Aberdeen and Glasgow Airports

MacFarlane M (Marc)

From: #ABZ Safeguarding <abzsafeguard@aiairport.com>
Sent: 24 December 2020 10:33
To: MS Marine Renewables
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

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: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

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The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

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Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

any part of this e-mail is not permitted. If you are not the intended recipient please destroy the email, remove any copies from your system and inform the sender immediately by return. Communications with the Scottish Government may be monitored or recorded in order to secure the effective operation of the system and for other lawful purposes. The views or opinions contained within this e-mail may not necessarily reflect those of the Scottish Government.
****

British Telecoms (Radio Network Protection Team)

MacFarlane M (Marc)

From: lisa.4.smith@bt.com
Sent: 08 January 2021 10:37
To: radionetworkprotection@bt.com; MS Marine Renewables
Cc: MacFarlane M (Marc); Bamlett R (Rebecca); Irvine S (Sophia)
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021 - WID11402

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM, Yellow Category

Hi All

Apologies, further to the below if there are any new on land at height structures i.e. buildings etc.. we will be happy to check those for any interference. In the meantime the offshore area specified will not have any impact on our network.

Regards
Lisa Smith
Engineering Services Radio Planning

From: Smith,L,Lisa,TNS187 R **On Behalf Of** radionetworkprotection G
Sent: 08 January 2021 10:29
To: 'MS.MarineRenewables@gov.scot' <MS.MarineRenewables@gov.scot>
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021 - WID11402

OUR REF: WID11402

Dear Sir/Madam

Thank you for your email dated 21/12/2020.

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

The conclusion is that, the Project indicated should not cause interference to BT's current and presently planned radio network.

Please direct all queries to radionetworkprotection@bt.com

Regards
Lisa Smith
Engineering Services Radio Planning

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: **NEW** Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021 - WID11402

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
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Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

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Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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Caithness District Salmon Fishery Board

MacFarlane M (Marc)

From: Caithness DSFB <cdsfb@outlook.com>
Sent: 30 January 2021 08:51
To: MS Marine Renewables
Subject: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder
Attachments: Dounreay offshore windfarm[17406].docx

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Good Morning Marc,

Please see attached, a response prepared by our consultant on behalf of the Caithness district salmon fishery board.

Kind regards,
Meghan

Sent from Mail for Windows 10

From: MS.MarineRenewables@gov.scot
Sent: 25 January 2021 12:52
To: MS.MarineRenewables@gov.scot
Cc: Giulia.Agnisola@gov.scot; Sophia.Irvine@gov.scot; Marc.MacFarlane@gov.scot
Subject: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

Dear Sir/Madam,

Please note that the consultation period for the below will conclude in one week's time. If you intend to reply, and have not submitted a response already, please do so by 1 February 2021.

Kind regards,
Marc

From: MS Marine Renewables
Sent: 21 December 2020 14:03
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
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Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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Caithness District Salmon Fishery Board
4 Braal Terrace
Halkirk
Caithness
KW12 6YN

28 January 2021

Dear Sir,

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness: Scoping Report.

You requested an opinion from the Board re. the floating windfarm development proposed by Highland Wind Limited for an area 6km offshore near Dounreay in northern Caithness.

A number of the Caithness rivers are obviously likely to be affected by the proposed development because the WRG Site and the Export Cable Corridor sit astride the major route for adult salmon returning to Scottish rivers from the northern ocean and probably also some of the outward routes for salmon smolts leaving the northern rivers for the sea.

The Scoping Report cites Malcom et al.'s report of 2010 on the importance of the development area for salmon, sea-trout and eels. However, several studies of the use by adult salmon of the general area around the windfarm have been completed and published since 2010 by Marine Scotland Science and these should also have been used to inform the Scoping Report.

In addition, a report by the Flow Country Rivers Trust "Fishermen's Knowledge: Salmon in the Pentland Firth" can be downloaded at https://caithness.dsfb.org.uk/publications/). The report shows that the WTG Site and the Export Cable Corridor span the major throughway for adult salmon returning from the ocean to salmon rivers in Caithness (including the River Thurso SAC) but also including all the other rivers of the North Coast and all the rivers of the east and west coasts of Scotland. Indeed, some fish passing through the proposed development area prove to travel even further.

Because the Scoping Report lacks substance in this respect, the Board considers that Table 8.4 is defective. The table scopes out all categories of potential effects of the development (construction and operation) on salmon on the very flimsiest of grounds. The Board wishes to see a full consideration of the potential effects of the development on salmon leaving and returning to the local northern rivers, set in the wider context of potential effects on the full range of rivers (including many SACs) that may be impacted elsewhere.

Furthermore, Table 8.4 scopes in cumulative impacts associated with future development of additional offshore windfarms in the same general area. This also is not good enough. In the case of salmon, at least, the potential interactions of the proposed windfarm extend to existing and planned non-wind renewables installations. The Board therefore wishes to see a full consideration of interactions with other developments especially, but not confined to, tidal energy facilities located or planned within the confines of the Pentland Firth to the east of the proposed windfarm.

Yours faithfully,

Meghan Blackwood
Clerk to Caithness District Salmon Fishery Board

Fisheries Management Scotland

MacFarlane M (Marc)

From: Alan Wells <alan@fms.scot>
Sent: 08 February 2021 15:52
To: MS Marine Renewables
Cc: Agnisola G (Giulia); Irvine S (Sophia); MacFarlane M (Marc)
Subject: RE: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

To MS Renewables,

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness: Scoping Report.

Thank you for contacting Fisheries Management Scotland with regard to the above development. Fisheries Management Scotland is the representative body for the District Salmon Fishery Boards, the River Tweed Commission and the Rivers and Fisheries Trusts in Scotland. We work to promote and ensure the best, evidence-based fisheries management for the conservation of Scotland's wild salmon and native freshwater fish, and the protection, improvement and development of their fisheries and the environment on which they depend. District Salmon Fishery Boards have a statutory responsibility to protect and improve salmon and sea trout fisheries in their district. Rivers and Fisheries Trusts and independent charities with objectives extending to all fish species and the wider aquatic environment. We note that the Northern and Caithness DSFBs have been consulted.

The Scoping Report cites the report by Malcom et al. 2010 regarding the importance of the development area for salmon, sea trout and eels. However, since that time further work and identification of evidence gaps has been undertaken, including the ScotMER Diadromous Fish Evidence Map. The Scoping Report should be updated to fully incorporate this process. It should also be updated to include more recent work undertaken by Marine Scotland Science (e.g. https://marine.gov.scot/data/application-acoustic-tagging-satellite-tracking-and-genetics-assess-mixed-stock-nature-coastal).

As highlighted in the response from the Northern District Salmon Fishery Board, Atlantic salmon use the Pentland Firth as a major migratory route for adult salmon returning to Scottish rivers from the northern ocean and possibly also some of the outward routes for salmon smolts leaving the northern rivers for the sea. The work undertaken by Marine Scotland Science (reference above) demonstrates that salmon for a wide range of Scottish rivers, specifically including the Spey SAC, utilise the Pentland Firth. We do not consider that it is possible to scope out *any* of the 17 SACs in Scotland, and should the developer wish to do so, a clearly evidenced justification will be necessary.

We consider that table 8.4 is inadequate and we wish to see a full consideration of the potential effects of the proposed development on salmon leaving and returning to Scotland's rivers, taking into account the strategic importance of the Pentland Firth as a major migratory route. This should include a full consideration of the cumulative effect of the development with existing and proposed developments across Scotland.

We would make the following specific points about table 8.4:

Scoped out: Effects of EMFs from subsea and dynamic cables on sensitive species.
We do not agree that EMFs can be scoped out as this stage. Indeed, we note that the HRA Screening Report for the proposed Berwick Bank Offshore Wind Farm, concluded that underwater noise, EMFs, accidental pollution and in-combination effects could not be discounted as likely significant effects for any of the SAC rivers identified in that report.

EMFs in relation to floating windfarms were discussed at the MASTS floating wind workshop in October 2020. Concern was expressed that because the cables arising from the turbines are present in the water column and cannot be shielded, that this was an issue of particular importance.

Scoped out: Barrier effects on migratory fish from the presence of the floating platform and associated infrastructure.

In recent months, concerns have been raised by some of our members about the possibility of displacement effects arising from offshore wind farms – essentially the concern is that they may act as 'artificial islands' that migratory fish chose to avoid due to visual disturbance. The impacts of such avoidance activity, should it occur, are unknown. This issue was discussed at the most recent meeting of the ScotMER Diadromous Fish Group.

By way of explanation, little consideration has been given to the way in which fish may perceive and react to their aerial surroundings as viewed through the water surface. Light passing through the air/ water interface surface is refracted due to the difference in the optical densities of the two mediums. Only light passing vertically through the interface is not refracted and as the angle of incident light moves away from the vertical, the extent of refraction increases. The overall effect of this is that, within the water column, all the visual information passing into the water space from the full 180^{o} arc of the sky and from all around its 360^{o} horizon is compressed within a 97^{o} cone. Fish swimming within the cone view their external surroundings through a relatively small surface window in the form of a disc that varies in size, while continuing to contain all the same information, depending on the fish's depth within the cone.

Under most conditions the fish's surface window on the world is essentially devoid of notable information (e.g. at sea) or the window's visual content is static (e.g. where a forest or mountain overlooks a river or lake). However, a fish swimming in close proximity to a wind turbine, will not see the lower part of the turbine column in the surface window due to reflectance. The more elevated features, such as the moving turbine blades, are potentially more prominent features in the fish's view of the surrounding landscape than might otherwise be expected.

From the fish's point of view, any aerial object seen to move into the surface window across the static background is a potentially mortal threat and a response of proportionate intensity is expected. The so-called non-consumptive effects of predation modify the behaviour of prey species, alter performance of individuals and adversely affect populations. It is not likely that fish assess the threat of avian predation based on identification of specific predator species because the overhead image observed by fish is often distorted when the air-water interface becomes non-planar due to the effects of wind or currents. However, the visual system of fish is reported to be highly sensitive to movement and predation risk is probably assessed non-specifically on this basis. Therefore, it will be necessary to consider how fish react to a highly dynamic image of turbine blades as represented in the surface window and whether this is likely to affect their performance and/ or their use of aquatic habitat.

Scoped out: Effects of operational noise on sensitive species.
See above - the HRA Screening Report for the proposed Berwick Bank Offshore Wind Farm, concluded that underwater noise could not be discounted as a likely significant effect for any of the SAC rivers identified in that report.

Scoped out: Fish aggregation around the floating structure and associated infrastructure.
We consider that there is a significant risk of increased predation, if fish of any species aggregate around the turbines. There is evidence from England of offshore wind turbines attracting predators such as seals and given that the location of the proposed development lies within a major migratory route for wild salmonids, the impact of any increased predation should be fully considered. This issue has been identified by the ScotMER Diadromous fish group and is included in the Marine Scotland Evidence Map for diadromous fish.

Please do not hesitate to contact us if you require any further information.

