Agenda Item	6.9
Report No	PLN/097/22

HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date:6 December 2022

Report Title: 22/03864/S36 : Highland Wind Limited

Development Site 9KM NW Of Dounreay Nuclear Research Establishment, Dounreay

Report By: Area Planning Manager North

Purpose/Executive Summary

- **Description:** Pentland Offshore Floating Wind Farm Erection and Operation of an offshore floating wind farm and associated offshore infrastructure comprising up to seven floating wind turbines of up to 300m to blade tip height, seven floating substructures with associated mooring lines and anchors / piles, inter-array cables, two export cables , landfall, and associated scour and cable protection measures.
- Ward: 02 Thurso And North West Caithness

Development category: Major

Reason referred to Committee: Raise no objection on Electricity Act Application and Community Council objection

All relevant matters have been taken into account when appraising this application. It is considered that the proposal does not accord with the principles and policies contained within the Development Plan and is unacceptable in terms of applicable material considerations.

Recommendation

Members are asked to agree the recommendation **RAISE NO OBJECTION** to the application as set out in section 11 of the report

1. PROPOSED DEVELOPMENT

- 1.1 The Council has been consulted by the Scottish Government (Marine Scotland) on an application submitted under section 36 of the Electricity Act 1989 and Part 4 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal Access Act 2009 to construct and operate an offshore floating wind farm off the north coast of Caithness. A separate application under the Town and Country Planning (Scotland) Act 1997 (As Amended) is under consideration by the Planning Authority for the onshore infrastructure.
- 1.2 The Council is not the determining authority but is an important consultee nonetheless. Unlike onshore development, were the Council to decide not to support the developments, there would be no automatic Public Local Inquiry.
- 1.3 The development proposed shares similar characteristics, and therefore some of the environmental effects, to applications for onshore wind development and therefore this report will give consideration to those effects, positive and negative, in so far as they relate to the interests of the Council. This in the main relates to those effects on the human environment as opposed to the marine environment. Marine Scotland is best placed to consider effects on the latter.
- 1.4 The proposed development comprises:
 - Up to seven floating offshore Wind Turbine Generators (WTGs);
 - Up to seven associated floating substructures;
 - Up to nine mooring lines for each floating substructure (63 in total);
 - Up to nine anchors or piles for each floating substructure (63 in total);
 - Up to seven inter-array cables (dynamic and static);
 - Up to two offshore export cables (continuation of inter-array cables to bring power ashore);
 - Associated scour protection and cable protection (if required); and
 - Up to five Light detection and Ranging (LiDAR) buoys.
- 1.5 The application site for both the Section 36 application and Marine Licence are split into:
 - the Array Area comprising an area of 10km² located approximately 7.5km offshore this is where the turbines and the associated floating substructures will be located along wit the associated mooring lines, anchors and inter-array cables; and
 - the Offshore Export Cable Corridor which runs from the Array Area to Mean High Water Springs – this is where the two export cables will be located and will follow a route to allow landfall in proximity of the HMS Vulcan and Dounreay Nuclear Establishment sites.
- 1.6 Given many of the uncertainties around this type of development within what is a challenging marine environment, as well as the long lead time in which the project is

likely to commence on site, the exact layout, design, number, height and support structure requirements for each phase of the development is yet to be determined. For each element of the project there are a range of options for deployment. The Environment Impact Assessment Report is based on a principle known as the 'Rochdale Envelope'; a term deriving from established case law, which essentially means that consideration is given to the maximum and minimum extents of the project in order to establish a 'worst case scenario'. Work continues on refining the project concepts and the exact final design is unlikely to be known until after consent is given.

- 1.7 The development will not include off-shore substation platforms which have commonly been seen in the offshore wind energy developments off the east coast of Highland. Instead, the substation and all associated infrastructure will be located onshore in vicinity of HMS Vulcan and the Dounreay Establishment. An application for Planning Permission in Principle for the onshore works is currently under consideration by the Planning Authority.
- 1.8 If the development is consented by Marine Scotland, it is anticipated that construction would commence in 2024 and the site will be commissioned in Q4 2026. Thereafter, it is anticipated it would have an operational life of up to 30 years from the date of first commissioning. At the end of the life of the development a decision will be taken as to whether re-power the site, decommission the site or extend its life. In accordance with the provisions of the Energy Act 2004, the applicant will be required to prepare a Decommissioning Programme for approval by Scottish Ministers. The applicant has outlined the decommissioning measures required in the EIAR but a detailed programme would only be required should the development gain consent.
- 1.9 The applicant is considering a number of different locations for onshore servicing of the development. A final choice on which location is yet to be determined.
- 1.10 The applicant has been in regular contact with the Planning Authority in advance of submission of the application seeking advice on procedural matters and to advise on the details which will accompany the application. The applicant has also undertaken a series of pre-application consultation events in line with the provisions of the Marine Licensing (Pre-Application Consultation) (Scotland) Regulations 2013. In person events were held at Reay Golf Club and the North Coast Visitor Centre in May 2022. A virtual exhibition was also held between 27 September 2021 and 31 October 2021. Further a pre-submission update event was held online from 04 July 2022. The application is supported by a Pre-Application Consultation Report outlining the consultation undertaken and the feedback received.
- 1.11 The application site is in the same location of the Dounreay Tri Offshore Floating Wind Farm which was consented by Scottish Ministers in 2017.
- 1.12 The application is supported by:
 - Environmental Impact Assessment Report with chapters on
 - Policy and legislation;
 - Site selection;

- Stakeholder engagement;
- Project description;
- EIA methodology;
- Marine physical processes;
- Water and sediment quality;
- Benthic ecology;
- Fish and shellfish ecology;
- Marine mammals and other megafauna;
- Commercial fisheries;
- Shipping and navigation;
- Aviation and radar;
- Seascape, landscape and visual amenity;
- Marine archaeology;
- Other users of marine environment;
- Socio-economics, recreation and tourism;
- Climate change and carbon;
- Risk of major accidents and disasters;
- Summary of offshore impacts and mitigations
- Planning and Policy Statement; and
- Pre-Application Consultation Report
- 1.13 No variations have been made to the application following the consultation from Marine Scotland

2. SITE DESCRIPTION

- 2.1 The proposal is located to the west of the Pentland Firth and the array area (where the turbines will be located) is approximately 7.5km from the Caithness coastline. The offshore export cable corridor wraps around the eastern edge of the array area and then narrows in area until it reaches mean high water springs adjacent to the HMS Vulcan and Dounreay Establishment. The nearest settlements are Reay and Portskerra both of which are approximately 8.5km from the array area.
- 2.2 The seabed primarily consists of sand, gravel shell gravel and boulders. There are some areas of stony reefs and bedrock reefs in the export cable corridor area. In survey work undertaken to date the applicant has identified the presence of kelp beds, skate, ocean quahog, ling, place, octocorallia, sand eel and herring. A non-native species was also recorded (goniadella gracilis). Common dolphins, killer whales, harbour porpoise, white beaked dolphins, bottle-nose dolphins, and other cetacean species have been recorded within the Offshore Site and surrounding waters on an irregular basis.

- 2.3 In terms of Natural Heritage, there are no statutory nature conservation designations within the proposal site, although it is within proximity of the following designated sites:
 - North Caithness Cliffs Special Protection Area;
 - Sandside Bay Site of Special Scientific Interest; and
 - Red Point Coast Site of Special Scientific Interest.
- 2.4 The applicant has undertaken a series of ornithological surveys during the preparation of the application. It has identified and considered the effects on black legged kittwake, common guillemot, razorbill, Atlantic puffin, northern fulmar, northern gannet, artic tern, great black-backed gull, great skua, herring gull, red-throated diver, petrels and sheerwaters, and wildfowl and waders.
- 2.5 The applicant has reviewed the historic environment baseline in the area and identified that there are no charted wrecks within the application site and there are no Historic Marine Protected Area, Protected Places or Controlled Sites designated under the Protection of Military Remains Act 1986. In the wider area there are a number of wrecks of note the wider area with the nearest one lying 3.5km to the north of the application site. There are no recorded aviation losses within the application site but there is a possibility one may be found as various aircraft that have went missing off the north coast. The applicant has not identified any submerged landscapes and cultural remains through their assessment work to date. There are a number of onshore built and cultural heritage features which may be impacted and have been subject to assessment by the applicant. This includes: Sandside Harbour; Cnoc Urray Broch; Cnoc Freiceadain Cairns; Reay Church; Sandside House; Creag Bhreac Mhore stone rows; St Mary's Chapel (Forss); Dunnet Head; Halladale Inn; Ben Griam Beag Hillfort; Bridge of Broubster; and Cnoc an Ciste Chambered Cairn.
- 2.6 The site is located to the north of the Portskerra Regional Coastal Character Assessment area which is split into four sub areas in the Orkney and North Caithness Coastal Character Assessment. Each of the four areas are characterised by views north to the Atlantic and to the north east where Orkney is a distant feature. To the south east of the development site the Dunnet Bay and Thurso Bay Regional Coastal Character Assessment is set out in the aforementioned document. These areas generally have north west facing views but the coastlines (where the sea meets the land) is difficult to access. However there are more elevated locations from which views across the Pentland Firth toward the Atlantic can be appreciated. The following landscape designations are present in vicinity of the application:

National Scenic Areas

- Hoy and West Mainland (Orkney)
- North West Sutherland
- Kyle of Tongue

Special Landscape Areas

- Oldshoremore, Cape Wrath and Druness
- Eriboll East and Whiten Head
- Farr Bay, Strathy and Portskerra

• Dunnet Head

Gardens and Designed Landscapes

- Castle of Mey
- Melsetter House (Orkney)
- Tongue House
- 2.7 A number of Wild Land Areas (WLA) are present to the south of the application site. These include:
 - WLA35 Ben Klibreck Armine Forest
 - WLA36 Causeymore Knockin Flows
 - WLA37 Foinaven Ben Hee
 - WLA38 Ben Hope Ben Loyal
 - WLA39 East Halladale Flows
 - WLA40 Cape Wrath
 - WLA41 Hoy (Orkney)
- 2.8 There are a number of turbine developments in proximity of the proposal, which must be taken into account by the assessment for cumulative landscape and visual impacts (LVIA). The LVIA study area is set at 45km from the outermost turbines so the list below sets out windfarm projects within 45km that are operational, approved or have been submitted but not yet determined

Site Name	No. of Turbines	Tip Height (m)	Location and Distance from the Proposed Development				
Operational Sites							
Forss	6	78	9.9				
Baillie	21	115	12.4				
Strathy North	33	110	21.1				
Achlachan	5	115	31.1				
Causeymire	21	100	32.4				
Halsary	15	120	33.7				
Bad a Cheo	13	112	33.8				
Lochend	4	99.5	35.5				
Stroupster	13	113	41.1				

Consented / Sites Under Construction					
Limekiln	21	149.9	13.3		
Limekiln Extension	5	149.9	13.3		
Strathy South	35	200	23		
Strathy Wood	13	180	18.9		
Achlachan 2	3	110	17.8km		
Hoy (Orkney)	6	149.9m	149.9		
Application / Appeal Sites					
Forss III	2	100	8.3		
Ackron	12	149.9	10.6		
Tormsdale	12	149.9	31.6		
West of Orkney Offshore	TBC	TBC	20		

In addition to the above wind energy developments. The applicant has undertaken a cumulative assessment to consider the combined effects with: ongoing decommissioning works at Dounreay; Space Hub Sutherland; Proposed Dounreay Substation; and Existing Substation at Dounreay.

