Aberdeen International Airport

MacFarlane M (Marc)

From: #ABZ Safeguarding <abzsafeguard@aiairport.com>
Sent: 02 September 2022 10:35
To: MS Marine Renewables
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM
Objective: -1

This proposal is located outwith our consultation zone. As such we have no comment to make and need not be consulted further.

Kind regards

Kirsteen

Aberdeen International Airport

#ABZ Safeguarding
abzsafeguard@aiairport.com
www.aberdeenairport.com
Aberdeen International Airport Limited, Dyce, Aberdeen, AB21 7DU

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO

CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

BT

MacFarlane M (Marc)

From: radionetworkprotection@bt.com
Sent: 26 August 2022 14:25
To: MS Marine Renewables
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - WID11953

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

OUR REF: WID11953

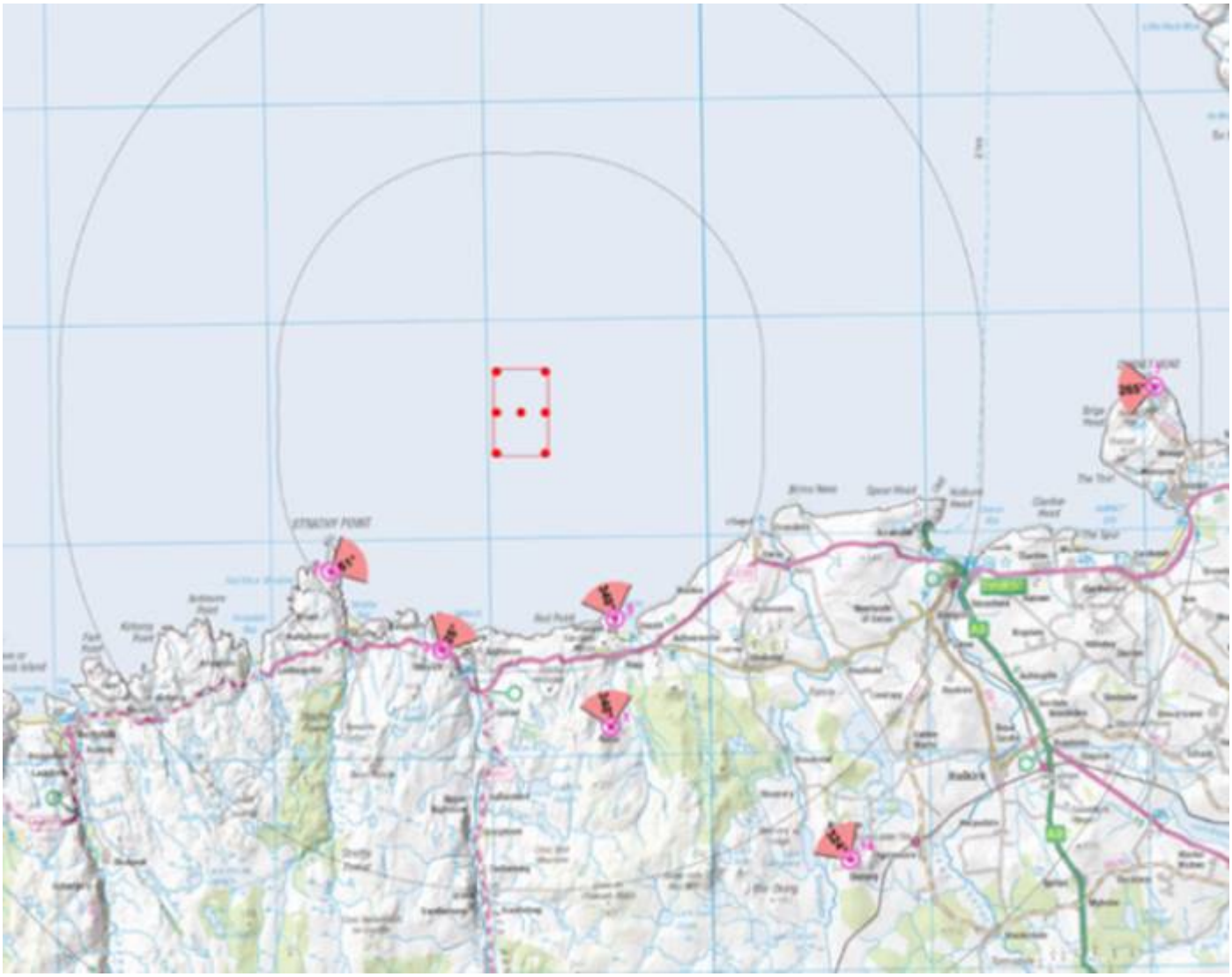
Good afternoon Marc

Thank you for your email dated 24/08/2022.

We have studied this Offshore Wind Farm proposal with respect to EMC and related problems to BT point-to-point microwave radio links.

The conclusion is that the indicative location provided for the 7-10 offshore proposed Turbine locations should not cause interference to BT's current and presently planned radio network.

Regards
Chris


LITTLEHAM POINT
Rudkin

Chris Sampson
M: [Redacted]

Engineering Services - Radio Planning
Networks

BT Group

BT - Beyond Limits

From: MS.MarineRenewables@gov.scot [mailto:MS.MarineRenewables@gov.scot]
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

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Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Caithness District Salmon Fishery Board

MacFarlane M (Marc)

From: Caithness DSFB <cdsfb@outlook.com>
Sent: 02 October 2022 10:18
To: MS Marine Renewables
Subject: Re: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: The Pentland Floating Offshore Windfarm.docx; image001.png

Hello,

Please see attached document as reply to consultation from our consultant.

Kind regards,
Meghan

Sent from my iPhone

From: MS Marine Renewables
Sent: 24 August 2022 10:40
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Mckay J (John) <John.Mckay@gov.scot>; MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
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Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Pentland Floating Offshore Windfarm: CDSFB Response to Consultation on EIR Report

The Pentland Floating Offshore Windfarm has the potential to affect all of the rivers of the Board's area – partly due to proximity and partly due to the windfarm's location on or near the main migratory routes taken by salmon to and from their ocean feeding grounds. The Board's principal concern re. development relates to the potential barrier effects posed by wind turbine arrays and, in particular, the cumulative effects of sequential arrays being developed near the pinch point on the migration route represented by the Pentland Firth. The risk is that barriers will delay or displace migratory fish.

Chapter 10 of Volume 2 of the Offshore EIAR shows that the developer has failed to engage with the issues that the Board previously raised regarding potential barrier effects. In particular, moving turbine blades will be visible to fish over large areas around the array for epipelagic species like salmonids which swim near the ocean surface. Although the Pentland Floating Windfarm will be relatively small, its potential to contribute to cumulative barrier effects for salmon is significant post the recent ScotWind round. Yet, the risk arising from the visual effects of the moving turbine superstructure has been scoped out of consideration – apparently with the support of MS-LOT (p9).

Unfortunately, no reasoning is given for MS-LOT's position. The developer's position on scoping out barrier effects because of a lack of information (as per Section 10.5.2.1) is unreasonable. So, for example, the maximum extent and duration of any visual effects of moving turbines are predictable from physical principles alone and curtailed by patterns of power generation, sea-state and cloud cover - all of which can be estimated.

Windfarm construction poses risks to aquatic ecology and many or most of the risks cannot be adequately quantified based on existing knowledge. With global acceleration in the construction of windfarms, it is now recognised worldwide that the way forward must be to acquire new information as these developments proceed in order to avoid continually repeating mistakes first made near the outset.

In order to acquire the missing information, it is first necessary to acknowledge the potential risks. Developers, and especially regulators, should therefore engage with stakeholders and assess all the identified risks rather than just ignoring issues as they get raised hoping that they will go away.

In this way, Pentland Floating Offshore Windfarm appears to have been negligent regarding the issues raised by the Board - with the seeming support of MS-LOT as noted above. As the regulatory authority, MS-LOT's position in particular lacks rigour. This is surprising since MS-LOT must surely be aware of current trends in the wider international regulatory context as mentioned above.

Caithness West Community Council

MacFarlane M (Marc)

From: Jgbundy100 <jgbundy100@aol.com>
Sent: 12 October 2022 23:20
To: MS Marine Renewables; EPlanning
Cc: Walker B (Ben); Mckay J (John); Simon Hindson (Planning and Environment)
Subject: Re: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM
Objective: -1

Marc,

Thank you for extending the period in which we can comment.

Caithness West Community Council wishes to OBJECT to this development for the following reasons;

1. Cumulative Impact
The extent of onshore windfarm developments in Caithness and Sutherland is already extensive and the addition of a further ten 300m turbines only 6km from the shore will only add to the significant cumulative impact. This will be particularly so in Reay, where the Bailiie and Forss windfarms are within 5 kilometres and the consented Limekiln development will be within 2.5km. This will mean Reay is almost encircled, with turbines highly visible to the north, south and east of the village.

2. Landscape and Seascape Impact
The proposed development is within the North Caithness Cliffs Special Protection Area (SPA) and the Sandside Bay Site of Special Scientific Interest (SSSI). The development will have a detrimental impact on both the natural landscape and seascape.

3. Wild Land Impact
The development will have a detrimental impact on the qualities of a number of Wildland Areas, in particular WLA 39.

4. Impact on Sea Birds
A number of sea bird species will be at risk of collision or displacement. Other migratory species may also face collision risks.

5. Impact on Marine Mammals
Several marine mammal species either hunt or transit through the area of the proposed development and are at risk from construction works and disruption to echo-location.

6. Migratory Salmon
The development site is located in an area where migratory salmon transit as they approach river mouths and inland spawning areas.

7. Traffic And Roads
Roads in Caithness are already in an extremely poor state of repair, in part due to additional heavy traffic from current windfarm construction and associated activities such as deforestation, quarrying and

infrastructure development. The addition of this development will only exacerbate the deterioration in our roads and will increase the volume of traffic on the A9 and A836.

While deemed planning permission already existed for the original Dounreay Tri scheme, this development is significantly bigger and will therefore have a much greater detrimental impact. We therefore respectfully request that Marine Scotland refuses consent.

Thank you

Jillian Bundy
Chair
Caithness West Community Council

Simon - please could you also register this as an Objection on THC consultation for this development
Thanks

Sent from the all-new AOL app for iOS

On Thursday, October 6, 2022, 4:06 pm, MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot> wrote:

Highlands and Islands Airports Limited

MacFarlane M (Marc)

From: Safeguarding <Safeguarding@hial.co.uk>
Sent: 26 August 2022 14:07
To: MS Marine Renewables
Cc: Bamlett R (Rebecca); Mckay J (John); MacFarlane M (Marc)
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM
Objective: -1

Our Ref: 2022/301/WIC

Dear Sir/Madam,

Proposal: APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY
Location: ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

The proposed development has been examined from an aerodrome safeguarding perspective at Wick Airport and could conflict with safeguarding criteria unless any planning permission granted is subject to the conditions detailed below:

Submission of a Construction Strategy Plan
Development shall not commence until details of the construction strategy plan have been submitted to and approved in writing by the Planning Authority. The submitted Plan shall include details of:

- Details of the construction of the Wind Turbines onshore
- Turbine route map from onshore to the offshore location

We, therefore, have no aerodrome safeguarding objection to this proposal, provided that the above condition are applied to any planning permission.

Kind regards,

Nyree

Nyree Millar-Bell
Safeguarding Officer and Operational Assistant
Highlands and Islands Airports Limited
✉ NBell@hial.co.uk Visit our Website at www.hial.co.uk

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot

Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

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Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Historic Environment Scotland

MacFarlane M (Marc)

From: Urszula Szupszynska <urszula.szupszynska@hes.scot>
Sent: 28 October 2022 14:27
To: MacFarlane M (Marc); Heritage - Consultations Mailbox
Cc: Walker B (Ben); Mckay J (John)
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation Reminder
Attachments: 20221014 HES Response - EIA Report.pdf

Good afternoon Marc,
I wrote the response letter on the 14th of October, before my annual leave, but for some reason it was never sent out to you. Apologies.
Please find our response attached.
Kind regards
Urszula

Urszula Szupszynska | Senior Environmental Assessment and Advice Officer | Environmental Assessment and Advice Team | Heritage Directorate

We inform and enable good decision-making so that the historic environment of Scotland is valued and protected.

Involved in decisions affecting the historic environment? See the Historic Environment Policy for Scotland at www.historicenvironment.scot/heps

Historic Environment Scotland | Àrainneachd Eachdraidheil Alba
Longmore House, Salisbury Place, Edinburgh EH9 1SH
T: 0131 668 8983
M: [Redacted]
E: urszula.szupszynska@hes.scot

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

By email to:
MS.MarineRenewables@gov.scot

Marine Scotland (Marine Renewables)
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

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

Our case ID: 300046189

14 October 2022

Dear Marine Scotland

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Pentland Floating Offshore Wind Farm - EIA Report

Thank you for your consultation which we received on 24 August 2022. We have considered it and its accompanying EIA Report in our role as a consultee under the terms of the above regulations and for our historic environment remit as set out under the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013. Our remit is World Heritage Sites, scheduled monuments and their setting, category A-listed buildings and their setting, gardens and designed landscapes (GDLs) and battlefields in their respective inventories and historic marine protected areas (HMPAs).

You should also seek advice from your archaeology and conservation service for matters including unscheduled archaeology and category B and C-listed buildings.

The Proposed Development

We understand that the Pentland Floating Offshore Wind Farm (PFOWF) is to be situated approximately 7.5 km off the coast of Dounreay, Caithness. The Section 36 application specifically requests consent for the construction, operation, and maintenance of the offshore components of the PFOWF. We understand that the key components of the proposed development are as follows:

- 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), with landfall achieved via Horizontal Directional Drilling (HDD); and
- Associated scour protection and cable protection (if required).

We note that the onshore development does not form part of the current application and therefore it has not been considered in the submitted EIA.

We understand that the offshore development is being developed at the same location as the consented Dounreay Trì Project. We also note that the PFOWF Array Area is more setback from the Dounreay coast and its overall size has decreased, reducing the horizontal spread of the WTGs and potential visual impacts on land-based receptors in comparison to the maximum worst-case scenario presented in the Scoping Report (HWL, 2020) and Scoping Report Addendum (HWL, 2021), with the maximum number of WTGs to be deployed decreasing from ten to seven.

Our Advice

We have reviewed the EIAR and the supporting visual materials. We consider that sufficient information has been provided to be able to assess the impacts of the proposal on our historic environment interests.

We note that all effects on marine and intertidal archaeological assets were assessed as not significant in the EIAR.

We note that the risk of unknown marine and intertidal historic environment assets being present in the Offshore Site is considered by the applicant to have been reduced because of the marine geophysical surveys already conducted and reviewed.

In terms of impacts on the onshore nationally important heritage assets, in no case was it concluded that an effect was so significant as to affect the asset's understanding, experience or appreciation to the extent that it would impact on the integrity of its setting. We agree with this conclusion.

Our Position

We do not wish to object to the proposed development as we are content that the proposal will not raise issues of national interest for our remit.

Planning authorities are expected to treat our comments as a material consideration, and this advice should be taken into account in your decision making. Our view is that the proposals do not raise historic environment issues of national significance and therefore we do not object. Our decision not to object should not be taken as our support for the

proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy guidance.

Further Information

This response applies to the application currently proposed. An amended scheme may require another consultation with us.

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes/. Technical advice is available through our Technical Conservation website at www.engineshed.org.

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

Yours faithfully

Historic Environment Scotland

Ian Kelly MRTPI

MacFarlane M (Marc)

From: Ian Kelly <iankellymrtpi@gmail.com>
Sent: 04 April 2023 12:46
To: MS Marine Renewables
Cc: ePlanning; Marine Scotland Mailbox
Subject: Pentland Offshore Wind Farm - Objection
Attachments: Pentland Offshore S36 WF - Application - [Redacted] Objection - Issue.pdf

Categories: Saved in eRDM
Objective: -1

MS References: ML00009991 and ML00009992
THC References: 22/03864/S36 and 22/04722/PIP

Good afternoon,
I enclose an objection on behalf of my client whose interest are set out in the document.
A full response from Ministers would be appreciated as would information on how the updated assessments as required by NatureScot can be accessed.
Regards,
Ian

Ian Kelly MRTPI
Mobile: [Redacted]

[Redacted]/Pentland/IK

Electricity Act 1989

Town and Country Planning (Scotland) Acts 1997 as amended

Marine (Scotland) Act 2010

PROPOSED PENTLAND OFFSHORE S36 WIND FARM

MS Ref: 00009991 and 00009992

Highland Council References: 22/03864/S36 and 22/04722/PIP

OBJECTION

on behalf of

[Redacted]

(third party objectors)

Submitted: 4th April 2023

Ian Kelly MRTPI,

Ian Kelly Planning Consultancy Ltd

Email: iankellymrtpi@gmail.com

Background

1. This **objection** has been prepared in respect of the proposed Pentland Offshore S36 wind farm application, Marine Scotland references 00009991 and 00009992, and Highland Council reference 22/03864/S36 (offshore element) and Highland Council planning application reference 222/04722/PIP (onshore element)

2. The objection has been prepared by Ian Kelly (see later for qualifications and experience) on behalf of [Redacted] whose property interests, lying to the south of the onshore part of the application site, will likely be adversely affected by the scheme specific and cumulative effects of the proposed wind farm.

3. The instructions in this case have been issued by [Redacted] directly.

4. This objection has been prepared by Ian Kelly MRTPI, of Ian Kelly Planning Consultancy Ltd. He is a chartered town planner with forty five years' experience in the public and private sectors, mainly in Scotland, but also involving work south of the Border, and in Europe, mainly in Scandinavia. His relevant project work has included expert witness advice in relation to a very considerable number of wind farm proposals – both planning applications and S36 Electricity Act applications.

5. Mr Kelly has given planning policy evidence (on behalf of the John Muir Trust, local groups, individuals and other Estate objectors) in the Baillie, Spittal 1 and 2, Braemore, Cnoc an Eas, Culachy, Druim Ba 2, Caplich, Strathy Wood, Crossburn, Dullater Hill, Dorenell 1, Dorenell 2, Fallago 2, Strathy South 1 and 2, Drum Hollistan 1 and 2, Limekiln 1 and 2 and Extension, Glenshero, Strathy Wood, and the Paul's Hill II, Rothes III and Clash Gour wind farm Public Inquiries. Recently, he has advised objectors on the Bad Fearn, Meall Bhuide, Cairnmore Hill, Ackron, Strathy South 2 and Variation, Glendye, Nathro, Macritch and Clashindarroch II wind farm proposals. He has recently assessed the Armadale, Braelangwell, Glencassley 2 and Kirkton wind farm proposals. Therefore, he has very up to date experience in the consideration of all of the relevant policy issues that will apply when considering Electricity Act S36 wind farm proposals within the area of the Highland Council. This

objection primarily addresses the Council's consideration of the applications but also includes a very brief review of the application EIA-R Non-Technical Summary (NTS) for the onshore application as it is the various aspects of the onshore elements that are likely to most impact on the objector.

The Application

6. The current application is proposing 7 floating turbines of an unspecified height along with significant onshore infrastructure (which has not yet been designed in detail). Both aspects are considered to be parts of the same project in that one would not proceed without the other.

The EIA-R NTS (onshore)

7. Some very brief comments are made on the NTS using the section and paragraph numbers in the document as follows:

    a. Section 1.1 – the application is being promoted by an SPV, it is unclear if the SPV will have the resources to deal with significant issues that arise during construction and operation or that there will be sufficient resources to deliver on decommissioning at any stage in the life of the project

    b. Section 1.1 – the relationship with the SSENT Spittal to Beauly OHL project is not discussed

    c. Policy – the various references are out of date and new assessments are needed in respect of compliance or non compliance with NPF4

    d. Section 5 – in terms of ornithology the Draft Management Plan for the proposed Caithness World Heritage Site has already identified that there is insufficient information to be able to properly assess cumulative effects on protected bird species. This very significant concern, with legal implications for determinations, is not reflected in the EIA-R NTS

e. Section 8 – on the LVIA issues the response of NatureScot (see below) should be noted. There is a need for an updated scheme specific and cumulative assessment with cumulative wirelines and photomontages being provided

f. Section 9 – the likely traffic and transport implications are of considerable concern given the range of other projects that are currently being considered and which will impact on the same fragile network

8. It is also noted that NatureScot is seeking significant changes to the assessment although it is unclear how the resultant updated documentation will be made available to the interested public.

