other proposals affecting these protected areas.

The proposal also has the potential to impact the **Hoy and West Mainland National Scenic Area (NSA)**, protected for its special landscape qualities. Due to the scale of the turbines proposed and the predicted visibility across the NSA, we highlight the proposal could result in significant adverse effects on the NSA's special qualities.

The Applicant should be aware that failure to address significant impacts on these interests may result in an objection from us, should an application be submitted.

¹ More information on the sites described can be found on SiteLink at: <https://sitelink.nature.scot/home>.

- **Landscape and visual impacts, including cumulative impacts** with other wind turbine developments in this area. This will need to be carefully considered within the EIA Report given the very large scale of turbines proposed, which could give rise to significant adverse landscape and visual effects. We recommend that, as part of any design iteration, the scale of the development proposed should be reduced to avoid such effects.
- **The scope of the EIA will also need to take account of other potential significant impacts on nature** including, but not limited to, protected species (including breeding birds). We refer the Applicant to our published general scoping and pre-application advice document² to help inform the work carried out for their EIA Report.

We provide further advice on the scope of the EIA in Annex 1 of this letter.

2. Concluding remarks

Please note that while we are supportive of the principle of renewable energy, our advice is given without prejudice to a full and detailed consideration of the impact of the proposal if submitted as a formal application.

Please let me know if you need any further information or advice from us in relation to this proposal.

Yours sincerely

Siân Haddon
Area officer, Northern Isles and North Highland
Sian.Haddon@nature.scot

² *General pre-application and scoping advice for onshore wind farms* (2020), available from: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/onshore-wind-energy/advice-wind-farm-development>.

Annex 1 – Further advice on the scope of the EIA

1. Protected areas, excluding landscape

a) Orkney Mainland Moorlands SPA

The proposal lies adjacent to this SPA, and therefore within connectivity distance for all 3 SPA species.

The status of the site means that the Conservation (Natural Habitats, & c.) Regulations 1994 as amended (the “Habitat Regulations”) apply. Due to this connectivity, a Habitat Regulation Appraisals will be required and any direct or indirect impacts to SPA features will need to be fully considered as part of the EIA process. Avoiding impacts to this site should be a key consideration in the design and layout of the wind farm.

We agree with the scoping report that an assessment of potential impacts to this SPA should include collision risk (to birds using the wind farm site and moving through it) and disturbance/displacement impacts (to birds nesting or roosting within the wind farm site and the adjacent SPA). We further advise that the potential for barrier effects to birds (e.g. divers) using normal routes to and from feeding/breeding areas is also considered within the assessment.

Furthermore, depending on the activity identified during survey work, connectivity with other SPAs in this area may also need to be considered.

b) West Mainland Moorlands SSSI

We agree with the scoping report that impacts to the SSSI should also be considered within the EIA. Where impacts are identified, we encourage the Applicant to address these through appropriate site design and/or mitigation measures. In relation to the bird interests of the site, the Applicant may find the SSSI’s Site Management Statement (available from SiteLink) useful in identifying which species regularly breed on the SSSI.

c) Advice on the scope of ornithology assessment

The scoping report suggests that 2 years of survey work is not required due to the proximity of the SPA and the likelihood of existing monitoring data being available. We advise that although monitoring data for the SPA does exist, this does not replace the need for targeted Vantage Point (VP) survey work to establish the likelihood and significance of impacts to birds using the proposal site. In addition, the Applicant will need to assess the impacts of the proposal on wider countryside species (i.e. those not connected with a protected area) as outlined in our bird survey guidance³.

Our guidance states that 2 years of survey work is required unless it can be demonstrated that a shorter period is appropriate. Without seeing the results of the completed survey work, we cannot comment on whether this approach is adequate in this case. We advise that, given the proximity of the SPA and SSSI, it is likely that 2 full years of survey will be required to inform a robust assessment. We would be happy to advise the Applicant further on this, if required.

Following survey work, and where a collision risk is identified, Collision Risk Modelling should be undertaken. For species associated with the SPA, an assessment should be made against the conservation objectives for the site. For wider countryside species, an assessment should be made against the relevant Natural Heritage Zone (NHZ) i.e. NHZ 2: Orkney and North Caithness.

The assessment should also consider the cumulative impacts to birds from other proposals affecting this SPA and we refer the Applicant to our cumulative guidance⁴ for further information.

³ *Recommended bird survey methods to inform impact assessment of onshore windfarms* (2017), available from: <https://www.nature.scot/professional-advice/planning-and-development/renewable-energy-development/types-renewable-technologies/onshore-wind-energy/wind-farm-impacts-birds>.

⁴ *Guidance – Assessing the cumulative impacts of onshore wind farms on birds* (2018), available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-impacts-onshore-wind-farms-birds>.

2. Landscape and visual

a) Hoy and West Mainland NSA

We welcome the Applicant's intention to assess impacts on the NSA in line with our draft guidance for assessing effects on special landscape qualities. While we are in broad agreement with the viewpoints proposed to assess impacts on the NSA, we recommend the approach remains flexible e.g. during scoping of the special landscape qualities likely to be affected, which may result in additional viewpoints being needed to aid assessment.