3. PLANNING HISTORY

- 3.1 13.02.2017 16/04775/S36 Construction of two offshore Approved by wind turbines on a single floating platform, Scottish each with an installed capacity of up to 6MW Ministers (max rotor tip of 201m and max hub height of 124m above the lowest astronomical tide), installation of export cable and deemed planning permission for erection of onshore electricity substation
- 3.2 05.02.2021 20/05164/SCOP - Pentland Floating Offshore Scoping Wind Farm - Construction and operation of a **Opinion** Issued floating wind farm comprising between 6 and by Scottish 10 floating structures and turbines with a Ministers maximum blade tip height of 270m and associated supporting onshore infrastructure 3.3 29.10.2021 21/03686/S42 - Dounreay Tri Wind Farm - Approved Application for non-compliance with conditions

23 (Commencement of Development), 25

(Design of substation and ancillary development), 27 (Traffic and Transport), 29 (Onshore Construction Method Statement), 30 (Onshore Environmental Management Plan) and 31 (Onshore Cable Plan) of deemed planning permission 16/04775/S36

4. PUBLIC PARTICIPATION

4.1 Advertised by the applicant under the provisions of the Electricity Act, Electricity Works EIA Regulations and the Marine Works EIA Regulations

Date Advertised: 25 August 2022 (The Scotsman), 26 August 2022 (Edinburgh Gazette, Lloyds List, and John o' Groats Journal), 31 August 2022 (Fishing News Bulletin), and 02 September 2022 (John o' Groats Journal).

Representation deadline: 2 October 2022

Timeous representations: 0

Late representations: 0

5. CONSULTATIONS

Consultations Undertaken by the Planning Authority

- 5.1 **Bettyhill, Strathnaver and Altnaharra Community Council** did not respond to the application.
- 5.2 **Caithness West Community Council objects** to the application. It has raised concern over the cumulative impact of onshore and offshore wind energy development with the village of Reay becoming, in its opinion, encircled.

It is concerned over the impact on the North Caithness Cliffs Special Protection Ara and the Sandside Bay Site of Special Scientific Interest.

It considers the proposal will have a detrimental impact on the qualities of a number of wild land areas, in particular Wild Land Area 39 (East Halladale Flows).

The impacts on sea birds as a result of collision or displacement is of concern to the Community Council, as it is the impact on migratory birds.

Concern is raised in relation to the impact of the development on areas where marine mammals hunt or transit. Further concern is raised in relation to the impact on migratory salmon as the approach river mouths and inland spawning areas.

It highlights that the road network in Caithness is in a poor state of repair and considers that this development will exacerbate the deterioration of roads in the area.

It concludes by setting out that it considers that the propsoed development will have a much greater impact than the consented Dounreay Tri Wind Farm.

- 5.3 **Castletown Community Council** did not respond to the application.
- 5.4 **Dunnet and Canisbay Community Council** did not respond to the application.
- 5.5 **Melvich Community Council** did not respond to the application.

- 5.6 **Strathy and Armadale Community Council** did not respond to the application.
- 5.7 **Thurso Community Council** did not respond to the application.
- 5.8 **Coastal Planner** does not object to the application. It welcomes the embedded mitigation measures in relation to marine physical processes set out in the EIAR and notes that the horizontal directional drilling for the export cable installation presents a lesser potential impact. It has considered that the conclusion of minor (non significant) effects in relation to invasive non-native species is reasonable due to the proposed use of a construction environmental management plan and management plan for invasive and non-native species.

The presence of a comprehensive assessment for Ocean Quahog is welcomed and however it is expected that Marine Scotland and NatureScot will provide further opinion on this matter. It is also anticipated that further survey work will be undertaken as the site layout is refined.

It has been highlighted that pollution risk / incidents and disturbance of spawning grounds have been assessed and, subject to further comments from Marine Scotland and NatureScot, are accepted.

Consideration of the design of the development to minimise impacts on marine mammals is considered appropriate but further opinion is necessary from NatureScot on the cumulative effects of the development in combination with other planned major developments.

It explains that NatureScot will be required to provide advice on matters related to marine ornithology.

- 5.9 **Environmental Health Officer** does not object to the application. It is noted that the noise levels are higher than expected at the relevant noise sensitive receptors but that the noise levels from the development alone would not exceed the relevant noise limits as all noise sensitive receptors identified in the assessment. It explains the applicant has undertaken a cumulative noise assessment considering the wind farms at Limekiln, Ackron, Drum Hollistan, Forss and Baillie. It is content that cumulative noise at relevant properties will have a negligible effect. It is satisfied that the increase in noise exposure as a result of the development will have a negligible impact.
- 5.10 **Transport Planning** do not object to the application on the basis that the application relates to the offshore works of which the transport requirements are assumed to be on waterbourne.

Consultations Undertaken by Marine Scotland

- 5.11 **British Telecom** do not object to the application. It does not consider that the indicative layout of the development will cause interference to BT's current and presently planned radio network.
- 5.12 **Highlands and Islands Airports Limited** do not object to the application. It highlights that the proposed development could conflict with the safeguarding criteria for Wick Airport. It has requested a condition to secure a Construction Strategy Plan to mitigate the potential conflict with the safeguarding criteria for Wick Airport.

- 5.13 **Historic Environment Scotland** do not object to the application. It notes the applicant's assessment which sets out the risk of unknown intertidal historic environment assets being present in the offshore site as being reduced. It agrees with the applicant's conclusion that the integrity of the setting of nationally important heritage assets would not be affected.
- 5.14 **Marine Scotland Marine Analytical Unit** do not object to the application. It advises that the economic aspects of the assessment seems reasonable and proportionate for the scale of the development. It considers that the social impacts of the development should have been broken down to smaller areas within Caithness to provide finer grained detail within the assessment. It sets out that while cultural and distributional impacts have not been considered in detail and limited primary data has been collected on these matters. It highlights that as part of the assessment that there is no evidence that stakeholders have been involved in identifying impacts and agreeing on mitigation measures. It welcomes the appointment of a Community Liaison Officer and the structures the applicant has committed to for ongoing dialogue and feedback. It would have preferred further detail on the methodology and thresholds set out in the assessment on socio-economic impact.
- 5.15 **Maritime and Coastguard Agency** do not object to the application. It considers the navigational risk assessment is proportionate. It requests that prior to commencement of development the turbine layout is approved by the Maritime and Coastguard Agency to minimise risks to surface vessels. It will require marking, lighting and emergency response and co-operation plans to follow the relevant guidance. It provides a range of design parameters related to mooring arrangements, under-keel clearance, hydrographic surveys, cable routes and safety zones. It has a number of technical comments on the supporting documents such as the cable plan, navigation safety plan and charting requirements.
- 5.16 **Ministry of Defence Defence Infrastructure Organisation** do not object to the application. It has highlighted that the development will not physically impact upon MOD offshore Danger and Exercise Areas or adversely affect defence maritime navigational interests. It has identified that turbines will affect military low flying training activities that may be conducted in this area. To mitigate this impact it requests a condition to secure aviation safety lighting and accurate information to allow the turbines to be charted.
- 5.17 **NatureScot** do not object to the application. It has sought clarification related to the collision risk modelling.

In relation to seascapes, landscapes and visual impacts, it highlights that significant adverse effects on the north Caithness and Sutherland coastline between Strathy Point and Scrabster Hill with effects extending in land for approximately 13km. It considers there to be significant effects at the transition to and within the north Sutherland coastline. It encourages the developer to give further consideration to the location of the array areas within the previously consented Dounreay Tri area to mitigate effects. It recommends that colouring of the turbines be explored.

It recognises that visibility of the development would have similar extents as the previously consented Dounreay Tri Wind Farm in coastal locations. It highlights that inland visibility of the scheme would extend to approximately 30km in elevated locations. It broadly agrees with the applicant on the scope of significant landscape

and visual effects but considers that these would extend further toward viewpoint 6 at St Mary's Chapel, Forss.

Further it has identified that effects will extend to VP10 on the A836 east of Forss due to the scale of the development and the open views available across the land, sea and horizons. In such views it considers that the proposed development would erode the simple, clear transition between water and land. It considers the introduction of lighting will have an adverse effect, extending the visual impacts into hours of darkness.

It considers that receptors on the A836 travelling westwards from Forss to Reay will be impacted leading to the perception that you would be travelling between wind energy developments.

Considering cumulative impacts, it considers that the landscape effects are likely to be more widespread than those identified in the EIAR on the Sandy Beaches and Dunes LCT, Sheltered Bays LCT, Sweeping Moorland LCT, Coastal Crofts LCT, and Local Coastal Character Areas. In terms of visual cumulative effects it broadly agrees with the level of cumulative effects identified by the applicant. It considers that it is difficult to ascertain the cumulative impacts with the West of Orkney Wind Farm given the level of information currently available about the project.

It does not consider there will be significant adverse effects on the integrity of the How and West Mainland or the Kyle of Tongue National Scenic Areas.

In terms of the National Landscapes of Scotland, NatureScot have advised that the development is at a transitional point in the landscape on the North Sutherland Coastline and that the proposed development will have a significant effect on the transition. It outlines that mitigation of the impact may include positioning the turbines further eastward. It does however note that this may effect receptors at Forss and Reay.

It considers that there will be some effects on the qualities of the East Halladale Flows Wild Land Area (WLA39) but no effects on the Hoy Wild Land Area. It does not consider the effects on the East Halladale Flows Wild Land Area would raise issues of national interest. It notes that fragmented visibility across WLA39 extends approximately 20km into the northern part of WLA39, with the development being visible from the summit and slopes of Beinn Ratha. It outlines that the proposal will introduce wind energy into panoramic / semi-panoramic views within the WLA in a way which would effect the qualities of the WLA. It does sets out that the development being relatively limited in horizontal extent and at a distance of between 12-20km means the effects are unlikely to significantly affect the integrity of the WLA.

In relation to other matters, it has highlighted that post consent additional works will be required on unexploded ordinance, piling strategy, marine mammal mitigation plan, and underwater noise assessment.

It has provided advice to Scottish Ministers in relation to the Habitat Regulations Appraisal which is required. In doing so it agrees with the conclusion of the applicant that development would not impact on site integrity for the Special Areas of Conservation.

In relation to ornithology it advises that the assessment requires revision to provide clarity over the likely impacts.