The Approach in this Objection

9. Compared to assessing onshore S36 wind farm applications or assessing planning applications for wind farms it is quite difficult to track down the project documentation on the Marine Scotland web site whilst there is no guidance given on how to object to a proposal. In this case the Highland Council has already considered the project, albeit deciding not to object. Therefore, the main approach in this objection, following the above brief consideration of the EIA-R NTS, will be one of reviewing the Council's assessment to come to a view as to whether or not it is sound and can be relied upon by Ministers.

10. In that regard it is noted as the first primary consideration that the Council did not consider the project as a whole at a single meeting of the North Planning Applications Committee (NPAC). Rather, the offshore elements were considered at the December 2022 NPAC meeting whilst the onshore elements (an in principle only application) were considered at the January 2023 NPAC. This approach is assessed as being fundamentally flawed in that what is clearly the whole project was not placed in front of the NPAC for a decision on the project as a whole. It is considered that this flaw alone justifies the case being sent to Public Local Inquiry.

11. The second primary consideration is that in Appendix 16.9B, the Council standard visualisations, only the proposed offshore turbines are shown. The cumulative context is not provided either in the wirelines or in the photomontages. The cumulative

landscape and visual effects of this proposal, in combination with the landscape and visual other energy infrastructure, is a key determining issue. However, it is unclear how any specific evidence based assessments can be made when there are no cumulative visualisations.

The Correct Context

12. The first point to be made about the correct context for determinations on this case is the one set out above. The offshore and the onshore elements are very obviously part and parcel of the same project, and they should be assessed together in the same assessment and at a single NPAC meeting. That whole project consideration is the approach taken in this objection.

13. The second and extremely important point to factor into the assessment is that this proposed offshore wind farm, with its onshore substation and associated infrastructure, is only one part of the proposed overall energy generation and transmission project to deliver on the radical industrialisation of the remaining landscape resource in the Highlands. That overall energy project comprises:

    a. Several proposed very extensive OHL upgrades and new OHL projects (with some sections of undergrounding)

    b. Several proposed new and expanded substations (some of a very significant size and with other substation projects also likely to come forward in the future))

    c. Existing and new onshore wind farms (both consented but unbuilt and also yet to be determined or submitted proposals of which there are a very considerable number throughout the north Highlands)

    d. Very extensive new offshore wind farms

    e. The extensive and scattered onshore grid and substation infrastructure associated with these offshore wind farms

14. At this stage it would appear to be the deliberate strategy of the renewables industry and Ministers to avoid any form of consultation or decision making on the overall energy project aspirations but, rather, as SSENT have recently successfully done with the Highland Council consultation on the Skye OHL upgrade and Proposal of Application Notices for two substations, present discreet elements for consultation and approval on a standalone basis while hoping that nobody, especially the Highland Council, notices the elephant in the room.

15. It is considered to be of fundamental importance that this energy project bigger picture, including the related needs case and the alternatives, is brought fully into the public domain before there is any further consideration of any sub parts of this bigger project.

16. Thus, from the perspective of the objector (and probably many other groups and individuals too) it is appropriate to draw on all of the above and to ask some fundamental questions of Ministers as part of this objection. Those questions are:

    a. How much wind power do we need and want to enable Scotland to reach its net zero targets

    b. Where do we want to produce this power, if indeed any more generating stations are needed

    c. How can any additional power that is needed be produced and be exported and how can the impact of the necessary infrastructure be minimised

    d. How much more of the landscape and nature needs be destroyed (if any) to deliver on net zero for Scotland in line with the ambitions of the Scottish Government

17. Early responses from Ministers would be very much appreciated so that the objector can consider what further submissions, if any, are needed at this stage in the consideration of the Pentland Offshore wind farm application.

18. Certainly, lists of other wind farms were included in the December 2022 report in respect of the offshore elements of the proposal, the two reports to the NPAC

completely failed to set out either the overall multi-faceted cumulative context or the issues arising from that context. This was despite the objection from the Caithness West Community Council clearly setting out significant concerns about a range of cumulative effects. As noted earlier the Council standard visualisations did not show the cumulative effects with other energy infrastructure.

Consideration of the Offshore Elements

19. A Report of Handling on the offshore elements of the proposed wind farm was submitted to the December 2022 meeting of the NPAC. Although the existence of the planning application for the onshore elements was mentioned in the Report, the assessment was entirely in connection with only the offshore elements. The whole project was not assessed.

20. It should be noted that the author of the Report was in the process of leaving the Highland Council to join an offshore wind energy company. Ministers are respectfully asked to consider if this represents a conflict of interest of such a scale that the Council's recommendation should not be accepted.

21. The following comments are made with regard to the numbered sections or paragraphs within the Report:

    a. Para 1.6 – given the considerable range of uncertainties that are identified here, including that the layout, design, number and height, it is not certain that adopting the Rochdale Envelope approach is an appropriate assessment methodology

    b. Para 2.8 – with this extensive list of other wind farm developments it is clear that a full set of cumulative visualisations should have been provided

    c. Para 5.2 – the objection response from the Caithness West Community Council raises many valid material considerations and is strongly supported

    d. Para 5.17 – the range of concerns set out by NatureScot alongside their assessment of significant effects is so extensive that it is surprising that they did not object (in relation to ornithology there does not appear to be any

response from the RSPB). NatureScot concludes that the scheme specific and cumulative landscape and visual effects will be more extensive than assessed by the applicants. The transitional point issue is of considerable importance given previous wind farm appeal and Inquiry outcomes. The effects on the WLA are noted although the conclusion on the significance of effects is perhaps weak. It is surprising that more was not said on the matter of wild salmon given the significance of the Pentland Firth, and the rivers that flow into the Firth, for this protected species. The comment on ornithology 'that the assessment requires revision" might reasonably have added to the case that the Council's consideration of this application was premature

e. Para 5.22 – it would have been reasonable, given the very well known and extensive planning history of the issue, for the Council to be far more concerned by the objection from SEPA which relates to the potential disturbance of radioactive particles

f. Para 8.4 – this sets out the key tests under the Marine (Scotland) Act 2010 section 27 and these would all be considerations for the requested Public Local Inquiry (see later)

g. Para 8.8 – it is agreed that HWLDP Policy 67 should be key alongside the relevant Policies in NPF4

h. Para 8.19 – notwithstanding the national development status of the project a site specific and project specific locational decision is still required through applying the planning balance to the consideration of adverse effects and benefits

i. Para 8.21 – the list of other considerations from NPF4 should have included a reference to Policy 3B on biodiversity where enhancement is required (it is understood that the Council's ecology officer will be looking for a metric based 10% gain in biodiversity secured by way of a binding S75 legal agreement)

j. Para 8.29 – the generation of electricity in Scotland is effectively already decarbonised and, therefore, it is unclear from where these claimed significant CO2 savings would come from

k. Para 8.40 – what this is basically saying is that the ornithological effects are not known at this stage (yet another uncertainty) and it is considered that the Council should have given greater weight to this situation. It is noted that the Draft Management Plan for the Flow Country World Heritage Site has identified a lack of information on the cumulative effects of developments on protected bird species. That position, endorsed by the Council, is not factored into the assessment

l. Para 8.44 – this reference to a worst case assessment for turbines at 300m to blade tip is the first time that a turbine height is mentioned in the NPAC Report

m. Para 8.52 – the conclusion that the layout and design appears acceptable, as set out in this paragraph, appears to have been reached without first undertaking any analysis

n. Para 8.55 – the scheme specific effects on the north coast SLAs are key determining issues. However, the Report text simply sets out what the applicant says

o. Paras 8.56 to 8.58 – again, with the consideration of these other landscape effects the Report simply parrots the position of the applicants

p. Visual effects – there is a general tendency to try to downplay the effects

q. Para 8.71 – this key consideration of the transitional nature of the A836 (NC500) over a length of about 10km but mostly in the 2km to the west of Drum Hollistan has led the Council to strongly oppose onshore wind farms that adversely affect this section of the route it is unclear why the same conclusions have not been reached in this case

r. Para 8.73 – the conclusion of significant scheme specific and cumulative effects on users of the road network should have led to an objection had the Council been consistent in its decision making

s. Para 9.3 – the conclusions fail to set out the scale of the impacts on the views across to Orkney, a key aspect of the tourism interests in this area

22. In summary, the potential significant conflict of interest, the considerable design uncertainties about the project, the minimal amount of independent assessment in the Report, the lack of cumulative visualisations and wirelines, the failure to consider both parts of the project at the same time, the failure set out the full scope of cumulative effects and conclusions that are inconsistent with the Council's own decisions on other wind farms all lead to the conclusion that the Council's response should be set aside.

23. A more objective conclusion, and one that would be consistent with the Council's own assessments and conclusions in respect of other wind farms in this part of Caithness and Sutherland would be that the Pentland Offshore S36 wind farm does not meet the tests in the Electricity Act in that the effects have been insufficiently mitigated and that proposal is not in accordance with NPF4 Policy 3(b), NPF4 Policy 11, and Policy 67 in the HWLDP on account of significant adverse landscape, visual, ornithological and amenity effects that are not outweighed by the limited benefits.

Consideration of the Onshore Elements

24. A Report of Handling on the planning application in principle for the onshore elements of the project was submitted to the January 2023 NPAC meeting. The approach was to only assess the onshore elements, the whole project was not assessed.

25. <u>It should be noted that the author of the Report was in the process of leaving the Highland Council to join an offshore wind energy company. Ministers are respectfully asked to consider if this represents a conflict of interest of such a scale that the Council's recommendation should not be accepted.</u>

26. The following comments are made with regard to the numbered sections or paragraph numbers in the Report:

    a. It is noted that, in addition to the numerous design uncertainties about the offshore elements of the wind farm the application for the onshore elements in an application in principle meaning that, again, design detail is absent. In many ways the Council's response to the application is premature given the total lack of firm design details which, depending on the final solutions, could materially change the assessment of effects

    b. It is also noted that much of the text in the early sections of the Report and much of the text in Sections 7 and 8 of the Report is exactly the same as the text in the Report for the offshore elements (even although this separate Report is meant to be about the onshore planning application). This clearly confirms that both elements could easily have been considered together, in the same Report, an approach which would have, no doubt, further emphasised the significant adverse effects

    c. Para 5.4 – it is noted that the noise effects of the proposal (and presumably then the cumulative noise effects) cannot be assessed at this time. A condition is proposed. However, the obvious question is what happens if, in seeking to comply with the condition, the noise levels are found to be unacceptable

    d. Para 5.7 – the Transport Planning Team have raised serious cumulative impact concerns about effects on the A836 when responding on the Armadale S36 wind farm application. As the same main road (the NC 500) is involved it is unclear why that concern is not repeated here

    e. Para 7.4 onwards – the NPF4 issues raised in connection with the offshore element of the proposal are equally applicable when considering the onshore element (but are not repeated here)

    f. Para 8.8 – this refers to the "host Kilmorack Community Council". That community council has absolutely nothing to do with this proposal.

Presumably this has been a "cut and paste" as a Report is assembled, it perhaps reflects the limited actual assessment inputs

g. Para 8.29 – it is considered that this short section on landscape and visual effects is far too short to be able to properly evaluate the scheme specific and cumulative landscape and visual effects. In particular the combined landscape and visual effects from the whole project, the combination of offshore and onshore elements, is not addressed in any way. In any event there are no cumulative wirelines or visualisations that could be used to reach more carefully considered conclusions

h. Para 8.31 – this is dealing with the potential conflict/overlap with other energy infrastructure and clearly substantiates the need to fully understand the bigger picture

i. Construction impacts – there are many potentially severe adverse construction effects which the Council is simply not in a position to assess at this stage

j. Para 8.47 – NatureScot cannot point to any peer reviewed scientific evidence, based on existing measures at existing sites, to show that the mitigation will produce the predicted effects

k. Para 9.1 – NPF4 still requires that a locational decision is made balancing the adverse effects with the claimed benefits

l. Proposed Conditions – the recent experience with the breaches of planning control at the Creag Riabhach S36 wind farm site clearly confirms that conditions cannot be relied upon to prevent environmental harm in circumstances where the Council very obviously does not have adequate enforcement resources

m. Appendix 2 – the Appropriate Assessment – it is entirely unclear how an Appropriate Assessment can be completed at this stage given that the application is an in principle only application. Perhaps the Council should have been pressing for a full application to be submitted. Also, the Assessment

does not mention the cumulative effects concerns that are mentioned above from the Draft Management Plan for the World Heritage Site

27. In summary, the potential significant conflict of interest, the considerable design uncertainties about the project, the minimal amount of independent assessment in the Report, the lack of cumulative visualisations and wirelines, the failure to consider both parts of the project at the same time, the failure set out the full scope of cumulative effects and conclusions that are inconsistent with the Council's own decisions on other wind farms all lead to the conclusion that the Council's response should be set aside.

28. A more objective conclusion, and one that would be consistent with the Council's own assessments and conclusions in respect of other wind farms in this part of Caithness and Sutherland would be that the Pentland Offshore S36 wind farm does not meet the tests in the Electricity Act in that the effects have been insufficiently mitigated and that proposal is not in accordance with NPF4 Policy 3(b), NPF4 Policy 11, and Policy 67 in the HWLDP on account of significant adverse landscape, visual, ornithological and amenity effects that are not outweighed by the limited benefits.

Conclusions

29. For the reasons set out above the Council's assessment of both the offshore and the onshore elements of the Pentland Offshore Wind Farm is flawed, potentially biased, and does not provide a robust and safe basis for Ministers to approve this proposed wind farm.

30. Therefore, it is submitted that it is only with a full Public Local Inquiry that there will be a proper evaluation of this proposal taking account of the matters that should have been set out by the Council along with the concerns of the other consultees including the very clear objection from the Caithness West Community Council. Learning the lessons from the Beauly to Denny OHL Public Local Inquiry the Inquiry for this Pentland Offshore S36 wind farm needs to be organised as follows:

    a. A full Inquiry process to undertake the assessment of the need case by Reporters assisted by Technical Advisors (this will include putting the

proposal in its wider energy infrastructure and need context as referenced earlier)

b. The publication of the Inquiry report on this first stage

c. The Ministerial decision on the need case

d. If the need case is rejected, then no further procedure would follow

e. If the need case is supported, either fully or conditionally, then subsequent locational specific Public Local Inquiry evidence sessions should be held (which could be Inquiry or Hearing Sessions) to address the geographically specific local impacts/benefits/options aspects of the case

31. Hopefully, Ministers will now recognise the strength of public concern about the very significant multi project cumulative effects in the Highlands and drive forward on this basis to secure the preferred outcome of the suggested Public Inquiry process.

Conclusions and Submission

32. Should Ministers decide not to hold a Public Local Inquiry it is, therefore, in those circumstances respectfully submitted that, in due course, Ministers should reject the Pentland Offshore S36 wind farm proposals on the basis that the Pentland Offshore S36 wind farm does not meet the tests in the Electricity Act in that the effects have been insufficiently mitigated and that proposal is not in accordance with NPF4 Policy 3(b), NPF4 Policy 11, and Policy 67 in the HWLDP on account of significant adverse landscape, visual, ornithological and amenity effects that are not outweighed by the limited benefits.

[END]

Submitted: 4th April 2023

On behalf of [Redacted]

Ian Kelly MRTPI, Ian Kelly Planning Consultancy Ltd

Marine Analytical Unit

marinescotland

Pentland floating offshore wind farm EIA response

Marine Analytical Unit Response
The Pentland floating offshore windfarm EIA report includes assessments of impacts on a range of receptors. This response focuses only on the assessment of social and economic impacts described in Chapter 19: Socio-economics, Recreation and Tourism.

Scoping opinion vs EIA

Wider assessment of socio-economic impacts

"The Scottish Ministers advise that the assessment of potential social and economic impacts is too narrow and must be widened."

The scoping report had included impacts on the local economy, tourism, recreation and access to amenities. In MAU's response it was recommended that economic impacts such as supply chain impacts, employment, gross value added, displacement, substitution and additionality be scoped in, as well as social impacts including housing, access to services, cultural impacts, and distributional impacts.

The approach to the economic aspects of the assessment seems reasonable and proportionate for the scale of the development. Employment, GVA and supply chain impacts are included in the assessment and considerations towards displacement, substitution and additionality effects have been made. Both positive and negative impacts on other sectors (e.g. on tourism) have been considered and impacts have been assessed for local, regional and national scales.

While the economic aspects of the report are adequately covered, the assessment, falls a little short of what was asked for on social impacts.
Social impacts have been assessed for the Caithness region, the Highland region and for Scotland. We welcome the use of different spatial scales for analysis. However, Caithness is still quite a large area, and social impacts may occur at a more local scale. Cultural imacts and distribtional impacts have not really been considered and, although impacts to 'housing and local services' have been scoped in, it is only really housing that is considered.

Data collection and Description of methods

"We would recommend the collection of primary data through fieldwork using methods such as workshops, surveys or interviews. These methods will allow for a more accurate assessment of the potential social and economic impacts, and their magnitude/local importance. We would expect to see descriptions of methods, data collection, and the overall approach."

There does not appear to have been any primary data collection. Table 19.2 states that “The assessment of potential impacts on communities utilised evidence generated from workshop events and other types of consultation, including surveys.” There is no mention of workshops or surveys in the SEIA chapter or the methodology chapter. The Pre-Application Consultation event involved some questionnaires. Some of the results of the event are mentioned in the SEIA. However, the methods used in the PAC are not robust enough to be considered data collection. For example, there is no consideration of sampling, there is no information about the people who responded, the aim of the events was to share information rather than to collect information and so only 6 questions were asked, 3 of which were about the engagement event itself
The methods sections in the SEIA and in the Methodology chapter do not include descriptions of primary data collection, as this was not done.

Mitigation and Monitoring

“The Scottish Ministers advise that stakeholders and impacted communities are involved in the process of identifying impacts and agreeing on mitigation measures. The Scottish Ministers recommend a description of any proposed efforts to monitor social and economic impacts and to mitigate any negative impacts must be included in the EIA Report.”
There is no evidence that stakeholders have been involved in identifying impacts and agreeing on mitigation measures. There is also very little information regarding proposed monitoring. Further on in the table, there is a description of plans to monitor economic impacts through a data sharing agreement with CES as part of the Supply Chain Development Statement. This is not quite the same as monitoring, and certainly won’t capture social impacts.
The table also mentioned that a Community Liaison Officer has been appointed and that monitoring will be part of their role. A CLO does not normally carry out monitoring. It would be good to see more detail of what this will involve.

Stakeholder engagement

“We would recommend continuous engagement with stakeholders and local communities. We would also like more detail about how this engagement will be carried out, who will be included, and how the applicants will ensure that all relevant groups are represented.”
There is a commitment to appointing a CLO. This a very good step. The applicant has also committed to establishing governance structures to provide mechanisms for ongoing dialogue and feedback, the details of which will be included in the CEMP. It is not clear why that is not included in the SEIA, as it was asked for.
The PAC event had high attendance. However, it’s not clear who attended the event and how representative it was.
The applicant has been engaging with statutory and non-statutory consultees throughout the EIA process, and these meetings sound more two-way than the PAC event.

Other comments on SEIA

The thresholds of significance, used through the assessment, are not explained. A change of > 1% is considered high, a change of between 0.1 and 1% is considered moderate and a change of < 0.1% is considered low. It is not clear if there is some basis for these thresholds. If these thresholds are standard practice, or based on relevant literature, this should be explained. There are also some technical details that are not fully explained or justified. For example, it is not clear how the multipliers for the local area were developed. We would welcome a more through explanation of the assumptions upon which the parameters and multipliers are based. These could be included in a technical annex.