We also advise that a night time assessment is included within the LVIA, given the requirement for lighting turbines over 150m to blade tip. More information on the scope of assessment for turbine lighting can be found in Annex 2 of our pre-application and scoping advice document. We encourage early mitigation by design to reduce impacts, including consideration of smaller turbines which do not require lighting.

We would be happy to provide further advice to the Applicant on these points, if required.

b) Hoy Wild Land Area (WLA)

The scoping report states that a Wild Land assessment will be scoped-out of the EIA. From the submitted Zone of Theoretical Visibility (ZTV) map, some limited visibility of the proposal will extend into this WLA. The effects of this could be heightened given the requirement for lighting of turbines larger than 150m. However, given the separation distance from the WLA, we agree that the proposal would be unlikely to introduce significant effects on the WLA.

c) Further advice on the scope of the LVIA

With reference to our comments above, we are in broad agreement with the approach to LVIA as outlined in the scoping report. We would be happy to provide further advice on the final list of viewpoints, in consultation with the Orkney Islands Council, and the scope of the NSA assessment.

We highlight that the proposal (as currently proposed) is of a very large scale in relation to Orkney's topography and is contrary to the Landscape Capacity Assessment for Wind Energy in Orkney (2015)⁵. The proposed turbines would exceed the 'very large' turbine size category (80-125m to blade tip) which were assessed in this study. In addition, the proposed turbines would sit within the Coastal Hill and Heath (ORK 12) and Loch Basins (ORK 16) character types which have been assessed as having capacity for small groups of turbines 30-50m to blade tip (respectively). This is, in part, due to the modest scale and extent of the island landscapes, the highly dispersed population and patterns of settlement and the sensitive coastline and seascape which is a defining feature of the Orkney Islands. More information on Orkney's landscape character is also available from our website⁶.

Since the publication of the sensitivity study, we are aware of the nearby Costa Head Wind Farm being approved, which comprises of 4 turbines at 125m to blade tip. Given the proximity of this development, careful consideration of turbine height and proportion will therefore be very important to avoid cumulative impacts.

In addition, we are aware that the offshore West of Orkney Wind Farm is currently at scoping. Although we do not know the implications of this proposal at this time, we highlight it may influence the cumulative study area for this proposal and the Applicant may wish to consider this further. More information on this proposal can be found from Marine Scotland⁷.

⁵ <https://www.orkney.gov.uk/Service-Directory/R/landscape-capacity-study-for-wind-energy-in-orkney.htm>.

⁶ *Landscape Character Assessment: Orkney Landscape Evolution and Influences* (2019), available at: <https://www.nature.scot/doc/landscape-character-assessment-orkney-landscape-evolution-and-influences>.

⁷ At: <https://marine.gov.scot/ml/scoping-opinion-request-offshore-wind-power-ltd-west-orkney-wind-farm>.



HISTORIC
ENVIRONMENT
SCOTLAND

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ALBA

By email to:

planningconsultation@orkney.gov.uk

Orkney Islands Council (Planning)
Development Management
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KW15 1NY

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131-668-8716
HMConsultations@hes.scot

Our case ID: 300056534
Your ref: 22/080/SCO
11 April 2022

Dear Orkney Islands Council

The Town and Country Planning (Environmental Impact Assessment) (Scotland)
Regulations 2017

Nisthill Wind Farm - Hundland Hill (Land Near), Birsay, Orkney - Scoping opinion request
to erect 4 x 26.4MW wind turbines (maximum height 180m)
Scoping Report

Thank you for your consultation which we received on 22 March 2022 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

Your local authority archaeological and cultural heritage advisors will also be able to offer advice on the scope of the cultural heritage assessment. This may include heritage assets not covered by our interests, such as unscheduled archaeology, and category B- and C-listed buildings.

Proposed Development

We understand that the proposed development comprises 4 wind turbines of 180m maximum blade tip height and any associated infrastructure on land near Hundland Hill, Birsay, Orkney.

Scope of assessment

We are content with the proposed scope of the cultural heritage assessment, as set out in Chapter 9 of the submitted Scoping Report.

In terms of our more detailed advice on the proposal, we refer to our pre-application comments that we provided directly to the applicant's archaeological consultants in a letter dated 23 March 2022 (attached for ease of reference). You will note in our letter that we consider that the proposal may give rise to significant adverse impacts on the setting of a large number of heritage assets for our interests located within the vicinity of the proposed development. This includes scheduled monuments within the proposed site



boundary. Based on the information available in the scoping report, it appears likely that the proposed development will raise issues in the national interest such that we may have to object.

It is therefore essential that the developer undertakes pre-application consultation with us as their proposals progress. This will be important in helping us to understand what, if any mitigation could be implemented to reduce the impact of the proposed wind farm.

Further information

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes. Technical advice is available on our Technical Conservation website at <https://conservation.historic-scotland.gov.uk/>.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Urszula Szupczynska and they can be contacted by phone on 0131 668 8983 or by email on Urszula.Szupczynska@hes.scot.

Yours faithfully

Historic Environment Scotland



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ÀRAINNEACHD
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By email to:

[REDACTED]

CC:

[REDACTED]

Longmore House
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EH9 1SH

[REDACTED]

Lynne Roy
AOC Archaeology Group
Edgefield Industrial Estate
Edgefield Road
Loanhead
Midlothian
EH20 9SY

Our case ID: 300056534

23 March 2022

Dear Lynne Roy

Nisthill Wind Farm, Orkney
(Pre-application)

Thank you for your consultation of 25 February seeking our further comments on the proposal and more specifically on potential mitigation that could be achieved by re-design. Please find below our comments in response to your request.