- 5.18 **Northern District Salmon Fisheries Board** neither object nor support the application. It has raised concerns over the scope of the assessment undertaken related to barrier effects of the development (such as visibility of turbine blades by fish swimming close to the surface) in relation to salmon migration. Its concerns relate to the individual and cumulative effects of offshore wind energy development.
- 5.19 **Northern Lighthouse Board** do not object to the application. It welcomes the applicants commitment to engage with the Board on matters of navigational safety.
- 5.20 **Orkney Islands Council** do not object to the application. It considers that due consideration has been given to the likely impacts on Orkney landscapes.
- 5.21 **Royal Yachting Association Scotland** is content that its comments have been taken into account of the navigational risk.
- 5.22 **Scottish Environment Protection Agency object** to the application in relation to potential disturbance of radioactive particles. It requests further information and revisions to the submitted documentation to address the matters raised related to sampling rational, methodology for assessment, and coverage of the assessment.
- 5.23 **United Kingdom Chamber of Shipping** do not object to the application. It considers that it has limited navigational concerns related to the development and welcomes mitigation measures set out by the applicant. It highlights some concern over the proposed use of buoyancy modules due to the limited under-keel clearance it provides. It requests that when the development is decommissioned that all elements are removed to reduce snagging risk. There is concern. It supports the charting and anchoring of cables.

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

Highland Wide Local Development Plan 2012

- 6.1 28 Sustainable Design
 - 30 Physical Constraints
 - 49 Coastal Development
 - 57 Natural, Built & Cultural Heritage
 - 58 Protected Species
 - 59 Other important Species
 - 60 Other Importance Habitats
 - 61 Landscape
 - 63 Water Environment
 - 67 Renewable Energy Developments
 - 69 Electricity Transmission Infrastructure
 - 72 Pollution

Caithness and Sutherland Local Development Plan 2018 (CaSPlan)

6.2 There are no site-specific policies covering the application site therefore the application requires to be assessed against the general policies of the Highland-wide Local Development Plan referred to above. It is noted, however, that the CaSPlan

does identify Special Landscape Areas (SLA) within the plan area. In this instance, the SLAs are within the EIAR's Study Area: Oldshoremore, Cape Wrath and Durness; Eriboll East and Whiten Head; Farr Bay, Strathy and Portskerra; and Dunnet Head.

Highland Council Supplementary Planning Policy Guidance

- 6.3 The Onshore Wind Energy Supplementary Guidance provides additional guidance on the principles set out in Policy 67 of the Highland-wide Local Development Plan for Renewable Energy Developments. This document is a material consideration in the determination of onshore wind energy planning applications following its adoption as part of the Local Development Plan in November 2016. However, it also provides a useful assessment methodology for consideration of landscape and visual matters. This can usefully be applied to offshore wind energy development.
- 6.4 The document also contains the Loch Ness Landscape Sensitivity Study, the Black Isle, Surrounding Hills and Moray Firth Coast Sensitivity Study, and, the Caithness Sensitivity Study (adopted 2017). The site is not within the Caithness Sensitivity Study area but it is located immediately to the north of the study area. The proposed development will be visible from much of the northern section of the study area and in particular the following character areas:
 - CT4 Central Caithness
 - CT5 Dunnet Interior
 - CT7 Sandside Bay, Melvich, Dunnet Bay and Keiss and Ackergill Links
 - CT8 Rhubha Bhra to Dunbeath
 - CT9 North Caithness

Other Supplementary Planning Policy Guidance

- 6.5 The following Supplementary Guidance also forms an integral and statutory part of the Local Development Plan and is considered pertinent to the determination of this application:
 - Highland Historic Environment Strategy (Jan 2013)
 - Highland's Statutorily Protected Species (March 2013)
 - Physical Constraints (March 2013)
 - Special Landscape Area Citations (June 2011)
 - Standards for Archaeological Work (March 2012)
 - Sustainable Design Guide (Jan 2013)

OTHER MATERIAL POLICY CONSIDERATIONS

The Highland Council Non-Statutory Planning Guidance

6.6 The Highland-wide Local Development Plan is currently under review and is at Main Issues Report Stage. It is anticipated the Proposed Plan will be published following

publication of secondary legislation and National Planning Framework 4.

- ^{6.7} In addition to the above, The Highland Council has further advice on the delivery of major developments in a number of documents, which include the Construction Environmental Management Process for Large Scale Projects; and, The Highland Council Visualisation Standards for Wind Energy Developments.
- ^{6.8} The Pilot Pentland Firth and Orkney Waters Marine Spatial Plan (PFOWMSP) was published by Scottish Government in 2016. It was a jointly published document by Marine Scotland, The Highland Council and Orkney Islands Council. It is non-statutory planning guidance that can be used as a material consideration in the determination of applications within this area. As well as guiding development in the Pentland Firth and Orkney Waters, it is also proposed to be a useful basis for the preparation of the North Coast Scottish Marine Plan. The PFOWMSP contains a range of policies for development in the area covered by the plan.

Scottish Government Planning Policy (SPP), the Revised Draft National Planning Framework 4 (NPF4), and Guidance

- 6.9 Scottish Planning Policy (SPP) advances principal policies on Sustainability and Placemaking, and subject policies on A Successful, Sustainable Place; A Low Carbon Place; A Natural, Resilient Place; and A Connected Place, which relate national planning policy to the Scottish Government's National Outcomes. SPP highlights that the Development Plan is the starting point of decision making on planning applications. In that context, the content of the SPP is a material consideration that carries significant weight, but not more than the Development Plan, although it is for the decision maker to determine the appropriate weight to be afforded to it in each case.
- 6.10 SPP sets out continued support for renewable energy developments. SPP also lists considerations in respect of the scale of proposals in relation to area characteristics, to be taken into account in the assessment of energy proposals (Para. 169 of SPP). In addition, paragraph 170 of SPP sets out that areas identified for windfarms should be suitable for use in perpetuity. This means that even though the consent is time limited, the use of the site for a wind farm must be considered as, to all intents and purposes, a permanent one. The implication of this is that operational effects should be considered as permanent, and their magnitude should not be diminished on the basis that the specific proposal will be subject to a time limited consent.
- 6.11 National Planning Framework 4 is likely to supersede Scottish Planning Policy very soon and form a fundamental part of the Development Plan. Draft National Planning Framework 4 was published in November 2021 with the subsequent revised draft laid before the Scottish Parliament on 08 November 2022. In its newest iteration, draft NPF4 comprises three parts, summarised below:
- Part 1 sets out an overarching spatial strategy for Scotland in the future. This includes spatial principles, national and regional spatial priorities, and action areas.
 - Part 2 sets out policies for the development and use of land that are to be applied in the preparation of local development plans; local place plans;

masterplans and briefs; and for determining the range of planning consents. This part of the document should be taken as a whole in that all relevant policies should be applied to each application.

- Part 3 provides a series of annexes that provide the rationale for the strategies and policies of NPF4, which outline how the document should be used, and set out how the Scottish Government will implement the strategies and policies contained in the document.
- 6.13 The Spatial Strategy sets out that we are facing unprecedented challenges and that we need to reduce greenhouse gas emissions and embrace and deliver radical change so we can tackle and adapt to climate change, restore biodiversity loss, improve health and wellbeing, build a wellbeing economy while striving to create great places. Therefore, NPF4 sets out that choices need to be made about how we can make sustainable use of our natural assets in a way that benefits communities. The spatial strategy reflects legislation in setting out that decision making requires to reflect the long term public interest. However, in doing so, it is clear that we will need to make the right choices about where development should be located ensuring clarity is provided over the types of infrastructure that need to be provided and the assets that should be protected to ensure they continue to benefit future generations. To that end, the Spatial Priorities support the planning and delivery of sustainable places, where we reduce emissions, restore and better connect biodiversity; create liveable places, where we can all live better, healthier lives; and, create productive places, where we have a greener, fairer and more inclusive wellbeing economy.
- 6.14 It is anticipated that national developments, which includes Strategic Renewable Electricity Generation developments of over 50MW, will assist in the delivery of the Spatial Strategy and Spatial Priorities for the north of Scotland. The Spatial Strategy considers that Highland can continue to make a strong contribution toward meeting our ambition for net zero. It considers that the strategy for Highland aims to protect environmental assets and stimulate investment in natural and engineered solutions to climate change. Specific to this proposal, draft NPF4 states that development proposals for wind farms should only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities, as set out in Policy 11. The policy goes on to state that significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets, similar to the existing provisions of Scottish Planning Policy, while identifying impacts, including cumulative impacts, that must be suitably addressed and mitigated against. Furthermore, Policy 4 of draft NPF4, sets out that the principle of development within Wild Land Areas that supports meeting renewable energy targets is supported subject to demonstrating that significant impacts are appropriately mitigated. It goes on to set out that impacts on wild land gualities from development outwith a wild land area will not be a significant consideration.
- 6.15 The policies in the revised draft NPF4 most relevant to this proposal include:
 - Policy 1 Tackling the climate and nature crisis
 - Policy 2 Climate mitigation and adaptation

- Policy 3 Biodiversity
- Policy 4 Natural places
- Policy 5 Soils
- Policy 7 Historic assets and places
- Policy 11 Energy
- Policy 22 Flood risk and water management
- Policy 23 Health and safety
- Policy 25 Community wealth benefits
- Policy 33 Minerals

Other Relevant National Guidance and Policy

- 6.16 A range of other national planning and energy policy and guidance is also relevant, including but not limited to the following:
 - National Planning Framework for Scotland 3, NPF3
 - Scottish Energy Strategy (Dec 2017)
 - Historic Environment Policy for Scotland (HEPS, 2019)
 - PAN 1/2011 Planning and Noise (Mar 2011)
 - Circular 1/2017: Environmental Impact Assessment Regulations (May 2017)
 - PAN 60 Planning for Natural Heritage (Jan 2008)
 - 2020 Routemap for Renewable Energy (Jun 2011)
 - Onshore Wind Energy (Statement), Scottish Government (Dec 2017)
 - Onshore Wind Energy (Statement) Refresh Consultation Draft, Scottish Government (October 2021)
 - Siting and Designing Wind Farms in the Landscape, SNH (Aug 2017)
 - Energy Efficient Scotland Route Map, Scottish Government (May 2018)
 - Assessing Impacts on Wild Land Areas, Technical Guidance, NatureScot (Sep2020)

8. PLANNING APPRAISAL

- 8.1 The application has been submitted to the Scottish Government for approval under Section 36 of the Electricity Act 1989 (as amended) and for a Marine Licence under the Marine (Scotland) Act 2010. While not a planning application, the Council processes S36 applications in the same way as planning applications, because a consent under the Electricity Act will carry with it deemed planning permission.
- 8.2 Schedule 9 of The Electricity Act 1989 contains tests in relation to the impact of proposals on amenity, heritage, and fisheries, requiring proposals to:
 - have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of

protecting sites, buildings and objects of architectural, historic or archaeological interest; and,

- reasonably mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.
- 8.3 It should be noted that for applications under the Electricity Act 1989 that the Development Plan is just one of a number of considerations and Section 25 of the Town and Country Planning (Scotland) Act 1997 which requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise, is not engaged.
- 8.4 Section 27 of the Marine (Scotland) Act 2010 requires that 'in determining an application for a marine licence (including the terms on which it is to be granted and what conditions, if any, are to be attached to it), the Scottish Ministers must have regard' to: The need to protect the environment; The need to protect human health; The need to prevent interference with legitimate users of the sea; Any representations received from any person having an interest in the outcome of the application; Such other matters as the Scottish Ministers consider relevant; The practical availability of alternative methods; The effects of any use intended to be made of the works; and Giving the applicant the opportunity to make representations to them about observations made by consultees.