In some cases, a judgement is made about whether an impact is positive or negative. For example, it is considered that an increase in demand for housing is negative. However, in some cases, residents may be pleased to have people moving into the area, especially where there is a lot of outmigration. In these cases, it would be valuable to speak with local communities to understand their views.

Marine Scotland Science

MacFarlane M (Marc)

From: Menova M (Mariya) on behalf of MSS Advice
Sent: 10 October 2022 09:19
To: MacFarlane M (Marc)
Cc: Gray A (Abby) (MSS); Bamlett R (Rebecca); Walker B (Ben); Mckay J (John)
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 Consent and Marine Licence Applications - Consultation - Response due by 09 October 2022

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Saved in eRDM
Objective: -1

Good morning,

Apologies for the delay in providing comments for this casework. Please find these now attached in the link below:

2022-09-09- Pentland Floating Offshore Wind Farm - Section 36 Consent and Marine Licence Applications - REEA Response Letter to MS-LOT
[Redacted]

Kind regards,
Mariya

Mariya Menova (she/her)
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Marc MacFarlane
Marine Scotland Licensing Operations Team
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10 October 2022

PENTLAND FLOATING OFFSHORE WIND FARM - SECTION 36 CONSENT AND MARINE LICENCE APPLICATIONS

Marine Scotland Science (MSS) have reviewed the relevant documentation and have provided the following comments.

**No Comments = "We have considered the request and have no advice to provide."*

Commercial fisheries

MSS advises that that all potential impacts have been identified in relation to commercial fisheries and that the worst case scenario has been considered for the project parameters.

MSS advise that 2021 fisheries data is now available and this is to be used in any future assessments going forwards.

With regards to the export cable, the EIAR estimates that 80% of the cable will be buried to a minimum depth of 0.6 m. SFF have raised safety concerns with trawling over the cable and have requested an over trawl survey. The developer has highlighted that VMS data shows low to moderate trawling/dredging within the area and less activity within the export cable corridor however they have stated that if required, they will develop an overtrawl survey methodology. MSS advise that information should be provided on where the 20% of the cable with cable protection measures will be as this information will be useful in deciding if an overtrawl survey is required if the area of cable protection overlaps with areas of trawling/dredging activity.

Hopefully these comments are helpful to you.

Yours sincerely,

Renewable Energy Environmental Advice group
Marine Scotland Science

MacFarlane M (Marc)

From: Menova M (Mariya) on behalf of MSS Advice
Sent: 31 October 2022 14:30
To: MS Marine Renewables; MacFarlane M (Marc)
Cc: Walker B (Ben); Mckay J (John); Gray A (Abby) (MSS)
Subject: RE: Advice Request - PFOWF Section 36 and Marine Licences Application

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM
Objective: -1

Good afternoon,

Thank you for agreeing to the extension, however, our advisers have now been able to provide comments. Please see the MSS response now attached in the link below:

PFOWF Section 36 and Marine Licences Application - REEA Response Letter to MS-LOT
[Redacted]

Kind regards,
Mariya

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31 October 2022

PENTLAND FLOATING OFFSHORE WIND FARM SECTION 36 AND MARINE LICENCES APPLICATION

Marine Scotland Science (MSS) have reviewed the request from MS-LOT and provide the following advice.

Marine Ornithology

MSS have reviewed The Royal Society for the Protection of Birds (RSPB) and NaureScots' (NS) comments pertaining to the Population Viability Analysis (PVA) modelling elements of the ornithological impact assessment of the Pentland Floating Offshore Wind Farm (PFOWF). The PVA analyses were carried out by HiDef Ltd on behalf of Highland Wind Ltd, and are presented in *Technical Appendix 12.5: Population Modelling* of the Environmental Impact Assessment Report (EIAR).

Both the RSPB and NS express concerns over elements of the PVA analysis and MSS provide advice on specific concerns below, including surveys underpinning the PVA:

In the Technical Appendix, HiDef provide PVA projected population estimates for three species; namely kittiwake, guillemot and puffin, and provide estimated population counts for 30- and 50-years post-construction. In their advice, NS state that the first five years of simulated population growth rates are routinely discarded (as per scoping recommendations), in order to "remove the influence of starting conditions".

This use of a 25-year projection period is in line with modelling undertaken in relation to other developments. NS understand that the 30-year projection was selected due to the licence period of PFOWF, however recommend that population estimates for 25, 30 and 50-years post-construction are presented, in order to allow for comparison with estimated impacts on populations from other developments. MSS agree with NS that a 25-year population estimate for PFOWF, along with 30- and 50-year estimates should be presented.

NS also highlight discrepancies in the apportioning method used. MSS agree that review and correction of apportioning should be undertaken *apriori* to correctly estimate potential impacts.

The RSPB's advice expresses their intention to submit a **holding objection** over the manner in which the PVA has been run and the parameters used therein. The RSPB justify their objection based on the issues outlined below on which MSS provide comment:

The RSPB describe concerns relating to the combining of Matrix and SeaBORD approaches to assess for in-combination effects of displacement. MSS agree with advice given by NS that in-combination advice is updated once apportioning reviews have been undertaken and reviewed.

RSPB query the use of the matrix approach to describe impacts on juvenile birds. MSS are in agreement that this goes against the SNCB advice provided in the Joint SNCB Interim Displacement Advice Note[1]. The SNCB advice note states that the "matrix approach should only be applied in relation to adult mortality levels … for each defined season". MSS advise that the approach described in the SNCB advice note is adhered to and in agreement with RSPB, MSS do not consider the assessment of impacts on juvenile birds to be an appropriate use of the matrix approach.

The SNCB Interim Displacement Advice Note lists the input requirements for displacement assessment. This includes the use of, "population estimates for the development footprint and also for the **development footprint plus a standard displacement buffer**". MSS agree with RSPB in that the exclusion of the buffer "for some species" [puffin] goes against SNCB advice. MSS also advise that other projects scoped in for cumulative assessment (i.e. Beatrice, Moray East and Moray West) included the use of the 2 km buffer in their displacement analyses. As such, it may not be possible to draw valid comparisons between modelling outputs relating to these developments in comparison to PFOWF. MSS advise that a 2 km buffer is utilised in order to bring the results for puffin in line with SNCB guidance and to allow for comparison with projects scoped in for cumulative assessment. NS also indicate support for a 2 km buffer for puffin in their response.

The RSPB raise concerns regarding the divergence from utilising the recommended displacement mortalities that were provided in the displacement analyses (*Appendix 12.4: Marine Ornithology: Displacement Analysis*) in the PVA. Displacement mortalities utilised in the PVA assessment appear to have been derived from a combination of seabORD outputs used in relation to Moray West rates. MSS advise that clarification is sought as to the appropriateness of the displacement mortality rates used in the PVA and agree with the RSPB in that a range of displacement mortality rates were advised in Appendix 12.4 for use. Advice was sought on displacement rates previously and was provided by NS and MSS respectively[2] . As per NS advice on the 22nd of April 2022, MSS advise that precaution remains with the higher rate where a single rate is used in assessment, this extends across the SeabORD/Moray West method used in the application and that of the SNCB guided rates presented in Appendix 12.4.

The developer provides two datasets used for assessment from surveys (Jan – Dec 2015) and (September 2020- August 2021). The RSPB note in their advice that data collected during year 1 of the site-specific surveys are now over five years old (2015) and as such, may not be representative of current baseline conditions. MSS note that discussion regarding this concern was raised during an ornithology scoping advice meeting held in November 2021. Justification for this was given as surveys were undertaken concurrently with recent colony census surveys, allowing for direct comparisons to be made between the study area and nearby SPA populations. In addition, consideration of the small scale nature of PFOWF was given over to suitability of the datasets available and the necessity to do further surveys. MSS remain in agreement with NS as to these matters and that the surveys presented are acceptable.

Marine fish ecology

SFF - Does MSS consider that sedimentary plumes around spawning periods resulting from

[1] Joint SNCB Interim Displacement Advice Note (2017; updated 2022). Joint Nature Conservation Committee, Monkstone House City Road, Peterborough, PE1 1JY

[2] [Redacted]

the proposed works are likely to cause unacceptable disturbance to fish species? (Marine Fish Ecology)
MSS is content with the assessment of the effects of increased sedimentation during construction. Floating wind has smaller spatial footprint compared to fixed foundations so the suspended sediment will be comparatively minor during construction. The proposed site overlaps with potential spawning grounds for lemon sole, sandeel and sprat. The sandeel spawning grounds are identified as low intensity and the lemon sole and sprat of undefined intensity. The proposed area is a very small proportion of the spawning grounds available. The construction works are planned during spring/summer and so do not coincide with sandeel spawning. Furthermore, in the case of lemon sole and sprat they are pelagic spawners and are likely to be able to avoid localised disturbance. Their eggs are also pelagic and so less vulnerable to smothering. Given the relatively small area and short term nature of disturbance MSS advice that the impacts will be not significant.

SFF - Is the data provided on inter-array and transmission EMFs and rope pinging robust enough or should more information be recorded? (Marine Fish Ecology)
MSS is content with the EMF assessment. Predicted EMF levels for buried/protected cable sections, the dynamic inter-array cable sections and offshore export cable sections have been modelled and the levels have been found to be lower than the earth's natural magnetic fields and also lower than levels used in recent fish and shellfish research where negative effects were discovered.
MSS are investigating EMF through strategic research. Some of the aims of this research are to standardise methods to measure and model EMF emissions and to gain EMF measurements from in-situ cables. MSS recommend that this developer is involved in this strategic research, e.g. by allowing access to cables for EMF measurements to be collected.
MSS is content with the underwater noise impact assessment in relation to mooring line 'pinging' and the potential impacts on fish species. Data on mooring line 'pinging' has been collected from the Hywind Scotland Pilot Park and the noise levels produced have been compared to noise threshold criteria for injury to fish (Popper et al. 2014). The levels were below the onset criteria for injury to fish. Behavioural responses have also been considered and are expected to be localised and are not anticipated to cause population level impacts.

Popper, A. N., Hawkins, A. D., Fay, R. R., Mann, D. A., Bartol, S., Carlson, T. J., Coombs, S., Ellison, W. T., Gentry, R. L., Halvorsen, M. B., Løkkeborg, S., Rogers, P H., Southall, B. L., Zeddies, D. G. and Tavolga, W. N. (2014) Sound exposure guidelines for fishes and sea turtles. A technical report prepared by ansi-accredited standards committee. Springer Link.

Commercial fisheries

SFF - Does MSS believe the data the developer has presented on displacement of fish species and the associated fishing vessels is oversimplified? (Commercial Fisheries)
MSS is content with the fisheries displacement assessment. The assessment follows the 'Good practice guidance for assessing fisheries displacement' report published by Marine Scotland.

Physical environment / coastal processes

NatureScot's comments regarded the values in Table 7.19 suggesting the change in the near bed flow speeds were around 0.01%. MSS agree with NatureScot that, unless the predicted changes to flow speed presented in this table are wrong, the percentage change is around 10%. MSS further agree with NatureScot's suggestion to update/correct Table 7.19 and re-evaluate their subsequent conclusions.

Chemistry

We have no comments to provide for chemistry.

Hopefully these comments are helpful to you.

Yours sincerely,

Renewable Energy Environmental Advice group
Marine Scotland Science

Marine Laboratory, 375 Victoria Road,
Aberdeen AB11 9DB
www.gov.scot/marinescotland

Maritime and Coastguard Agency

MacFarlane M (Marc)

From: Nick Salter <Nick.Salter@mcga.gov.uk>
Sent: 22 September 2022 11:45
To: MS Marine Renewables
Cc: Bamlett R (Rebecca); Mckay J (John); MacFarlane M (Marc); Vaughan Jackson; Vinu John; HMCG OELO
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: Pentland s.36 and ML response.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Marc,

Please find attached our response to the Pentland OWF consultation.

Best regards,

Nick

Nick Salter
Offshore Renewables Lead
Marine Licensing and Consenting
UK Technical Services Navigation

+44 (0) 20 3817 2554
[Redacted]
nick.salter@mcga.gov.uk

Maritime & Coastguard Agency
c/o Falmouth Marine Office
Pendennis Point
Castle Drive, Falmouth
Cornwall, TR11 4WZ

Safer Lives, Safer Ships, Cleaner Seas
www.gov.uk/mca

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Nick Salter
Maritime and Coastguard Agency
UK Technical Services Navigation

www.gov.uk/mca
22 September 2022

Marine Scotland - Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

By email to MS.MarineRenewables@gov.scot

Dear Sir/Madam

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

Thank you for the opportunity to comment on the application for consent under Section 36 of the Electricity Act 1989 and marine licence under the Marine (Scotland) Act 2010 for the Pentland floating offshore wind farm. The MCA's remit for Offshore Renewable Energy Installations (OREIs) is to ensure that the safety of navigation is preserved, and our Search and Rescue capability is maintained, whilst progress is made towards government targets for renewable energy. The Navigation Risk Assessment (NRA) and the shipping and navigation elements of the Environmental Impact Assessment Report have been reviewed and we would like to comment as follows:

Navigation Risk Assessment
Anatec Limited has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance (MGN 654) and NRA risk assessment methodology. We are satisfied that appropriate traffic data has been collected in accordance with MGN654, which includes two 14-day marine vessel traffic survey in summer and winter of 2021. MCA is content the hazard log is a reasonable and proportional assessment of the risks. A completed MGN 654 Checklist has been provided as part of the NRA, and MCA is content that all recommendations have been addressed.

Layout Design
The turbine layout design will require MCA and Northern Lighthouse Board (NLB) approval prior to construction to minimise the risks to surface vessels, including rescue boats, and search and rescue aircraft operating within the site.
MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation.

Marking and Lighting
MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and the NLB. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN 654 Annex 5.

Emergency Response & Co-operation Plans
A SAR checklist based on the requirements in MGN 654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCOP) and will be incorporated as a condition of the Marine Licence.

During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas.

Construction scenarios
We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.

Mooring Arrangements:
Third Party Verification of the mooring arrangements for all floating devices will be required prior to construction to provide assurance against loss of station. Ideally this will be a condition of the marine licence. Guidance on regulatory expectations on mooring arrangements can be found on our website: https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping

Under-Keel Clearance
There are several references to the requirement for cable protection not reducing under-keel clearance by more than 5%. It should be noted that water depths should not be reduced by more than 5%, in relation to charted depths. However, I note in the list of embedded risk controls in Table 16 of the NRA it refers to water depths referenced from Chart Datum.

Hydrographic Surveys
MGN 654 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager and the UKHO. Further information can be found in MGN 654 Annex 4 supporting document titled 'Hydrographic Guidelines for Offshore Developers', available on our website: https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping. This includes surveys during the pre-construction, post-construction and post-decommissioning stages.

Cable Routes
Export cable routes, cable burial protection index and cable protection are issues that are yet to be fully developed. However due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum.

Safety Zones
The requirement and use of safety zones as detailed in the application is noted, and MCA will comment on the safety zone application once submitted, as a statutory consultee.

Liaison with local MCA Marine Office
The applicant should be reminded that their contractors and subcontractors must have the required certification for all vessel operations, and early engagement with the local Marine Office should be undertaken where necessary to ensure there are no issues with regards to survey and inspections, towage, and safety requirements. A loadline exemption for the turbine platforms will be required prior to any towage to site and the applicant must ensure any ballast water requirements are addressed.

Embedded Mitigation and Management Plans
We have the following comments on the proposed risk controls in Table 14.10 in Chapter 14 of the EIA Report:

1. Cable Plan (CaP) / Cable Burial Risk Assessment
    - In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, notification must be issued to MCA, NLB, the Kingfisher Information Service of Seafish and the UKHO within 24 hours of becoming aware.
    - In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners and inform Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MCA, NLB, and the UKHO within 5 days.
    - The plan must include proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised scheme which includes a risk-based approach to the management of unburied or shallow buried cables.

2. Navigation Safety Plan (NSP)
    - Local notification to mariners must be issued at least 14 days prior to the commencement of the authorised project or any part thereof advising of the start date of each work and the expected vessel routes from the construction ports to the relevant location. They must be updated and reissued at weekly intervals during construction activities and at least 5 days before any planned operations (or otherwise agreed) and maintenance works and supplemented with VHF radio broadcasts agreed with the MCA.
    - The Kingfisher Information Service of Seafish, must be informed of details of the vessel routes, timings and locations relating to the construction of the authorised project or any part thereof by email to kingfisher@seafish.co.uk :-
        i. at least 14 days prior to the commencement of offshore activities, for inclusion in the Kingfisher Fortnightly Bulletin and offshore hazard awareness data, and;
        ii. as soon as reasonably practicable and no later than 24 hours of completion of all offshore activities.
    - Post construction monitoring is required and must include vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised project. An appropriate report must be submitted to the MCA and NLB at the end of each year of the three-year period.

3. Charting requirements

- On completion of construction latitude and longitude coordinates of the below infrastructure must be provided as Geographical Information System data referenced to WGS84 datum to UKHO, MCA and NLB:
    i. centre point of the location for each wind turbine generator and offshore platform, substation, booster station and meteorological mast, as appropriate.
    ii. inter array and export cable routes.

Conclusion

The comments detailed above are not considered to be blocks to development, but they are provided to highlight areas of concern. Subject to the applicant meeting requirements addressed in this letter, and meeting licence conditions which will be provided to Marine Scotland, it provides a cautious acceptance of the application for consent.

Yours faithfully,

[Redacted]

Nick Salter
Offshore Renewables Lead
UK Technical Services - Navigation

Ministry of Defence

MacFarlane M (Marc)

From: Oulaghan, Teena C2 (DIO Estates-SafegdgMgr1) <Teena.Oulaghan100@mod.gov.uk>
Sent: 02 November 2022 11:33
To: MS Marine Renewables
Cc: MacFarlane M (Marc); Bamlett R (Rebecca)
Subject: 20221102_MOD_Response Pentland Offshore Wind Farm
Attachments: 20221102_MOD_Response_Letter.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning

Please find attached MOD response to recent consultation.

Kindest regards

Teena Oulaghan

Safeguarding Manager
Estates – Safeguarding

St George's House| Defence Infrastructure Organisation Head Office |
DMS Whittington | Lichfield | Staffordshire | WS14 9PY

Mobile Tel: [Redacted]

Website: www.gov.uk/dio/ | **Twitter**: @mod_dio

Read DIO's blog: https://insidedio.blog.gov.uk/

Defence Infrastructure Organisation

Due to covid-19 I am working from home until further notice.

In line with the latest guidance, I am working offline where possible to ease the pressure on the IT network, so I will only be checking emails and Skype periodically. This means I might not respond as promptly as usual, so if you need my attention more urgently, please call me on 07970170934.

Defence Infrastructure Organisation

Teena Oulaghan
Safeguarding Manager
Ministry of Defence
Safeguarding
Defence Infrastructure Organisation
St George's House
DMS Whittington
Lichfield,
Staffordshire
WS14 9PY

Telephone: [Redacted]
E-mail: teena.oulaghan100@mod.gov.uk

Application Ref: Section 36
Our Reference: DIO10035413

Rebecca Bamlett
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

02 November 2022

Dear Rebecca,

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

I write to confirm the safeguarding position of the Ministry of Defence (MOD) in relation to the above application to construct and operate the Pentland Floating offshore wind farm.

This scheme will comprise of up to 7 wind turbines, up to 320m in height (to blade tip) that will be located approximately 7.5 km off the coast of Dounreay, Caithness. In addition to the turbine structures there will be up to 7 associated floating substructures, up to 9 moorings for each floating substructure (63 in total), up to 9 anchors or piles for each floating substructure (63 in total), up to 7 inter-array cables, up to 2 offshore export cables, as well as associated scour protection and cable protection. The onshore components of the project will be subject to a separate application to the Highland Council under the Town and Country Planning (Scotland) Act 1997 (as amended).