Background

As you will be aware, we previously provided comments on a similar proposal in this location in September 2021. That scheme, Ludenhill Wind Farm, proposed four turbines of approximately 175m to blade tip. We stated that these proposals would likely raise issues in the national interest, which would warrant our objection. We highlighted that it was very unlikely that the setting of several scheduled monuments in the vicinity could absorb the impacts of a scheme of this scale in this location.

Our advice

The layout and design of the scheme currently proposed appears to be identical to that for Ludenhill Wind Farm with two notable differences: the four turbines would be 5m taller, and the site boundary has been extended beyond the confines of the turbines and their associated infrastructure to include a wider area.

Two scheduled monuments are located within the development boundary:

- *Nisthouse, burial mound 270m ENE of (SM1318)*

Historic Environment Scotland – Longmore House, Salisbury Place, Edinburgh, EH9 1SH

Scottish Charity No. **SC045925**

VAT No. **GB 221 8680 15**



- *Hundland Hill, enclosure 500m NE of Nisthouse (SM13451)*

Several other scheduled monuments are located within the immediate vicinity, for example:

- *Hundland, settlement mound 270m SW of (SM1284)*
- *Mittens, two mounds 11m NE of, Swannay (SM1350)*
- *Park Holm, artificial island and causeway, Loch of Swannay (SM1362)*
- *Stoney Holm, crannog, Loch of Swannay (SM1394)*

as well as many other scheduled monuments in the wider area of north Mainland. The proposals are also located within the sensitive area of the Heart of Neolithic Orkney World Heritage Site.

Our assessment

Below we have provided an initial view of four monuments which appear to be most immediately affected by the proposals. It is however important to stress that this is not an exhaustive list. Should further information be made available that clarifies the likely impacts of the scheme, such as a ZTV, it may be that the number of monuments which could be significantly impacted would increase substantially.

Hundland Hill, enclosure 500m NE of Nisthouse (SM13451)

The monument comprises the remains of a prehistoric hilltop enclosure on the summit of Hundland Hill. Measuring about 60m in diameter within a broad bank, the enclosure is likely Neolithic or Bronze Age in date. Situated on the isthmus between the Loch of Swannay and Loch of Hundland, the monument is afforded excellent views in all directions.

Prehistoric hilltop enclosures are extremely uncommon in the British Isles. Fewer than ten examples have been identified in England, with only a handful of putative examples known in Scotland including Albie Hill (Dumfries and Galloway), Berry Hill (Aberdeenshire), Cluny Hill (Moray), and Dunknock (Perth & Kinross). The enclosure on Hundland Hill is therefore an important example of an exceptionally rare type of prehistoric site in Scotland, particularly in Orkney. Its significance is enhanced by its marked survival, with its earthen bank visible for most of the circuit. Its hilltop position and the benign nature of later land-use are likely to have preserved important



archaeological evidence. The enclosure's prominent location on the summit of Hundland Hill also contributes to its significance. From this position the monument overlooks a landscape rich in broadly contemporary funerary and ritual monuments. This results in good views across this prehistoric landscape from the monument, as well as correspondingly good views towards the monument from the surrounding area.

Turbines of the size and number within the development boundary would likely severely disrupt these views, overwhelming the monument's presence in the landscape and distracting from and undermining the monument's relationship with the surrounding topography and relationships to other assets in its setting. The proximity of the turbines to the monument would exacerbate this significant impact.

Nisthouse, burial mound 270m ENE of (SM1318)

The monument comprises the remains of a burial mound or barrow dating probably to the Bronze Age. The monument is located on the southwest slope of Hundland Hill, overlooking the Loch of Hundland with long views to the west and southwest.

The monument is of national importance because of its potential to make a significant addition to our understanding of funerary practice in the Bronze Age. Earthen barrows form an important and relatively widespread element of Orkney's Bronze Age landscape; however, within Scotland the type is unusual, and important within a British context, because the majority are earthen mounds as opposed to stone-built cairns. They provide evidence for the significant changes which took place in society and funerary practice in the Bronze Age in Orkney.

Set against the backdrop of Hundland Hill, the monument's setting is characteristic of similar monuments in the wider landscape, being a mound constructed on the shoulder of a hill. The monument is intervisible with several similar sites in the landscape to the south, west, and north-west.

When viewed from these directions, the proposals would severely undermine the monument's relationship with other burial mounds in the area. The proximity and size of the turbines would introduce a very large and imposing element to the hilltop backdrop to the monument, distracting entirely from the monument's subtle but important relationship to its surroundings. The proximity of the development is such that the monument's immediate setting would be disrupted when experienced from the monument itself. Here,



the mound would appear immediately adjacent to large and imposing wind turbines, resulting in a significant change to the character of setting to that which it currently exhibits.

Stoney Holm, crannog, Loch of Swannay (SM1394)

The monument comprises the remains of a crannog close to the western shore of Loch of Swannay. The crannog is occupied almost entirely by a rectangular stone-built structure reduced to its foundations. The monument is of unknown date, but likely dates to the medieval period. The structure's masonry has been noted to consist of stones massive in size, which may point to an earlier medieval, or possibly Iron Age, origin.