Determining Issues

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

Planning Considerations

- 8.6 The key considerations in this case are:
 - a) compliance with the development plan and other planning policy;
 - b) energy and socio-economic benefits;
 - c) transport and access;
 - d) natural heritage (including ornithology);
 - e) built and cultural heritage;
 - f) design, landscape and visual impact (including wild land areas)
 - g) noise;
 - h) telecommunications, aviation and maritime safety;
 - i) decommissioning, and,
 - j) other material considerations.

Development plan/other planning policy

8.7 The Development Plan comprises the adopted Highland-wide Local Development

Plan (HwLDP), Caithness and Sutherland Local Development Plan and all statutorily adopted supplementary guidance.

Highland-wide Local Development Plan (HwLDP)

- With no site-specific allocations or policies within the CaSPlan at the application 8.8 location, the proposal is principally assessed against HwLDP Policy 67 for Renewable Energy developments Policy 67 sets out that renewable energy development should be well related to the source of the primary renewable resource needed for its operation. Proposals are required to be judged according to their contribution in meeting renewable energy targets and positive/negative effects on the local and national economy as well as against all other relevant policies of the Development Plan and other relevant guidance. In that context the Council will support proposals where it is satisfied they are located, sited, and designed such as they will not be significantly detrimental overall, either individually or cumulatively with other developments, having regard to the 11 specified criteria (as listed in paragraph 6.1). Such an approach is consistent with the concept of Sustainable Design (Policy 28) and aim of Scottish Planning Policy to achieve the right development in the right place, and, the emerging NPF4 where it promotes appropriate management of development and land uses in the long-term public interest; it is not to allow development at any cost.
- 8.9 If the Council is satisfied that the proposal is not significantly detrimental overall, either individually or cumulatively with other developments, then the application will accord with the Development Plan and national planning policy.

Caithness and Sutherland Local Development Plan

- 8.10 The Caithness and Sutherland Local Development Plan does not contain any specific land allocations related to the proposed development. Paragraph 74 of the CaSPlan sets out that the Special Landscape Area boundaries have been revised for the CaSPlan to ensure 'key designated landscape features are not severed and that distinct landscapes are preserved.' The boundaries set out in the CaSPlan are supported by a background paper that includes citations for each of the Special Landscape Areas. Policies 28, 57, 61 and 67 of the HwLDP seek to safeguard these regionally important landscapes. Revised Draft National Planning Framework 4 (Policy 4 Natural Places) also provides a level of protection to such regionally designated features. The impact of this development on landscape is primarily assessed in the Design, Landscape and Visual Impact (including Wild Land) section of this report.
- 8.11 The CaSPlan recognises the potential for marine renewable energy generation, particularly in the north-east of the Plan area which is identified in the Spatial Strategy for energy business expansion. This reflects the National Planning Framework 3 (NPF3) which designates the Orkney, Pentland Firth and North Caithness as an Area of Coordinated Action of marine renewables. The CaSPian aims to maximise the benefits to the local economy by adopting a more targeted, but still flexible, approach to identifying business and industrial land. It builds on the work carried out as part of the North Highland Onshore Vision (NHOV) which identified land use planning actions to support the growth of marine renewables. The Caithness and Sutherland Vision and Spatial Strategy 2030 states that the area will be become an international

centre of excellence for marine renewables.

Onshore Wind Energy Supplementary Guidance (OSWESG)

- 8.12 The Council's Supplementary Guidance for Onshore Wind Energy is a material consideration in the determination of planning applications. It should be noted that the guidance does not provide additional tests to assess development proposals against over and above the Development Plan policy. Rather, the guidance compliments the policy by ensuring a consistent and robust methodology is adopted in the assessment of all applicable applications, in particular (although not exclusively) for consideration of landscape and visual impacts. In that way, the guidance provides a clear indication of the approach the Council takes towards the assessment of proposals.
- 8.13 The OSWESG also provides strategic considerations that identify sensitivities and potential capacity for windfarm development called the Landscape Sensitivity Appraisals (LSA). The Caithness Sensitivity Appraisal were published in 2017, and forms an integral part of the statutorily adopted OWESG. The findings of this study identifies key routes and key views which need to be given consideration in bringing forward development. While directed to onshore wind energy, the findings of the document could be applied to offshore wind development given the similarities in the development types.
- 8.14 The OWESG approach and methodology to the assessment of windfarm proposals is applicable to the current application. Specifically, paragraphs 4.16 and 4.17 of the OWESG, which describe the 10 key design criterion that set the 'thresholds' developments should seek to achieve in order to ensure the development is appropriately sited and designed to avoid significant landscape and visual impacts, and comply with the applicable criteria of HwLDP Policy 67. The development's compliance or otherwise with the 10 criteria is discussed in the Design, Landscape and Visual Impact (including Wild Land) section of this report.

National Planning Policy

- 8.15 As stated, SPP sets out continued support for onshore wind, requiring planning authorities to progress, as part of the Development Plan process, a spatial framework identifying areas that are more likely to be more appropriate for onshore wind farms; indeed SPP sets out that areas identified for wind farm developments should be suitable for this land use in perpetuity. This framework, which the OWESG provides, is intended as a guide for developers and communities alike.
- 8.16 Notwithstanding the overarching context of support, SPP recognises that the need for energy and the need to protect and enhance Scotland's natural and historic environments must be regarded as compatible goals. The planning system has a significant role in securing appropriate protection to the natural and historic environment without unreasonably restricting the potential for renewable energy. National policies highlight potential areas of conflict but also advise that detrimental effects can often be mitigated and that effective planning conditions can be used to overcome potential objections to development. A number of criteria are set out in SPP against which proposals for on-shore wind energy development should be assessed (paragraph 169). These criteria are primarily reflected in Policy 67 (Renewable Energy) of the Highland-wide Local Development Plan. A failure against

one of these criteria does not necessarily mean that a development fails, all these criteria must be given consideration.

- 8.17 As a statement of the Government's approach to spatial planning in Scotland, National Planning Framework 3 (NPF3) is a material consideration that should be afforded significant weight in the planning balance. NPF3 considers that onshore wind has a role in meeting the Scottish Government's targets to achieve at least an 80% reduction in greenhouse gas emissions by 2050, and to meet at least 30% overall energy demand from renewables by 2020, including generating the equivalent of at least 100% of gross electricity consumption from renewables. However, it should be noted that the targets set out in NPF3 have now been superseded by legislation which sets the legally binding target of net zero by 2045.
- 8.18 As set out above, National Planning Framework 4 (NPF4) was published in draft form in November 2021 with a revised draft laid before the Scottish Parliament on 08 November 2022. As such, the document is going through the final parliamentary process and is no longer open to consultation, and, following a period for consideration by Scottish Ministers, it is anticipated that the revised draft will be adopted, subject to any changes made by Ministers agreed through parliamentary processes, as the new principal planning policy and spatial strategy for Scotland. Therefore, significantly more weight can be attached to NPF4 than to previous revisions. However, for the time being at least, National Planning Framework 3, Scottish Planning Policy, and the adopted Development Plan are the extant adopted documents. It will be up to Scottish Ministers to determine the weight to be afforded to it in reaching their decision depending on the status of the document at the time of reaching their determination on this application. It is anticipated that the Planning Authority may wish to make further representation to the application if it is not determined at the time of adoption of NPF4 or if substantive changes are made to NPF4 prior to adoption by Scottish Ministers.
- 8.19 The development subject to this application is identified as a national development as "Strategic Renewable Electricity Generation" given it has the capacity to generate and store more than 50MW. There is in principle support for national scale developments as they have been identified of national importance in the delivery of Scotland's Spatial Strategy. However, any project identified as a national development requires to be considered at a project level to ensure all statutory tests are met. This includes consideration against the provisions of the Development Plan, of which National Planning Framework 4 is a part.
- 8.20 Specific to this proposal, draft NPF4 states that development proposals for wind farms should only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities, as set out in Policy 11. The policy goes on to state that significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets, similar to the existing provisions of Scottish Planning Policy, while identifying impacts, including cumulative impacts, that must be suitably addressed and mitigated against. These considerations relate to matters of: impacts on communities and individual dwellings in relation to amenity; landscape and visual impact; public access; aviation and defence interests; telecommunications; traffic; historic environment; biodiversity (including birds); impacts on trees; decommissioning; site

restoration; and cumulative effects. In relation to landscape and visual impacts it advises that where impacts are localised and / or appropriate design mitigation has been applied such effects will generally be considered acceptable.

- 8.21 However NPF4 must be read as a whole and detailed consideration given to linked policies. Relevant to this proposal are the following policy matters:
 - Policy 4 (Natural Places) this policy sets out that development proposals that by virtue of type, location or scale will have an unacceptable impact on the natural environment will not be supported. The policy also is clear that development proposals that affect a site designated as a landscape area in the LDP (Special Landscape Area for Highland Council) will only be supported where it will not have a significant adverse effect on the integrity of the area as assessed against the special qualities for which it has been identified. This effect on integrity can effectively be set aside where significant adverse effects on the integrity of the area are clearly outweighed by social, economic or environmental benefits of at least local importance. This is relevant due to the impact on the Special Landscape Areas along the north coast. However, Policy 4 also reduces the weight to be afforded to impacts on Wild Land Areas where development is located outwith a Wild Land Area.

The other policies relevant to this proposal are set out in para 7.9 of this report, the provisions of which are considered throughout the report where any conflicts or compliance are highlighted.

- 8.22 Indeed, the Scottish and UK Governments have published a number of reports in recent years relating to national energy policy and climate change. In short, none indicate a distinct policy change but rather indicate a direction of travel in terms of future policy. Most relevant to this application are as follows:
 - Scottish Energy Strategy: The future of energy in Scotland (December 2017);
 - Scottish Government, Securing a Green Recovery on a Path to Net Zero: Climate Change Plan 2018–2032 (updated December 2020);
 - Committee on Climate Change, The Sixth Carbon Budget, The UK's Path to Net Zero (including Policy and Methodology) (December 2020);
 - National Audit Office, Net Zero Report (December 2020);
 - HM Government, Energy White Paper, Powering our Net Zero Future (December 2020); and,
 - Department for Business, Energy and Industrial Strategy 'Enabling a High Renewable, Net Zero Electricity System: Call for Evidence'
- 8.23 Further to the above, in late 2019 the Scottish Government's targets for reduction in greenhouse gases were amended by The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. This sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, 90% by 2040.
- 8.24 The statements of continued strong support relating to offshore wind energy contained within these documents are acknowledged. Support for wind energy development is anticipated to meet with the continued aspiration to decarbonise the

electricity network, enable communities to benefit more directly in their deployment and to support the renewables industry and wider supply chain.