The MOD has assessed the location and layout of the offshore element of the development scheme proposed. The scheme outlined will not physically impact upon MOD offshore Danger and Exercise Areas or adversely affect defence maritime navigational interests. However, the turbines will affect military low flying training activities that may be conducted in this area. To address the impact up on low flying given the location and scale of the development, the MOD would require that conditions are added to any consent(s) issued requiring that the development is fitted with aviation safety lighting and that sufficient data is submitted to ensure that structures can be accurately charted to maintain air traffic safety. Suggested wording for relevant conditions to implement this are set out in Annex A.

As a minimum the MOD would require that the development be fitted with MOD accredited aviation safety lighting.

The application for the marine licence (ref.00009992) to install the transmission cable from the floating wind farm to the shore defines a development zone, bounded by a red line in plan ref. A100671_S01_MarineLicenceApplication_Figure_02 dated 05/08/2022, in which the cable(s) and associated landfall installation works would be located, if consented. This cable works development zone abuts the site of the MOD Vulcan Naval Reactor Test Establishment (NRTE). The development zone defined in the application contains an area of foreshore leased by the MOD which contains a coolant water intake to the Vulcan facility which whilst no longer utilised is likely to be the subject of some maintenance operations in the near future.

The MOD therefore considers it necessary that any marine licence granted for the proposed installation of the transmission cables should include a condition that requires the applicant to submit a management plan, for the approval of the Marine Scotland, prior to the commencing of any works. This plan should set out measures and arrangements to maintain communication between the applicant, and their appointed contractors undertaking the works subject to this marine licence, with the Head of Establishment at the Vulcan Naval Reactor Test Establishment. The purpose of this plan will be to coordinate these works with any operations being undertaken at the Vulcan NRTE Site and to support the maintenance of site security requirements for the establishment. Suggested wording for a relevant condition to implement this is set out in Annex B.

The MOD therefore maintains no safeguarding objection to the proposed development of the Pentland Firth– floating offshore wind farm, subject to any consents granted including the conditions identified above.

I trust this adequately explains our position on this matter.

Yours sincerely,

[Redacted]

Teena Oulaghan
Safeguarding Manager

Enc. Annexes A and B

Annex A

Condition - Aviation Lighting

Prior to commencing construction of any wind turbine generators, or deploying any construction equipment or temporal structure(s) 50 metres or more in height (above mean sea level) the undertaker must submit an aviation lighting scheme for the approval of the Scottish Government in conjunction with the Ministry of Defence defining how the development will be lit throughout its life to maintain civil and military aviation safety requirements as determined necessary for aviation safety by the Ministry of Defence.

This should set out:

a) details of any construction equipment and temporal structures with a total height of 50 metres or greater (above mean sea level) that will be deployed during the construction of wind turbine generators and details of any aviation warning lighting that they will be fitted with; and
b) the locations and heights of all wind turbine generators and any anemometry mast featured in the development identifying those that will be fitted with aviation warning lighting identifying the position of the lights on the wind turbine generators; the type(s) of lights that will be fitted and the performance specification(s) of the lighting type(s) to be used.

Thereafter, the undertaker must exhibit such lights as detailed in the approved aviation lighting scheme. The lighting installed will remain operational for the lifetime of the development.

Reason for condition.
To maintain aviation safety.

Condition - Aviation Charting and Safety Management

The undertaker must notify the Ministry of Defence, at least 14 days prior to the commencement of the works, in writing of the following information:

a) the date of the commencement of the erection of wind turbine generators;
b) the maximum height of any construction equipment to be used in the erection of the wind turbines;
c) the date any wind turbine generators are brought into use;
d) the latitude and longitude and maximum heights of each wind turbine generator, and any anemometer mast(s).

The Ministry of Defence must be notified of any changes to the information supplied in accordance with these requirements and of the completion of the construction of the development.

Reason for condition.
To maintain aviation safety.

Annex B

Condition – transmission cable installation works management

Prior to commencing works to install the export cables, the undertaker must submit a management plan for the approval of the Scottish Government, in conjunction with the Ministry of Defence, defining: a schedule of the works to be undertaken providing details of the expected timescale for when these works and associated activities will be undertaken, as well as details of any work enclosures, or, deployments of temporal structures, or, plant equipment on the foreshore. The plan should also set out communicational protocols to maintain effective communication with the Head of Establishment at the Vulcan Naval Reactor Test Establishment to coordinate the works with operations undertaken at the facility.

Reason for condition.
To maintain operations and site security at the Vulcan Naval Reactor Test Establishment.

NatureScot

MacFarlane M (Marc)

From: Kim McEwen <Kim.McEwen@nature.scot>
Sent: 13 October 2022 16:37
To: MS Marine Renewables
Cc: MacFarlane M (Marc); MARINEENERGY
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - NatureScot Response
Attachments: 2022 10 13 - Pentland Floating Wind Farm - S36 and ML application - NatureScot Response.pdf

Good Afternoon,

Thank you for consulting us on the above application and for granting us extra time to respond, please find our response attached.

If you have any queries please do not hesitate to get in touch.

Kind regards,
Kim

Kim McEwen | Marine Sustainability Adviser | Sustainable Coasts & Seas
NatureScot | Eastbank, East Road, Kirkwall, Orkney, KW15 1LX | T: [Redacted]
nature.scot | @nature_Scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

From: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Mckay J (John) <John.Mckay@gov.scot>; MacFarlane M (Marc) <Marc.MacFarlane@gov.scot>
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

NatureScot
Scotland's Nature Agency
Buidheann Nàdair na h-Alba

Marc MacFarlane
Marine Scotland – Licensing Operations Team
Marine Laboratory
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

13 October 2022

Our ref: CLC168158

Dear Marc,

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989
MARINE LICENCE UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010
TO CONSTRUCT AND OPERATE THE PENTLAND FLOATING OFFSHORE WIND FARM

Thank you for consulting NatureScot on the Section 36 and Marine Licence applications for the development of the Pentland Floating Offshore Wind Farm, and for granting us an extension to fully consider the application.

Our advice detailed in this letter is in relation to the offshore infrastructure (seaward of MHWS) only as the onshore components are subject to a separate planning application to The Highland Council.

Policy context

NatureScot works in support of the Scottish Government's vision for an energy sector that delivers secure, affordable and clean energy for Scotland[1]. We provide advice in the spirit of Scotland's National Marine Plan[2] and Sectoral Marine Plan[3] for Offshore Wind, which balance the promotion of the sustainable development of offshore wind, whilst protecting our biodiversity and taking account of seascapes, landscapes and visual impacts.

Working within the context of a climate emergency and a biodiversity crisis, we wish to provide advice that is enabling, to secure the right development in the right place with most benefit for

[1] Scottish Government Energy Strategy 2017: https://www.gov.scot/Publications/2017/12/5661/3
[2] https://www.gov.scot/Publications/2015/03/6517
[3] Sectoral Marine Plan for Offshore Wind – published 2020 https://www.gov.scot/publications/sectoral-marine-planoffshore-wind-energy/ and draft Sectoral Marine Plan for Innovation and targeted Oil and Gas decarbonisation offshore wind https://consult.gov.scot/marine-scotland/smp-innovation-and-targeted-oil-and-gas/

climate change mitigation and to halt biodiversity loss. We also consider that any demonstration proposal should not just be about demonstrating engineering /technology capabilities, but also demonstrate good practice in all aspects of its lifecycle, including benefits to biodiversity.

Proposal

This proposal which includes a project design envelope approach, comprises:

- Up to seven wind turbines (up to 300 metre to tip height);
- Up to seven associated floating structures;
- Up to nine moorings for each floating structure (63 in total);
- Up to nine anchors or piles for each floating structure (63 in total);
- Up to seven inter-array cables (dynamic and static);
- Up to two offshore export cables;
- Cable and scour protection, where necessary; and
- An installed capacity of up to 100 MW with a proposed 30-year consent period.

Background

Highland Wind Limited is proposing to demonstrate a floating offshore wind farm with an installed capacity of up to 100 MW. The proposal is an extension to the Dounreay Trì Project that was consented in 2017, but not constructed.

The offshore wind farm will connect to the onshore substation via two export cables, which will in turn connect to the grid at the existing 132-Kv Scottish and Southern Energy (SSE) Dounreay Substation.

Operation and maintenance activities are expected to be coordinated from an onshore harbour base located in close proximity to the offshore wind farm. There is no mention of wet storage areas for the wind turbine generators and floating substructures, and indeed if this will be required. Therefore, we have made no assessment of any aspects relating to wet storage. If wet storage is likely to be needed this will require additional consideration.

NatureScot advice

We provide summary advice on each of the key receptors of concern below, with more detailed advice contained within appendices. We provide our final advice for the key receptors except ornithology, for which additional information is required.

Ornithology

We welcome the detailed ornithological impact assessment, and the inclusion of new methods, such as SeabORD in the displacement assessment. We have identified key concerns regarding inconsistencies in apportioning values and subsequent screening out of certain Special Protection Areas (SPAs) without a clear audit trail. We also have further queries which require additional information related to: puffin displacement, collision risk modelling (CRM), and population modelling. Specific details of the additional information required can be found in Appendix 1 and includes the following:

- **We require clarification on which apportioned values are correct for all species and SPAs to ensure the apportioned impacts estimated are accurate, and the predicted impacts can be finalised.**

- **We advise both option 2 and option 3 are included in the CRM assessment for great black backed gull and herring gull.**

- **We advise the puffin displacement assessment should be revised to include the 2km buffer, and the SeabORD outputs should be scaled.**

- **We advise that population modelling outputs are provided for 25, 30 and 50 years, to enable comparison of impacts with other offshore wind farms and which may also help with interpreting the counterfactuals, in particular counterfactual for population size (CPS) which can be sensitive to the model time period.**

This information is required in order for us to provide our final ornithological advice.

Seascapes, landscapes and visual impacts

The proposal will introduce significant adverse effects on the north Caithness and Sutherland coastline within the 'horseshoe' of coast broadly between Strathy Point and Scrabster Hill extending inland approximately by 13 to 15km.

The predicted significant effects are identified at the transition to and within the eastern part of the regionally distinctive coastline of north Sutherland. Whilst these effects do not raise issues of National Interest to NatureScot, we encourage further consideration of the location of the array area within the consented Dounreay Tri area to mitigate effects. Any further design iteration should be balanced with mitigation of significant effects on other sensitive receptors.

We advise there are no predicted significant adverse effects on the integrity of the Hoy and West Mainland National Scenic Area (NSA) or the Kyles of Sutherland NSA.

There are also no predicted significant effects on the Hoy Wild Land Area (WLA). We consider there would be some significant effects on the qualities of the East Halladale Flow WLA 39, but that these do not raise issues of National Interest.

Should the proposal be consented, there are opportunities to explore different colouring of the turbines (as part of the deployment function as a demonstration site) which could potentially be explored in consultation with other relevant parties.

We provide detailed seascape, landscape & visual impact advice in Appendix 2.

Marine mammals and other megafauna

We agree with the EIA conclusions, for both this project alone and when considered cumulatively. We also agree with the Habitat Regulation Appraisal (HRA) conclusions.

We provide detailed marine mammal and other megafauna advice in Appendix 3. This includes advice on what additional work may be required post consent including: the production of a Piling Strategy should piling be used, the development of a marine mammal mitigation plan, European Protected Species (EPS) licencing, and post consent monitoring for operational noise and potentially for entanglement.

Other natural heritage interests

Marine physical processes

We agree that given the location of the proposal area, the low sensitivity of the affected seabed and the choice of landfall location and method, the EIA Report identifies no significant effects in terms of physical processes.

However, the following error causes under-estimation of hydrodynamic change, which may result in under-estimation of effects on receptors, both for physical processes and other receptors, such as benthic ecology. Table 7.19 deals with predicted reduction in near-seabed tidal flow downstream of cable protection. The figures of between 0.01 and 0.03 in the 'percentage change' column are not actually percentages, but *absolute* changes. In fact the reductions in tidal flow predicted within the table are up to three orders of magnitude higher, at ca.10%. This has the most potential to be substantive within the export corridor, where seabed sediment is more mobile due to shallower depths.

We advise that Table 7.19 is updated with the correct figures, and further consideration is given to the conclusions for receptors that may be impacted and included within the post consent cable plan for the array area and export cable corridor.

Benthic ecology

All relevant impacts to benthic ecology have been identified and assessed, and we agree with the conclusions that impacts are either minor or negligible, based on receptors having low sensitivity, or where sensitivity is higher, the impacts are highly localised and therefore insignificant.

In addition, we confirm there are no relevant designated sites for benthic features within the likely range of impacts.

Our understanding of electromagnetic field (EMF) effects is poor as highlighted in Section 9.5.6, especially around subsea and dynamic cables associated with floating wind farms. We are aware of Marine Scotland proposals to carry out infield measurement of EMF to better understand impacts on benthic and fish species. Therefore, any input this project could assist with, either from project measurements or contributions to this wider work, that can validate the assumptions in the EIA Report and inform future assessments would be very beneficial.

Fish and shellfish

We have reviewed the EIA Report with respect to marine fish and shellfish species of conservation importance, including diadromous fish species, and all relevant impacts have been identified and assessed. We agree with the conclusion that impacts are either minor or negligible and based on the available evidence (in which there are gaps) agree with the conclusion of no significant effect.

In addition, we have reviewed the HRA with respect to migratory fish and agree with the conclusions presented.

Climate change and carbon

We welcome the standalone chapter on climate change and carbon, and in particular the blue carbon assessment, carbon assessment, and the consideration of the proposal in-combination with the projected changes in climate.

Removal of marine growth is mentioned as an embedded mitigation measure specific to climate resilience. If the removal of marine growth is required, and the growth is released into the environment, then further advice should be sought from Marine Scotland as this may require a licence.

Although we agree with the conclusions of the blue carbon assessment, which considers impacts to kelp beds and peat deposits, it is worth noting that released carbon may not be integrated into the sediment transport regime in the long term. Furthermore, although the proposal is unlikely to affect the carbon sequestration potential of the immediate seabed and associated habitats, there will be loss of carbon from the disturbance of these habitats / deposits, which would affect the blue carbon assessment.

Mitigation

We note that the applicant commits to embedded mitigation and monitoring measures (see Table 5.3), and advise that these commitments are secured in any consent.

Conclusion

We provide final advice for the key receptors except ornithology. We require additional ornithological information, detailed above and in Appendix 1, in order to provide final advice.

In addition to requiring the additional information to assist our assessment and advice, we also advise that as consideration is given through the determination process, any and all opportunities for demonstration are considered. It should demonstrate good practice throughout its lifespan, not only in the sense of engineering and technology, but in demonstrating methods and techniques to reduce environmental impacts and contribute towards closing current knowledge gaps.

Further information and advice

We hope this advice is helpful. If you have any queries please contact Kim McEwen or Erica Knott.

Yours sincerely,

Kim McEwen
Marine Sustainability Adviser
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[Redacted]

Appendix 1 – Ornithology

Combining connectivity and apportioning

In our advice dated 18th March 2022 on the Nature Conservation Appraisal (NCA) screening report (see below), we explicitly raised concerns about the use of apportioning with connectivity and advised against applying the apportioning before assessing the impacts.

We have raised concerns with the approach adopted in the NCA screening report for screening ornithological features, which we have previously raised (meeting on the 16th December 2021). Our main concern is the introduction of apportioning as part of screening for LSE. We consider this introduces an assessment of magnitude to this test. The purpose of screening is to identify those European sites for which an Appropriate Assessment is required. The HRA process requires that this comprises those sites and features where an LSE is expected to arise from the project. The approach taken within Scotland and elsewhere in the UK is that this is a coarse filter; LSE will be assumed to arise where there is the potential presence of an impact pathway. The screening process, therefore, examines potential connectivity between the activities assumed to occur through the development and the qualifying features of European site(s). We acknowledge this approach to screening is highly precautionary as no judgement is made about the likely magnitude of any impact arising from the project, just that a pathway for an impact to occur is assumed to exist. However, this is being applied UK-wide and follows European case law. The extent to which that connectivity will lead to an adverse effect on each site is then considered in more detail at a later stage of the HRA process. Our recommended approach to screening is that of defining the 'long-list' of SPAs and features that have connectivity (as defined by mean-max foraging range plus on standard deviation presented in Woodward et al. 2019; with exceptions for gannet, razorbill and guillemot). This long list can be revised by consideration of 'at-sea' distances as a biological sense-check for species that are known to fly around land.

While we note that the long lists have been included within Appendix 12.2, the inclusion of apportioning prior to quantifying the impacts resulted in making it hard to follow the assessment process. For example, within Chapter 12 it is somewhat confusing to have a list of "key SPAs" tabulated (e.g. Table 12.3-12.9) before including the wider conservation status and designation information within Table 12.10. We were first, unable to determine the rationale for which SPAs were chosen as the "key" SPAs, and subsequently noticed discrepancies between the apportioned values presented in the different chapters and appendices (noted below). This meant it has been difficult to follow the audit trail of what the impacts were for SPAs that were calculated to have a (small) level impact, but this wasn't quantified.

We note the following differences in the apportioned weighting between Chapter 12 and Appendices 12.2, 12.3 and 12.4:

- **Kittiwake for Marwick Head SPA** (0.025 in Chapter 12 and Appendix 12.3, 0.026 in Appendix 12.2)
- **Guillemot for Sule Skerry and Sule Stack SPA** (0.040 in Chapter 12 and Appendix 12.5, 0.004 in Appendix 12.2)
- **Razorbill for West Westray SPA** (0.153 in Chapter 12 and in Appendix 12.4, 0.015 in Appendix 12.2)
- **Fulmar for North Caithness Cliffs SPA and Hoy SPA** (0.890 in Chapter 12, 0.925 in Appendix 12.2 and 12.4)
- **Gannet for Fair Isle SPA** (0.011 in Chapter 12, 0.027 in Appendix 12.2, 12.3 and 12.4)

We require clarification on which are the correct values for all species and SPAs to ensure the apportioned impacts estimated are accurate.

We also note the following SPAs with impact apportioned to them in Appendix 12.2 were not listed in Chapter 12, Tables 12.3-12.7, or included within the collision or displacement analyses (although these were included in the HRA Report):

- Kittiwake - Hoy, Handa, Rousay, Copinsay and Troup, Pennan and Lion's Head SPAs
- Guillemot – Copinsay, Rousay and Calf of Eday SPAs
- Razorbill – North Rona and Sula Sgeir SPA
- Puffin - Cape Wrath, Hoy, Fair Isle, Foula and Handa SPA
- Fulmar - East Caithness Cliffs, Fair Isle, Cape Wrath, Copinsay, Rousay, Foula SPAs

Also, within the HRA Report (but not any other documents) apportioning for gannet includes the Seas off St Kilda SPA. However, collision and displacement impacts for marine SPAs are undertaken at a breeding colony level and, therefore, by including this site the impacts apportioned to the breeding colonies will be underestimated.

The inconsistency between which sites are included within different chapters and appendices is confusing and could be misleading. While we acknowledge some of the impacts predicted to these SPAs are small, we are unclear if these estimates are correct. We also advise that for transparency in the HRA, and for any future cumulative impact or in-combination assessments, these should be clearly and consistently reported throughout the relevant chapters and appendices audit trail.

EIA Report - Chapter 12

Table 12.14 provides information to determine the overall impact sensitivity based on conservation value, vulnerability and recoverability. We note the use of regional population trends, but it is not clear which region or which source is used, noting that species such as guillemot can vary between regions.

We agree with the approach to assess Arctic tern through the EIA, and that they are scoped out of the HRA.

Highly Pathogenic Avian Influenza (HPAI)

We welcome the inclusion of a summary of the ongoing HPAI outbreak and qualitative assessment on HPAI within this assessment. However, due to the outbreak being an ongoing mortality event, with continually emerging evidence, it is currently not possible to reach the conclusion that levels of mortality predicted from any offshore development would "not likely cause additional pressures to seabird colonies on top of the impacts caused by avian flu".