The monument is of national importance as an uncommon example in Orkney of a crannog, a type of artificial island much more common in the south and west of Scotland. It has the potential to provide important information that could make a significant contribution to our understanding of the purpose and function of crannogs in Orkney, and the origin and longevity of these sites in the Northern Isles.

No causeway is visible to the island, but its proximity to the western shore suggest that access was gained from this area. Hundland Hill rises behind the monument to the west, forming a prominent topographic marker in the crannog's setting. It is likely that the surrounding land on the east side of Hundland Hill was worked (or at least regularly traversed) by the crannog's builders and users. This is also the case for the water of Loch of Swannay. The loch may also have provided an important element of security for the crannog by restricting access. Within the development boundary, the number and size of the turbines proposed would undermine the monument's connection with both land and water by introducing large wind turbines in very close proximity to the site. These would entirely overwhelm the monument's presence in the landscape in any landward approaches from the north, west, and south, and any waterborne approaches from the east.

Park Holm, artificial island and causeway, Loch of Swannay (SM1362)

The monument comprises the remains of a small artificial island in the Loch of Swannay, with a partly-submerged stone causeway linking it to the western shore. Traces of drystone walling are visible on the island among rubble. The island is 12m in average diameter but its base, on the bed of the loch, is over 20m in diameter.



Like Stony Holm, the monument is of national importance as a rare example of a crannog in Orkney. Its drystone construction of large stones is suggestive of a prehistoric origin for the site. The monument's excavation could reveal important comparative information on late prehistoric defensive and domestic architecture. The importance of both Stony Holm and Park Holm is enhanced by their proximity to each other, which offers the opportunity to study the evolution of how inland lochs were utilised in Orcadian life from the prehistoric to medieval periods.

The monument's setting is clearly defined by its connection to the Loch of Swannay and the land west of the loch. The causeway provides a clear indication of the importance of the land in this direction to the crannog's occupants, who would have approached the site from the west, and may have used the land in the vicinity and around Hundland Hill for farming. The proposals would therefore introduce a substantial intrusion into the monument's wider and immediate settings, altering the currently open, pastoral landscape to the west and north to one occupied by very large turbines. These would also backdrop the monument when viewed or approached from the east, overwhelming and distracting from the monument's presence in the landscape.

Mitigation

Our view is that due to the location of the proposed turbines, their proximity to heritage assets, and scale, the development would result in significant negative impacts to the setting of several, possibly all, of the above scheduled monuments. Given the distribution of scheduled monuments in this part of Orkney, it is likely that an EIA exercise could find significant impacts on other scheduled monuments in the wider area.

You mentioned in your correspondence that AOC are currently considering mitigation options that would involve changes to the layout to increase separation distance between the proposed turbines and the scheduled monuments on the site and also to ensure that the location of other infrastructure such as tracks, substations etc. are located so as to minimise impacts on the setting of nearby assets. It is very unlikely that any such changes to the scheme could meaningfully mitigate the predicted impacts.

However, should the applicant feel the viability of the scheme can be explored further, we would require at least wirelines in order to give more comprehensive advice. In the first



instance we would suggest that these depict the scheme in views from SM13451, SM1362, SM1284, and SM1477.

Our position

The proposals would be likely to raise issues in the national interest, which would warrant our objection. You asked if there were any specific changes to the layout that we consider would mitigate impacts. It is very unlikely that small revisions to the layout of the scheme of this scale, within the proposed site boundary, could adequately address our concerns. However, should AOC, as heritage advisors to the applicant, identify a revised scheme that would be unlikely to have significant adverse impacts on the setting of nationally important heritage assets in the area, we would be happy to look at further information.

I hope the above advice is of assistance to you. Please do not hesitate to contact me, should you have any questions in relation to this response.

Yours sincerely

Historic Environment Scotland

Wednesday, 27 April 2022



Local Planner
Development Management, Development and Infrastructure
Orkney Islands Council
Kirkwall
KW15 1NY

Development Operations
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
Glasgow
G33 6FB

Development Operations
Freephone Number - 0800 3890379
E-Mail - DevelopmentOperations@scottishwater.co.uk
www.scottishwater.co.uk



Dear Customer,

Hundland Hill (Land Near), Birsay, KW17 2NB
Planning Ref: 22/080/SCO
Our Ref: DSCAS-0061227-7FP
Proposal: Scoping opinion request to erect 4 x 26.4MW wind turbines
(maximum height 180m)

Please quote our reference in all future correspondence

Audit of Proposal

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced. Please read the following carefully as there may be further action required. Scottish Water would advise the following:

Drinking Water Protected Areas

A review of our records indicates that the proposed activity falls within a drinking water catchment where a Scottish Water abstraction is located. Scottish Water abstractions are designated as Drinking Water Protected Areas (DWPA) under Article 7 of the Water Framework Directive. Loch of Boardhouse supplies Boardhouse Water Treatment Works (WTW) and it is essential that water quality and water quantity in the area are protected. In the event of an incident occurring that could affect Scottish Water we should be notified immediately using the Customer Helpline number **0800 0778 778**.

The activity is a sufficient distance from the intake that it is likely to be low risk, however care should be taken, and water quality protection measures must be implemented.