- 8.25 However, it is also recognised that such support should only be given where justified. With regard to planning policy, these statements largely reflect the existing position outlined within the National Planning Framework 3 and Scottish Planning Policy, a policy framework that supports development in justified locations where there is an expectation that areas already hosting wind energy schemes will continue to do so beyond the lifetime of current consents, a policy line echoed in Policy 11 of the emerging NPF4. In addition, it must be recognised that the greenhouse gas reduction targets and the targets in the Energy Strategy are related not just to production of green energy but also related to de-carbonisation of heat and transport.
- 8.26 The Pilot Pentland Firth and Orkney Waters Marine Spatial Plan was adopted in 2016. It was put in place to support sustainable decision making on marine use and management. Specifically related to this proposal is Sectoral Policy 4 (Renewable Energy Generation). This sets out that the plan will supports proposals sited in the areas identified through the Sectoral Marine Spatial Plan; integration of different marine uses have been considered; regard has been had to relevant factors in regional locational guidance; connections for developments have been considered against policies in the Local development Plan; there has been early communication and consultation with affected stakeholders to avoid or minimise adverse impacts; and any adverse impacts are satisfactorily mitigated.

Energy and socio-economic benefits

- 8.27 The Council continues to respond positively to the Government's renewable energy agenda. There is currently 8.4GW of installed onshore wind capacity in Scotland, with a further 4.69GW in the planning/consenting process, 4.64 GW are awaiting construction and 0.43GW under construction. Highland wind energy projects currently have an installed capacity of 2.53GW, there is a further 1.42GW of generation permitted but not yet built and 1.3GW currently under construction. Installed onshore wind energy developments in Highland therefore accounts for around 30.12% of the national installed onshore wind energy capacity. There is also a further 2.1GW of onshore wind farm proposals currently in planning pending consideration in Highland. In terms of offshore wind energy, there is a capacity of 2.4GW in already consented and operational developments, primarily located off the east coast.
- 8.28 The UK Government targets an addition 5GW of offshore wind energy capacity by 2030. While Highland Council has effectively met its own target, as previously set out in the Highland Renewable Energy Strategy, it is acknowledged that such targets are not a cap and may be exceeded. Equally, however, the Council recognises the balance that is called for in both national and local policy and it remains the case that there are areas of Highland capable of absorbing renewable developments without significant effects.
- 8.29 It is in this context that the Pentland Firth Offshore Wind Farm indicative maximum capacity of 100MW would make a significant contribution to Scottish and UK Government policy targets, the international commitments for renewable energy and electricity generation to facilitate net zero by 2050. Based on the applicant's assessment of the displacement of CO₂ emissions, between 2.57 and 4.17 million

tonnes when considering 'high emissions' and 'low emissions' scenarios respectively compared with mixes of other energy sources.. The EIAR projects that the development is anticipated to 'pay back' the carbon emissions associated with its construction, operation, and decommissioning within 2-7 years based on the high and low emission scenarios.

- 8.30 The PFOWF is a test and demonstrator project and therefore it is relatively small in size compared to existing fixed bottom offshore wind farm projects. The deployment of the wind farm would provide valuable learning opportunities and supply chain developments, which will facilitate the delivery of future larger scale floating offshore wind farm projects including those awarded leases via Scotwind.
- 8.31 In terms of economic benefits, the proposed development anticipates a construction period of approximately 18 months and 30 years of operation prior to Such a proiect decommissioning or repowerina. offer significant can investment/opportunities to the local, Highland, and Scottish economy including for businesses ranging across construction, haulage, electrical and service sectors through the supply chain, with opportunities in research and development, design, project management, civil engineering, component fabrication / manufacture, installation, and maintenance. The application is accompanied by a socio-economic, recreation and tourism assessment. that looks at both the construction and operational phases for the development. During construction, it is anticipated that between 6-13 full time equivalent jobs will be created within Caithness, between 401-639 in Highland, 639-894 in Scotland and between 944-1304 UK wide. During operation, it is anticipated that during operational phase of the development (including maintenance works) 25.4 full time equivalent jobs will be created, between 30.2-34.6 jobs in highland 39.7-48.5 in Scotland and between 77.9-87.1 jobs in the UK.
- 8.32 The applicant estimates that the construction of the Project would generate additional economic output (measured in gross value added (GVA)) both directly and indirectly. High and low scenarios have been applied to give a range of the likely economic benefits in GVA each year. This is set out below:

Indicator	Average annual total GVA (£m)
Caithness Low	0.3
Caithness High	0.8
Highland Low	23.7
Highland High	37.2
Scotland Low	36.6
Scotland High	51
UK Low	52.6

UK High	72.8
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While not significant in EIA terms the increase in GVA against the baseline figures for the area are considered beneficial.

8.33 The applicant estimates that the operation of the Project would generate additional economic output (measured in gross value added (GVA)) both directly and indirectly. High and low scenarios have been applied to give a range of the likely economic benefits in GVA each year. This is set out below:

Indicator	Average annual total GVA (£m)
Caithness Low	1.6
Caithness High	1.6
Highland Low	1.9
Highland High	2.2
Scotland Low	2.5
Scotland High	3.1
UK Low	4.9
UK High	5.4

While not significant in EIA terms the increase in GVA against the baseline figures for the area are considered beneficial.

- 8.34 The applicant has set out a range of measures it is putting in place to boost the benefits of the development to the communities in Highland. The most significant of which includes the signing of a Memorandum of Understanding with Scrabster Harbour to facilitate the provision of support services during both the construction and operation and maintenance phases. However, the applicant has also and is continuing to undertake supply change engagement; delivery of initiatives with secondary education establishments in Caithness to deliver education and training on STEM subjects as well as the appointment of a Community Liaison Officer.
- 8.35 Tourism is a of great importance to the local area with annual visitors to Caithness spending just over £143m per year. The applicant has identified that project has the potential to affect Tourism by affecting the visitor perceptions of Caithness and by creating competition for tourist accommodation during the construction and operational phases of the development. However, it considers that any impact would be minimal and mitigated by the location of the development in vicinity of the Dounreay facility, the availability of substitute activities for those disturbed in vicinity of the site, and limited use of the application site for boating and offshore recreational fishing. It also highlights that similar projects in the form of onshore wind

developments have been progressed in the area and tourism activity in Highland and Caithness has increased year on year (with exception of 2020 as a result of the Coronavirus pandemic). Overall, the applicant has identified no significant adverse effects on tourism. This is not disputed by officers.

Transport and access

- 8.36 This is an application for the offshore elements of the development only. It is anticipated that all materials will be taken to the site by sea, therefore there will be no impact on the local or trunk road network. There is however likely to be movement of staff between the servicing bases and their place of residents. As the service base is yet to be confirmed it is not possible to reach a significance of assessment on such matters.
- 8.37 It is anticipated that the road network will be adversely affected by the onshore elements of the works. This will however be assessed as part of the separate planning application for the onshore works which is currently under consideration by the Planning Authority.
- 8.38 Given the existing restrictions to recreational access to water around Dounreay, and the location of the remainder of the site, it is not anticipated that the proposal will have adverse impacts on wider recreational access in the area.

Natural heritage (including ornithology)

- 8.39 The applicant has undertaken a number of surveys and related assessments in relation to benthic ecology, fish and shellfish ecology, marine mammal and other megafauna. While a number of species have been identified within the area, subject to the implementation of mitigation through design or via condition, it is not anticipated that there would be any significant effects. NatureScot and Marine Scotland Science will comment further and recommend conditions to cover such matters.
- 8.40 In relation to ornithology, the methodology for the assessment has been questioned by the RSPB and NatureScot. However, it should be noted that the study of collision risk for marine ornithology is an evolving subject. While the applicant had reached an agreement with Marine Scotland on the methodology to be employed in light of the comments from RSBP and NatureScot. The applicant is in dialogue with Marine Scotland, NatureScot and RSPB to resolve the concerns with the modelling. It is anticipated that an agreement will be reached and that Scottish Ministers will have sufficient information to allow them to reach a view on the impacts on marine ornithology.
- 8.41 Concern had been raised by Caithness West Community Council over impact on designated sites. The applicant has not identified impacts on the Caithness and having reviewed the applicants assessment and considering the response from NatureScot, it is not anticipated that there would be impacts on the integrity of any Special Area of Conservation. Conclusion of discussions on the methodology related to the ornithological assessments needs to progress to allow a conclusion to be reached by Scottish Ministers on the Special Protection Areas (and associated Sites of Special Scientific Interest).

Built and cultural heritage

- 8.42 There are no known wrecks within the application site. While a number of surveys have been undertaken to establish seabed conditions there remains scope for unknown marine and intertidal archaeology within the area as a result of the use of the area for military operations, fishing and aviation. The applicant has proposed to bring forward a Written Scheme of Investigation for the assessment and investigation of marine archaeological within the offshore site. As the offshore site is beyond high mean water springs, then the archaeological matters fall primarily into the remit of Historic Environment Scotland. However, the Council's Historic Environment Team will also have an interest given the way in which it will assist in our understanding of the area. If there are finds it is expected that the applicant will make the information available to the Council for inclusion within our Historic Environment Record.
- 8.43 An assessment has been undertaken of the setting of onshore historic environment assets. This has considered a range of listed buildings and Scheduled Monuments, including but not limited to Sandside Harbour, Reay Church and St Mary's Chapel (Forss). The applicant has provided visual material to assist in the consideration of the impact on the setting of those features. Particular consideration has been given to the way in which these historic assets would be appreciated and the impact on people understanding of the assets if the development is constructed. The applicant has not identified any significant adverse effects on the setting of any of the cultural heritage features within the study area. Historic Environment Scotland have agreed with the findings of the assessment undertaken by the applicant. Having considered the applicants' assessment and the view of Historic Environment Scotland it is considered that while there may be visual impacts on receptors visiting these assets. it is agreed that there would not be an impact on the setting, understanding or appreciation of the assets. Therefore the findings of the applicants' assessment is accepted.

Design, landscape, seascape and visual impact (including wild land areas)

- 8.44 The applicant has undertaken a Seascape, Landscape and Visual Impact Assessment (SLVIA) to determine the likely significant effects of the wind farm and offshore transmission infrastructure. This assessment is based on a 'worst case' which is considered in the EIAR at 300m height to tip;
- 8.45 The methodology for the SLVIA follows that set out in Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3). As set out in para 3.32 of GLVIA 3 the "LVIA should always clearly distinguish between what are considered to be significant and non-significant effects." Technical Appendix 16.1 sets out the methodology of assessing significance of effect following judgements of the: Sensitivity of the Receptor, which includes a judgement of the susceptibility of the receptor against the value of the host landscape / view; Magnitude of Change, which includes a judgement of the effect as experienced by the receptor, the geographical extent of the effect, the duration of the effect within the landscape / view, and, the reversibility of the effect of the development; and finally, the Level of Effect, based on a combination of judgements based on the Sensitivity of the Receptor against the Magnitude of Change. The Level of Effect is attributed as either negligible, minor, moderate, or major, according to the

definitions provided in the Technical Appendix 16.1 of the EIAR based professional judgement and utilising a matrix to divulge the final result. Following on, significant effects are ascribed to major-moderate and major levels of effect. Generally, the Council are of the view that moderate impacts can be significant effects but this is to be determined on a case by case basis taking into account the matters set out above. The methodology for the LVIA as described is sufficiently clear to follow the applicant's logic, whereby any discrepancies of the applicant's final assessment of significance of effect between viewpoints where the sensitivity of the receptor and magnitude of change are otherwise the same is explained within the text of the SLVIA.