Wildfowl and waders

We acknowledge that the migratory collision research project is yet to be published and, therefore, specific assessment of collision risk is currently not possible. However, we had expected to see more qualitative discussion of information from the WWT (2014) report on migratory pathways. For example, the EIA Report acknowledges a number of species which may potentially migrate over the PFOWF Array Area, but does not consider the destinations of those species.

Petrels and shearwaters

We do not agree that it is possible to conclude "that artificial lighting which could potentially attract species into the PFOWF Array Area should not in any way increase their exposure to collision risk". The key lighting elements of potential concern in the operational phase are

navigational and aviation lighting, and we advise that the Lighting and Marking Plan is used to minimise these impacts.

Seabird species that may be at particular risk of attraction to and disorientation by artificial lighting are storm petrels and shearwaters. All aerial surveys are restricted to daylight hours such that nocturnally active birds cannot be detected. In the baseline characterisation data there are incidental observations of Manx shearwaters, but neither storm petrels nor Leach's storm petrels are recorded. Given the ground sample distance (GSD) of 2cm, we cannot be certain that this means no birds were present, noting that we are aware from other surveys that storm petrels have been detected using this same method during daylight DAS.

Deakin *et al.* (2022)[4] highlights that our understanding of attraction and disorientation risks to shearwaters and petrels posed by lighting at sea away from colonies is poorly understood, as are the implications of any such attraction with respect to assessment of associated collision (or displacement) associated with offshore wind farms. We also lack information on responses to different colours or intensity of lights although "it is likely that the cones of Manx shearwaters have greater sensitivity to blue than red light" and "Experiments to examine the response of adult Manx shearwaters in flight over the colony to different intensities and wavelengths of light showed that birds were more responsive to (avoided) bright white than dim white light and showed greater avoidance of blue and green light than red light (Syposz *et al.*, 2021a[5]). There was no difference in the birds' behaviour when exposed to red light compared to no light. These results indicate that Manx shearwaters have greater sensitivity to light of shorter wavelengths (blue and green) than long (red)" (Deakin *et al.* 2022). There is also evidence that use of flashing rather than steady lights reduces attraction risk (Deakin *et al*. 2022 - Table 4). So, the available evidence indicates that use of red flashing aviation lighting is unlikely to significantly impact shearwater behaviours. The potential effects of the navigation lighting are unclear as the colour is not specified, and further clarification is sought on this in a Lighting and Marking Plan.

The greatest potential concern for marine birds around lighting at Pentland Floating Wind Farm may be associated with lighting on vessels, particularly in the construction phase, with associated risk of birds being attracted and then disorientated such that they become stranded on vessels. While the limited evidence suggests that this may potentially be more of an issue for storm petrels than shearwaters (Deakin *et al*. 2022), there could be concerns around extensive nocturnal vessel activity in an area used by large numbers of shearwaters at certain times of year.

We recommend there could be value in working to develop associated protocols for reducing construction vessel lighting where feasible (e.g. through use of blinds on accommodation portholes) and for the handling and release of stranded birds on vessels in order to mitigate any such risk.

Collision

At scoping we advised that options 2 and 3 should be presented for all CRM species with worst case and most likely scenario. We note option 2 has not been presented for great black-backed gull or herring gull. ***We request both option 2 and option 3 are included in the CRM assessment for great black-backed gull and herring gull*.**

[4] Zoe Deakin, Aonghais Cook, Francis Daunt, Aly McCluskie, Nicola Morley, Emma Witcutt, Lucy Wright and Mark Bolton (2022) A review to inform the assessment of the risk of collision and displacement in petrels and shearwaters from offshore wind developments in Scotland (unpublished report to MSS);

[5] SYPOSZ, M., PADGET, O., WILLIS, J., VAN DOREN, B. M., GILLIES, N., FAYET, A. L., WOOD, M. J., ALEJO, A. & GUILFORD, T. 2021a. Avoidance of different durations, colours and intensities of artificial light by adult seabirds. Scientific reports, 11, 1-13.

We are aware that fulmar, Arctic tern and great skua have not previously had collision assessments undertaken in Scotland. Within the CRM tool there are no default values for flight speed provided for these species. It is not clear in Appendix 12.3 which references have been used to inform the parameters for the CRM of these species. We have made the assumption that for Arctic tern - Alerstam *et al.* (2007)[6] and for fulmar and great skua that Pennycuick (1997)[7] have been used to inform the assessment. However, we request confirmation that this is correct or that clarity on which parameters have been used for these species is provided.

Our understanding is the mortality estimates are the number of individuals, noting that in HRA Report Table 9.5 appears to have Breeding Season and BDMPS column titles mixed up.

We note the use of 0 tidal offset due to floating wind farm.

Overall we are largely content with the methodology undertaken. However, as mentioned above, we have some queries over the apportioning which may have implications for the predicted impacts.

Displacement

We welcome the use of SeabORD in the breeding season. SeabORD has been undertaken for kittiwake, guillemot, razorbill and puffin using the distance decay function and a uniform prey distribution, as tracking data are unavailable in this location. We understand the approach taken to assess North Caithness Cliffs SPA separately due to geographic separation of the SPA sub-sites/components. We are also content with the advice from the tool developers, UK CEH, for scaling of results where the models included a proportion of the actual population.

We disagree with the statement in paragraph 46 of Appendix 12.4 that "there are zero impacts predicted on adult survival rates during the breeding season and minimal mortalities predicted". This is imprecise, as, if there are mortalities predicted then the adult survival rate will change even if it is minimally. Therefore, we advise these adult survival rate values should be provided.

In the HRA Report, Table 9.6, the SeabORD "estimate" is presented and refers to the "displacement value". While these values are provided within the Displacement Appendix 12.4, it would be more helpful to provide detail on specific metrics presented in the EIA chapter and HRA Report, i.e. is it a mortality rate? The Displacement Appendix summarises the key outputs for each species, but does not provide a total for the North Caithness Cliffs SPA as a whole.

Displacement apportioning in some parts for kittiwake in the breeding season misses out Marwick Head, which according to Table 10 in the connectivity apportioning Appendix 12.2 has a weighting of 0.026 and is greater than the weighting of Cape Wrath. We also note that it appears that displacement is only being assessed for the "key SPAs" and does not include Hoy, Handa, Rousay, Copinsay and Troup, Pennan and Lion's Head SPAs.

We strongly advise that the apportioned values are checked and corrected if necessary, so the predicted impacts can be finalised.

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[6] Alerstam, T., Rosén, M., Bäackman, J., Ericson, P.G.P., and Hellgren, O. 2007. Flight speeds among bird species: allometric and phylogenetic effects. *PLoS Biol.* 5(8): e197

[7] Pennycuick, c. (1997) Actual and 'optimal' flight speeds: field data reassessed. J Exp Biol: 200(17) 2355-2361

Puffin

We have concerns about the approach of excluding the 2km buffer for the puffin displacement assessment. All species taken forward to the matrix stage of displacement assessment should be assessed against impacts to development site plus an appropriate buffer. This is because displacement can occur at a distance away from the offshore wind farm footprint. For most species, including puffin, the buffer should be 2km outside the wind farm footprint. It is noted that the buffer included a high density of puffin in the June surveys. Given the proximity to the North Caithness Cliffs puffin colony, and the large fluctuation in attendance around colonies, it is highly likely that the birds are using the area for self-maintenance, and not considered an "anomaly". Therefore, we advise that the displacement assessment includes puffins within the 2km buffer.

In reviewing the population estimates for puffin and those used in the SeabORD assessment, we noted that the conversion factor used for correcting guillemot and razorbill individuals to breeding pairs (referred to as the auk conversion factor) had also been applied to puffin. The literature on this correction factor is only for guillemot and razorbill. We acknowledge that not making this clear in our response to a query regarding the auk conversion factor was an oversight. Puffin are more difficult to get an accurate estimate of breeding pairs due to the fluctuations in attendance at colonies by adults. They may be recorded as AOS (adults on site), AOB (adults on burrows) or IND (individuals) (Walsh *et al*. 1995[8]). However, we note that there is no available conversion factor for puffin and the number of individuals is used as a proxy for breeding pairs (e.g. Hughes *et al*. 2018[9]), which may be an overestimate. We therefore would advise the SeabORD outputs for puffin are scaled using the same approach as was used for guillemot.

We advise the puffin displacement assessment should be revised to include the 2km buffer, and the SeabORD outputs should be scaled.

Offshore export cable

The route of the offshore export cable goes through the North Caithness Cliffs SPA at Melvich. We note in Section 9.10.2.1 of the HRA Report it refers to "Melvich SPA sub-site", however it should be referred to as a component of the North Caithness Cliffs SPA.

The information for assessing the ornithological impacts of the offshore export cable is minimal, with no information provided on the temporal scale of the works (either in terms of when it would likely be undertaken or how long it may take). While spatially the assessment acknowledges that <0.05km^2 of habitat loss will occur, it is unclear which habitats these might be. Given that this is occurring within the extension of a colony SPA, these areas are important for maintenance behaviours for breeding seabirds. It would be helpful to compare with available survey data to understand which species have been seen in the area where the intended cable route is proposed, and if the cable laying could be undertaken out with the breeding season to mitigate any disturbance. It is acknowledged micro–siting will occur, and the Cable Plan (CAP) and Cable Burial Risk Assessment (CBRA) will include the final route and cabling methods. This should also aim to minimise and mitigate any impacts to the SPA.

Population Viability Analyses (PVA)

The population models used for the PVA used the Natural England PVA tool. These models are in accordance with currently recommended methods to estimate population impacts. The impacts of collision, displacement and barrier effects need to be considered in the context of relevant SPA

[8] Walsh et al. 1995. *Seabird monitoring handbook for Britain and Ireland*. JNCC/RSPB/ITE/Seabird group, Peterborough.
[9] Hughes et al. 2018. A census of Atlantic Puffin in Orkney, UK. *Seabird*, 31: 56-63.

breeding colonies, particularly where the assessed effects exceed a change to the adult annual survival rate of 0.2 percentage point change. We note this threshold has been applied but should be reviewed in light of the advice we have given above regarding apportioning.

Population models give outputs for 30 year and 50 year timespans. However, we advise that 25 years and 50 years should be used. When calculating population growth rates, the first five years of simulations are discarded, as per scoping recommendations, to remove the influence of starting conditions. The use of 30 years rather than 25 years prevents the comparison of impacts with other developments that have routinely used a 25 year runtime. We understand the 30 years was presented due to the licence period.

Therefore, we advise that population modelling outputs are provided for 25, 30 and 50 years, to enable comparison of impacts with other offshore wind farms and which may also help with interpreting the counterfactuals, in particular counterfactual for population size (CPS) which can be sensitive to the model time period.

HRA comments

Note that in Section 9.4 - approaches to assessment – of the HRA Report, it states that "conservation objectives follow a standard format across all SPAs". However, it should be noted that the marine SPAs have slightly different conservation objectives.

Please see our comments above in relation to HPAI.

In-combination/cumulative impacts

Apart from wind farms in the Moray Firth cluster, kittiwake displacement has not previously been undertaken in other offshore wind farm assessments. This application has not recalculated displacement values for these other North Sea offshore wind farms. While we are likely to recommend this is undertaken for new applications going forward, this aspect of our advice is still under development and will be finalised once the Cumulative Effects Framework (CEF) is available. Therefore, we are content with the approach taken here.

A discrepancy between Hornsea 4 and Moray West collision mortality numbers (for North Sea apportioning in the non-breeding season – Table 9.18 in the HRA Report) has been identified, and it has been proposed to use the lower values in Moray West. As the Moray West values have been accepted for consent, we are content for these to be used within the assessment.

Our advice on in-combination/cumulative impacts will be updated once the apportioned values have been reviewed and confirmed.

Appendix 2 – Seascape, landscape and visual impacts

Our advice focusses on potential effects on the National Scenic Area (NSA) and Wild Land Area (WLA) resource and any identified regionally distinctive landscape. No comment is made on the onshore element or grid connection of the proposal as it is not sited within any national landscape designation nor is likely (by virtue of proximity and scale of development) to significantly affect any of the special qualities or attributes for which these landscapes are designated.

Consideration has also been given to the regionally distinctive coastline where it transitions at Portskerra/Melvich from the settled landscapes of Caithness to the more rugged uninhabited moorland and indented coastline of north Sutherland.

The principle of developing an offshore wind farm at this site has been established through the consent of Dounreay Tri. The SLVIA for the proposal has been based on the baseline scenario of an undeveloped seascape.

The maximum design envelope of 7 turbines up to 300m blade tip will give rise to more extensive landscape and visual effects that the two previously consented 201m blade tip turbines (Section 16.14).

Turbines are to be coloured light grey reflecting industry standard, but if considered beneficial other colours could be explored reflecting the status of the proposal as a test facility (Section 5.12.3).

Potential significant landscape and visual effects

Comparison of blade tip and hub height visibility (Figures 16.6b and 16.7b) indicate similar extents of visibility, mainly concentrated within the horseshoe of coastline and hinterland between Strathy Point and Brims Ness. Inland, predicted visibility radiates out in narrow bands associated along the more elevated ridges of landform. There is an ever increasing fragmentation of modelled visibility out to approximately 30km radius, where it markedly drops in extent and there is predicted almost continuous visibility from Strathy Point eastwards to Brims Ness.

The EIA Report assessed that there would be significant effects on 4 out of the 5 Landscape Character Types (LCTs) within the SLVIA study area, out to a radius of 13km including on:

- *Sandy Beaches and Dunes LCT*
- *High Cliffs and Sheltered Bays LCT*
- *Sweeping Moorland LCT*
- *Coastal Crofts and Small Farms LCT*

In more detail the EIA Report assessed that out of the 16 representative viewpoints there was predicted to be significant effects on 5 viewpoints all lying within a 13km radius of the proposal. These locations being:

- *VP1 Beinn Ratha (within East Halladale Flows WLA)*
- *VP2 Strathy Point Carpark*
- *VP3 Portskerra/Melvich*
- *VP4 Drum Hollistan layby*
- *VP5 Sandside Head*

In the EIA Report sequential effects were predicted for east bound road users of the A836 between Strathy and Reay (~12km), whilst west bound users may be affected between Hill of Scrabster and Forss (~5km) and then Reay to Melvich (~10km).

We broadly agree with the assessment of significant landscape effects as described above. However, we consider that significant visual and sequential effects would extend further. For VP6 St Mary's Chapel, whilst the location of this view is next to the operational Forss wind farm, the open sea and rocky cliff are a clear natural focus in the view into which directly all 7 turbines would be introduced at just over 10km. Notwithstanding the context of the view, from the proximity and direction of the existing seaward focus, we would consider this to be significant.

We consider the proposal will introduce significant effects for VP10 A836 East of Forss (representative of continually wide open views focussing on the land: sea: sky horizon travelling west from Scrabster ~15km distance). This is by virtue of the existing landscape context and key foci, and the scale of the 300m structures which on approaching Forss appear commensurate in scale with the significantly closer, but smaller Forss Wind Farm. The introduction of turbines into the previously undeveloped waters erode the simple clear transition between water and land, such that the turbines from this representative view appear extending across this sensitive transition.

We also consider that the effects of artificial lighting can impact on both landscape character and visual receptors. In particular, where dark skies are a component of the landscape character (as suggested in Figures 16.28 and 16.29) artificial lighting may introduce significant effects which need to be proportionately assessed. In addition, for many remote landscapes with wildness characteristics (including WLAs) they often have fewer visitors, which heightens their secluded and remote qualities, raising the strength of the wildness character. Therefore, the number of people visiting a WLA is typically less relevant coming to judgements of effects (reflecting our WLA guidance[10]).

The introduction of lighting would effectively increase the magnitude of change of significant effects by extending the period of effects from daytime into night-time (where the appreciation of dark skies is especially strong). This is most acute on the section of coast between Strathy Point and Scrabster where there are clear views to the full elevation of the turbines and all lights.

With regard to sequential effects we consider that the assessment of significant effects, in addition to those identified in the EIA Report would also be significant on the section of the A836 travelling westwards from Forss to Reay. Furthermore, the proposal would appear in an, as yet, undeveloped area, in the opposite direction to other existing terrestrial wind energy, such that you would be travelling between wind energy developments. This would introduce a further ~10km of significant adverse effects on this route.

Cumulative landscape and visual effects

Three cumulative scenarios were assessed within Section 16.8 of the EIA Report.

Significant cumulative effects are predicted to be more widespread on *Sandy Beaches and Dunes LCT, Sheltered Bays LCT, Sweeping Moorland and Coastal Crofts LCT* as well as Local Coastal Character Areas (LCCA). However, it is difficult to ascertain the likely levels of effects, as the visualisations indicate horizontal bands and distances only, and therefore likely cumulative significant effects are difficult to judge from the information provided.

Significant cumulative effects were predicted for the 5 viewpoints above, with the exception that only scenarios 2 and 3 would affect VP3 Portskerra and only scenario 3 would affect VP2 Strathy Point.

[10] https://www.nature.scot/doc/assessing-impacts-wild-land-areas-technical-guidance

Significant cumulative effects were also predicted for the A836 eastbound under scenario 1 and west bound under scenario 1 and 2.

We broadly agree with the level of cumulative effects with the caveat that effects would be greater where we have identified a higher level or extent of significant effects arising from the proposal as described above. Furthermore, for scenario 3, given the very limited information available for the West of Orkney Wind Farm, it is difficult to ascertain whether the widespread levels and extents of additional significant effects assessed in the EIA Report would be realised. For most receptors the proposal would be sitting in front of and in much closer proximity to the Sutherland/Caithness coastline.

In summary we consider there would be significant adverse effects on coastal receptors (coastal, visual and cumulative, including night-time) within the 'horseshoe' of the coast broadly between Strathy Point and Scrabster Hill. These significant adverse effects are concentrated along quite a substantial section of coastline out to approximately 13-15km inland where visibility is predicted.

National Scenic Areas (NSAs)
We agree with the conclusions in the EIA Report that there is unlikely to be a significant effect (individual or cumulative) on the integrity of the Kyle of Tongue or the Hoy and West Mainland NSAs.

Within the Kyles of Tongue NSA views represented by VP13 A' Mhoine reflect those from the settlement of Talmine on the Melness peninsular. These views capture the dramatic indented coastline and inshore islands and skerries to the north east across Tongue Bay to the offshore island at Eilean Nan Ron. In turn, this viewpoint illustrates the coastal scenery and uninhabited character which are recognised Special Qualities (SQs) of the NSA. In clear conditions, the blades and 5 hubs of the 7 turbines would appear sitting above the usual horizon of the Eilean Nan Ron, which is a key focus in the view. Whilst the view is highly sensitive and characteristic of the type of experience of local residents and the SQs of the NSA in this locale - we agree with the EIA Report that the magnitude of change (with distances over 30km) is not of a level to introduce significant effects. However, in the event that further design modifications to the proposal layout are pursued, consideration to the location of the turbines with respect to the foreground island is encouraged, to further mitigate localised impacts.

Wild Land Areas (WLAs)
We agree with the EIA Report that there are unlikely to be significant effects (individual or cumulative) on the Hoy WLA, and therefore this is not considered further.

The EIA Report assessed that there would not be significant effects on the East Halladale Flows WLA 39.

The closest point of the East Halladale Flows WLA is 12km to the proposal and in this context we would typically consider that there are unlikely to be significant effects on the integrity of the WLA. However, taking due cognisance of Section 1.2.2 of the EIA Report and as per our Scoping Response, the need for the WLA assessment was considered appropriate given the substantial increase in turbine heights that this proposal would introduce (max 300m to tip height) from the previously consented project. Individually, the development would introduce significant effects on the underpinning landscape character out to 13km and significant visual effects are predicted for Beinn Ratha within the WLA.

The blade tip Zone of Theoretical Visibility (ZTV) illustrates that there would be theoretical fragmented visibility across the northern half of the WLA, out to 20km. Beyond this predicted visibility drops markedly. Within this northern area, bands of visibility are associated with the summits and slopes to Beinn Ratha running continuously along the north and north eastern WLA boundary down to Beinn nam Bad Mor. Eastwards there is visibility locally associated with the uplands at Sean Airigh and in an east to west band extending between Blar Mor eastwards to Cnoc an Fhuarain Bhain.