Your faithfully,

Alan Wells

Dr Alan Wells | CEO
Fisheries Management Scotland
11 Rutland Square, Edinburgh, EH1 2AS
Tel: 0131 221 6567 | [Redacted]
www.fms.scot

From: MS.MarineRenewables@gov.scot
Sent: 25 January 2021 12:52
To: MS.MarineRenewables@gov.scot
Cc: Giulia.Agnisola@gov.scot; Sophia.Irvine@gov.scot; Marc.MacFarlane@gov.scot
Subject: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

Dear Sir/Madam,

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Kind regards,
Marc

From: MS Marine Renewables
Sent: 21 December 2020 14:03
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

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Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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Historic Environment Scotland

MacFarlane M (Marc)

From: Laura Denholm <laura.denholm@hes.scot>
Sent: 28 January 2021 12:59
To: MS Marine Renewables
Subject: Pentland Floating Offshore Wind Farm
Attachments: 20210128-EIAScoping-HESResponse.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Kind regards

Laura
Laura Denholm |Business Support Officer – Casework Technician | Heritage Directorate Historic Environment Scotland | Àrainneachd Eachdraidheil Alba Longmore House, Salisbury Place, Edinburgh, EH9 1SH
T: 0131 668 8898
E: laura.denholm@hes.scot

www.historicenvironment.scot

Heritage For All - read our new Corporate Plan and help to share our vision

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20210128-EIAScoping-HESResponse

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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

28 January 2021

Dear Marine Scotland

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness
Scoping Report

Thank you for your consultation which we received on 21 December 2020 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

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

Proposed Development

We understand that the proposed development is for a demonstration floating offshore wind farm to be created approximately 6 km off the coast of Dounreay in Caithness with an installed capacity of up to 100 megawatts (MW). The windfarm would be composed of 6-10 floating substructures and turbines connected by a subsea cable to the grid at Dounreay.

Scope of assessment

In the supplied Scoping report, the scoping assessment for onshore assets is limited to an Onshore Study Area defined by the applicant as an area where construction work will take place. This is largely delimited by existing field boundaries and is - we presume -the area that will be subject to Construction Design Management (CDM) regulations during the works.

We would suggest a more systematic approach to the scoping assessment such as by scoping in or out any assets within 5km, 10km, or 20km of the proposed development rather than limiting it to the Onshore Study Area.

Table 9-14 of the Scoping report includes an assessment of potential impacts on "historic landscapes and monuments". It is unclear if this includes scheduled monuments. The assessment concludes that assessing impacts would only be of relevance to offshore archaeology of a floating nature or submerged wrecks. We therefore have assumed that impacts on scheduled monuments have not been assessed.

There are several scheduled monuments within the vicinity of the development. Seven scheduled monuments have been identified in Section 12.2.7.1 as being in the vicinity of the Onshore Study Area. We would welcome an explanation on how these have been identified as likely to be impacted as opposed to other assets. We would also welcome some clarity on how the impacts of the turbine array itself versus the impacts of the onshore infrastructure have been assessed.

In conclusion, we would recommend a detailed scoping assessment is undertaken in order to understand if any scheduled monuments in the vicinity of the development may be impacted. If the applicant concludes that there will be no impacts on scheduled monuments in the vicinity, it would be helpful to understand the assessment behind this conclusion.

Further information
Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes. Technical advice is available on our Technical Conservation website at http://conservation.historic-scotland.gov.uk/.
We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Chloe Porter and they can be contacted by phone on 0131 668 8585 or by email on chloe.porter@hes.scot.

Yours faithfully

Historic Environment Scotland

Highlands and Islands Airports Ltd

MacFarlane M (Marc)

From: Safeguarding <Safeguarding@hial.co.uk>
Sent: 29 January 2021 13:24
To: MS Marine Renewables
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Our Ref: 2021/0011/WIC

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In regards to the scope of the EIA, the following should be considered:

- Lighting requirements as per the Air Navigation Order 2016.
- Construction Process – awareness the construction process/cranes has the potential to impact on the Instrument Flight Procedures (IFPs) for Wick Airport. An IFP impact assessment can only be conducted by and accepted from, an Approved Procedure Design Organisation, as approved by the CAA. The list of approved organisations can be found at the following link: https://www.caa.co.uk/Commercial-industry/Airports/Safety/Instrument-flight-procedures/Approved-procedure-design-organisations/
- Surveillance – Wick Airport does not currently have surveillance, however, this is proposed to be introduced. HIAL cannot include surveillance in its current safeguarding criteria as type and location are undefined. However, once confirmed, surveillance safeguarding will become a criteria that would require to be considered.

Regards,

Safeguarding Team
Highlands and Islands Airports Limited
Head Office, Inverness Airport, Inverness IV2 7JB
✉ safeguarding@hial.co.uk 🌎 www.hial.co.uk

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

Joint Radio Company

MacFarlane M (Marc)

From: JRC Windfarm Coordinations <windfarms@jrc.co.uk>
Sent: 03 February 2021 11:54
To: Irvine S (Sophia)
Subject: Re: FW: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021 [WF137424]

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Sophia,

Lindsay Kiley just logged the following message to a coordination request in which you participate:

Dear Planning,

***Name/Location**: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation*

***Site Centre/Turbine** :*
Lat: Long:

58°40'25.6" -3°53'36.0"
58°40'27.7" -3°48'25.7"
58°37'46.0" -3°48'22.0"
58°37'44.0" -3°53'31.9"
58°37'44.0" -3°53'31.9"
58°40'27.7" -3°48'24.7"
58°37'46.0" -3°45'34.3"
58°34'28.9" -3°46'14.2"

***Development Radius**: 0.1KM*

***Hub Height**: 107-150m **Rotor Diameter**: 170-240m*

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

The Local Utility Company

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

In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However,if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal.

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

liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently,developers are advised to seek re-coordination prior to considering any design changes.

Regards

Wind Farm Team

Friars House
Manor House Drive
Coventry CV1 2TE
United Kingdom

Office: 02476 932 185

Marine Scotland Marine Analytical Unit

MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

From: Allen K (Kathleen) <Kathleen.Allen@gov.scot>
Sent: 01 February 2021 15:15
To: Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Cc: Diaz M (Reme) <Reme.Diaz@gov.scot>; Barclay K (Kay) <Kay.Barclay@gov.scot>
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Hi Sophia,

With thanks to Reme for her input, please see attached MAU's written response to the Pentland Floating Offshore Wind Farm scoping report.

We are happy to provide further clarifications on any aspect of our advice to the developers/consultants, if required.

Please feel free to get in touch if you have any questions.

Best wishes,

Kathleen

Kathleen Allen
Senior Social Researcher | Marine Analytical Unit | **marinescotland**
Kathleen.Allen@gov.scot
Working from home, available via Skype or email.

From: Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Sent: 21 December 2020 14:20
To: Barclay K (Kay) <Kay.Barclay@gov.scot>
Cc: McQueen A (Amy) <Amy.Mcqueen@gov.scot>; Sekhon C (Chahat) <Chahat.Sekhon@gov.scot>; Allen K (Kathleen) <Kathleen.Allen@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; MacFarlane M (Marc) <Marc.MacFarlane@gov.scot>
Subject: FW: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Good Afternoon,

Please see below scoping consultation in relation to the Pentland Floating Offshore Wind Farm near Dounreay. MS-LOT requests advice in relation to the socio-economic aspects.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

If a response could be provided by 1 February 2021 that would be much appreciated. Should you wish to discuss anything further, just let me know.

Kind regards,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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From: MS Marine Renewables
Sent: 21 December 2020 14:03
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
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REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

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The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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marinescotland

The Pentland Floating Offshore Wind Farm Scoping Report

Marine Analytical Unit Response

The Pentland Floating Offshore Wind Farm EIA Scoping Report includes descriptions of a range of potential impacts. This response focuses only on the assessment of social and economic impacts.

Marine Scotland is producing guidance on how to carry out Socio-Economic Impact Assessments for offshore renewable developments. The guidance is still in draft form and so cannot be shared, but the recommendations included in this response align with the broad contents of the guidance document.

Overall, the assessment of potential social impacts is quite narrow, and in the description of the methods that will be used for assessing these impacts there is an overreliance on existing datasets, some of which are quite old. For potential economic impacts, it is recommended that the scope is widened to include economic considerations such as supply chain impacts, employment, GVA, and other considerations such as displacement, substitution and additionality. In the following paragraphs specific issues are described before making the recommendation that a full Socio-Economic Impact Assessment be scoped into the EIA, and describing what this should include.

Range of social and economic impacts considered

The range of social and economic impacts considered in this report is very narrow. We would expect to see a comprehensive assessment of the potential social and economic impacts that might occur as a result of a development. An example of potential impacts can be seen in Table 1.

The impact on the local economy is assumed to be positive. Both potential positive and negative impacts should be assessed. If the development is expected to have a purely positive impact on the local economy, we would expect more evidence to support such a claim.

In section 9.8.8 'Identification of potential impacts', there is a description of the social impacts which might be included in other sections. The report states "Section 8.6: Other Users of the Marine Environment where specific recreation pursuits are discussed out with this section." There is, however, no mention of specific recreation pursuits in this section.

Although direct impacts on tourism and recreation are scoped in, there is no mention in this section, or the section on cultural heritage, of the potential impact on local people and the way they enjoy the outdoors.

Description of methods and data to be used in EIA

Chapter 6, outlines the approach to scoping and EIA but does not really describe the proposed approach to carry out the EIA. Chapter 9, specifically section 9.8 includes brief descriptions of the data that may be used to assess social and economic impacts. There are no plans to collect any primary data and the socio-economic impact assessment will rely entirely on desk-based assessment of literature and existing datasets. Many of the sources cited are 5+ years old. 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.

Mitigation and monitoring

Very little, if any mention is made of mitigating or monitoring impacts. While we understand that this is a scoping report, and not an impact assessment, we would appreciate some description of efforts to monitor social and economic impacts and to mitigate any negative impacts. We recommend that stakeholders and impacted communities are involved in the process of identifying impacts and agreeing upon mitigation measures.

Stakeholder and community engagement

Chapter 4 also describes stakeholder engagement. This appears to be limited to the pre-application engagement efforts. There is very little detail about plans to engage with stakeholders in the future, and no description of participatory engagement with communities. 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.

Recommendation for full Socio-Economic Impact Assessment to be scoped in

We recommend that a full Socio-Economic Impact Assessment be scoped into the Environmental Impact Assessment. Marine Scotland is producing guidance on how to carry out SIA for offshore wind farms and, as this is not yet complete, in this section we will outline the main principles that should underpin the SIA for this development.

In the absence of Marine Scotland's guidance, John Glasson and his team at Impact Assessment Unit (IAU), Oxford Brookes University have produced Guidance on assessing the socio-economic impacts of offshore wind farms (OWFs). This guidance aligns with the

forthcoming work from Marine Scotland and will provide suitable detail to accompany the points set out below.