- 8.46 As part of the SLVIA, the applicant has undertaken an assessment of night time visual effects, better known as visual impacts in hours of darkness. The applicant has clearly set out that the lighting required will be required to comply with aviation and maritime safety standards. The lighting scheme proposed comprises the following:
 - 2000 candela visible aviation safety lighting on the hub of the turbines. In clear conditions when visibility is greater than 5km, the intensity of the lighting will reduce to 200 candela;
 - Infra-red lighting on the hub of the turbines. This will not be visible and therefore has not been considered further in the applicants assessment; and
 - Marine navigational lighting comprising of visible flashing yellow lights on each corner of the floating substructures at a maximum height of 30m. The nominal range for these would be 5 nautical miles (9.26km).
- 8.47 The applicants cumulative assessment for the purposes of the SLVIA includes three scenarios:
 - Scenario 1 impacts of the proposed development in combination with the consented and operational onshore wind energy developments, other electrical transmission infrastructure and Space Hub Sutherland;
 - Scenario 2 impacts of the proposed development in combination with the consented and operational onshore wind energy developments, other electrical transmission infrastructure and Space Hub Sutherland PLUS any application stage onshore wind energy projects;
 - Scenario 3 impacts of the proposed development in combination with the consented and operational onshore wind energy developments, other electrical transmission infrastructure, Space Hub Sutherland, any application stage onshore wind energy projects PLUS the proposed West of Orkney Wind Farm.

Site Selection and Design

8.48 Chapter 2 of the EIAR sets out the criteria used for site selection. Development in this area has some significant history dating back to a 2014 study by Marine Scotland looking at potential deep water sites to trial floating offshore wind turbines. The original Dounreay Tri site (the predecessor to this development), was selected on the basis of: deep water, close to shore reducing the length of the export cable and associated environmental impacts; good wind speed; lack of intensive fishing; completion of geophysical surveys of the seabed; and proximity of a connection to the national grid. The Dounreay Tri project has not been taken forward for a range of

reasons related to project viability.

- The current application reviewed the site for the previously consented scheme and 8.49 having undertaken further survey work brought forward a layout of up to 10 wind turbines as part of an EIA scoping request. Following feedback from a range of stakeholders, the scheme was reduced in scale to 7 turbines. In doing so the array area was reduced in size to present a more compact scheme. Concerns were raised in relation to visual impact as a result of the proximity of the development to the coast and settlements in north Caithness. The applicant therefore reduced the turbine area and has committed to no turbine being closer than 7.5km from the coast. This is 1.5km further away than the consented Dounreav Tri scheme. While this will be the closest offshore development to the coast of Highland, and the reduction in visibility of the scheme inland as a result of the curvature of the earth will not play in the developments favour as it does with schemes further offshore, these mitigations by design are nonetheless welcomed. NatureScot have suggested that it may have been beneficial to move the turbine array area further east to reduce the impact on the transition between the more rugged landscapes of the west and the more settled flows of the east. However, as recognised by NatureScot, it is considered that this would lead to greater visual impacts on communities in Caithness and it would also have a greater effect on the views from the north coast toward Orkney.
- 8.50 While the layout set out in the assessment is indicative and will be refined based on a range of technical criteria, the visual impact of the proposal has clearly been part of the applicant's considerations to date. There are a range of different options for the floating substructures, turbines, and export cables. Each of these elements of the scheme will have different impacts. It is considered that the turbine design and substructure design set out in the visualisations and described in Table 16.7 of the EIAR, are the "worst case scenario" based on the options set out in the project descriptions chapter of the EIAR. There will be no visibility of the export cables, until they make landfall therefore these have not been considered further.
- 8.51 NatureScot have suggested that as this is a demonstrator project that the use of coloured turbines may mitigate the visual impacts of the proposed development. This is something that has been considered in a number of onshore schemes to varying degrees of success. With that said, there may be benefit in exploring alternative turbine colours from the standard matt grey turbines given the environment in which the development is set. However, the turbines would be viewed by most receptors would be at a relatively low level when moving through the area. In such views the sky would backdrop the turbines, in these instances it is considered that a light grey colour works best given the changing light and weather conditions experienced.
- 8.52 While the layout and design may appear acceptable at this time, given the indicative nature of the layout, it is recommended that the layout and design of the development be secured by condition and that Highland Council should have an opportunity to comment on this.

Landscape Impacts

8.53 The proposed development will be visible from two National Scenic Areas (NSA): Kyle of Tongue; and Hoy. The applicant has undertaken an assessment of the effects of the proposed development on the special qualities of each of the NSAs. The focus for Highland Council will be impacts on the Kyle of Tongue NSA given it is within Highland. Scottish Planning Policy and the emerging National Planning Framework 4 require consideration of effects on NSAs. These policies states that any development that effects a NSA will only be permitted where the objectives of the designation and the overall integrity of the area will not be compromised or that significant impacts can be demonstrated to be clearly outweighed by social, environmental or economic benefits of national importance.

- 8.54 The Kyle of Tongue NSA is at its closest point 23km from the turbine array area. As a result there will be no direct effects on the NSA. The applicant has identified that the visibility of the proposal from the NSA will be largely limited to the coastal edge, lower moorland hills and from Ben Hope. At these points of the NSA the proposal will by between 38-48km away. There are other developments in proximity of the NSA which would form part of a cumulative assessment, including Space Hub Sutherland, Bettyhill Wind Farm, Strathy North Wind Farm and the proposal would have on the special landscape qualities of the NSA, both individually and cumulatively, has concluded that there would be no significant impacts on the NSA. NatureScot agree with this position. Further, while outwith Highland, NatureScot and the applicant agree that the proposed development will not have an effect on the integrity of the Hoy NSA.
- 8.55 The applicant has undertaken an assessment of the impacts of the proposed development on the Special Landscape Areas (SLA) along the north coast. The revised draft NPF4 sets out that development proposals affecting such features should only receive support where development will not lead to significant adverse effects on the integrity of the area or any significant adverse impacts are clearly outweighed by social, environmental or economic benefits of at least local importance. The applicant's assessment and the view of officers can be summarised as follows:
 - Farr Bay, Strathy and Portskerra SLA the development is between 8-13km from the coastal areas which forms this SLA. There will be no direct impacts on the SLA. The special qualities tend to focus on the intricate coastline and the expansive views which can be experienced by receptors within the SLA. Those expansive views stretch toward Orkney, and along the coast toward Cape Wrath to the west and Dunnet Head to the east in clear conditions. The proposed development will sit within the expansive views but it is not considered that it will dominate the views from the SLA to a point where it would effect the integrity of the SLA. The mitigation by design has helped to reduce potential effects by limiting the horizontal extent of the development. The turbines will however still appear large given their scale. This has led to the applicant finding that there would be significant effects on the two of the four SLA qualities but this is limited to the area between Strathy and Portskerra (inclusive).
 - Dunnet Head SLA the development is approximately 25km from the SLA. There will be no direct impacts on the SLA. It is anticipated that there may be visual effects. However, given the intervening distance, it is not considered that the panoramic views from the headland at Dunnet will be so adversely affected that it would lead to an impact on the integrity of the SLA. This is further

mitigated by the limited horizontal spread of the proposed turbines as a result of the small turbine array area.

The applicant's assessment findings of no significant effects on the SLAs on the north coast can be accepted.

- 8.56 The applicant has considered the landscape and seascape impacts. It has found that there would be significant effects on 4 out of the 5 landscape character types within the study area up to distances of 13km. These are not direct impacts given the location of the turbines but indirect impacts. The main reason for the impacts being considered significant is the relationship that these landscapes have with the coast and the large scale of the turbines would influence the landscape characters. Given the scale of the turbines this is not surprising. NatureScot have agreed with the findings of the applicant's assessment.
- 8.57 The effects on Local Coastal Character Areas and Regional Coastal Character Areas has been assessed by the applicant. These are not direct impacts given the location of the turbines but indirect impacts. It has identified 5 out of the 10 assessed character areas as being significantly affected by the proposed development. Those which have not been identified as being significantly adversely affected are as a result of other developments (including onshore wind developments and the Dounreay facility) reducing the magnitude of change. Where significant effects have been identified, it is as a result of the close association of the Coastal Character Areas with the North Atlantic. The applicant's assessment of such matters is accepted.
- 8.58 The applicant has assessed the impact on the qualities of Wild Land Areas. Caithness West Community Council consider there will be adverse effects on WLA39 (East Halladale Flows) amongst others. The assessment undertaken by the applicant follows a clear methodology and they have included assessments for WLA39 (Appendix 16.4) and WLA 41 (Appendix 16.5). The applicant's assessment and the view of officers can be summarised as follows:
 - WLA39 East Halladale Flows the majority of the WLA will experience no • visibility of the proposed development. However in the elevated areas, particularly around Beinn Ratha, there will be clear visibility of the development. Due to the required lighting, this visibility will extend into hours of darkness. In most areas where the development is visible other human influences in the form of the Dounreay facility, Baillie and Limekiln Wind Farms, electricity transmission infrastructure and commercial plantations will also be visible. However, at present in these areas no wind energy development is visible to the north, with the exception of this projects predecessor, Dounreay Tri. The applicant has not considered there to be any significant effects on the wild land area. NatureScot consider there would be additional significant effects on the wildness gualities of the wild land area as a result of the proposed development. It is accepted that the scale and proximity of the turbines will have a presence in prominent locations within the WLA, however the wildness qualities are best experienced when looking to the west and south away from existing human influences. It is considered that while there is a cumulative effect on the wild land area but the presence of the proposed development would not significantly adversely effect the qualities of

wildness experienced in the WLA.

• WLA41 – Hoy – given the distance from the wild land area to the proposed development, the applicant has not identified any significant effects on the Hoy WLA. NatureScot accept the applicant's assessment.