Scottish Water have produced a list of precautions for a range of activities. This details protection measures to be taken within a DWPA, the wider drinking water catchment and if

there are assets in the area. Please note that site specific risks and mitigation measures will require to be assessed and implemented. These documents and other supporting information can be found on the activities within our catchments page of our website at www.scottishwater.co.uk/slm

We welcome receipt of this notification about the proposed activity within a drinking water catchment where a Scottish Water abstraction is located.

The fact that this area is located within a drinking water catchment should be noted in documentation. Also anyone working on site should be made aware of this during site inductions and we would also like to take the opportunity, to request that 3 in advance of any works commencing on site, Scottish Water is notified at protectdwsources@scottishwater.co.uk so we can make our operational teams aware there will be activity taking place in the catchment.

Surface Water

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system.

There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- ▶ Scottish Water asset plans can be obtained from our appointed asset plan providers:
 - ▶ Site Investigation Services (UK) Ltd
 - ▶ Tel: 0333 123 1223
 - ▶ Email: sw@sisplan.co.uk
 - ▶ www.sisplan.co.uk

I trust the above is acceptable however if you require any further information regarding this matter please contact me on **0800 389 0379** or via the e-mail address below or at planningconsultations@scottishwater.co.uk.

Yours sincerely,

Angela Allison

Development Services Analyst

PlanningConsultations@scottishwater.co.uk

Scottish Water Disclaimer:

"It is important to note that the information on any such plan provided on Scottish Water's infrastructure, is for indicative purposes only and its accuracy cannot be relied upon. When the exact location and the nature of the infrastructure on the plan is a material requirement then you should undertake an appropriate site investigation to confirm its actual position in the ground and to determine if it is suitable for its intended purpose. By using the plan you agree that Scottish Water will not be liable for any loss, damage or costs caused by relying upon it or from carrying out any such site investigation."

From: HIAL Safeguarding <hialsafeguarding@traxinternational.co.uk>
Sent: 22 March 2022 16:25
To: planningconsultation <planningconsultation@orkney.gov.uk>
Subject: RE: Scoping Application Consultation 22/080/SCO

Your Ref: 22/080/SCO
Our Ref: 2022/121/KOI

Dear Sir/Madam,

Proposal: Nisthill Wind Farm. Scoping opinion request to erect 4 x 26.4MW wind turbines (maximum height 180m).

Location: Hundland Hill (Land Near), Birsay, Orkney.

With reference to the above, our calculations show that, at the given position and height, this development may infringe the safeguarding criteria for Kirkwall Airport.

As the proposed wind farm is to be located beneath airspace coincident with the Instrument flight procedures serving Kirkwall Airport; Highlands and Islands Limited (HIAL) request that the applicant commission an Aviation Impact Feasibility Study (AIFS), of the proposed Nisthill Wind Farm, is undertaken to understand any impact on the infrastructure and operation of Kirkwall Airport. The following are required to be assessed:

- Instrument Flight Procedures (IFPs) (see CAP785) requirement. (Ref CAP764 Preplanning & consultation, 4.2, point 2.)
- Crane and Lifting equipment use during construction (see CAP1096) requirement.

The AIFS should be produced by a firm which has the necessary expertise and a track record of performing such assessments. This office will provide guidance, if required, in selecting a firm.

Once the AIFS has been reviewed by HIAL, and any impact to Kirkwall Airport is understood, the applicant may then expect to be contacted by HIAL to enter into formal discussions.

If the applicant has any questions or further information required, as stated above please use both email addresses below.

Yours faithfully,

Ed

Ed Boorman
HIAL Safeguarding (Acting for and on behalf of Highlands & Islands Airport Ltd)



m: +44 (0)7962 269420

e: hialsafeguarding@traxinternational.co.uk

e: safeguarding@hial.co.uk

From: Inter-Isles Pilots (Kirkwall) <flightopskoi@loganair.co.uk>

Sent: 27 April 2022 11:23

To: planningconsultation <planningconsultation@orkney.gov.uk>

Subject: Re: Scoping Application Consultation 22/080/SCO

Thanks for the opportunity to comment.

The location of the development is not near any of the Loganair inter island routes and consequently will have no material impact on the service we operate on behalf of the Orkney Islands' Council.

Regards,

Colin McAllister

From: [NATS Safeguarding](#)
To: [planningconsultation](#)
Subject: RE: Scoping Application Consultation 22/080/SCO [SG33065]
Date: 24 March 2022 16:07:24
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Our Ref: SG33065

Dear Sir/Madam

The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.

If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.

Yours faithfully

NATS

NATS Safeguarding

E: natssafeguarding@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk



-----Original Message-----

From: planningconsultation@orkney.gov.uk <planningconsultation@orkney.gov.uk>
Sent: 22 March 2022 14:40
To: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Subject: Scoping Application Consultation 22/080/SCO

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

See attached documents

NATS Public

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

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Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.