Participatory approach

Creating participatory processes and a deliberative space to facilitate community discussions about desired futures, the acceptability of likely negative impacts and proposed benefits, and community input into the SIA process.

- Assess community capacity to engage – capacity building may be necessary
- Appoint Community Liaison Officer(s) for each affected community
- Set up governance structures so that communities feel they can voice opinions and be listened to
- Begin community engagement as soon as possible, brief communities on project with as much detail as possible so that they can prepare

Baseline

Gain a good understanding of the communities and stakeholders likely to be affected by the project (i.e. profiling) including their needs and aspirations and any key social issues that may arise as a result of the project.

- Develop social and economic profile of the area including history, culture and context
- Engage with community to learn of any other important features/indicators to include in baseline. There may be useful local datasets
- Analysis may draw on a combination of existing datasets and primary data

Prediction

Forecasting the social changes that may result from the project and the impacts these are likely to have on different groups of people. A list of potential socio-economic impacts can be seen in Table 1. Many of these impacts can be considered from a social and economic perspective. In the following sections we describe in more detail how this could be done.

- Identify potential/anticipated social impacts
- Identify suitable method for predicting impacts
- Collect necessary evidence to conduct analysis
- Engage with community to check predictions and assign significance to predicted impacts
- Impact prediction should include
    - Assessment of different phases of the project (development, construction, operation & maintenance, decommissioning) and phases within phases (early construction, peak construction)
    - Consideration of transition between phases

Table ***Error! No text of specified style in document.*** *Types of socio-economic impact (taken*

1. **Direct economic:**
   - employment, including employment cohort and safeguarding of existing employment;
   - unemployment and underemployment
   - characteristics of employment (e.g. skill group);
   - labour supply and training; and
   - other labour market effects, including wage levels and commuting patterns
2. **Indirect/induced/wider economic/expenditure:**
   - employees' retail expenditure (induced);
   - linked supply chain to main development (indirect);
   - labour market pressures;
   - wider multiplier effects;
   - effects on existing commercial activities (eg tourism; fisheries);
   - effects on development potential of area; and
   - GVA and GNP.
3. **Demographic:**
   - changes in population size; temporary and permanent;
   - changes in other population characteristics (e.g. family size, income levels, socio-economic groups); and
   - settlement patterns
4. **Housing:**
   - various housing tenure types;
   - public and private;
   - house prices and rent / accommodation costs;
   - homelessness and other housing problems; and
   - personal and property rights, displacement and resettlement
5. **Other local services:**
   - public and private sector;
   - educational services;
   - health services; social support;
   - others (e.g. police, fire, recreation, transport); and
   - local authority finances
6. **Socio-cultural:**
   - lifestyles/quality of life;
   - gender issues; family structure;
   - social problems (e.g. crime, ill-health, deprivation);
   - human rights;
   - community stress and conflict; integration, cohesion and alienation; and
   - community character or image
7. **Distributional effects:**
   - effects on specific groups in society (eg: by virtue of gender, age, religion, language, ethnicity and location); environmental justice

from Glasson 2017[1])

Mitigation and enhancement

Identifying ways of mitigating potential negative impacts and maximising positive opportunities.

- Engage with community to develop strategy for enhancing benefits and mitigating against impacts
- This may involve Community Benefit Agreement (CBA)
- Care should be taken to ensure that CBA and any associated funds should have accessible application procedures so that allocated funds can be used

[1] Glasson J (2017a) "Socio-economic impacts 2: Overview and economic impacts" in Therivel R and Wood G (eds.), Methods of Environmental and Social Impact Assessment, Abingdon: Routledge

Monitoring

Developing a monitoring plan to track implementation, variations from mitigation actions, and unanticipated social changes, especially negative impacts.

- Develop management plan and monitoring strategy
- Engage with community – especially with regard to both
    - Community may have concerns that they particularly want to be monitored
    - There may be local considerations regarding timing of monitoring and methods used e.g. access to internet for particular groups
- Link management plant to governance structures so that community can continue to engage with the project

Specific considerations for economic impact assessment

The detailed analysis of economic impacts should be followed by conclusions on the current supply chain and supply chain development trends in Scotland and the impact area. Impact areas assessed should include local, national (Scottish) and UK wide impact areas. While national and UK wide are defined boundaries, defining the immediate area will need to be clearly communicated in the impact assessment report. The *Additionality Guide* by Homes and Communities Agency (HCA) sets out the common geographical levels used in economic and social impact assessments.
Further economic considerations that should be included in the socio-economic impact assessment report are:

- **Displacement**
  Displacement effects arise when some of the project's benefits produce dis-benefits elsewhere in the local economy, i.e. jobs being moved from one location to another within the UK. Developers are expected to assess the impacts on affected livelihoods in the local project area, such as impacts on fisheries and tourism business as a result of the development.
- **Substitution**
  Substitution impact can be viewed as within firm displacement and refers to the impact of businesses substituting one form of activity for a similar one. For instance, recruiting a jobless person to replace a current employee in order to take advantage of public sector assistance. These affects need to be considered before presenting the total economic impacts.
- **Additionality**
  Defined as additional benefits of a development that would not have occurred had the development not taken place. The benefits are often expressed in terms of the increase in GVA and employment generated by the development. Primary factors to be considered in the calculation of Additionality include:
  Gross impacts, Leakages, Displacement, Deadweight loss, and Substitution. Please refer to HCA *Additionality guide* for detailed information.
- **Optimism bias, Risk Bias and Sensitivity Analysis**

Refer to Green Book for detailed definitions. (Green Book https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf)

- Where applicable any impacts related to the use of natural resources (depletion risks, resource use considerations, etc.) should be considered.

The EIA should be clear on the assumptions and methodologies applied at each stage of the assessment. The developers should be explicit in stating the following:

- Development's impact area
- Low, medium and high scenario definitions
- Assumed appraisal period and price base
- Applied SIC codes, GVA to turnover and employment to GVA multipliers
- Assumed Additionality factors
- Applied economic multipliers (Type I and Type II)

The following datasets/reports can be considered to inform the socio-economic impact assessment:

1. Scotland's Marine Economic Statistics 2018 - https://www.gov.scot/publications/scotlands-marine-economic-statistics-2018/
2. Scottish Marine Recreation & Tourism Survey 2015- http://marine.gov.scot/information/scottish-marine-recreation-tourism-survey-2015
3. Annual Business Survey, ONS; http://www.ons.gov.uk/ons/rel/abs/annual-business-survey/index.html
4. *Additionality Guide Fourth Edition 2013*, HCA; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/378177/additionality_guide_2014_full.pdf

Marine Scotland Science

MacFarlane M (Marc)

From: Gray A (Abby) (MSS) on behalf of MSS Advice
Sent: 12 March 2021 09:29
To: Irvine S (Sophia)
Cc: Edwards E (Ewan); Stainer P (Paul) (MARLAB)
Subject: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Opinion - MSS Comments

2020-12-22 - Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Opinion - MSS Advice Template
https://erdm.scotland.gov.uk:8443/documents/A31383234/details

Please find attached updated version for the above casework now including comments for Physical/Coastal Processes.

Kind Regards,
Abby

Abby Gray
Renewable Energy Environmental Advice Group
marinescotlandscience
Scottish Government
Marine Laboratory | 375 Victoria Road | Aberdeen, AB11 9DB
Phone: 0131 528775
Abby.Gray2@gov.scot

T: +44 (0)131 244 2500
E: MSS_Advice@gov.scot

Marine Scotland Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

4 March 2020

HIGHLAND WIND LIMITED - PENTLAND FLOATING OFFSHORE WIND FARM - DOUNREAY, CAITHNESS - SCOPING OPINION

Marine Scotland Science has reviewed the relevant documentation (the Scoping Report, NatureScot advice provided 18 February 2021, and RSPB advice, and have provided the following comments.

AQUACULTURE

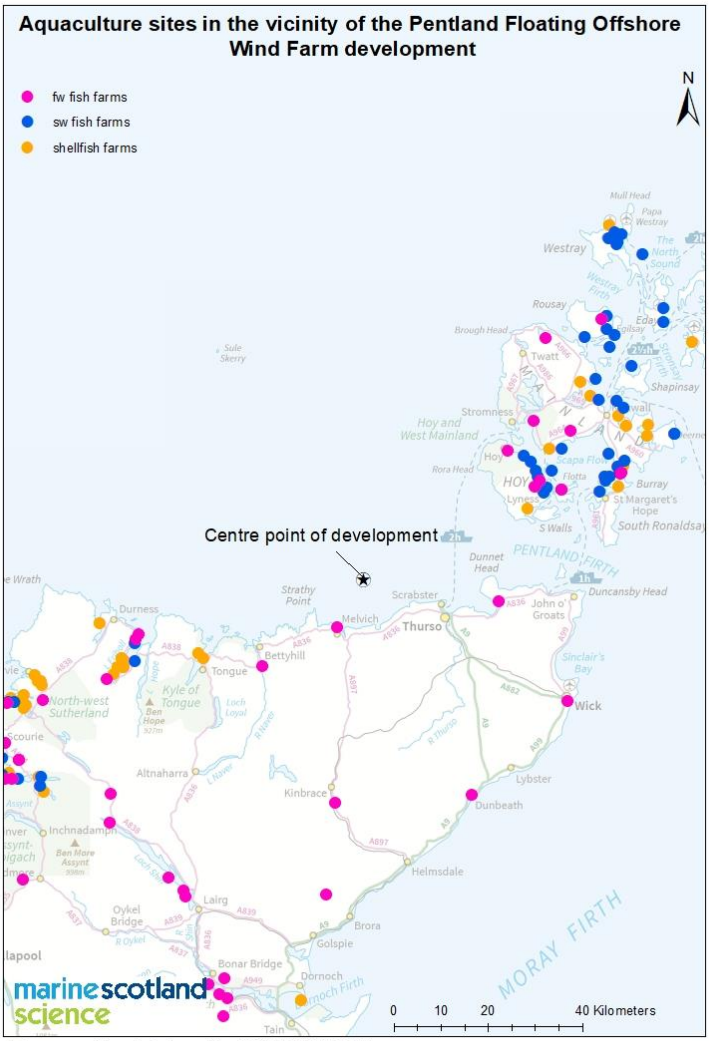
There is no fundamental difference to the comments provided in 2016 regarding aquaculture for the Section 36 and marine licence applications for Dounreay Tri Floating Demonstration Project, as no new fish farm sites have been developed or proposed in the vicinity of the proposed development - Pentland Floating Offshore Wind Farm, Dounreay, Caithness by Highland Wind Limited.

There are currently no aquaculture sites registered with Marine Scotland Science located in the close vicinity of the Pentland Floating Offshore Wind Farm, Dounreay, Caithness by Highland Wind Limited.

The nearest active marine aquaculture site is situated at Kyle of Tongue, ca. 35 km south west of the south west corner of the proposed offshore site. It is a seawater trestle site holding Pacific oysters, operated by Kyle of Tongue Oysters Ltd.