Visual Impacts

- 8.59 The Zone of Theoretical Visibility indicates that the development would be visible beyond the 50km study area however visibility will predominantly be concentrated within 10km in all directions, with visibility to the south, south east and south west of the development beyond that distance more fragmented due to topography. Visibility of the turbines is more consistent along the coastline between Dunnet Head and the A'Mhoine peninsula. The main transport route impacted by visibility of the development is the A836 that runs east-west of the development. This route is part of National Cycle Route 1 and the North Coast 500 tourist route.
- 8.60 The EIAR includes a visual impact assessment from each of the 17 viewpoints. The applicant's assessment of the significance of the visual impact of the proposal as a standalone development concludes that the development will result in significant visual impacts at Viewpoints, 1 (Beinn Ratha), 2 (Strathy Point Car Park), 3 (Portskerra / Melvich), 4 (Drum Hollistan Layby), and 5 (Sandside Head). It has identified significant cumulative visual effects at viewpoints 1 (Beinn Ratha), 2 (Strathy Point scenario 3 only), 3 (Portskerra / Melvich), 4 (Drum Hollistan Layby), 5 (Sandside Head). The development will be predominantly viewed by three different types of receptors: residents and those in and around settlements; recreational users of the outdoors; and users of the road network.
- 8.61 The applicant has included a number of representative viewpoints in their visual impact assessment to allow consideration of how the scheme may be viewed by residential receptors within settlements. This includes VP3 (Portskerra / Melvich), VP10 (East of Forss), and VP13 (Talmine). While submitted for the purposes of consideration of cultural heritage considerations, there is also a viewpoint at Reay Church which gives an impression of the development from an elevated position at the edge of Reay. The applicant considered that there would be a significant adverse visual impact individually and cumulatively at Portskerra. This can primarily be put down to the way in which the turbines will be viewed from the settlement where they will appear as large scale features on the horizon. The limited horizontal spread of the turbines due to the reduced turbine array area, is of significant benefit from this area as it reduces the impact on the receptors sense of scale of the cliffs along the coast on the mainland and of Orkney. If the West of Orkney Wind Farm is consented those turbines would appear to the rear of the proposed development increasing the intensity of turbines within the view. There would however also be some onshore turbines visible from this location, however, it is not considered that the receptor would feel encircled by wind energy development.
- 8.62 While the applicant does not have a viewpoint from within Reay itself, it is important to consider the impact on the settlement, particularly due to its proximity to other wind energy developments. To date development to the west of Reay has been resisted but developments are located to the south and east of the village. The proposed development would introduce wind energy development to the north of the village.

The viewpoint submitted for cultural heritage assessment at Reay Church gives an impression of the scale of the development at a distance of 9.8km to the development. The turbines would appear in such views as a relatively well laid out development of large scale structures. At this point if the receptor was to turn round they would also get a view of the Limekiln Wind Farm to the south. However, this is one of few locations in the village which would have such a view due to the positioning of the houses and topographic screening of both the existing and proposed development. It is considered that there may be some localised significant cumulative effects within Reay, there are limited areas in which these will be experienced. It is understood that there may be a perception of encirclement of the village by turbines however this is unlikely to be experienced by residential receptors, either in their properties or enjoying the amenity ground around their homes. This issue will be discussed further in relation to routes later in the report.

- 8.63 The development will also be seen by residential receptors to the East of Forss (Viewpoint 10), 13.78km away from the proposed development. In this location, the turbines would be viewed in a wider panorama which would contain a number of different wind energy developments in clusters, the most prominent of which would be the cluster containing Baillie Wind Farm and Limekiln wind farms and the cluster containing the Forss wind farms. The wind farms at Strathy would be barely perceptible features in the landscape at this distance. The proposed development would appear slightly larger than the Forss turbines, changing the receptors perception of scale and distance given the actual difference in height of the turbines is in the region of 200m. With that said, the turbine array would not appear out of scale with its surroundings and the magnitude of change in the view is lessened due to the presence of existing turbines. There are still significant sections of the views from this area which would be free from turbine development. The West of Orkney Wind Farm, if consented would likely increase the intensity of turbines within the view, however full details of that project are not yet known. The visual impacts will however extend into hours of darkness due to the need for aviation lighting. This aviation lighting will appear somewhat of an alien feature in the views when darkness has fallen as the context of the development will not be easily read. The mitigation measure of reducing lighting intensity will however assist in reducing the impact during hours of darkness.
- 8.64 At Talmine on the A'Mhoine peninsula (Viewpoint 10), there will be limited visual impacts due to the intervening topography of the Rabbit Islands, Eilean Nan Ron and Coomb Island and the distance to the proposed development of over 33km.
- 8.65 Overall, in relation to impacts on residential receptors, the applicant's assessment is considered appropriate. It has found some significant effects but these are more likely to be in closer proximity to the development.
- 8.66 The applicant has assessed a number of viewpoints which provide opportunities to access the outdoors through both low level activities and higher waking routes. From those areas where the receptors are at lower levels (Viewpoints 2, (Strathy point), 5 (Sandside Harbour), 6 (St Mary's Chapel), 7 (Dunnet Head)), the development is often seen in the context of the coastline and the coastal cliffs. In such views, the turbines have adequate separation from the cliffs as not to diminish their scale. The applicant has considered those receptors in closer proximity to the development, including those at Strathy Point and Sandside Harbour, to be subject to significant

visual impacts from the development. Those at further distance, have not been considered as having significant effects on receptors. Considering the cumulative assessment for such receptors, the magnitude of change is lessened due to the presence of operational and consented wind farms. However, the proposed development will introduce visibility to a new sector of the view. Where the view is more enclosed, such as at Sandside Harbour, it is considered that there is a greater effect. However, in those areas where there is a wide panorama, it is considered that the limited horizontal spread of the turbine array limits the adverse impacts. There are a number of other low level walking routes in and around the village of Reay, such as the circular route taking in the forestry tracks, it is not anticipated that these will be significantly adversely affected.

- From higher level walking routes (Viewpoints 1 (Beinn Ratha), 11 (Beinn Griam Beg), 8.67 12 (Ben Loyal), 14 (Ben Dorrey)), which are predominantly to the south and south west of the development, the limited horizontal spread of the turbine array, and simple, evenly spaced, layout of the proposed development can be appreciated. Out of such locations and routes, the applicant, has only identified significant adverse individual and cumulative, visual impacts from Beinn Ratha (VP1). It is agreed that the visual impact, individually and cumulatively from the other high level viewpoints would not be significant due to intervening topography. From Beinn Ratha, those traversing this popular local hill, will have the wind farm in view over much of the slopes when climbing the hill and it will be in your view as part of a wider panorama from the summit. The turbines would be In this location receptors would be approximately 12.9km to the north and would appear as large scale structure. To the east of receptors Limekiln wind farms, Baillie Wind Farm and Forss wind farms would be visible. To the west, some elements of the Strathy wind farms will be visible but these would be subject to a level of topographic screening. While the applicant has shown the Drum Hollistan and Ackron wind farms, neither of these are now active projects having been refused and withdrawn respectively. While the presence of other turbines will no doubt lessen the magnitude of change experienced for receptors, this is one location where the perception of encirclement of wind farms may be felt if the proposed development was to be consented. While there are some elements of respite in the view from wind energy development, it is anticipated the intensity of experience of wind energy development to the north will increase if the West of Orkney Wind Farm is brought forward. However, the West of Orkney Wind Farm would be further north and the visual impact of that may be reduced as the distance from receptors means that the curvature of the earth may screen more distant turbines. The impact of aviation lighting at this viewpoint will also extend the impacts of the development into hours of darkness and reduce the remote qualities of the view during hours of darkness.
- 8.68 Whilst the applicant has not assessed the visual impact from Ben Dorrey (Viewpoint 14) at 23.3km distant as being significant, it is considered that there is an adverse visual effect which would be considered moderate adverse and significant. The turbines will appear on the horizon as a similar scale to those of Limekiln wind farms, Baillie Wind Farm and Forss wind farms. Given the proposed turbines are a significant distance further away, it is considered that this will affect the receptors sense of perception of depth of the landscape. The turbines are positioned between the Limekiln wind farms cluster and the Baillie / Forss wind farms cluster. While there is sufficient spacing between the clusters of development and the proposed

development to ensure each cluster has its own identity, the location of the development would mean that a significant proportion of the panoramic view would contain wind energy development. As a result, it is considered that the impacts on receptors at this location has been slightly underplayed by the applicant in their assessment.

- 8.69 The applicant's findings of significant impact at Beinn Ratha are accepted and it is considered that for the other high level routes, with the exception of Ben Dorrey, that the applicant's assessment can be accepted.
- 8.70 One of the key concerns with further wind energy development along the north coast is individual and cumulative visual impact on the users of the road network, both for local users and tourists. The A836 in particular is part of both the National Cycle Network and the popular North Coast 500. At present, when travelling along the A836, visibility of wind energy developments extends from Scrabster Hill in the east to Drum Hollistan in the west. Beyond this there is limited visibility of wind energy development due to the siting and design of wind farms. The more minor roads in the area also experience sequential views of wind energy development, particularly the B874 (Thurso to Isauld). The applicant's assessment has focussed on the A836, and in doing so they have assessed the effects on eastbound and westbound users. It has identified significant effects for eastbound users between Strathy and Reay and between Hill of Scrabster-Forss and Reay to Melvich for westbound users when considering the development individually. It has identified significant cumulative impacts on the route from Forss to Drum Hollistan for both eastbound and westbound users.
- 8.71 While the applicant's assessment can be considered a fair assessment of impact, it does not consider the heightened impact of the transitional nature of the route which characterises this part of the north coast, particularly when travelling from west to east. NatureScot have set out in their response, and the Council have put forward cases at public local inquiries about the importance of the transition from the rugged landscapes of the west to the more settled flows of Caithness. This is also a matter highlighted in the Council's Caithness Landscape Sensitivity Appraisal. While this transition happens gradually over approximately 10km, it is felt most abruptly in approximately a 2km section of the route to the west of Drum Hollistan when travelling eastbound. The transitional experience is very much related to the landscape but the seascape also plays a role in the transitional experience as the vastness of the landscape and seascape is experienced together along the route. This is best demonstrate at viewpoint 4 (Drum Hollistan Layby). When the road drops down after Drum Hollistan the expansive nature of the views is reduced due to topography, field boundaries and development. The development will interrupt the panoramic views across the sea to Hoy and Orkney, however, the limited horizontal spread of the development and the simple layout of the development reduce the effects.
- 8.72 In terms of the local routes, while the applicant has not done an assessment of these, it is anticipated that the visual effects would not be significant due to the way in which the visibility of the scheme drops in and out across those routes as one is travelling westbound as a result of changes in road direction and topographic screening. Views travelling eastbound on the local routes are unlikely to be affected.

8.73 Overall, there will be a significant visual impact as a result of the development, individually and cumulatively on users of the road network. While concerns have been raised about encirclement and the perception of travelling through a wind farm landscape due to the combination of onshore and offshore developments, it is considered that the points at which this will be experienced would be limited due to the spacing between the onshore wind developments, and the set back of those developments from the road network.

Noise

8.74 An assessment of predicted onshore noise has been carried out by the applicant. This indicates that noise would not be significant for any potential noise sensitive receptor (i.e. houses, guest houses and hotels) onshore. The applicant has assessed the potential cumulative noise impact with Limekiln, Ackron, Drum Hollistan, Forss and Baillie Wind Farms for a number of onshore noise sensitive receptors. Environmental Health is content that cumulative noise at relevant properties will have a negligible effect. It is also satisfied that the increase in noise exposure as a result of the development will have a negligible impact. Should the application be approved it is recommended that a condition be applied to secure noise levels at the simplified criteria of 35dB(A).

Telecommunications, Aviation and maritime safety

8.75 Based on the submissions made by the relevant interests for these matters, subject to technical matters being addressed and guidance followed in the final designed layout of the scheme, it is not anticipated that there will be any effects on telecommunications, aviation or maritime safety.

Decommissioning

8.76 There is a legal requirement under the Energy Act 2004 for the site to be decommissioned at the end of its working life. No decommissioning plan has been included within the ES but will need to be subject to further consideration, prior to decommissioning. Having said that, a decision may be taken at some point within the period of operation on whether the development should be re-powered.