Defence Infrastructure Organisation

Teena Oulaghan
Ministry of Defence
Safeguarding Department
St George's House
DIO Headquarters
DMS Whittington
Lichfield
Staffordshire
WS14 9PY

Mr Jamie Macvie
Orkney Islands Council
Planning Department
School Place
Orkney
KW15 1NY

MOD Telephone: 07970 170 934
E-mail: teena.oulaghan100@mod.gov.uk

Application Ref: 22/080/SCO
Our Reference: DIO10054667

24 May 2022

Dear Jamie,

Site Name Nisthill Wind Farm.
Site Address Hundland Hill (Land Near), Birsay, Orkney.
Proposal Scoping opinion request to erect 4 x 6.6 MW wind turbines (maximum height 180m).

Thank you for consulting the Ministry of Defence (MOD) on the above request for a Scoping Opinion for the proposed construction and operation of Nisthill Wind Farm which was received by our office on 22 March 2022.

I am writing to inform you that the MOD has concerns about this proposed development.

We have assessed this proposal on the basis that there will be 4 turbines at 180.00 metres in height from ground level to blade tip and located at the grid references detailed in the table below:

Turbine	Easting	Northing
1	329964	1027270
2	330455	1027012
3	330910	1027302
4	331012	1026849

It has been identified that this development will have the following impacts upon defence operations:

Military Low Flying Training

The airspace over the UK land mass is used to provide the UK Military Low Flying System to deliver essential military low flying training. The proposed development will occupy Low Flying Area 14 (LFA 14) within which military fixed wing aircraft are permitted to fly down to 250 feet (76.2 metres) above terrain features. The development proposed will cause a potential obstruction hazard to these military low flying training activities.

To address this impact, it would be necessary for the development to be fitted with aviation safety lighting.

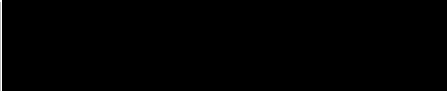
Therefore, in the interests of air safety, the MOD would request that the development be fitted with MOD accredited aviation safety lighting in accordance with the requirements of the Air Navigation Order 2016.

MOD Safeguarding wishes to be consulted and notified about the progression of this proposal and any subsequent application(s) that may be submitted relating to it to verify that it will not adversely affect defence interests.

I trust this adequately explains our position on this matter. Further information about the effects of wind turbines on MOD interests can be obtained from the following website:

<https://www.gov.uk/government/publications/wind-farms-ministry-of-defence-safeguarding>

Yours sincerely

A solid black rectangular box used to redact the signature of Teena Oulaghan.

Teena Oulaghan
Safeguarding Manager

Dear Planningconsultation,

A Windfarms Team member has replied to your co-ordination request, reference **WF715141** with the following response:

Please do not reply to this email - the responses are not monitored.

If you need us to investigate further, then please use the link at the end of this response or login to your account for access to your co-ordination requests and responses.

Dear Sir/Madam,

REF: 22/080/SCO

Site Name: Nisthill Wind Farm

Location: Hundland Hill (Land Near)

Birsay,
Orkney

Turbines at NGR:

1 329964 1027270
2 330455 1027012
3 330910 1027302
4 331012 1026849

Max Tip Height: 180m

(For the purposes of calculations, Hub height of 120m and Blade radius of 60m used in interim)

This proposal is ***cleared*** with respect to radio link infrastructure operated by:

S&S Scottish Hydro

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements.

In the case of this proposed wind energy development, JRC does not foresee any potential problems

based on known interference scenarios and the data you have provided. However, if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal. Please note that due to the large number of adjacent radio links in this vicinity, which have been taken into account, clearance is given specifically for a location within the declared grid reference (quoted above).

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, you are advised to seek re-coordination prior to submitting a planning application, as this will negate the possibility of an objection being raised at that time as a consequence of any links assigned between your enquiry and the finalisation of your project.

JRC offers a range of radio planning and analysis services. If you require any assistance, please contact us by phone or email.

Regards

Wind Farm Team

*Friars House
Manor House Drive
Coventry CV1 2TE
United Kingdom*

Office: 02476 932 185

JRC Ltd. is a Joint Venture between the Energy Networks Association (on behalf of the UK Energy Industries) and National Grid.

Registered in England & Wales: 2990041

[About The JRC | Joint Radio Company | JRC](#)

We maintain your personal contact details in accordance with GDPR requirements for the purpose of 'Legitimate Interest' for communication with you. However, you have the right to be removed from our contact database. If you would like to be removed, please contact anita.lad@jrc.co.uk.

We hope this response has sufficiently answered your query.

If not, please **do not send another email** as you will go back to the end of the mail queue, which is not what you or we need. Instead, **reply to this email by clicking on the link below or login to your account** for access to your co-ordination requests and responses.

<https://breeze.jrc.co.uk/tickets/view.php?id=26712>

Mr Jamie Macvie
Orkney Islands Council
By email

12 April 2022

Dear Mr Macvie,

Scoping opinion request to erect 4 x 26.4MW wind turbines (maximum height 180m) at Hundland Hill (Land Near), Birsay, Orkney (22/080/SCO)

Thank you for consulting RSPB Scotland on the EIA scoping opinion for the Nisthill Windfarm. We are pleased to see the developer is considering the environmental impacts at this early stage of the project. We welcome engagement with the applicant at an early stage to discuss any of the matters raised in this letter.

We understand the proposed development is for an onshore electricity generating station consisting of four wind turbines, each up to 180 meters blade tip height and with a total generating capacity in the region of 26.4 MW. As such, it would fall within the remit of OIC to determine. We politely request the description of the development is reviewed as it currently implies generating capacity would be in the region of 104MW.