In addition to this, there are also a number of marine cage aquaculture sites in Orkney, however these sites are > 40 km north east of the proposed development (see map).

There are several land based freshwater sites displayed on the map but these are not expected to be affected by this development.



Marine Ornithology

In preparing our ornithology advice, Marine Scotland Science (MSS) have considered the Pentland Floating Offshore Wind Farm EIA Scoping Report prepared by Highland Wind Limited (hereafter, the Developer) and the consultation responses on this from NatureScot (NS, dated 18th February 2021) and from the Royal Society for the Protection of Birds (RSPB, dated 29th January 2021).

<u>Summary</u>
In common with NS and RSPB, MSS highlight the potential connectivity of the proposed development with several SPA/ pSPAs and their features. As such, we agree with NS and RSPB that provision of the HRA screening report should provide adequate detail for consultees and advisors to provide adequately informed advice for screening of sites and features for inclusion for HRA.

MSS welcome the collection of contemporary site specific ornithology data, by means of aerial surveys September 2020 through to August 2021. These data are established in Table 8-14 as being the data that may be used to inform assessment methods. Ordinarily, baseline data to inform assessment would comprise of two full years of data. MSS consider that the site may have adequate historical data that could be sufficient to inform the assessment for the site. MSS advise that a decision on the requirement of the data to inform assessment should be made upon presentation of all of these data in an informative format. In addition, justification should be presented for the use and appropriateness of the 2 km buffer used in baseline data collection.

MSS consider the scoping report to have provided several key impacts and methods for assessment of these impacts. However, there are several potential routes to impact that need further

consideration, discussed below. MSS would welcome further discussion, together with NS and RSPB around how these impacts are assessed.

NS advise that cumulative assessment should include the Moray Firth wind farms, and RSPB consider that for some species their breeding ecology may require onshore wind developments to be considered in cumulative assessment. NS also suggest this potentially requires consideration for great black-backed gull. MSS would welcome further discussion and agreement with MS-LOT and NS regarding the project list to be considered in the cumulative assessment and how terrestrial wind farms are considered.

Specific comments are detailed below:

Study Area

MSS agree with both NS and RSPB that given the increase in scale from the original Dounreay Tri Limited project additional justification and clarification, should be provided as to the suitability of the 2 km buffer in the context of the proposed development, when emerging standard guidance is for a 4 km buffer. However, MSS note that a 2 km buffer was included in an earlier survey methods document (dated 4 August 2020) which MSS and NS advised on, with neither commenting then on the adequacy of the stated buffer size. Consideration could be given to increasing to a 4 km buffer (given this emerging as standard guidance) for any outstanding surveys, this could be informed by discussion with NS, MSS, and RSPB.

The export cable landfall occurs within the North Caithness Cliff SPA. We support a baseline characterisation of this area and of the proposed cable route. We do not expect aerial survey coverage of this region.

Baseline surveys

The developer provides indicative detections from 12 months of surveys in 2015. The detections provided in Tables 8-10 and 8-11 are provided as densities in the original report and MSS support the NS suggestion that data are provided in a consistent approach and where data are combined, appropriate methods are used. For example, soon to be published Marine Scotland best practice recommendations on combining data from different survey platforms may be beneficial, as RSPB also suggest (though by RSPB for 'contextual assessment' only).

In section 8.5.7, the scoping report states further surveys undertaken in an adjacent area in 2015 and 2016 (Figure 8-8) had broadly the same result. MSS suggest these and other data are provided to inform site characterisation, to allow for comparison as to the relative density estimate in the overall area between years.

In common with NS and RSPB we welcome the decision to undertake new surveys between September 2020 and August 2021. MSS advise that existing data and new data are presented for provision of fully informed advice. This should include consideration of the age of survey data (raised as of concern by RSPB as >5 years pre-application) and when using multiple sets of survey data as to how these are combined.

Key species

In agreement with NS, MSS advise that the focus of the ornithological assessment will pertain to impacts affecting qualifying SPA and pSPA features, including migratory species.

As advised by NS, completion of a long-list process at HRA screening will provide a clearer indication of the key species that should be considered.

SPA connectivity

MSS agree with the guidance provided by NS regarding SPA connectivity, namely that SPA connectivity is derived primarily using the mean-max + 1 SD from Woodward et al. 2019[1]. We agree with the exceptions detailed by NS in terms of site-specific exceptions and the grouping of the including and excluding Fair Isle foraging ranges. However we consider further discussion and agreement should be sought with respect to a suitable precautionary approach regarding alternative

[1] Woodward, I., Thaxter, C.B., Owen, E., and Cook, A.S.C.P. 2019. Desk-based revision of seabird foraging ranges used for HRA screening. BTO research report number 724

metrics where there was insufficient data for Woodward et al. (2019) to derive a mean-max + 1 SD, i.e. where there is greater uncertainty in inferring potential for likely connectivity with a breeding site.

Impacts pathways scoped in/out

MSS assume that the HRA screening will include consideration of all features of any SPA and pSPA with connectivity to the proposed development. Below we comment on impacts not considered in this scoping document.

Given the impact summary is high level it is not clear whether impacts during construction of the cabling route have been considered in this scoping report. MSS recommend a qualitative (subject to agreement with NS) assessment is presented including presentation of the expected route, an estimated timeline of works, suitable presentation of buffers and connectivity with designated sites and affected features. Whilst effects may be temporary and of a short duration if there is the possibility of pathway to impact and subsequent effects (even if short in duration) to any (for example) breeding or roosting feature, the EIAR and HRA should strive to identify any potential overlap, spatial or temporal, provide evidence for no risk and/or provide further consideration of effects and mitigation to ensure MS-LOT (and NS) are provided with adequate evidence to assess the potential for impact.

We agree in principle with NS regarding the potential for underwater noise impacts on seabirds, but highlight that quantitative assessment of underwater noise impacts likely requires in-depth knowledge of the sensitivity of bird species to sound source levels and frequencies, and for many species this knowledge is lacking. We note that mitigation measures to reduce risk of injury to marine mammals, e.g. watches prior to clearance of unexploded ordnance (UXO), may help reduce impacts to diving seabird species. Thus, in the absence of evidence to specifically assess this impact for birds, the mitigation approaches taken for marine mammals could be broadened to reduce risk to birds.

We note that entanglement of foraging birds with debris, such as fishing gear, that snags on the mooring lines has not been considered. We acknowledge the limited evidence available to assess how likely entanglement may be, however this potential pathway to impact should be considered. Mitigation measures suggested below in our Marine Mammal response to reduce impacts to marine mammal species should also help reduce any impacts to foraging seabirds, e.g. '*We also consider that the potential for entanglement in debris caught on the mooring lines should be included in the ES. We would recommend that strategies to minimise or remove such debris are considered*.'

MSS agree with RSPB comments that impacts should also be considered for Procellariform species (petrels, shearwaters and fulmar) in terms of their nocturnal activity and collision risk. Clarification on how to approach assessment of these impacts should be sought in discussion with NS, MSS and RSPB.

The impacts of attraction to structures and vessels due to artificial light, and subsequent risks of e.g. collision or stranding should be considered qualitatively for shearwater and petrel species. MSS acknowledge there is currently limited information on the likely impacts of attraction to and collision of shearwaters and petrels with wind turbine structures. Literature recording attraction and stranding/collision with vessels and infrastructure is widely available, including an information note from NS on, 'The Effect of Aviation Obstruction Lighting on Birds at Wind Turbines, Communication Towers and Other Structures'[2]. This effect should be considered in assessment considering potential overlap (spatial and temporal) between structures and vessels with lighting and at risk species, including potential for built-in or other mitigation.

MSS agree with NS that pollution impacts are scoped out for ornithology but more information and detail should be provided in the Environmental Impact Assessment Report (EIAR) regarding the embedded mitigation reducing this impact during construction and operation (as suggested also by RSPB with respect to the oil used in wind turbine generators).

Assessment methods

MSS consider that further detail is required on the methods of assessment to be used for some effects scoped in, such as creation of roosting habitat or foraging opportunities and potential changes

[2] https://www.nature.scot/information-note-effect-aviation-obstruction-lighting-birds-wind-turbines-communication-towers-and

in prey availability. MSS consider the appropriateness of approaches to key impacts (collision, displacement and disturbance and barrier effects) mentioned to be adequate. However, we do consider some specific comments for awareness of both emerging and existing guidance and methodologies and are content to partake in further discussion to reach agreement on most appropriate methods together with NS and RSPB where relevant:

Breeding birds

MSS agrees with both RSPB and NS that where available the latest figures from the 'Seabird Count' (available via the Seabird Monitoring Programme Database[3]) are used in assessment of impacts to breeding birds.

Collision

NS provide a number of recommendations on which model version to use and some discussion on appropriate references for parameter values. RSPB do not provide specific comments here except in the case of the avoidance rate for gannet, where they recommend that the default rate of 98% to be used, based on a recent publication[4] suggesting gannets change their behaviour (which may change their avoidance behaviour) during the breeding season. MSS would welcome further discussion with NS and RSPB concerning this and other collision modelling specifications, to seek agreement on the collision risk modelling approach.

The developer proposes to perform collision risk modelling using both the deterministic Band (2012)[5] model and the stochastic implementation of Band (2012) developed by Masden (2015)[6] and subsequently implemented as a user friendly web application (McGregor et al. 2018)[7], known as the stochastic collision risk model (sCRM). NS support the use of both approaches, while RSPB recommend solely the use of the sCRM application (i.e. McGregor et al. 2018).

MSS support the use of standardised tools such as the sCRM. MSS advise the outputs of the sCRM should be relied on for assessment but for comparability and context it may still be useful to also run the deterministic Band (2012) model.

The developer proposes to assess collision risk for migratory species qualitatively with reference to the Marine Scotland commissioned strategic level report (Marine Scotland 2014)[8]. This approach is supported by NS and MSS. As NS note in their advice, Marine Scotland have contracted a further strategic study[9], which is currently in progress. The new strategic study also includes further development of the sCRM tool for migratory species assessment. Should this be available within the assessment timescale then MSS agree with NS that this report and tool should be used, informed by discussion with NS and MSS.

Displacement and disturbance effects:

[3] https://app.bto.org/seabirds/public/about.jsp

[4] Lane, J. V., Jeavons, R., Deakin, Z., Sherley, R. B., Pollock, C. J., Wanless, R. J., & Hamer, K. C. (2020). Vulnerability of northern gannets to offshore wind farms; seasonal and sex-specific collision risk and demographic consequences. Marine Environmental Research, 162, 105196.