There are predicted high scores on the individual NatureScot datasets of *Naturalness, Remoteness and Lack of Modern Artefacts.* There are lower scores for *Rugged and Challenging Terrain*, but this dataset models gradient and does not take into consideration challenging terrain from boggy or low lying moorland, which is the prevalent ground condition here. Overall the area scores highly for *Relative Wildness* as is typical by definition of a WLA.

The proposal introduces wind energy development into a new direction of view to the north, within wider often panoramic or semi panoramic views from within the WLA. This introduces man-made development cumulatively into part of the seascape that contributes to the *awe inspiring simplicity of landscape at the broad scale with a strong horizontal emphasis, wide skies and few foci.* The *remote and discrete interior with limited access and a strong sense of solitude,* experienced will also be significantly and cumulatively affected by the proposal. In addition, the proposal located in the open wide seascape which contributes to the '*remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible',* would also be significantly affected.

Therefore, we consider the introduction of very large scale vertical rotating structures (up to 300m) with lighting, that there are likely to be some additional significant effects on some of the qualities and attributes of the WLA. In particular where the undeveloped open plain of water contributes to the intensity of qualities experienced in the WLA. Furthermore, views across the water plain will be foreshortened such that the proposal may appear closer than in reality. However, at a distance of between 12-20km and with a relatively contained horizontal spread the proposals **are unlikely to significantly affect the integrity of the East Halladale Flows WLA in combination with the existing development.**

North Sutherland regionally distinctive coastline

The sensitivity of the transition between the coastal seaboard landscape character of north Caithness and Sutherland is recognised in The Highland Council sensitivity assessment[11] and the NatureScot response on the Marine Scotland Sectoral Plan[12].

In particular The Highland Council sensitivity assessment cites that there is considered '*no scope for larger scale development to the west of the LCA where it impinges upon experience of the important landscape transition between Caithness and Sutherland. Even wind energy development within 10 to 15km could significantly erode this experience'.* Furthermore, *'To the west the relatively abrupt transition from the more rugged Sutherland landscape character to the open flatter landform of Caithness provides a key gateway and is highly sensitive to windfarm development in the immediate and wider landscape (given wide open views) that would erode the*

[11] THC Onshore Wind Energy Supplementary Guidance - https://www.highland.gov.uk/download/downloads/id/16949/onshore_wind_energy_supplementary_guidance-_currently_adopted_suite.pdf

[12] Sectoral Plan Consultation - https://www.nature.scot/doc/sectoral-plan-consultation-summary-and-design-guidance

clarity of this transition and interrupt experience of moving from one regional landscape to another.

The NatureScot Sectoral Marine Plan for Offshore Wind Consultation Design Guidance[10] reinforces this position by stating that there are sensitivities with respect of the distinctive 'regional' landscape stemming from the abrupt change from the settled agricultural landscape of Caithness to the wilder more rugged grazed heather moorland landscape of North Sutherland. The distinctive mountainous landscape with Ben Hope and Ben Loyal also contributes to this experience.

At Scoping, NatureScot did not raise distinctive regional landscape as a sensitive receptor likely to be significantly affected by the proposal (given the context of consent for a development in this locale) and therefore it has not been assessed in the EIA Report. The advice to follow with regard to this receptor does not raise issues of National Interest for NatureScot. **However, the increased magnitude of cumulative change that the proposal introduces on the Caithness coast as it transitions to Sutherland, imposes a step change in level of significant effects which will influence the capacity of this area to accommodate further terrestrial development.**

The regionally distinctive north Sutherland coastline transitions at Portskerra/Melvich which coincides with and is illustrated by the visualisations for VP3 (with VP2 Strathy Point representing views from within this area).

The proposal is located in the inshore waters (8km northwards) just eastwards of this transition on land. As such, as illustrated by the ZTVs, the proposal would introduce visibility to this proposal on east facing slopes and ridges of the Sutherland coastal landscape and hinterland. Travelling eastwards the proposal will introduce significant adverse effects into the distinctive Sutherland coastline before entering into Caithness. Therefore, significant adverse effects would be concentrated into the eastern extent of the regionally distinctive coastline and in particular within 10km of the gateway transition in character at Portskerra/Melvich. By virtue of the location of the proposal in the open waters just westwards of this transition, whilst significantly affecting part of this coastline (and the transition to Sutherland), this does not fundamentally affect the 'integrity'[13] of this landscape, which is more strongly expressed westwards of Strath Halladale. The proposal does significantly contribute to, and intensifies the already existing significant cumulative effects experienced along the north-western coastline of Caithness.

To mitigate some of the effects on this regionally important transition in character, consideration should be given to the location of the array area within the Dounreay Tri consented project area, moving the array area eastwards. However, in doing so, it is appreciated that this could intensify the already significant effects on the coastal receptors further eastwards in the vicinity of Forss and Reay. As such full consideration should be given to balancing these issues and mitigation of significant effects on other sensitive receptors in any further design iteration.

[13] In this context the term 'integrity' is used to convey a wholeness of experience, rather than specific policy wording.

Appendix 3 – Marine mammals and other megafauna

Summary

As the foundation type is still to be determined, the applicant has considered a worst case scenario. For marine mammals, this is piling during construction, and the potential entanglement risk during operation. Regardless of the foundation type, they have also looked at other activities that may be needed for the project, including any further geophysical and geotechnical surveys, any unexploded ordinance (UXO) clearance activities, as well as vessel activity, dredging, trenching, cable laying and drilling.

We agree with the EIA conclusions, for both this project alone and when considered cumulatively. We also agree with the HRA conclusions.

Additional work that will be required post-consent:

- The developer has committed to the production of a Piling Strategy, should piling be the chosen foundation type, and the development of a Marine Mammal Mitigation Plan.
- Should UXOs be found and required to be cleared, a separate assessment will be submitted. This will include a mitigation and monitoring plan. In this event we expect the monitoring to follow National Physical Laboratory (NPL) Protocol for in-situ underwater measurement of explosive ordnance disposal for UXO (v2. 2020)[14].
- EPS licences for disturbance will be required in the event piled foundations are selected, if further geophysical surveys are needed, and if UXO clearance is required. In the latter case, depending on the charge weight of the discovered UXO, an EPS licence for injury may need consideration.
- If further geophysical surveys are needed, the conclusions of this EIA remain valid only for the equipment characteristics as assessed. If the equipment actually used differs from these assumptions we may need confirmation that the impacts remain the same as detailed here.
- Post consent monitoring may be required for operational noise and potentially for entanglement.

EIA advice

Underwater noise impact assessment

The modelling has been conducted by Subacoustech (Appendix 10.1). We have no substantive comments on the modelling that would affect the conclusions of the EIA Report. However, we provide the advice below for information.

The methodology states the use of the INSPIRE (v5) model. This is a Subacoustech proprietary model and we know this model has been used for a number of offshore renewable developments, in Scotland and further afield. We highlight that any/all models such as these are effectively 'black box' as there is no way for advisors (or other underwater acousticians) to check the detail of the model. We are told that this model is tuned using 80 data sets from noise monitoring that Subacoustech hold. Various iterations of the model have been used for assessments for a number of years, and have been accepted by ourselves and Marine Scotland in previous applications. To aid confidence, graphs are presented that compare measured data and model performance and show a good fit.

[14] NPL Protocol- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/955204/NPL_2020_-_Protocol_for_In-Situ_Underwater_Measurement_of_Explosive_Ordnance_Disposal_for_UXO.pdf

It is not explained (Figure 1.1, Appendix 10.1) why the modelling location at the furthest point offshore was chosen for the model. Choosing this location potentially may underestimate noise levels towards the north coast.

Noise impact modelling uses the worst case piling parameters, in terms of the largest pile diameter and the longest piling duration. The text states that the source level is estimated based on the pile diameter and the blow energy, which is adjusted depending on the water depth (so not using the conversion factor methodology).

The worst case instantaneous PTS range modelled is 560m for the VHF hearing group. The worst case cumulative PTS max range is 27km for the LF hearing group.

Other activities (non-piling) have been assessed using simple spreading equations. Table 5.2 (Appendix 10.1) details the information used. It is not clear why different transmission loss equations have been used. Our understanding is that the 'N' reflects the environment, and therefore should be representative of the location of the proposed activity.

Table 5.3 (Appendix 10.1) details the reduction in source level from the unweighted level. It is not clear how these dB reductions have been calculated. The results from the modelling of cable laying, suction dredging, trenching, rock placement and vessel noise, is that any marine mammal would need to be within 100m from the noise source to accumulate enough noise dose to induce PTS. TTS is considered unlikely.

We are still at early stage in understanding the operational noise from floating offshore wind farms. It has been postulated that noise from floating wind turbines may not be less than fixed foundations, due to the floatation structures resonating. It is likely operational noise monitoring will be required to inform knowledge in this area.

Below is a list of ongoing work that we are aware of monitoring operational noise;

- Fortune project https://supergen-ore.net/projects/fortune
- Information from Hywind Scotland Pilot Park desk study. Statoil ASA http://marine.gov.scot/sites/default/files/marine_noise_desk_study_a100142-s00-tech-003_a01_0.pdf (accessed 16/09/2022) section 5 is a review of Hywind I UWN data
- Jasco – recording at Hywind array – suggest that noise from each turbine is variable and therefore noise recorded from a single device may not be representative. https://www.jasco.com/s/Hywind-Scotland-Sound-Source-Characterisation.pdf (accessed 16/09/2022)

We agree that the risk of PTS/TTS from operational noise is minimal. The issue remains regarding disturbance of animals to the presence of the array, and how much an array may raise the general background noise levels in the area (in concert with other sources relating to the increasing trend in underwater noise and Good Environmental Status).

The underwater noise impact assessment (Appendix 11.1) has been drafted by SMRU Consulting and builds on Subacoustech's underwater noise modelling results.

HiDef conducted aerial surveys for the baseline study, but density estimates have been taken from SCANS III - Block S or K. Where densities have not been available, SMRU used Waggitt *et al.* (2020). SMRU carefully considered the use of Waggitt *et al.* (2020), as this is not generally considered appropriate for quantitative assessment due to uncertainty in weighting and averaging of data, but was used where it was the most cautious estimate. On that basis, with the caveats

stated, we consider this to be a sensible compromise. Seal species densities were taken from Carter *et al.* (2020).

The assessment of significance under EIA Regulations is done by comparison with the marine mammal management units (MUs). This is in keeping with the IAMMWG paper[15] definition of MUs. However, our view is that many of the MUs are UK wide, and therefore unrealistic in terms of management. Since scoping we have started to advise that the UK portion of the MUs as detailed in IAMMWG 2022 is used as the reference population. Our view is that the MUs as described are predominantly based on biologically relevant population units, which are not necessarily practical as a management unit. The use of the UK portion of the MUs would increase the percentage of the population at risk. Nonetheless, it is likely that the percentage of the reference population impacted from this activity would still be low. Therefore, **we agree with the conclusions of significance of effects as summarised in Chapter 11 of the EIA Report, Tables 11.34 and 11.35**.

We note that potential max PTS ranges for piling as predicted by the noise modelling (whilst we appreciate the layering of precaution) are at concerning ranges (Max LF cetacean PTS onset 27km) and will require revisiting in the Piling Strategy once the project envelope is refined in terms of appropriate mitigation.

Likewise for the UXO predictions. These are based on commonly used modelling methodology, again with associated uncertainty relating to age and condition of any UXO target, and resting on the seabed and degree of burial. This also will need to be revisited in the event of UXO clearance being required. We highlight current joint UXO clearance guidance[16] in terms of low noise alternatives to be used in preference to high order techniques.

We acknowledge that in the absence of formal guidance, SMRU have used the effective deterrent ranges (EDRs) from the JNCC Report no. 654 (2020)[17] for disturbance to UXO clearance (26km for high order, and 5km for low noise alternative). They have also presentenced predictions based on the Southall *et al*. 2019 TTS threshold (as described in Southall *et al*. 2007). We agree with the limitations as described in all cases, but our preference remains with the use of TTS. The EDRs are not based on UXO characteristics, or UXO noise data. The TTS threshold, although does not represent the transition from impulsive to non-impulsive, is considered the most appropriate at this time.

Whilst the impact of UXO clearance may be low in EIA terms, **we do not agree with the conclusion of low based on the frequency content.** Robinson *et al.* 2020[18], shows that there is energy potentially beyond 100 kHz. NPL protocol, as referenced above, suggests that at a minimum the nominal frequency range of the measurement kit should be 20Hz to 20kHz, but also mentions that this should cover the frequency range of the receptor of concern.

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[15] IAMMWG paper - https://hub.jncc.gov.uk/assets/3a401204-aa46-43c8-85b8-5ae42cdd7ff3

[16] Joint statement on UXO Clearance - https://www.gov.uk/government/publications/marine-environment-unexploded-ordnance-clearance-joint-interim-position-statement/marine-environment-unexploded-ordnance-clearance-joint-interim-position-statement

[17] JNCC Report no. 654 (2020) - https://hub.jncc.gov.uk/assets/2e60a9a0-4366-4971-9327-2bc409e09784

[18] Robinson et al (2020). Underwater acoustic characterisation of unexploded ordnance disposal using deflagration. Mar Poll Bull 160 111646

Entanglement

The EIA Report concedes that there is uncertainty regarding entanglement. The applicant suggests that they will be checking the moorings at a 'high frequency' initially, but conclude that there will be negligible impact due to entanglement. We tend to agree, but acknowledge the uncertainty, and although the theory and proxies suggest that the risk of entanglement is negligible, we are still at the very early stages of understanding the potential impacts from floating wind technologies. Entanglement is further considered in Section 13.6.2.3 in Chapter 13. This focuses on the potential for gear to be snagged onsite by active fishing, rather than ghost gear, i.e. abandoned, lost discarded fishing gear drifting on the currents becoming snagged. We consider the risk of entanglement in ghost gear is a potential issue, and welcome the willingness to continue discussion on monitoring.

HRA advice

Table 3.4 of the HRA Report details the Special Areas of Conservation (SACs) scoped in for assessment. All are screened in due to location within the relevant management unit to the development and the species. The approach is well presented and uses all relevant and up to date understanding. We agree with the conclusions for all marine mammals considered (bottlenose dolphin, harbour porpoise, harbour seal and grey seal) that there is no adverse effect on site integrity.

For the bottlenose dolphin of the Moray Firth SAC, harbour seal of Sanday SAC, and grey seal of Faray and Holm of Faray SAC, iPCoD modelling was conducted to provide assurance that there would be no detrimental impact to the populations, and in all cases there was no difference in the population trajectories.

Harbour seals in the Orkney area are in decline. However, Sanday SAC is 117km from the development site, and assessment of tagging data show limited connectivity to the development. We agree with the considerations put forward throughout.

Northern District Salmon Fishery Board

MacFarlane M (Marc)

From: Alexa MacAuslan <ndsfbclerk@gmail.com>
Sent: 21 September 2022 11:34
To: MS Marine Renewables
Subject: Fwd: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: Pentland Offshore windfarm 210922.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Good morning
Please find attached a response to the above consultation from The Northern District Salmon Fishery Board. Should you require any further clarification or discussion, please do not hesitate to contact me.

Kind regards
Alexa

Alexa MacAuslan
Clerk
The Northern District Salmon Fishery Board

Tel: [Redacte
email: ndsfbclerk@gmail.com
website: http://northern.dsfb.org.uk

---------- Forwarded message ---------
From: <MS.MarineRenewables@gov.scot>
Date: Wed, Aug 24, 2022 at 10:39 AM
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
To: <MS.MarineRenewables@gov.scot>
Cc: <Rebecca.Bamlett@gov.scot>, <John.Mckay@gov.scot>, <Marc.MacFarlane@gov.scot>

Dear Sir/Madam

ELECTRICITY ACT 1989

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,

Marc

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046

General Email: MS.MarineRenewables@gov.scot

Website: http://www.gov.scot/Topics/marine/Licensing/marine

The Northern District Salmon Fishery Board
The Firs, Berriedale, Caithness, KW7 6HD
Email: ndsfbclerk@gmail.com; Website: http://northern.dsfb.org.uk

21st September 2022

Email: MS.MarineRenewables@gov.scot

Dear Sirs

PENTLAND FLOATING OFFSHORE WINDFARM - SECTION 36 AND MARINE LICENCES APPLICATION - CONSULTATION

Thank you for the opportunity to respond to the above consultation. We have consulted with our Scientific Advisor regarding this and wish to make the following comments.

The Pentland Floating Offshore Windfarm has the potential to affect all of the rivers of the Board's area – partly due to proximity and partly due to the windfarm's location on or near the main migratory routes taken by salmon to and from their ocean feeding grounds. The Board's principal concern re. development relates to the potential barrier effects posed by wind turbine arrays and, in particular, the cumulative effects of sequential arrays being developed near the pinch point on the migration route represented by the Pentland Firth. The risk is that barriers will delay or displace migratory fish.

Chapter 10 of Volume 2 of the Offshore EIAR shows that the developer has failed to engage with the issues that the Board previously raised regarding potential barrier effects. In particular, moving turbine blades will be visible to fish over large areas around the array for epipelagic species like salmonids which swim near the ocean surface. Although the Pentland Floating Windfarm will be relatively small, its potential to contribute to cumulative barrier effects for salmon is significant post the recent ScotWind round. Yet, the risk arising from the visual effects of the moving turbine superstructure has been scoped out of consideration – apparently with the support of MS-LOT (p9).

Unfortunately, no reasoning is given for MS-LOT's position. The developer's position on scoping out barrier effects because of a lack of information (as per Section 10.5.2.1) is unreasonable. For example, the maximum extent and duration of any visual effects of moving turbines are predictable from physical principles alone and curtailed by patterns of power generation, sea-state and cloud cover - all of which can be estimated.

Windfarm construction poses risks to aquatic ecology and many or most of the risks cannot be adequately quantified based on existing knowledge. With global acceleration in the construction of windfarms, it is now recognised worldwide that the way forward must be to acquire new information as these developments proceed in order to avoid repeating mistakes that get made near the outset.

In order to acquire the missing information, it is first necessary to acknowledge the potential risks. Developers, and especially regulators, should therefore engage with stakeholders and assess all the identified risks rather than just ignoring issues as they get raised hoping that they will go away.

In this way, Pentland Floating Offshore Windfarm appears to have been negligent regarding the issues raised by the Board - with the seeming support of MS-LOT as noted above. MS-LOT's position in particular lacks rigour. This is surprising since MS-LOT must surely be aware of current trends in the wider international regulatory context as mentioned above.

Yours faithfully,

Mrs Alexa MacAuslan
Clerk, NDSFB

Northern Lighthouse Board

MacFarlane M (Marc)

From: Adam Lewis <Adam.Lewis@nlb.org.uk> on behalf of navigation <navigation@nlb.org.uk>
Sent: 25 August 2022 09:00
To: MS Marine Renewables
Subject: RE: [EXT] Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: O6_17_747 - NLB Response.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Saved in eRDM

Good morning,

Please find attached the NLB response to the above applications.

Regards

Adam

Official - Northern Lighthouse Board Email

Adam Lewis
Coastal Inspector

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: [EXT] Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
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APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into

consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Northern Lighthouse Board

84 George Street
Edinburgh EH2 3DA

Tel: 0131 473 3100
Fax: 0131 220 2093

Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk

Your Ref: PFOWF - Section 36 & Marine Licences Application
Our Ref: AL/OPS/ML/O6_17_747

Mr Marc MacFarlane
Marine Licensing Casework Officer
Marine Scotland – Marine Planning and Policy
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

24 August 2022

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Application for Consent Under Section 36 of the Electricity Act 1989 (as amended) and Marine Licences Under Part 4 of the Marine (Scotland) Act 2010 to Construct and Operate Pentland Floating Offshore Windfarm, off the Coast of Dounray, Caithness

Thank you for your e-mail correspondence dated 24th August 2022 relating to the application submitted by **Highland Wind Limited** for consent to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at the site off the coast of Caithness.