Our comments are focused on section 5 (Ornithology) of the EIA Scoping Report.

Ornithology

We are pleased to see that Ornithology has been scoped into the EIA Report. In general, the ornithological chapter of the EIA should consider all the components of the proposal including access roads (including the route on public roads to get the turbines on site), on site tracks, borrow pits, drainage, grid connection, substation, and temporary construction buildings/storage compounds. Disturbance, displacement (including barrier effects), loss of suitable habitat (breeding, wintering and foraging) and collision risk should be assessed for all species.

The proposed development site overlaps the Hundland Hill RSPB Reserve. It lies inside and adjacent to Loch of Swannay Local Nature Conservation Site (LNCS) and is also adjacent to Orkney Mainland Moors SPA, West Mainland Moors SSI and 40 meters away from Loch of Hunland Local Nature Conservation site. There are a further six designated (either SPA, SSI or LNCS) within 5km.

The Orkney Mainland Moors SPA¹ is designated for breeding and non-breeding hen harrier, and breeding re-throated diver and short eared owls, though it also provides nesting opportunities for an assemblage of other moorland breeding birds. The West Mainland Moors SSSI is recognised for blanket bog as well as its breeding

¹ NatureScot – Site Link - [Orkney Mainland Moors SPA](#)

bird assemblage² including red-throated diver, hen harrier, and short-eared owls. Information from Orkney Island Council³ shows both LNCS support several nationally important habitats and bird species. This includes red-throated diver, lapwing, and curlew. Loch Swanney is also important for winter wild wildfowl, especially Greenland white-fronted geese and Hen Harriers are known to hunt over the Loch Hunland area. The RSPB reserve similarly supports breeding and wintering hen harriers, breeding red-throated divers and breeding short-eared owls. It is also an important area for waders including curlew, whimbrel and golden plover, merlin and great and arctic skua.

Mindful of the importance of the surrounding area and in the absence of precise information as to what data already exists and the quality and the age of that data, we do not consider the developer has demonstrated a shorter period of data is sufficient to support the application. Use of the Orkney Mainland Moors SPA data is welcome for additional context, but it is not site specific and predominantly dates from between 2004 and 2013⁴. It is therefore unsuitable to be relied upon as recent data. Two full years of site-specific surveys should therefore be provided in line with the published guidance from NatureScot⁵.

Information within the EIA report must demonstrate that the survey data are adequate, robust, and accurate. The following should be included:

- Full information on the Vantage Point (VP) Survey work undertaken, including dates, times, and weather conditions
- Maps showing VP locations that also denote viewsheds (we note this is currently included in Figure 5.2 of the scoping report)
- Maps showing diver and raptor foraging areas and flights
- Worked example(s) of collision risk calculations
- Provision of raw data in order independent verification of collision risk calculations

We also wish to highlight that Greenland white-fronted geese are particularly sensitive to disturbance at the roost. We would therefore recommend including wintering goose and swan roost surveys on any lochs and waterbodies within the application site and zone of influence.

In regard to collision risk modelling, we wish to highlight that data analysis methodologies developed on the Scottish mainland are not always appropriate on Orkney. For example, hen harriers exhibit higher levels of polygyny on Orkney and therefore any population viability analysis as a results of disturbance impacts must be undertaken for both male and female hen harriers.

Red-throated diver are known to demonstrate a high level of macro avoidance which could result in increased energy expenditure by birds commuting between breeding and foraging sites via a longer route. This could result in reduced condition or reduced food provisioning for any chicks and represents an important impact in addition to collision risk upon the diver population. Population viability analysis is therefore likely to be required for this species.

Cumulative impacts on the species and their populations that are sensitive to wind energy and other developments should be assessed across the Natural Heritage Zones, SPA and local populations. There are several other anticipated, consented, and operational developments close to this proposed development site, with predicted impacts on the ornithological features, including Costa Head windfarm, Burgar Hill Windfarm and Hammars Hill Windfarm. Disturbance, displacement (including barrier effects) and collision risk should be

² NatureScot- Site Link – [West Mainland Moorlands SSSI](#)

³ Orkney Island Council - [Supplementary Guidance: Natural Environment](#) (Adopted 2017)

⁴ NatureScot – Site Link - [Orkney Mainland Moors SPA](#)

⁵ Scottish Natural Heritage (2017) [Recommended bird survey methods to inform impact assessment of onshore wind farms](#), Version 2

assessed cumulatively for all species. Cumulative impacts of habitat loss of Annex 1 habitats (such as blanket bog) should also be assessed.

The EIA Report should include post-construction monitoring for collision mortality and breeding birds. We request that a detailed Habitat Management Plan (HMP) is prepared as part of the EIA and submitted with the application, including any proposals for mitigation/enhancement in relation to important habitats and species.

We agree with the conclusion in paragraph 5.4.6 of the EIA Scoping Report that an appropriate assessment under the Habitats Regulations will also be required.

Other Matters

No detail has been provided regarding the method for site selection and the how alternatives have been considered. Reasonable alternatives studied by the developer (including site location, development scale and design) and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects must be included with the EIA Report. If no alternatives sites were considered, the reasons why alternatives sites were not feasible should be explained.