[5] SOSS-02: A review of methods to estimate the risk of bird collisions with offshore wind farms - https://www.bto.org/our-science/wetland-and-marine/soss/projects

[6] Masden, E. (2015) Developing an avian collision risk model to incorporate variability and uncertainty. Scottish Marine and Freshwater Science Vol 6 No 14. Edinburgh: Scottish Government, 43pp. DOI: 10.7489/1659-1. Available from: https://data.marine.gov.scot/dataset/developing-avian-collision-risk-model-incorporate-variability-and-uncertainty

[7] McGregor, R., King, S., Donovan, C., Caneco, B., Webb, A. (2018). A Stochastic Collision Risk Model for Seabirds in Flight. https://www2.gov.scot/Topics/marine/marineenergy/mre/current/StochasticCRM

[8] Marine Scotland (2014) Scottish Marine and Freshwater Science Volume 5 Number 12: Strategic assessment of collision risk of Scottish offshore wind farms to migrating birds. https://www.gov.scot/publications/scottish-marine-freshwater-science-volume-5-number-12-strategic-assessment/

[9] Strategic study of collision risk for birds on migration and further development of the stochastic Collision Risk Modelling tool. Public Contracts Scotland reference number: SEP395028. https://www.publiccontractsscotland.gov.uk/search/show/search_view.aspx?ID=SEP395028

To assess displacement effects the developer proposes to use the SNCB Matrix Approach (SNCBs 2017)[10] potentially with the SeabORD tool (Searle et al. 2018)[11].

In agreement with NS, MSS advise that the SeabORD tool should be applied to those species it is currently specified for (i.e. where tracking data is available). The SNCB matrix assessment approach should be used for those species not included in the tool.

For the non-breeding season apportioning, NS advise that for the auk species the BDMPS Report (Furness, 2015)[12] population scales be applied, except for common guillemot where the assessment area and population should be derived using breeding season foraging range. MSS advise that emerging evidence (e.g. auk tagging studies from MacArthur Green and SEATRACK)[13] could alter our understanding of the movement and distribution of auk species during the non-breeding season, and as such, should new evidence emerge within the assessment timeline, then it may be appropriate to review how these species are assessed for the non-breeding season. MSS welcome the suggestion from both NS and RSPB towards further discussion and agreement on displacement mortality values to be used in assessment.

For kittiwake, NS advise that there needs to be further discussion to reach agreement on whether the species is assessed for displacement and barrier effects in addition to collision risk. RSPB do not provide specific comment on this. As NS note it was previously unclear whether collision risk and displacement risk are mutually exclusive. A soon-to-be-published Marine Scotland commissioned study[14] now indicates that these are not mutually exclusive risks at the population scale, though the study also indicates complexities around how collision and displacement/barrier effect assessments should be parameterised in a common way. Once that report is published MSS advise that there should be further discussion to reach agreement on the approach to be taken for kittiwake.

For gannet, NS advise that displacement effects need to be included in assessments. MSS agree that this should be assessed, and suggest that there should be further discussion around the approach to take. This should include consideration of whether to assess for both the breeding and non-breeding seasons, or only for the breeding period, and whether barrier effects need to be considered in addition to displacement. This should be informed by baseline data and the aforementioned forthcoming Marine Scotland commissioned report**Error! Bookmark not defined.**.

Barrier effects:
The Developer suggests barrier effects will be assessed in a qualitative approach with reference to published literature but that emerging guidance and techniques may consider the integration of displacement and barrier effects together.

NS state that they support the use of SeabORD during the breeding season for those species with tracking data, with SeabORD providing an integrated assessment of displacement and barrier effects. Where it is not possible to apply the SeabORD tool, MSS support a qualitative approach to assessment for barriers to movement effects.

Population Viability Analysis (PVA)
Where effects are assessed to be potentially significant either from the proposed development alone or in combination with other developments, PVA modelling should be used to better understand

[10] Joint SNCB Interim Displacement Advice Note 2017. https://hub.jncc.gov.uk/assets/9aecb87c-80c5-4cfb-9102-39f0228dcc9a
[11] K R Searle, D C Mobbs, A Butler, R W Furness, M N Trinder and F Daunt. 2018. Finding out the Fate of Displaced Birds. Scottish Marine and Freshwater Science Vol 9 No 8, 149pp. DOI: 10.7489/12118-1 https://data.marine.gov.scot/dataset/finding-out-fate-displaced-birds
[12] Furness (2015). Non-breeding season populations of seabirds in UK waters - Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Report NECR164 to Natural England. http://publications.naturalengland.org.uk/publication/6427568802627584
[13] See: http://www.seapop.no/en/seatrack/ and Auk Tagging and Monitoring - MacArthur Green -Interim Report 2019. https://group.vattenfall.com/uk/siteassets/wind-pdf-documents/eowdc/auk-and-guillemot-tagging-study-by-macarthur-green.pdf
[14] Study to examine how seabird collision risk, displacement and barrier effects could be integrated for assessment of offshore wind developments (ITQ-0246). Marine Scotland commissioned study. Publication imminent.

population level impacts for protected sites (SPA populations). NS suggest a threshold of 0.2% change in adult survival rate. However, MSS advise that there should be further discussion to agree appropriate thresholds for when PVA should be undertaken; the 0.2% change in adult survival value may be appropriate for some species, but given interspecific variation in annual survival a percentage of background mortality may be a more appropriate approach. The developer does not provide detail on their proposed methods for PVA. In common with NS and RSPB, MSS recommend the NE tool[15] as a standardised approach for implementing PVAs for seabird populations. MSS also highlight a recently completed strategic project regarding PVA, for consideration when undertaking population level assessment. The recommendations of Searle et al. (2020)[16] should be considered carefully when parameterising PVA models; this includes where to draw population and demographic parameter estimates from and suggestions to 'tune' demographic parameters to improve model performance, but this must follow an automated and transparent approach.

Apportioning:
The developer suggests apportioning will follow the NS interim Guidance, found in NatureScot (2018)[17]. NS advise that apportioning should follow emerging Marine Scotland guidance for those species it pertains to and NS interim guidance for other species. MSS assume that the emerging Marine Scotland guidance referred to is the recently published report and MS Apportioning Tool (Butler et al. 2020)[18]. RSPB support the use of this recently developed tool. MSS are in general agreement with NS but wish to clarify that the MS Apportioning Tool includes two different apportioning options: one a new method using the Wakefield et al. (2017)[19] colony specific distributions, and the NatureScot breeding season 'theoretical approach' method. MSS advise that there should be further discussion to allow provision of specific advice on breeding season apportioning.

For apportioning during the non-breeding season the developer states that there will need to be further discussion to reach agreement on approach, but suggests use of the BDMPS approach (Furness 2015)[20]. NS state that the BDMPS approach should be used for most species but that this will require further discussion for species that disperse less widely from the breeding area during the non-breeding season (e.g. guillemot). RSPB provided no specific comment here. MSS are in agreement with NS on the general approach and agree that further discussion will be needed to reach agreement on approach (also note our comment above under Displacement and disturbance effects regarding emerging evidence for non-breeding season movement and distribution of auk species).

Cumulative assessment

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[15] Searle, K., Mobbs, D., Daunt, F. & Butler, A. 2019. A Population Viability Analysis Modelling Tool for Seabird Species. Natural England Commissioned Reports, Number 274. http://publications.naturalengland.org.uk/publication/4926995073073152 also see https://github.com/naturalengland/Seabird_PVA_Tool

[16] Searle, K., Butler, A., Bogdanova, M. and Daunt, F. 2020. Scoping Study - Regional Population Viability Analysis for Key Bird Species CR/2016/16. Scottish Marine and Freshwater Science Vol 11 No 10, 118pp. DOI: 10.7489/12327-1 https://data.marine.gov.scot/dataset/scoping-study-regional-population-viability-analysis-key-bird-species-cr201616

[17] NatureScot (2018) Interim Guidance on apportioning impacts from marine renewable developments to breeding seabird populations in SPAs - https://www.nature.scot/interim-guidance-apportioning-impacts-marine-renewable-developments-breeding-seabird-populations

[18] Butler, A., Carroll, M., Searle, K., Bolton, M., Waggitt, J., Evans, P., Rehfisch, M., Goddard, B., Brewer, M., Burthe, S. and Daunt, F. 2020. Attributing seabirds at sea to appropriate breeding colonies and populations (CR/2015/18). Scottish Marine and Freshwater Science Vol 11 No 8, 140pp. DOI: 10.7489/2006-1 - https://data.marine.gov.scot/dataset/attributing-seabirds-sea-appropriate-breeding-colonies-and-populations-cr201518 - to note the report is published but the tool is not yet published, MSS are currently in the process of publishing the accompanying tool.

[19] Wakefield, E.D., Owen, E., Baer, J., Carroll, M.J., Daunt, F., Dodd, S.G., Green, J.A., Guilford, T., Mavor, R.A., Miller, P.I., Newell, M.A., Newton, S.F., Robertson, G.S., Shoji, A., Soanes, L.M., Votier, S.C., Wanless, S. and Bolton, M. (2017), Breeding density, fine-scale tracking, and large-scale modeling reveal the regional distribution of four seabird species. Ecol Appl, 27: 2074-2091. doi:10.1002/eap.1591 https://doi.org/10.1002/eap.1591

[20] Furness (2015). Non-breeding season populations of seabirds in UK waters - Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Report NECR164 to Natural England. http://publications.naturalengland.org.uk/publication/6427568802627584

MSS agree with NS that in the breeding season, cumulative assessment should consider effects of projects within foraging range of the colony SPA under consideration, using Woodward et al. 2019.

MSS welcome further discussion, together with NS and RSPB to reach agreement on the ultimate list of relevant developments to be included upon provision of the HRA screening document. Discussions should focus around SPA species, the inclusion of onshore developments (for those marine species such as red throated divers and great black-backed gulls, whose ecology means they could have connectivity with terrestrial developments during the breeding season) and on the inclusion of additional wind farms.

Comment on embedded mitigation

It is stated that the '*minimum distance between the bottom of the blade and the water surface will be between 22 m to 40 m*'. This is generally termed the 'air gap' in terms of collision risk modelling. Generally, a project with fewer turbines and large air gaps will lead to reduced collision risk. Due to the lower risk of collisions MSS advise that the Developer considers air gap when refining their design envelope, and agree with NS recommendation to refine the design envelope as far as possible prior to assessment.

Climate change and ecosystem effects

Under their general comments (i.e. not in the Ornithology specific Appendix A), NS state a need to assess wider ecosystem-scale effects, including in relation to prey species for top predators (including seabirds). Furthermore NS state that consideration is given to how certain climate stressors may act in combination with project specific effects. These points are largely not developed in the ornithology specific section. Should these factors be considered in assessment, MSS suggests that further discussion will be required to inform on how these are assessed with respect to ornithology.

Marine Mammals

MSS have reviewed the scoping report in relation to marine mammals.

We note the intention to include white-beaked dolphin, harbour porpoise, bottlenose dolphin, minke whale, harbour seals and grey seals in the EIAR, and the intention to include other species, but would appreciate further information on what those species are and how the species to be included will be identified. We recommend that both Paxton *et al.* (2016), Waggitt *et al.* (2020) and Hague *et al.* (2020) are considered in the review of baseline information.