Northern Lighthouse Board note Chapter 14 (Shipping and Navigation) of the Environmental Impact Assessment report, and the associated Navigational Risk Assessment, and welcome the commitment by the applicant to engage fully with NLB and MCA with regard to all aspects of navigational safety across the lifespan of the windfarm.

NLB have no objection to the proposed development and operation of the Pentland Floating Offshore Wind Farm project.

Yours sincerely
[Redacted]

Peter Douglas
Navigation Manager

Orkney Harbours

MacFarlane M (Marc)

From: harbours <harbour@orkney.gov.uk>
Sent: 04 October 2022 16:51
To: MS Marine Renewables
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Classification: NOT PROTECTIVELY MARKED

Good Afternoon,

No response from any officers here.

Kind Regards
Chloe

Marine Services and Transportation
Orkney Islands Council
Harbour Authority Building
Scapa, Orkney
KW15 1SD
Tel: 01856 873636
Email: harbours@orkney.gov.uk
Web: www.orkneyharbours.com

ORKNEY ISLANDS COUNCIL
Marine Services & Transportation

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 04 October 2022 15:58
To: MS.MarineRenewables@gov.scot
Cc: Ben.Walker@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: FW: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Good afternoon,

The consultation period for the works described below has now concluded. As MS-LOT has not received a response from yourself, a nil-return will be assumed.

Kind regards,
Marc

From: MS Marine Renewables
Sent: 24 August 2022 10:40
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Mckay J (John) <John.Mckay@gov.scot>; MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
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The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Orkney Islands Council

MacFarlane M (Marc)

From: Shona Turnbull <Shona.Turnbull@orkney.gov.uk>
Sent: 21 October 2022 10:11
To: MS Marine Renewables
Subject: 22/314/S36 con Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application -

Objective: -1

Classification: NOT PROTECTIVELY MARKED

Thank you for consulting OIC on this proposal. For clarity, this proposal lies outwith the boundary of the Orkney Islands marine region therefore the delegate is not a statutory consultee. As due consideration has been given to the likely visual impacts of the proposal on Orkney landscapes, we have no further comments to offer.

Regards,
Shona

Dr Shona Turnbull
Marine Planner
Orkney Islands Council

Development & Marine Planning

Working from home, so email is the best contact

Royal Society for the Protection of Birds

MacFarlane M (Marc)

From: planning, scotland <scotland.planning@rspb.org.uk>
Sent: 05 October 2022 18:56
To: MS Marine Renewables
Cc: Walker B (Ben); Mckay J (John); MacFarlane M (Marc); Peter Moore
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: 20221005 RSPB Holding Response PFOWF.pdf

Hi Marc,

Thank you for consulting RSPB Scotland on the above application and agreeing an extension of time for comments.

We wish to submit a holding objection due to concerns over how the Population Viability Analysis (PVA) model has been run and questions about the parameters used in the models. We also have concerns about the predicted outputs for the North Caithness Cliffs SPA kittiwake population which we consider mean it is not possible to rule out an Adverse Effect on the Integrity of this Special Protection Area (SPA) from the impacts of this project either alone or in combination. We have similar concerns for other species, including but not limited to puffin.

The applicant has been in contact with us and we hope to meet them to discuss the modelling. I've copied Peter Moore (Consents Manager) into this email so he has the response too.

Best wishes,

Catherine

Mr MacFarlane,
Marine Scotland Licensing Operations Team
Marine Scotland
By email: MS.MarineRenewables@gov.scot

5th October 2022

Dear Marc,

Application for consent under Section 36 of the Electricity Act 1989 (as amended) and Marine Licences under Part 4 of the Marine (Scotland) Act 2010 to construct and operate Pentland Floating Offshore Wind Farm

Thank you for consulting RSPB Scotland on the above application and agreeing an extension of time for comments. We understand the proposed development would consist of up to 7 floating wind turbines approximately 7.5km offshore (each with a maximum of 9 anchors) in water depths of 67-102 meters as well as 2 export cables and associated infrastructure. It would generate up to 100MW of electricity, connect to an existing substation near Dounreay Nuclear PowerStation and would have an operational lifetime of 30 years. Should the proposal gain connect and go ahead, we understand the earliest full commissioning date would be towards the end of 2026.

We wish to submit a **holding objection** due to concerns over how the Population Viability Analysis (PVA) model has been run and questions about the parameters used in the models. This is aside from the predicted outputs for the North Caithness Cliffs SPA kittiwake population which we consider mean it is not possible to rule out an Adverse Effect on the Integrity of this Special Protection Area (SPA) from the impacts of this project either alone or in combination. We have similar concerns for other species, including but not limited to puffin.

Our main PVA model related concerns:

- Validity of results of in-combination assessment obtained from combining Matrix and SeaBord approaches
- Application of the matrix approach to describe impacts on juvenile birds which is contrary to the Statutory Nature Conservation Bodies (SNCB) advice (see Joint SNCB Interim Displacement Advice Note)

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Edinburgh
EH12 9DH

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Twitter: @RSPBScotland
rspb.org.uk

- Exclusion of buffer for some species, contrary to SNCB advice (see Joint SNCB Interim Displacement Advice Note)
- Divergence from displacement mortalities recommended during the pre-application process in the matrix models (despite being provided in the displacement analysis -Appendix 12.4)

We have been in contact with the applicant and are looking to attend a meeting with them and HiDef (who carried out the modelling) to explore this situation regarding the modelling and will provide further comments following this.

We also wish to highlight that we remain disappointed with the deviation from the normal method of using two years' worth of site-specific data collected within the last five years to inform the assessments. Given mobility of seabirds and their prey in response to weather, sea conditions, marine productivity, and other factors, having less than two years of recent survey data risks not being sufficient to characterise temporal and spatial variability in seabird numbers within the survey area. The first year of site-specific surveys were completed in December 2015. This data is now over five years old limit which reduces the reliability of this dataset. We raised this concern in our response to the Environmental Impact Assessment (EIA) Scoping request (29th January 2021). The Scoping response (28th September 2021) paragraph 5.7.2 also highlights the need for the Developer to provide a sufficient and scientifically robust justification for deviating from the normal best practice. We do not consider this has been provided. We also disagree with the assertion of no impacts beyond the life span of the windfarm as populations take time to recover post impact.

Notwithstanding the comments above, we are pleased to see that the minimum air gap in the worst-case scenario development has been raised to 35 meters (as opposed to 22 meters at the scoping stage). Should consent be granted for this development, we would welcome this minimum airgap being secured though the consent process.

I trust these comments are of assistance and hope to provide more comments following our discussion with the applicant.

Yours sincerely,

[Redacted]

Cc: Peter Moore (Consents Manager) (pem@cop.dk)

RSPB Scotland Headquarters
2 Lochside View
Edinburgh Park
Edinburgh
EH12 9DH

Tel: 0131 317 4100
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Royal Yachting Association

MacFarlane M (Marc)

From: Pauline McGrow <Pauline.McGrow@ryascotland.org.uk>
Sent: 26 September 2022 13:29
To: MS Marine Renewables
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Marc,

RYA Scotland is content that our comments have been taken account of in the Navigational Risk Assessment and elsewhere and we have no further comments to make.

Kind Regards

Pauline

Pauline McGrow
Senior Administrator
Mob: [Redacted]

Royal Yachting Association Scotland
T: 0131 317 7388
E: pauline.mcgrow@ryascotland.org.uk

RYA Scotland, Caledonia House, 1 Redheughs Rigg, South Gyle, Edinburgh, EH12 9DQ
T: 0131 317 7388, Fax: 0844 556 9549

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

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Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Scottish Environmental Protection Agency

MacFarlane M (Marc)

From: Planning.North <Planning.North@sepa.org.uk>
Sent: 29 September 2022 15:39
To: MS Marine Renewables
Cc: Bamlett R (Rebecca); Mckay J (John); MacFarlane M (Marc)
Subject: SEPA Response 6301 - Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application

Follow Up Flag: Follow up
Flag Status: Flagged

OFFICIAL

Dear Marc MacFarlane

ELECTRICITY ACT 1989 - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 & The Electricity (Applications for Consent) Regulations 1990
MARINE (SCOTLAND) ACT 2010 - The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017
TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM
OFF THE COAST OF DOUNREAY, CAITHNESS
SEPA Reference: 6301

Thank you for your consultation below. We have reviewed the information as below with respect to our interests in terms of radioactive substances:

- Pentland floating offshore wind farm Volume 2: Offshore EIAR Chapter 8: Water and Sediment Quality, Xodus Group Ltd, 14/07/22
- Pentland floating offshore wind farm Volume 3: Appendix A.9.1 Environmental Baseline Report, MMT, 20/02/22

We **object** to the proposals and request that the information outlined below is provided for our review.

Pentland floating offshore wind farm Volume 2: Offshore EIAR Chapter 8: Water and Sediment Quality, Xodus Group Ltd, 14/07/22

1. Section 8.4.5.5
    a. The particle retrieval exercises undertaken by DSRL at the Dounreay site is a requirement of the Environmental Authorisations (Scotland) 2018 permit (and formerly RSA 93 Authorisation) for the site and is not deemed remediation. **We request that the text is amended.**
2. Section 8.4.5.5.5
    a. Eighteen samples were sent for analysis for radioactivity content. It is not clear whether these samples are representative statistically for the area under consideration for construction and disturbance. **We request that the sampling rationale is detailed.**
    b. The radiochemical suite analysed for was more akin to a suite for Naturally Occurring Radioactive Material (NORM) and not specific to the Dounreay fragments of irradiated nuclear fuel fingerprint. **We request that the sampling rationale is detailed.**
    c. It is stated that radioactive particles were detected. **We request that it is clarified whether these particles were segregated out from the surrounding sediment matrix.**
    d. Whilst the analysis has been compared to the DPAG criteria, **we request that it is clarified whether the number of samples analysed are statistically significant in relation to the area under consideration and as such each classification is per particle and not for the area as a whole.**

e. This section refers to a Radiation Risk Assessment (NUVIA, 2021b) for the Offshore Site. The section states 'The assessment concludes that it is very unlikely that contamination will arise and spread due to the wind farm construction activities'. **We request that this documentation and underlying methodology is made available to SEPA for review so we can comment on whether the opinions expressed within that document are valid.**

3. Section 8.4.6
   a. This section states 'With respect to the potential for radioactive particles, the situation is more likely to improve in the future, due to the potential identification and remedial works, associated with the ongoing monitoring programme near the Dounreay Nuclear Facility'. Please refer to Comment 1a. Also the inventory of particles is not known and as such to state that 'the situation is more likely to improve in the future' cannot be said to be 'more likely'. **We request that the text is amended.**
4. Section 8.4.8
   a. This section states 'There are not considered to be any residual uncertainties associated with the potential for contaminants and radioactive particles across the Offshore Site'. Given that there are only 18 samples in the entire area and the concerns expressed in Comments 2 & 3 above this cannot be concluded. **We request that the text is amended.**
5. Section 8.5.2.2.3
   a. This section covers 'Changes in water and sediment quality due to increased suspended sediment concentrations during operation, associated with the movement of moorings, and maintenance of cables'. It states that 'This impact is scoped out because, as described for the construction activities in Section 8.5.2.1, increases in turbidity from installation activities would be localised, transient and temporary. The same is considered to apply to the movement of moorings during operational and the repair of cables, should it be required'. However, given the uncertainties and concerns expressed in Comments 2-4, **we request this is reconsidered and scoped in.**
6. Section 8.6
   a. Given comments 1-5 above and the uncertainties identified, we do not agree with the assessment of risk given within this section. **We request this section is re-evaluated in relation to radioactive contaminants**.

Other Comments

7. **We request that consideration is given to the impact onshore of any disturbance of radioactive contamination offshore and how this will be assessed or demonstrated.** For example, additional monitoring or measurements of sediment disturbance on local beaches. For the avoidance of doubt, SEPA are concerned that the work offshore may alter the current mechanism that determines the arrival rate and composition of fragments of irradiated nuclear fuel on the Dounreay foreshore and Sandside beaches.
8. **We request that Food Standards Scotland are consulted specifically in relation to the FEPA Order area.** The FEPA order is designed to protect the food chain, however the impact of the actions of survey and construction may result in the remobilisation of more deeply buried fragments and could result in the amendment of the FEPA order area.

Given that the radioactive particles are existing contamination, if the works are insufficiently mitigated and result in an increase in particles recovered onshore, the developer could be considered under the Radioactive Contaminated Land Regulations as a Polluter, known as an Appropriate Person with respect to Part IIA of the Environmental Protection Act 1990 Section 78F (ref: 78F (2) below).

78F (2) Subject to the following provisions of this section, any person, or any of the persons, who caused or knowingly permitted the substances, or any of the substances, by reason of which the contaminated land in question is such land to be in, on or under that land is an appropriate person.

For all other matters in relation to our interests please see our standing advice at section 3 of lups-gu13.pdf (sepa.org.uk).

Regards
Clare

Clare Pritchett

Senior Planning Officer
Planning Service, SEPA
Email: planning.north@sepa.org.uk
Telephone: [Redacted]
Part Time: Wednesday & Thursday

OFFICIAL

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

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please contact the Marine Scotland Licensing Operations Team (“MS-LOT”) on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a ‘nil return’.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Scottish Fishermen’s Federation

MacFarlane M (Marc)

From: Malcolm Morrison <M.Morrison@sff.co.uk>
Sent: 04 October 2022 18:09
To: MS Marine Renewables
Cc: Walker B (Ben); Mckay J (John); MacFarlane M (Marc)
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: 20221001 PENTLAND OFFSHORE WINDFARM Licence App.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Here it is Marc, thanks for your patience

Best Regards, Malcolm

Fishery Policy Officer
Mob. [Redacted]

Tel. +44 (0) 1224 646944
www.sff.co.uk

Please be aware that as I am working from home, there may be occasions where I will send emails outwith the 9-5, that is to suit me, I don't expect replies at these times, only when you are working!

Connect with us:
Scottish Fishermens Federation| 24 Rubislaw Terrace | Aberdeen | Scotland | AB10 1XE

Connect with SFF:

From: MS Marine Renewables
Sent: 24 August 2022 10:40
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Mckay J (John) <John.Mckay@gov.scot>; MacFarlane M

(Marc) <Marc.Macfarlane@gov.scot>
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
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Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

Our Ref: MM/dr: 01/10

Your Ref:

1st October 2022

E-mail: MS.MarineRenewables@gov.scot

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24 Rubislaw Terrace
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Scotland UK

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E: sff@sff.co.uk

www.sff.co.uk

Dear Marc

PENTLAND FLOATING OFFSHORE WINDFARM, Licence Application

The Scottish Fishermen's Federation (SFF) on behalf of the 450 plus fishing vessels in membership of its constituent associations, The Anglo Scottish Fishermen's Association, Fife Fishermen's Association, Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association, Shetland Fishermen's Association and our colleagues at the North & East Coast rIFG, have compiled this response to the consultation.

To start with a small detail that should be tidied up is the disparate dates used in different sections for describing stakeholder consultation, also . The SFF can agree that in 2014 consultation highlighted that the area was outside of any area of intense fishing, but that is not to say that consideration of fishing should not be as per Scotland's National Marine Plan (NMP).

This should be highlighted in the Socio-economic section, particularly noting that the first hand sale of fish is not the only parameter to be measured. Scrabster benefits from the harbour dues arising from fish landings, the value & employment of the market and processors, Engineering, Chandlery and shops and all topped off by the fleet of refrigerated lorries that take the produce south to consumers. The normal comparison is that, for every job at sea there are 5 ashore, which would be a serious difference to the figures used in this application.

The SFF has a problem with the Decommissioning Plan (DP), which is quite clearly defined in the response to scoping from the regulators, referring to site selection and alternatives. The non-technical summary misses the point. Nor does the claim of best practice cover these points. These discrepancies make the SFF wary of leaving the DP development until post consent, this should be a licence condition to have it in place immediately. Should there be a condition requiring a bond to cover this work in case the development loses money?

The SFF would question whether there is any point in citing Tension Leg Platforms (TLP) as being in consideration for the project? Given the timescales and the technology this does not seem likely to be any more than a distraction, since the fishing industry views them as less intrusive?

The catenary mooring system is going to be problematic, with c94,000 metres of ropes, chains etc tied on to 63 anchors. No matter which way you look at it, the array is going to be *de facto* closed to all types of fishing. Vague statements claiming that reducing the spread of moorings to benefit fishing have no backup, and are aggravated by the statement in 13.6.2, "there is no legislative requirement to prevent fishing." When SFF considers that the role of the Crown Estate Scotland includes protecting the right to fish, the developers are being at the least disingenuous! N.b. Fisheries Plans (FP) 2,4 & 17 from the NMP, which cover, Economic benefit for Communities, Co-existence and Fairness respectively, and we would say are breached by this standpoint.

Whilst generally the production of sediment plumes may not be a problem, the SFF would point out that, if they occur at spawning time, particularly for shellfish, there could be significant mortalities caused. In most scenarios, the paper on habitats, Coull et al from 1998, would be considered too old to apply, and, as Scotmer has identified a lack of habitat mapping, developers who make claims on the subject should be responsible for furnishing proof.

The cable route, both export and inter array, if the developer cannot guarantee 100% burial, needs to be negotiated, paying heed to the CBRA, with the fishing industry to ensure the least impact on fishing. Using different types of protection can cause problems if in the wrong place, and would breach FP4 & 17 on co-existence and fairness.

Furthermore, 9.6.2.5.1 states EMF effects, from both Inter-array & Export cables, on the Benthic Community are not understood, and there is limited evidence; 10.5.2.2 referring to noise also notes the lack of available data, including Rope pinging, all of which are identified as lacking by Scotmer. The SFF would contend that because of these lacks it is simply not enough to do Desk Top Studies, as mentioned often in the application, there is not enough data/science to study. If the project is consented without addressing these 3 shortages, at the very least by actually monitoring them appropriately, Marine Scotland will be choosing to ignore the Precautionary Principle, which would require the developer to prove they were not creating a problem by their actions.

The NMP has General policies (GP) and an entire chapter on FP, which this application fails to note, only mentioning GP9 & 13 (natural heritage & Noise) and ignoring GP2, 3,4 and 17 (Economic benefit to communities, Social benefit, Co-existence and Fairness respectively) There are 5 FP which are ignored in favour of noting Wild Fish 1, concerning the habitat for diadromous species, which highlights the dismissal of the commercial fisheries in favour of a few salmon. This is also an issue with Ocean Quahogs, which were not a word on everyone's lips until windfarms started doing surveys. They appear in almost every windfarm, widespread in this one, so surely if they are not that rare, there needs to be monitoring to prove they are endangered.

The developer seems to have a very much simplified view of displacement, which in reality is not necessarily fishing 100m away from your normal area. Fish species tend to be specific to seabed types, and Fishing vessels designed to work to that specificity, so displacement can become a much bigger problem than this application notes. In 13.6.1.1 for the developers to claim telling fishers about safety zones and displacement is mitigation is not acceptable. Then to quantify it as

an insignificant closure for 14 months out of 24, when no fisher is guaranteed 12 months a year at sea is beyond the pale!

Continuing with chapter 13, making the bold statement that the area lost to fishers is small, without any data or comparison to the availability of other grounds. This applies to all the species described, each of which needs to be treated as they need to be.

Further on in Ch 13 the application makes claims about displacement, that are simply unbelievable. Trawlers will shift to avoid creels? Double displacement. Mobile gear can navigate around creels? Dubious. The reality is that each and every development contributes to the Spatial Squeeze, and the Cumulative Impacts are Scotland Wide, whereas this application does not even consider the West of Orkney development. With predictions of losing more than 50% of our fishing grounds in the next couple of decades, the regulators need to take strong action to protect fishing in the name of food security.

This application, as it stands, has 9 plans for mitigation, only one of which mentions fishing (in terms of co-operation!) There are 7 embedded mitigations cited, none of which are relevant to fishing, being the usual sub-set of H&S statements. Before the farm gets consent they should demonstsate exactly how they will mitigate their impact on fishing.