Other material considerations

8.77 SEPA have sought clarification and further information on the radioactive substances. The applicant is working with SEPA to provide the information they require.

9. CONCLUSION

- 9.1 The Development Plan and national planning policy support the deployment of renewable energy developments. There is currently a drive for the delivery of appropriately located offshore wind energy developments. While this is not a project progressed under ScotWind, it is a site which benefits from an existing consent for a floating offshore wind farm, albeit of a much smaller scale.
- 9.2 The majority of the technical matters raised with the application are outwith the remit of the Council but could be controlled by condition. The applicant has proposed a

significant package of mitigation, both by design of the development and through commitments to preparation and implementation of protection plans and monitoring of effects to address matters which may be of concern. While there are outstanding matters related to ornithology and some other technical matters, the applicant is working with Marine Scotland and their consultees to provide clarity and resolve outstanding concerns. Marine Scotland would be required to take a view on such matters before making a recommendation to Scottish Ministers on the application.

- 9.3 The key issue for the Council is the seascape, landscape and visual impact of the development. These turbines would be some of the closest offshore wind turbines to Scotland's coastline. They would, at this time, also be some of the largest turbines deployed in offshore. Given the position and scale of the turbines, there will be significant adverse impacts on recreational users of the outdoors, residential receptors and users of the local road network. There will also be some significant impacts on landscape and seascape character. However, the impacts of the development are in relative close proximity to the scheme and do not extend significant distances in shore. The applicant's mitigation by design to push the turbine array further offshore and reduce the horizontal spread of the turbine array area has helped to reduce the effects of the development for these receptors.
- 9.4 The adverse effects need to be balanced against the economic and energy benefits of the scheme for the area. It is anticipated that over the course of the operation period of the development there would be in the region of £48million gross value added in the Caithness economy and £57-66m gross value added to the Highland economy. The project will also help to test the use of floating wind offshore energy technology, which will bring benefits to future anticipated Scotwind projects across Scotland in terms of research and development. In addition the development would make a meaningful contribution to tackling the climate emergency through the delivery of a nominal 100MW of renewable energy. In line with the revised draft National Planning Framework 4, this should be given significant weight.
- 9.5 While there are significant impacts in terms of landscape and visual impacts, these can be considered acceptable in the balance given the mitigation by design outlined above and the benefits the proposal will bring. As a result it is considered that the proposal accords with the provisions of the development plan, national planning and energy policy and is acceptable and, is acceptable in terms of all other applicable material considerations. Consequently, it is recommended that the Council raises no objection to the application.

10. IMPLICATIONS

- 10.1 Resource: Not applicable
- 10.2 Legal: Not applicable
- 10.3 Community (Equality, Poverty and Rural): Not applicable
- 10.4 Climate Change/Carbon Clever: The development will produce renewable energy and help to address the climate and ecological emergency.
- 10.5 Risk: Not applicable

10.6 Gaelic: Not applicable

11. **RECOMMENDATION**

Subject to the above, it is recommended to **RAISE NO OBJECTION** to the application subject to the following conditions and reasons:

1. The Development shall be undertaken in accordance with the Schedule of Mitigation contained within Chapter 22 of the EIAR unless otherwise agreed in advance in writing with the Planning Authority and Marine Scotland.

Reason: To ensure the environmental impacts of the development are appropriately managed and mitigated

2. No development shall commence on the development until the Council has been consulted, and given its considered opinion, on the design and layout options for the development.

Reason: To ensure that the seascape, landscape and visual impacts can be appropriately managed through the final design and layout of the development.

3. The applicant shall maximise the amount of GVA in terms of employment, associated economic activities and socio-economic impacts in Highland, as a result of the construction and operational phases of the project.

Reason: In the interests of delivering economic benefit to Caithness and Highland.

4. (1) The rating level of noise immissions from the combined effects of the wind turbines forming part of the Development (including the application of any tonal penalty) when determined in accordance with the Guidance Notes for this condition shall not exceed the values for the relevant integer wind speed set out in, or derived from, Tables 1 and 2 at any dwelling which is lawfully existing or has planning permission at the date of this consent.

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

Property	Standardised 10 m Wind Speed (m/s)									BEK 135 Method	
	3	4	5	6	7	8	9	10	11	12	(8m/s)
Project onshore ele	ments a	nd shore	eline pr	operties	;						
Isauld House	15.9	18.5	23.9	28.5	30.2	30.4	30.4	30.4	30.4	30.4	28.4
Isauld Lodge	15.5	18.1	23.5	28.1	29.8	30.0	30.0	30.0	30.0	30.0	28.0
Farm house A836	15.2	17.8	23.2	27.8	29.5	29.7	29.7	29.7	29.7	29.7	27.6
Fresgoe	17.1	19.7	25.1	29.7	31.4	31.6	31.6	31.6	31.6	31.6	29.9
Portskerra shore	17.5	20.1	25.5	30.1	31.8	32.0	32.0	32.0	32.0	32.0	30.4
Portskerra	16.8	19.4	24.8	29.4	31.1	31.3	31.3	31.3	31.3	31.3	29.6
Bighouse	16.2	18.8	24.2	28.8	30.5	30.7	30.7	30.7	30.7	30.7	29.0
Sandside House	16.3	18.9	24.3	28.9	30.6	30.8	30.8	30.8	30.8	30.8	29.2
Reay	15.4	18.0	23.4	28.0	29.7	29.9	29.9	29.9	29.9	29.9	28.3
Limekiln WF and ex	tension	(and Dr	um Hol	listan 2	WF)				1	II	
Achins	14.6	17.2	22.6	27.2	28.9	29.1	29.1	29.1	29.1	29.1	27.4
Borlum House	14.6	17.2	22.6	27.2	28.9	29.1	29.1	29.1	29.1	29.1	26.8
Loanscorribest	13.4	16.0	21.4	26.0	27.7	27.9	27.9	27.9	27.9	27.9	26.0
Baillie WF											
Achiebraeskiall	12.3	14.9	20.3	24.9	26.6	26.8	26.8	26.8	26.8	26.8	24.7
Buolfreuoch	13.1	15.7	21.1	25.7	27.4	27.6	27.6	27.6	27.6	27.6	25.5
Stemster	11.0	13.6	19.0	23.6	25.3	25.5	25.5	25.5	25.5	25.5	23.4
Ackron / Drum Hol	listan 2 \	WF									
House west of	14.0	16.6	22.0	26.6	28.3	28.5	28.5	28.5	28.5	28.5	26.9
Halladale Bridge											
Ackron Farm	13.4	16.0	21.4	26.0	27.7	27.9	27.9	27.9	27.9	27.9	26.4
Forss Wind Farm a	nd exten	sions									
Hill of Lybster	14.3	16.9	22.3	26.9	28.6	28.8	28.8	28.8	28.8	28.8	26.3
Crosskirk	14.4	17.0	22.4	27.0	28.7	28.9	28.9	28.9	28.9	28.9	26.2

- (2) The turbines shall be designed to permit individually controlled operation or shut down at specified wind speeds and directions in order to facilitate compliance with noise criteria.
- (3) The Company shall continuously log power production, wind speed and wind direction. These data shall be retained for a period of not less than 24 months. The Company shall provide this information to the Planning Authority within 14 days of receipt in writing of a request to do so.
- (4) Prior to the Date of First Commissioning, the Company shall have submitted to, and received written approval of the Planning Authority to, a list of proposed independent consultants who will undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Planning Authority.
- (5) Within 21 days from receipt of a written request from the Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the Company shall, at its expense, employ a consultant approved by the Planning Authority in terms of paragraph (4) above to assess the level of noise immissions from the wind farm at the complainant's property. The written request

from the Planning Authority shall set out at least the date, time and location to which the complaint relates and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component [or amplitude modulation].

- (6) The assessment of the rating level of noise immissions in terms of paragraph (5) above shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Planning Authority. The protocol shall include the proposed measurement location(s) where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Planning Authority under paragraph (5) above. [Within 21 days of a written request by the Planning Authority, following a complaint to it from a resident alleging noise disturbance at the dwelling at which they reside and where excess amplitude modulation is considered by the Planning Authority to be present in the noise emissions at the complainant's property, the Company shall submit a scheme, for the approval of the Planning Authority, providing for the further investigation and, as necessary, control of excess amplitude modulation. The scheme shall be based on best available techniques and shall be implemented as approved.]
- (7) Where the property to which a complaint is related is not listed in Tables 1 or 2, the Company shall submit to the Planning Authority for written approval proposed noise limits selected from those listed in Tables 1 and 2 to be adopted at the complainant's property for compliance checking purposes. The proposed noise limits are to be those limits selected from Tables 1 and 2 specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's property. The rating level of noise immissions resulting from the combined effects of the wind turbines shall not exceed the noise limits approved in writing by the Planning Authority for the complainant's property.
- (8) The Company shall provide to the Planning Authority the independent consultant's assessment of the rating level of noise immissions within two months of the date of the written request of the Planning Authority for compliance measurements to be made under paragraph (7), unless the time limit is extended in writing by the Planning Authority. Certificates of calibration of the instrumentation used to undertake the measurements shall be submitted to the Planning Authority with the independent consultant's assessment of the rating level of noise

immissions.

(9) Where a further assessment of the rating level of noise immissions from the wind farm is required, the Company shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (6) above unless the time limit has been extended in writing by the Planning Authority.

Reason: In the interests of amenity

- (1) There shall be no Commencement of Development unless and until a programme of archaeological works to be carried out during construction of the Development has been submitted to, and approved in writing by, the Planning Authority.
 - (2) The programme of archaeological works shall include measures to be taken to protect and preserve any features of archaeological interest in situ and the recording and recovery of archaeological features which cannot be protected or preserved.

The approved programme of archaeological works (as amended from time to time with written approval of the Planning Authority) shall be implemented in full.

Reason: To protect and/or record historic resources and features of archaeological importance on and adjacent to the development site

6. Radio and Television Reception

- (1) There shall be no Commencement of Development unless and until a Radio [and Television] Reception Mitigation Plan has been submitted to, and approved in writing by, the Planning Authority. The Radio [and Television] Reception Mitigation Plan shall provide for a baseline radio [and television] reception survey to be carried out prior to the installation of any turbine forming part of the Development. The results of the baseline radio [and television] reception survey shall be submitted to the Planning Authority prior to the installation of any turbine forming part of the Development.
- (2) The approved Radio [and Television] Reception Mitigation Plan shall be implemented in full.
- (3) Any claim by any person regarding radio [or television] interference at their house, business premises or other building, made during the period from installation of any turbine forming part of the Development to the date falling twelve months after the Date of Final Commissioning shall be investigated by a qualified engineer and the results of the investigation shall be submitted to the Planning Authority.

Should any impairment to the radio [or television] signal be attributable to the Development, the impairment shall be remedied so that the standard of reception at the affected property is equivalent to the baseline radio or television reception.

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

Signature:	Dafydd Jones
Designation:	Area Planning Manager - North
Author:	Simon Hindson, Strategic Projects Team Leader
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Plan 1 – Location Plan





Figure 5.1 Offshore Development boundary