We broadly agree with the activities to be scoped into the EIAR (Table 8-7), but note the following:

- We note and welcome the statement in section 5.2.4 that hammer piling will not be used to install the anchors. This will reduce the potential impacts from underwater noise to marine mammals. Some of the suggested alternative methods for installing the anchors (e.g. drilling) in Table 5-4 may also produce relatively high levels of underwater noise, and we would expect to see an assessment of the impact of this in the EIAR.
- We also note that the area is considered to be a low risk for presence of unexploded ordnance (UXO). Should it be the case that UXOs are found on the site, a full assessment of the noise likely to be produced in clearing the ordnance will be required, as well as an assessment of the impacts to marine mammals. It would be preferable to include this in the ES if possible to allow assessment of the project as a whole. A suitable mitigation strategy will be required.
- We advise that it would be useful if any further geophysical surveys that may be required are included in the EIAR where possible. This is to allow assessment of the project as a whole. It is likely that any such activity will need to be considered through the EPS licensing process too (see updated guidance on EPS EPS+guidance+July+2020.pdf (www.gov.scot)).
- We recommend that entanglement risk is included as a potential impact to marine mammals in the EIAR, particularly as a decision has not been made on the type of mooring lines to be used. Taut lines would represent a lower risk of entanglement. We also consider that the potential for entanglement in debris caught on the mooring lines should be included in the EIAR. We would recommend that strategies to minimise or remove such debris are considered.
- The impacts for the Decommissioning phase to be scoped in / out mirrors those identified for the Construction phase. However, without a decommissioning methodology it is difficult to

determine whether the impacts will be the same as those during construction. For example, it is possible that methods used to remove the turbines and anchors may produce underwater noise that would require assessment. MSS also recommends that long-term habitat change, which is scoped in for the Operation phase but not considered for the Construction phase, should also be scoped in for the Decommissioning phase due to the inherent uncertainty regarding end-of-life decisions for project (e.g. the removal of foundations).

We agree with the list of projects to be included in the cumulative assessment (table 6-1) with respect to marine mammals.

Table 8-8 is confusing.

To note, the NMFS (2014) reference has now been superseded by NMFS (2018), which includes the published noise assessment thresholds.

It is unclear how the initial 12 months of aerial surveys will address the potential for long-term changes to habitat. These aerial surveys will characterise the occurrence of marine mammals and basking sharks in the development area, but will not capture any behavioural data (i.e. foraging patterns) nor will they describe the current condition / status of the habitat itself. We recommend referring to the surveys mentioned in the Benthic, Fish and Shellfish and Commercial Fisheries sections (i.e. benthic and geophysical surveys undertaken in 2021) here instead, as a more appropriate methodology to evidence this impact pathway.

The conclusions section summary text is missing long-term habitat change as an impact, which is to be scoped in (for Operation phase) according to Tables 8-7 and 8-8.

In Table 13-1, we consider that cumulative impacts from construction and decommissioning noise should be scoped in. It is unclear why there is a separate row for “construction noise”.

Marine Fish Ecology

Data, survey work and EIAR assessment methodology

MSS are content that most of the existing data on fish and shellfish resources have been listed, however MSS advise that the developer refers to a report which provides a modelled spatial representation of the probability of the presence of 0 age group fish (fish in the first year of their life) and the probability of aggregations of 0 age group fish (Aires et al. 2014). It is recommended these data are presented visually in conjunction with the Coull et al. (1998) and Ellis et al. (2012) nursery maps, as there are certain limitations with the data. Further details are available here: (https://www2.gov.scot/Topics/marine/science/MSInteractive/Themes/fish-fisheries/fsm)

In addition to the Coull et al. (1998), Ellis et al. (2010) and Aires et al. (2014) data, new information is available regarding the spawning areas of cod, haddock and whiting (González-Irusta and Wright 2016; González-Irusta and Wright 2016; González-Irusta and Wright 2017). The whiting paper is available but the associated GIS layers are not available as yet. The three papers contain the new information however they are not yet available on NMPi. We hope that these will be available online shortly to enable their use

MSS advise that it would be helpful to include the results of the ICES International Herring Larvae Survey (IHLS), due to the proximity of the study area to herring spawning grounds. These data provide quantitative estimates of herring larval abundance which are used as a relative index of changes in herring spawning stock biomass in the assessment.

MSS also advise referencing the ORJIP study on ‘Impacts on fish from piling at offshore wind farm sites: collating population information, gap analysis and appraisal of mitigation options’ which was published in 2018 (Boyle and New 2018).

As stated in this Scoping Report, predicted EUNIS habitat data suggests there may be suitable seabed habitat for sandeels within the Offshore Study Area. The developer states that this would need to be confirmed by benthic grab samples and geophysical and geotechnical site investigation surveys. In section 8.3.10 (Method of Assessments) the developer proposes a desk based assessment to review seabed images collected in the area to determine suitability of sediments present for spawning and nursery grounds. MSS agree that further confirmation and refinement of sandeel spawning areas is required and therefore MSS advise that surveys should be undertaken to identify suitable habitat for sandeel spawning to inform impact assessment and the need for mitigation. Reviewing seabed images to determine suitability of sediments present for sandeel spawning is not an accurate method. MSS recommend sediment analysis as a more accurate method to judge whether spawning is likely within an area. Sandeels prefer spawning substrate with a low clay silt fraction (<10%) and typical sandeel habitat is within the 20 – 100 m water depth range (Mazik et al. 2015 and Lancaster et al. 2014).

MSS is content with the fish species identified in Table 8-3 but recommend that the table is updated to reflect those fish species which are Priority Marine Features (PMFs), to highlight the importance of those species. MSS also recommend that the EIAR should consider those fish species which provide an important function as a key prey resource (such as herring, sandeels and sprat) and the implications for predator/prey interactions.

Impacts

MSS agree with the potential impacts which have been identified for fish and shellfish ecology however MSS have some further points for consideration.

EMF

MSS agrees with NatureScot and advise that the potential effects of EMFs (from subsea and dynamic cables) on sensitive species are scoped in. Floating offshore wind farms have dynamic cables which are free-hanging in the water column and therefore consideration should also be given to pelagic fish species that might come into contact with these cables.

Fish aggregation around the floating structure and associated infrastructure

MSS agrees with NatureScot and advise that fish aggregation around the floating structure and associated infrastructure should be scoped in. Floating offshore wind farms may act as a fish aggregation device and this may have wider ecological implications such as attracting marine predators.

Habitat disturbance

MSS welcome any technical designs that minimise seabed disturbance and footprint such as the shared anchor point and steep wave mooring system.

Commercial Fisheries

Development design

MSS understand that the final design of the floating substructure, mooring system, anchor type and wind farm configuration have not been confirmed yet. These final details will help MSS to make a better assessment of the potential impacts on commercial fisheries but in the meantime, MSS can provide the following advice.

Data and guidance

MSS highlight that finalised Scottish Government fisheries statistics for 2019 were published in October 2020 and therefore MSS recommend using the most up-to-date statistics. Please note that the format of the statistics has changed and from 2019 onwards, these will be published in .csv format and made available through the Marine Scotland Data page: https://data.marine.gov.scot/group/fisheries.

The 2019 finalised statistics (which include finalised statistics for 2015 - 2019) are available on the following web page (doi: 10.7489/12338-1): https://data.marine.gov.scot/dataset/2019-scottish-sea-fisheries-statistics-fishing-effort-and-quantity-and-value-landings-ices

Historical statistics are also still available on the following web page:
https://www2.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/RectangleData

MSS is commissioning a project to develop good practice guidance for assessing fisheries displacement by other licensed marine activities. This contract has commenced and will end in July 2021. MSS recommend referring to this guidance if it is published in time to supplement this EIAR.

Impacts and mitigation
MSS agree with the potential impacts which have been identified for commercial fisheries and scoped in.

It is likely that the development of a floating offshore wind farm and its associated cabling and mooring infrastructure may result in a permanent loss of access to fishing grounds and displacement of fishing activity for certain types of fisheries, in particular mobile fishing. This is due to health and safety concerns, and the potential for damage or loss of fishing gear due to entanglement and snagging on floating and subsea structures. This permanent loss and displacement should be considered in a fisheries displacement assessment to estimate displacement levels. This assessment should include (but not be limited to),

- consideration of minimum operating space requirements for the range of fishing activities (deploying and hauling gear),
- vessel manoeuvrability and,
- over-trawl-ability of cables.

The assessment should also consider the impact of displaced fishing on surrounding areas and other marine users.

In terms of mitigation, MSS recommends consideration of the types of fishing that take place in the area, their minimum operating space requirements (deploying and hauling gear) and vessel manoeuvrability, and factor this into wind farm layout, configuration and turbine spacing where possible from an early design process stage.

MSS recommend consulting with fisheries stakeholders on the feasibility of the proposed cable protection measures, either concrete mattresses or rock placement, to avoid the risks of fishing gear snagging on cable protection measures.

Decommissioning
With regards to decommissioning, the developer states that cables and scour protection may be left *in situ*. MSS advise that all infrastructure that might pose a hazard to fishing should be removed.

Diadromous fish

MSS agree that the main diadromous fish likely to occur at the site are Atlantic salmon, sea trout and eel. Malcolm *et al*. (2010) provided a comprehensive review of information on the coastal migration of returning adult salmon and emigrating salmon smolts, and sea trout. However, new material has shed additional light on various topics - notably, in this part of Scotland, in relation to returning adult salmon. Tagging studies and some genetic assignment of salmon caught at sea off the north coast of Scotland to their rivers of origin show that fish destined for north coast and more distant rivers, particularly Scottish east coast rivers, are present (Malcolm *et al*. 2010, Cauwelier *et al.* 2015, Godfrey *et al*. 2015, Godfrey *et al.* 2014, Downie *et al.* 2018). Of the rivers on the north coast with populations of salmon, the three with the largest populations are the Rivers Borgie, Naver and Thurso, and all are designated as salmon SACs and all with valuable rod fisheries for salmon.

Diadromous fish are mobile and should be considered over a larger study area than that defined in Section 8.3.5. Certainly, the potential impacts on the salmon populations of the Rivers Borgie, Naver and Thurso should all be included for consideration in the EIAR. An annual grading of Scottish salmon rivers is carried out by Marine Scotland Science using catch, counter and juvenile survey

data, to assess the resilience of the salmon population of each Scottish salmon river to any additional mortality. The latest assessment is at Consultation and application of conservation limits on salmon - gov.scot (www.gov.scot). This approach now forms the basis of assessing the state of the salmon populations in SACs.

In relation to diadromous fish, MSS are generally content with what is proposed in Table 8-4 to be scoped in and out. However;

- MSS agree with NatureScot that the effects of EMFs from subsea and dynamic cables on sensitive species should be scoped in. There is published information for Pacific salmon (Putman *et al.* 2013, 2014), which is also likely to apply to Atlantic salmon, on the importance of geomagnetic navigation both to post-smolts in migrating to marine feeding grounds and to returning adult salmon in homing to their natal rivers. Such navigation makes use of very small differences in the ambient magnetic fields which should be considered in relation to the magnetic fields associated with cables. Emigrating smolts and returning adults both mainly migrate close to the sea surface (many references are now available) which may increase the potential for the migration of geomagnetically navigating salmon to be impaired or delayed through interaction with EMF associated with mid water to surface cables. Hutchison *et al.* (2020) have recently reviewed the potential for interaction between resource species, including fish, and electromagnetic fields associated with electricity production by offshore wind farms.