It is very disappointing to see items that are defined as highly sensitive, then being described as low impact, in fact in table9.12 on, there is nothing defined as anything other than minor. This is very wrong, breaching FP4 & 17 again.

The paper does acknowledge, on P44, that the assessments are qualitative and rely on expert judgement to ascribe values, but the outcomes of this application exhibit yet again a lack of empathy and knowledge of the grass roots fishing industry.

Finally, the SFF would like to see timelines for various plans adjusted, eg Cable, Vessel Management, FMMS and Decommissioning being consent conditioned to be addressed within 6 months of consent being granted.

[Redacted]

Malcolm Morrison
Fisheries Policy Officer
Scottish Fishermen's Federation

Scottish Surfing Federation

MacFarlane M (Marc)

From: sheila finlayson <sheila_finlayson@hotmail.com>
Sent: 04 December 2022 12:58
To: MS Marine Renewables
Subject: Re: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Marc,

I received notification that I was too late but I can't find the email prior to that looking for a consultation. I don't feel I have been consulted .

I have got to grave concerns as to the impact on our local community.

Firstly Tourism.
Tourism is already being affected by the number of Windmills We have in this area. We have a disproportionately high number of windmills for the population. This is an area of outstanding natural beauty and one of Europes few wilderness areas as is Orkney. Undoubtedly the economy he will suffer due to these large structures being visible from what was unblemished coastline. Tourists already are shocked by the number of Windmills in this area it is disproportionately high.

secondly fitness

A huge number of people surf within the community . Less surf and choppier surf will mean less surfing and less fitness . I am certain Surf will be affected by these Windmills without a doubt. Even a boat going past effects our waves. Surfing keeps a huge number of local people fit and is a great draw a card for Tourists. Thurso East is one of the worlds best waves. It is in direct line of being affected by this development as is the whole caithness and sutherland coastline and other classic breaks . The swell direction we need comes from the north-west which is exactly where the Windmills will be.

If this is to go ahead how come Company possibly compensate the huge losses financially and surf wise that are going to occur within Caithness. What compensation shall we get? How long till the competition go on for ? Would you build a wave pool to replace the waves that are going to be reduced in both size and quality. It

Do you realise that people come from all over the world to surf the north coast of Scotland. As an ex Scottish surfing champion there is a reason why I live here. People who live and work here often surf and sometimes the only reason they've come is because of the Surf . Which has attracted skilled people who would not be here otherwise . We have very few resources up here but we do have waves honestly will be the final straw if that gets interfered with .The highland region or Scottish Goverment gives very little to this area. Where is our fun stuff? Its in Edinburgh or Inverness.

With all due respect I suggest you move the Windmills significantly further north out of eyesight And where the waves will not be affected as strongly.

There is a power line between Shetland Courtney on the mainland which could be attached to further North

I see this in its present form as a very damaging thing for Caithness and plan to fight this . You can expect a huge amount of opposition.

Kind regards

Sheila Finlayson
Registered osteopath
Surfing coach
Founder of the North Shore club

From: MS Marine Renewables
Sent: 24 August 2022 10:40
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Mckay J (John) <John.Mckay@gov.scot>; MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions

The Highland Council

MacFarlane M (Marc)

From: Jethro Watson (Planning (North)) <Jethro.Watson@highland.gov.uk>
Sent: 12 December 2022 17:51
To: MS Marine Renewables
Cc: Simon Hindson (Planning (South))
Subject: MS-00009991 - PFFOWF - ML consultation response.
Attachments: THC_ML_Consultation_Response.pdf; PLN_097_22_1.pdf

Dear Marine Scotland,

Your reference: MS-00009991
Our reference: 22/03860/MAR

Please find attached the Highland Council's consultation response to Marine Scotland's Marine Licence consultation on the Pentland Floating Offshore Wind Farm - Dounreay, Caithness AT Development Site 9KM NW Of, Dounreay Nuclear Research Establishment, Dounreay

I understand that my colleague Simon Hindson is expecting to provide a response to the Section 36 Electricity Act (1989) consultation in parallel later this week.

Kind regards,

Jethro Watson
Coastal Planning Officer | Highland Council
Planning & Environment - Infrastructure, Environment and Economy Service
jethro.watson@highland.gov.uk | 01463 702914 |Glenurquhart Road, Inverness, IV3 5NX

The Highland Council
Comhairle na Gàidhealtachd

Highland Wind Limited
c/o Marine Scotland
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Please ask for/Foighnich airson:	Jethro Watson
E-mail/Post-d:	Jethro.Watson@highland.gov.uk
OurRef/Ur n-àireamh-iùil:	22/03860/MAR
Your Ref/Ar n-àireamh-iùil:	00009991
Date/Ceann-là:	12 December 2022

Dear Marine Scotland,

MS-LOT consult licence - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - 00009991 AT Development Site 9KM NW Of, Dounreay Nuclear Research Establishment, Dounreay,

Thank you for consulting the Highland Council on the above proposal. This was registered on the 24 August 2022. This response is provided in regard to the consultation for the marine licence application. However, it is understood that a consultation for Section 36 Electricity Act (1989) was submitted in parallel (Council ref: 22/03864/S36).

The Highland Council's primary point of contact for the proposal and the S36 consultation, Simon Hindson, notified Marine Scotland that a report would be prepared and taken to committee on 6th December. The content of this report is also taken to address the relevant matters from the Highland Council's perspective, regarding the marine licence application. Following the 6th December committee meeting the decision was made to support the recommendation that **the Highland Council raise no objection to the proposal**. The committee report did raise a number of suggested conditions deemed relevant and appropriate for the proposal. You are advised to review the committee report (item 6.9), including consultee responses and apply the suggested conditions.

A copy of the report is attached to the covering email. The report can also be viewed online at https://www.highland.gov.uk/meetings/meeting/4717/north_planning_applications_committee

A separate response addressing the S36 consultation will be issued by the Council in due course.

Privacy
Please note that correspondence received in connection with the application will be published online and can be viewed by members of the public.

Our privacy notices for planning applications, consents and notice of review sets out our legal basis for collecting personal information and how we use it. To view the privacy notice please visit the Council's website:https://www.highland.gov.uk/directory_record/1052173/planning_applications_consents_and_notice_of_review

Yours faithfully
[Redacted]

Coastal Planning Officer (Highlands wide)

The Highland Council
Comhairle na Gàidhealtachd

Highland Wind Limited
c/o Marine Scotland
Per: Marc MacFarlane
Marine Scotland

By email only to:
MS.MarineRenewables@gov.scot
pem@cop.dk

Please ask for/Foighnich airson: Simon Hindson
Direct Dial/Àireamh fòn: 01463 785047
E-mail/Post-d: simon.hindson@highland.gov.uk

OurRef/Ur n-àireamh-iùil: 22/03864/S36
Your Ref/Ar n-àireamh-iùil:
Date/Ceann-là: 14 December 2022

Dear Marc,

Pentland Offshore 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. AT Development Site 9KM NW Of, Dounreay Nuclear Research Establishment, Dounreay,

The Highland Council was consulted by your office on the above Section 36 Application on 24 August 2022. This letter seeks to convey the response of the Council.

Following consideration of the item by The Highland Council's North Planning Applications Committee, the Council in December 2022 Members of the committee determined to raise no objection to the application subject the conditions set out in the Report on Handling. The Report on Handling presented to Members is attached as background to this response.

Please do not hesitate to contact me if you would like to discuss the contents of this letter or the Report on Handling.

Yours Sincerely,

[Redacted]

Team Leader – Strategic Projects

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 10km^2 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:

<u>National Scenic Areas</u>

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

<u>Special Landscape Areas</u>

- 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 wind turbines on a single floating platform, each with an installed capacity of up to 6MW (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	Approved by Scottish Ministers
3.2	05.02.2021	20/05164/SCOP - Pentland Floating Offshore Wind Farm - Construction and operation of a floating wind farm comprising between 6 and 10 floating structures and turbines with a maximum blade tip height of 270m and associated supporting onshore infrastructure	Scoping Opinion Issued by Scottish Ministers
3.3	29.10.2021	21/03686/S42 - Dounreay Tri Wind Farm - Application for non-compliance with conditions 23 (Commencement of Development), 25	Approved

(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:

6.12
- 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 qualities 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)

8.8 With no site-specific allocations or policies within the CaSPlan at the application location, the proposal is principally assessed against HwLDP Policy 67 for Renewable Energy developments Policy 67 sets out that renewable energy development should be well related to the source of the primary renewable resource needed for its operation. Proposals are required to be judged according to their contribution in meeting renewable energy targets and positive/negative effects on the local and national economy as well as against all other relevant policies of the Development Plan and other relevant guidance. In that context the Council will support proposals where it is satisfied they are located, sited, and designed such as they will not be significantly detrimental overall, either individually or cumulatively with other developments, having regard to the 11 specified criteria (as listed in 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 CO_2 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 decommissioning or repowering. Such a project can offer significant 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

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 size and scale of the development's 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.

8.49 The current application reviewed the site for the previously consented scheme and 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 Dounreay 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 proposed West of Orkney Wind Farm. The applicant having assessed the impact that 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 qualities 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.

8.67 From higher level walking routes (Viewpoints 1 (Beinn Ratha), 11 (Beinn Griam Beg), 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 elements and shoreline properties											
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 extension (and Drum Hollistan 2 WF)											
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 Hollistan 2 WF											
House west of Halladale Bridge	14.0	16.6	22.0	26.6	28.3	28.5	28.5	28.5	28.5	28.5	26.9
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 and extensions											
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

5. (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:	[Redacted]
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

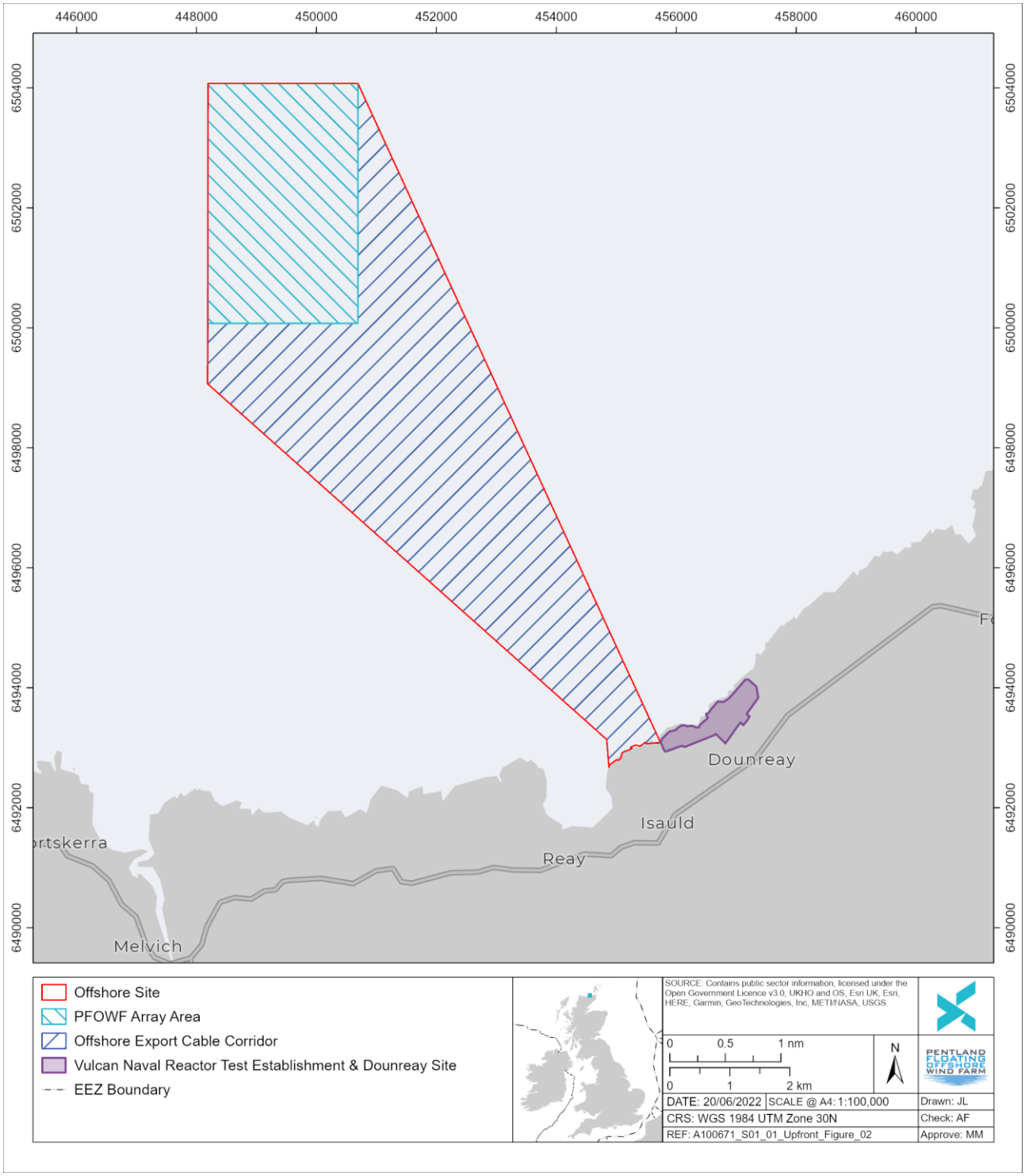

Figure 5.1 Offshore Development boundary

United Kingdom Chamber of Shipping

MacFarlane M (Marc)

From: Robert Merrylees <RMerrylees@ukchamberofshipping.com>
Sent: 09 February 2023 23:13
To: MS Marine Renewables
Cc: Bamlett R (Rebecca); Mckay J (John); MacFarlane M (Marc)
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022
Attachments: Pentland Floating Offshore Wind Farm - Additional Information Application Consultation - Response due by 05 February 2023

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Marine Scotland Marine Renewables Team,

Following the sharing of the attached correspondence with the Chamber of Shipping highlighting additional information and material submitted by the applicant, the Chamber reviewed documentation of relevance to it again, and believes it omitted several comments from those originally included below.

The Chamber apologises that it has not responded prior to the requested deadline 05/02/23 but hopes it comments will be taken into consideration.

In various places within "Pentland floating offshore wind farm, Volume 2: Offshore EIAR, Chapter 14: Shipping and Navigation" there is repeated mention of the availability of towage provision in the instance of an emergency. Whilst it is correct that the Orkney Islands Council Tugs are signed up to the CAST agreement, they may not be available as they are not emergency tugs, but commercially operated and cannot be guaranteed upon in a drifting or other emergency.

Is it also a concern that the capability of the RNLI to provide towing assistance is overstated. It is only practicable and safe for recreational yachts and small fishing vessels to have towage assistance from a Severn Class Lifeboat as is stationed at Thurso. Any belief that RNLI vessels could render towage assistance to commercial shipping would be false.

It should be noted that the MCA's Emergency Towage Vessel (ETV) contract was awarded to the company Marnavi Spa starting as of 1 January 2023 for a period of five years to operate the Ievoli Black. The vessel was built in 2010 and regardless of contract renewal of the ETV, vessel renewal will be required during the OWFs operational period.

Under paragraph 14.6.1.3.2 Drifting allision risk is identified as a risk and considered. Whilst the Chamber agrees that the probability of a drifting allision is low, the Chamber believes the mitigation and additional safety measures provided by the dedicated ETV or Orkney Harbour Tugs, which are located over 45km away from the OWF is overstated, as it would take multiple hours for the tugs to arrive on scheme and assist. As stated above any belief that RNLI vessels could render towage assistance to commercial shipping would be false.

Reported in paragraph 285 of the NRA produced by Anatec, it is correctly identified that *"external recovery from emergency response resources that may be available in the area, such as the ETV and the tugs based in Scapa Flow, has not been taken into account with the modelling [of drifting allision risk], as it is not certain that these would be available to assist in the time available."*

The Chamber agrees with this statement and questions why the report authors have not better represent it in Chapter 14 of the Offshore EIAR.

Regarding the cited historical incident data, whilst it is correct that no drifting allision incidents involving third-party vessels alliding with an operational wind farm structure have been reported within the UK, a serious incident has

occurred in the Southern North Sea close to the Netherlands. As reported within paragraph 129 of the NRA produced by Anatec, it is recognised that a bulk carrier broke free from anchor in a storm, collided into another vessel and allided into a turbine and monopile foundation which suffered "significant damage". The bulk carrier suffered damage to the hull and was making water as the 18 crew were evacuated. Not included in the NRA but of importance relevance is that a joint venture between Vattenfall, BASF and Allianz has invited contractors to bid for the removal of the Hollandse Kust Zuid offshore wind turbine foundation, https://safety4sea.com/wind-farm-foundation-to-be-removed-after-julietta-d-collision/

The Chamber does not assert that the above comments invalidate the findings of the risk register nor increase the risk to above tolerable levels but highlights as areas where due consideration should be given by Marine Scotland to this application and others coming in the Scotwind pipeline.

The Chamber would be happy to provide any further detail on these questions should it be warranted.

Kind regards,
Robert

Robert Merrylees
Policy Manager (Safety & Nautical) & Analyst

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From: Robert Merrylees
Sent: Tuesday, September 27, 2022 8:37 PM
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: RE: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Marine Scotland Marine Renewables Team,

The UK Chamber of Shipping welcomes the consultation request for the marine licence application for the abovementioned floating offshore wind farm.

The Chamber confirms it has had engagement with the developer and Anatec as risk consultants where the potential impact to navigation has been widely discussed. Noting the small nature of the overall development and the relative low density of commercial traffic transiting the array area, the Chamber has limited navigational concerns and welcomes the mitigations and commitments proposed by the developer.

The Chamber has the following comments however in relation to the development for which I would appreciate consideration and response where appropriate:

Buoyancy Modules – the Chamber notes that buoyancy modules may be used as part of the dynamic cable arrangement. The Chamber has some concerns about the under-keel clearance such devices provide so as to ensure no snagging risk and requests a firm commitment that sufficient UKC is provided for deep draught vessels.

Charting requirements – the Chamber recommends and supports the embedded mitigations and charting of cables and anchoring as detailed in table 14.10.

Decommissioning - the Chamber recommends the full removal of all sea-level and sea-bed infrastructure to ensure any snagging risk is removed and the seabed is fully returned for any potential future user.

The Chamber hopes these comments are of value and use.

Yours faithfully,
Robert

Robert Merrylees
Policy Manager (Safety & Nautical) & Analyst

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From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 24 August 2022 10:40
To: MS.MarineRenewables@gov.scot
Cc: Rebecca.Bamlett@gov.scot; John.Mckay@gov.scot; Marc.MacFarlane@gov.scot
Subject: Pentland Floating Offshore Wind Farm - Section 36 and Marine Licences Application - Consultation - Response Requested by 02 October 2022

Dear Sir/Madam

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 TO

CONSTRUCT AND OPERATE PENTLAND FLOATING OFFSHORE WINDFARM, OFF THE COAST OF DOUNRAY, CAITHNESS.

On 11 August 2022, Highland Wind Limited ("the Applicant") submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate Pentland Floating Offshore Windfarm and Transmission Infrastructure at a site off the coast of Caithness. This application is subject to an environmental impact assessment and, as such, the application is accompanied by an Environmental Impact Assessment report ("EIA report") which has been submitted by the Applicant and will be taken into consideration in determining the application. In addition, the Applicant has provided a Habitats Regulations Appraisal report ("HRA report").

Copies of the application documentation provided by the Applicant, including the EIA report, can be downloaded from: https://marine.gov.scot/ml/pentland-floating-offshore-wind-farm

If you wish to submit any representations in response to the consultation regarding the above application please ensure that these are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot, no later than **02 October 2022**. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team ("MS-LOT") on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a 'nil return'.

Kind regards,
Marc

Marine Scotland - Marine Planning & Policy
Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)300 244 5046
General Email: MS.MarineRenewables@gov.scot
Website: http://www.gov.scot/Topics/marine/Licensing/marine

Frequently Asked Questions