We welcome the scoping in of impacts to peat within the EIA Report. Peat is a valuable carbon store and a long-term nature-based solution supporting our climate change mitigation targets. It is also an important habitat. Development must avoid the unnecessary disturbance of peat and carbon rich soils and that best practice must be adopted in the movement, storage, management and reinstatement of peat and carbon-rich soils. Within the planning application regard should also be given to peatland restoration targets with commentary on how this development will avoid, reduce or, as a last resort compensate or offset impacts to peatlands. We wish to highlight that it is extremely difficult to restore peat to fully functioning bog.

Finally, with the expected adoption of NPF4 in summer 2022, we encourage developers to think about how they will deliver positive effects for or biodiversity net gain

Should you wish to discuss any of the above please do not hesitate to contact me.

Yours sincerely,

Catherine Kelham

Senior Marine Conservation Planner

RSPB Scotland

Appendix 2

Cumulative Schemes

The list below sets out those schemes that should be considered within the EIA cumulative assessment. This is not a definitive list however and further discussions should be held with the Council to agree finalised list, once the ZTV has been prepared.

Planning reference	Address	Description of Development	Status
22/081/SCO	West of Orkney Wind Farm - Hoy, Flotta & Fara, Orkney	Scoping opinion request to install onshore infrastructure related to an offshore windfarm, including export cable corridor and substation search areas	Request for Scoping Opinion submitted 1 March 2022
16/580/TPPMAJ	Costa Head Wind Farm – Costa Head (Land Near) Swannay, Orkney	Erect four wind turbines (max capacity 14.4MW, max height 125m), erect a meteorological mast (max height 81m), substation and associated infrastructure (including access track)	Appeal Allowed
	Hammars Hill		Operational
20/112/TPP	Hammars Hill Extension	Erect two wind turbines (maximum height of 150 metres, maximum capacity 8.4 MW total), a substation, hydrogen production facility and welfare building, construct access tracks, create borrow pits and associated infrastructure	Application/ Appeal
	Burgar Hill		Operational
08/253/PPF	Kingarly hill	Erect wind turbine generator	Operational

12/108/TPP	Rennibister	Erect a 900kW wind turbine (max height 67m), switchgear building and access track	Operational
19/042/SCO	Rennibister Extension	Scoping opinion request to erect 5 x 4MW turbines (max height 125m)	Scoping
20/037/TPPMAJ	Quanterness (Land Near), St Ola, Orkney	Erect 6 wind turbines (maximum height 149.9 metres, maximum wind farm capacity 50MW), erect a meteorological mast (maximum height 90 metres) and a substation, create an access and construct access tracks, and associated infrastructure	Approved by Scottish Ministers 21 December 2021 – Decision appealed to Court of Session
11/728/TPP	Hoy Community Turbine	Erect 2 0.9MW wind turbines (max height 74m) and ancillary works including access track, control building, cabling, crane hardstandings and temporary site compound	Approved
20/313/TPPMAJ	Hoy Windfarm - Lyness (Land Near), Hoy, Orkney	6 wind turbines of up to a maximum of 149.9m height from ground to blade tip when vertical, access tracks, a water crossing, crane hardstandings, underground cabling, possible external transformers, substation and maintenance building, temporary construction compound, borrow pit and permanent meteorological mast.	Approved by Scottish Ministers 21 December 2021 – Decision appealed to Court of Session

08/249/PPF	Ore Brae, Hoy	Erect wind turbine generator	Operational
04/224/PPF	West Hill, Flotta	Erection of wind turbine, alteration to turbine	Operational
17/083/TPPMAJ	Hesta Head	Erect five wind turbines (max capacity 20.4MW, max height 125m), erect a meteorological mast (max height 81m), substation and associated infrastructure (including access track)	Approved
09/092/PPF	Crowness Business Park	Revised proposal to erect a 900kW wind turbine generator (max. height 67m) instead of previously sought 2MW wind turbine generator (max. height 93.5m) in connection with proposed offices and workshop (subject to separate outline planning application ref 09/093)	Operational
21/240/TPPMAJ	Faray	Erect 6 wind turbines (maximum height 149.9 metres, maximum wind farm capacity 50MW), erect a meteorological mast (maximum height 90 metres) and a substation, construct access tracks, crane hardstandings, underground cabling, transformers, and a slipway and jetty, create a borrow pit, and associated infrastructure	Application/ Appeal

11/102/TPP	Spurness Point	Remove 3 existing wind turbines and erect 5 new wind turbines (max. height 100m) with associated hard standing, access tracks, operations building, temporary laydown area and extension to existing substation	Operational
11/718/TPP	Newark	Erect a wind turbine (max height 50m); temporary anemometer mast (31m); access road; cable; and switchgear building	Operational
08/254/PPF	Sandy Banks	Erect wind turbine generator	Operational
08/253/PPF	Kingarly Hill	Erect wind turbine generator	Operational
08/453/PPF	Spurness Point	Erect a wind turbine generator	Operational
08/252/PPF	Howe, Shapinsay	Erect wind turbine generator	Operational
08/411/PPF	Barnes of Ayre	Erect wind turbine generator (max. height 15m)	Operational
09/204/PPF	Upper Stove, Deerness	Erect a wind turbine generator (max. height 67m) with hard standing and switchgear enclosure	Operational