- MSS agree with NatureScot that fish aggregation effects around the floating structure and associated infrastructure should be scoped in, and this potential impact needs expanded in relation to diadromous fish to include the potential for the structures to attract and offer shelter and favourable predation opportunities to predatory birds, mammals and larger fish. The available relevant information which includes papers by Dannheim *et al.* (2019), Degraer *et al*. (2020) and Russell *et al.* (2014), *albeit* not on floating wind developments, should be reviewed to inform the impact assessment in the context of diadromous fish.

Regarding statutory sites, the justification of the statement in Table 11-6 in relation to the Rivers Borgie, Naver and Thurso that "*As the Project will have no direct or indirect impact on the site or adjacent habitat, there is no pathway for impact as identified in this report*." is not clear and requires further consideration.

MSS welcome (in Section 4) that the Northern and Caithness District Salmon Fishery Boards will be consulted. Although there is no District Salmon Fishery Board for Orkney, we recommend consulting with the Orkney Trout Fishing Association in relation to the important, although poorly documented, sea trout rod fishery in Orkney waters.

MSS highlight that the Association of Salmon Fishery Boards is now Fisheries Management Scotland.

In their consultation response to LOT of 18 February 2021, NatureScot state that "*We recognise the continued lack of knowledge on individual river populations for diadromous species which are SAC qualifying interests, and so currently we continue to advise that the assessment of these should be covered within the EIAR rather than the HRA.*" MSS advise that the matter of the adequacy of knowledge of diadromous fish populations from SAC rivers which could be impacted should be considered both in the EIAR and in the screening report.

Benthic Ecology

Under section 8.2.2 MSS recommend including species and habitats listed as Priority Marine Features (PMF; Scotland's National Marine Plan). The ocean quahog *Arctica islandica* for example is a PMF found in this region of the Pentland Firth (Moore 2015).

MSS broadly agree with Highland Wind on those impacts that are scoped out and agree with NatureScot's comments on the additional impacts that should be scoped in. MSS have provided more detail on reasoning for scoping these aspects in.

Introduction of marine non-native species (NNS): A new structure provides an opportunity for colonisation without competition from the indigenous population (Tyrrell & Byers 2007). NNS can arrive by numerous different vectors (Drake *et al.* 2007; Ashton *et al.* 2006; Coolen et al. 2006). Therefore even when precautions are taken to reduce likelihood of NNS, it is still possible they may colonise these structures. Research in the Southern North Sea points to the intertidal zone of windfarm turbines and those wind farms that are closer to shore as being important for colonisation by NNS (Coolen et al. 2016; Kerckhof *et al*. 2015). Literature such as Adams *et al.* (2014) describes how NNS can spread to natural habitats. MSS recommend an assessment of the risk of NNS while adhering to the protocols provided in the International Convention for the Control and Management of Ships' Ballast Water and Sediments. MSS recommend that regular monitoring of structures is carried out by trained observers, particularly of high risk areas (such as the splash zone), in order that management action can be taken swiftly should NNS be found.

Colonisation of subsea infrastructure, scour protection and support structures: Subsea structures are likely to be colonised by species with a preference for hard substrates. As this is a largely soft sediment environment, the introduction of subsea infrastructure presents an opportunity for colonisers, representing a change in the natural soft sediment ecosystems present in the area. From the perspective of benthic ecology, MSS recommend burial of cables over the addition of cable protection. Where cable / scour protection is necessary, MSS recommend where possible, minimising the amount that is installed in order to reduce the deposition of hard substrate structures on the soft sediment habitats. Consideration should be given to the choice of cable protection with a view to firstly, minimise the introduction of plastics contained within the rock mattresses and secondly, to use a type of cable protection that can be removed during decommissioning.

NS advise that impact to benthic communities from any thermal load or electromagnetic field (EMF) arising from the cable during operation are scoped in, particularly for inter-array cables (dynamic and static). Further to this, MSS advise that impacts of EMF should be considered for cables when buried in addition to those that are free-hanging or surface-laid.

Thermal load

There is evidence that thermal emissions occur from high voltage subsea cables, which can be detectable within the sediment surrounding a cable (Meißner 2006; Taormina *et al.* 2018). MSS recommend that the developer considers how thermal emissions might affect benthic species in the vicinity of subsea cables both within the sediment (for buried cables) and in the sediment and water column (for non-buried).

Electromagnetic field (EMF)

As raised in the Marine Fish and Diadromous Fish sections in this response, MSS advise MS-LOT that there is a need to consider potential impact of EMF on sensitive species or taxa. MSS advise that impact of buried cables is important in addition to those that are free-hanging or surface-laid. Recent research demonstrates that both the magnetic field and the induced electric field may still be detectable by electro-sensitive and magneto-sensitive organisms even after burial. Literature such as Hutchison *et al*. (2020) describes how cable burial increases the distance from the source of the EMF but it does not shield it, while research such as Formicki *et al.* (2019), Newton *et al.* (2018) and Hutchison *et al.* (2020) demonstrate that EMF is perceivable at levels that are biologically relevant for sensitive species. MSS acknowledge that research on many Scottish species are lacking however. Similarly, MSS is not aware of work specifically addressing EMF emissions from free free-hanging or

surface-laid cables but as there is no separation from the seabed or water column, it is expected that an animal could experience the full emission of EMF when adjacent to the cable.

MSS advise that the EIAR should include:

- A section detailing the models used to calculate EMF emissions for the various types of cables used, i.e. a buried DC export cable and free-hanging/surface-laid AC inter-array cables, together with the interaction with the local natural electromagnetic environment.
- A qualitiative evaluation of the potential behavioural and physiological effects from EMF for the various species / taxa for which there is evidence (examples in Scott *et al.* 2018; Cresci *et al.* 2019; Hutchison *et al.* 2020; Gill and Desender 2020; Taormina *et al.* 2020), giving particular consideration to those that are known to occur within the vicinity of this site.

Potential impacts during decommissioning: Note that all impacts listed during the construction phase should be scoped in, including the additional impacts recommended by NS and MSS.

MSS advise that increased sedimentation / smothering on benthic infauna and epifauna is scoped in. The process of open-cut trenching for cable installation and introduction of structures on the seabed will temporarily increase sediment concentrations in the water column and may result in smothering. Impacts should be assessed specifically for habitats and species found in the vicinity of the site.

Physical/Coastal Processes

The Oceanography group has reviewed the comments by NatureScot with regard to physical processes as well as the scoping report (Chapters 7 and 10 on Offshore and Onshore Physical Processes).
This project is an update to the Dounreay Tri Project that was consented in the same location for Hexican AB in 2017 (and comments on that application have been provided in the past). This scoping report is therefore also based on the previous Dounreay Tri Project scoping report (which the Oceanography group commented on as well) and it has been updated where appropriate based on findings of the previous Dounreay Tri EIA.

We are content with the scoping report except for the below comments/additions:

- Reviewing NatureScot's comment I can add to the following statement:
"Sandside Bay SSSI: It appears that the landfall could, if HDD is not chosen, involve some form of hard protection such as rock armour in the nearshore (5.2.6). Although the potential for disruption to hydrodynamics and sediment transport seems relatively low, there is a clear impact pathway, and we advise that these impacts should be scoped in."
The scoping report states:
"The sheltered nature of the beach limits sediment transport within the bay although there is some disturbance during storm events and some wind driven movement of sediments that have led to formation of the extensive dune system present behind the beach."
Therefore we agree with the statement that if the developer can confirm that the extended landfall corridor would only be used for the HDD option, then the above impacts can be scoped out.

- In Table 7-1 the 'impacts on SSSI' need to then potentially get scoped in, depending on the above comment.

- In Table 7-1 we agree with NatureScot that the impact 'increase in suspended sediments' needs additional specific analysis, for example modelling, in the assessment methodology to adequately assess the impacts.

- We agree with NatureScot's comment on including scour protection for 'impacts on local sediment transport'.

- Section 7.2.3 on Additional Information for bathymetry, water level, currents: the applicant could consider the Scottish Shelf Model sub-model of the Pentland Firth and Orkney Waters as a source of extra information (and to be used in section 7.2.10):

- The Scottish Shelf Model. Part 2: Pentland Firth and Orkney Waters Sub-Domain | Marine Scotland Data Publications

- The Pentland Firth and Orkney Waters Model | Marine Scotland Information

- In Table 13-1 'impacts on local sediment transport regime' we would suggest to also scope those in during the construction phase.

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Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS_Advice@gov.scot

Yours sincerely,

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23 September 2021

HIGHLAND WIND LIMITED – PENTLAND FLOATING OFFSHORE WIND FARM – DOUNREAY, CAITHNESS – SCOPING ADVICE CLARIFICATIONS

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

Marine Ornithology
MSS advise that the "*Best practice recommendations on combining data from different survey platforms*" is under review in the publications process and is expected to be published shortly. MSS advise that, "*Study to examine how seabird collision risk, displacement and barrier effects could be integrated for assessment of offshore wind developments* (ITQ-0246)" Marine Scotland commissioned study is under review in the publications process and should be made available shortly.

MSS advise that the accompanying tool to "*Attributing seabirds at sea to appropriate breeding colonies and populations*" is in the publications process. The tool can be supplied in advance of publication; please contact MSS Advice MSS_Advice@gov.scot, FAO: Dr Tom Evans, for further details or to request access.

Marine Mammals
Following MS-LOT's request for clarification dated 16th September MSS acknowledge that there is no mechanisim for MS-LOT to request the applicant amend the Scoping Report. Consequently, MSS recommend that MS-LOT make clear in the Scoping Opinion that: *Following the completion of the bird and marine mammal surveys in 2021, the species of cetacean included in the EIA should be reviewed and refined, if necessary*. The wording in the Scoping Report, although similar, does not make an explicit comitiment to refine the species included in the EIA as a result of the bird and marine mammal surveys. MSS note this is a region where there are relatively few baseline data on marine mammals, therefore the marine mammal surveys will be important for informing which, if any, additional cetacean species beyond those identified in the Scoping Report are included in the EIA.

Marine fish ecology
We have considered the request and have no further comments to provide

Commercial fisheries
The "*Good practice guidance for assessing fisheries displacement by other licensed marine activities*" has not been published yet. However, it is now in a final draft state with the aim for publication in autumn 2021.

Diadromous fish

MSS do not advise that the possible barrier effects from floating platform and associated infrastructure and the effects of operational noise should be scoped in. These are at present speculative impact pathways with no hard evidence, although a literature-based study to review the impact of shadow flicker or pulsating shadow effect, caused by onshore wind turbines blades, on Atlantic salmon (*Salmo salar*) is currently being carried out by Scotland's Centre of Expertise for Waters (CREW).

MSS advise that all types of marine renewables development should be considered in the cumulative assessment.

Hopefully these comments are helpful to you. If you wish to discuss any matters further then please contact the REEA Advice inbox at MSS_Advice@gov.scot

Yours sincerely,

Renewable Energy Environmental Advice group
Marine Scotland Science

Maritime and Coastguard Agency

MacFarlane M (Marc)

From: Nick Salter <Nick.Salter@mcga.gov.uk>
Sent: 25 January 2021 15:25
To: MS Marine Renewables
Cc: Helen Croxson; Pete Lowson; Julia Stringer
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: Pentland Floating Scoping Report Response.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Sophia,

Thank you for your email consultation on the Pentland Floating OWF scoping report. Please find attached the MCA response.

Best regards,

Nick

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From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and

REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

Maritime & Coastguard Agency

Bay 2/24
Spring Place
105 Commercial Road
Southampton
SO15 1EG
UK

Your ref:
Our ref: Pentland Floating

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy
Scottish Government, Marine Laboratory
375 Victoria Road
Aberdeen, AB11 9DB

25 January 2020

Dear Ms Irvine,

REQUEST FOR SCOPING OPINION CONSULTATION

Pentland Floating Offshore Wind Farm, Dounreay, Caithness

The MCA has reviewed the scoping report provided by Xodus Group on behalf of Highland Wind Ltd on the Pentland floating wind farm, as detailed in your email of 21st December 2019 and would comment as follows:

The Environmental Statement should supply detail on the possible impact on navigational issues for both commercial and recreational craft, specifically:

- Collision Risk
- Navigational Safety
- Visual intrusion and noise
- Risk Management and Emergency response
- Marking and lighting of site and information to mariners
- Effect on small craft navigational and communication equipment
- The risk to drifting recreational craft in adverse weather or tidal conditions
- The likely squeeze of small craft into the routes of larger commercial vessels.

A Navigational Risk Assessment will need to be submitted in accordance with MGN 543 (and MGN 372) and the MCA Methodology for Assessing the Marine Navigation Safety & Emergency Response Risks of Offshore Renewable Energy Installations (OREI). It should be noted that all three documents are currently under review and new versions are expected to be published in March 2021. The NRA should be accompanied by a detailed MGN Checklist which can be found at https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping

The development area carries a significant amount of through traffic to major ports, with a number of important shipping routes in close proximity, and attention needs to be paid to routing, particularly in heavy weather ensuring shipping can continue to make safe passage without large-scale deviations. The likely cumulative and in combination effects on shipping routes should also be considered, the impact on navigable sea room and include an appropriate assessment of the distances between wind farm boundaries and shipping routes as per MGN 543. As part of this a vessel traffic survey should be undertaken to the standard

of MGN 543 i.e. at least 28 days which is to include seasonal data (two x 14-day surveys) collected from a vessel-based survey using AIS, radar and visual observations to capture all vessels navigating in the study area.

The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 543 Annex 5, will be agreed at the approval stage.

Attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and, subject to the traffic volumes, an anchor penetration study may be necessary. If cable protection measures are required e.g. rock bags or concrete mattresses, the MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the HDD location.

Under section 9.3.3, the HSE/MCA regulatory mooring expectations document is identified for consideration and I can confirm this guidance should be followed and that a Third-Party Verification of the mooring arrangements will be required.

Particular consideration will need to be given to the implications of the site size and location on SAR resources and Emergency Response Co-operation Plans (ERCoP). 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. A SAR checklist will also need to be completed in consultation with MCA.

MGN 543 Annex 2 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. Failure to report the survey or conduct it to Order 1a might invalidate the Navigational Risk Assessment if it was deemed not fit for purpose.

On the understanding that the Shipping and Navigation aspects are undertaken in accordance with MGN 543 and its annexes, along with a completed MGN checklist, MCA are likely to be content with the approach.

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: 25 February 2021 09:54
To: MS Marine Renewables
Subject: 20210225-10035413-MOD response letter
Attachments: 20210224-10035413-MOD response letter.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Good Morning

Sorry for the delay, I appreciate the deadline was yesterday, however I had technology issues, please find attached MOD response to scoping request.

Kindest regards

Teena Oulaghan

Safeguarding Manager
Estates – Safeguarding

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 [redacted]

Defence Infrastructure Organisation

Building 49, DIO Sutton Coldfield, Kingston Road, B75 7RL

Mobile Tel: [Redacted] .

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

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

Defence Infrastructure Organisation

Defence Infrastructure Organisation

Teena Oulaghan
Assistant Safeguarding Officer
Ministry of Defence
Safeguarding Department
Kingston Road
Sutton Coldfield
West Midlands B75 7RL
United Kingdom

Telephone [MOD]: [redacted]

E-mail: teena.oulaghan100@mod.gov.uk

Sophia Irvine
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

24th February 2021

Dear Sophia,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);

REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and

REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatts with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

Thank you for consulting the Ministry of Defence (MOD) on the above Scoping Opinion request in respect of the Pentland Floating Offshore Wind Farm proposal received by this office on 21st December 2020.

I write to confirm the safeguarding position of the MOD on the information that should be provided in the Environmental Statement to support any application.

The applicant has prepared a Scoping Report of the proposed development. This recognises the principal defence issues that will be of relevance to the progression of the proposed development.

The use of airspace for defence purposes in the vicinity of the proposed development have been appropriately identified and considered. The Scoping Report considers aviation and radar systems that may be affected by the proposed wind farm. The MOD is correctly identified as a relevant receptor in section 9.4 Aviation and Radar of the Scoping Report. Potential interference with military air traffic control and air defence radars during both construction and operational phases has been scoped out. We agree with this, the proposed offshore will not affect military radar systems.

Impact on military low flying has been scoped in and the applicant states in the Scoping Report that they are committed to lighting and charting the turbines. In the interests of air safety, the MOD would request that the development be fitted with MOD accredited aviation safety lighting in accordance with the Civil Aviation Authority, Air Navigation Order 2016.

MOD has concerns with the proposed wind turbines in relation to the proximity to Vulcan Naval Reactor Test Establishment (NRTE) and its surrounding sea approaches in terms of security. In relation to the onshore elements of the proposed development further consultation with the MOD by the developer will be required.

The onshore study area is located adjacent to the Vulcan Naval Reactor Test Establishment (NRTE), a MOD facility. At present, the exact cable landfall location and onshore cable corridor is unknown with options still under consideration by the developer. One of the potential options is to use a sea water inlet. Please note this is under the control of MOD and not Dounreay Site Restoration Ltd (DSRL) as stated, this may not be available due to site decommissioning.

The development will require export cables and onshore cables from the landfall location to the grid connection. Construction works to install these cables will take place within the onshore study area. The export landfall location may require Horizontal Directional Drilling or Pinning. As these onshore activities and construction works will take place near to Vulcan (NRTE) any impact on the MOD will need to be considered and assessed. The MOD will need to be consulted on the onshore components once further details are known to determine any impacts, including Nuclear qualification and seismic justification of any Vulcan (NRTE) site facilities.

In addition, the impact of marine and road traffic associated with the construction phase and once works are completed and also, offshore construction works may impact upon the MOD. The applicant will need to assess this within their Environmental Statement to ensure Vulcan (NRTE) operations are not affected.

The MOD will need confirmation that there will be no constraints to existing power capacity which could impact current and future operations at the Vulcan site.

Finally, the report correctly notes that access to the Vulcan site for ecological surveys would not be permitted. Please note, in 2017 MOD ecologists carried out ecological surveys on the Vulcan site and surrounding areas. These surveys were undertaken in collaboration with DRSL appointed ecologists to inform the EIA of DSRL's proposed Phase 3 decommissioning of the Dounreay site. The findings of these surveys were incorporated into the Environmental Statement which accompanied their planning application. This ecological data can be provided by DIO if requested.

The MOD reserves the right to make further representations during the consenting process should circumstances change.

I trust this is clear however should you have any questions please do not hesitate to contact me.

Yours sincerely

[Redacted]

Teena Oulaghan
Safeguarding Manager

National Air Traffic Services

MacFarlane M (Marc)

From: AULD, Alasdair E <Alasdair.Auld@nats.co.uk>
Sent: 22 December 2020 07:55
To: MS Marine Renewables
Cc: MacFarlane M (Marc); Bamlett R (Rebecca); Irvine S (Sophia); NATS Safeguarding
Subject: Re: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – [SG23851]

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

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

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application.

This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.
If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.
Yours Faithfully

NATS Safeguarding

D: 01489 444687
E: natssafeguarding@nats.co.uk

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

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:02
To: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Cc: Marc.MacFarlane@gov.scot <Marc.MacFarlane@gov.scot>; Rebecca.Bamlett@gov.scot <Rebecca.Bamlett@gov.scot>; Sophia.Irvine@gov.scot <Sophia.Irvine@gov.scot>
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and

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The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

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Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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NatureScot

MacFarlane M (Marc)

From: Chris Eastham <Chris.Eastham@nature.scot>
Sent: 18 February 2021 10:26
To: MS Marine Renewables
Cc: MacFarlane M (Marc); Bamlett R (Rebecca); Irvine S (Sophia)
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: 2021 02 12 - Pentland Floating Offshore Wind Farm - Scoping - Response - NatureScot advice (A3398858).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sophia,

Please find attached our response to the scoping report for the Pentland Floating Offshore Wind Farm. Apologies for the delay in sending this to you.

Kind regards

Chris

Dr Chris Eastham | Marine Sustainability Advisor

NatureScot | Battleby, Redgorton, Perth PH1 3EW | [Redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

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Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

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The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

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Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

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Communications with the Scottish Government may be monitored or recorded in order to secure the effective operation of the system and for other lawful purposes. The views or opinions contained within this e-mail may not necessarily reflect those of the Scottish Government.
****

NatureScot is the operating name of Scottish Natural Heritage.

--

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

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

18 February 2021

Our ref: CNS REN OSWF DEMONSTRATION SITE Project Highland

Dear Sophia

PENTLAND FLOATING OFFSHORE WIND FARM – HIGHLAND WIND LIMITED

NatureScot SCOPING ADVICE

Thank you for consulting NatureScot on the scoping report submitted by Highland Wind Limited. Please find our advice on the natural heritage interests to be addressed within the Environmental Impact Assessment Report (EIAR) and Habitats Regulations Appraisal (HRA) below for the proposed Pentland Floating Offshore Wind Farm, located approximately 6km off the coast of Dounreay, Caithness.

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

- 6-10 wind turbines with maximum blade tip of 270m above LAT;
- Floating substructures (with either 1 or 2 turbines per substructure);
- Anchors and moorings securing the substructures to the seabed;
- Inter-array cables (dynamic and static);
- Export cables (continuation of inter-array cables to bring power ashore);
- Connection to the grid at Dounreay – either to the existing 132 kV substation or the 275 kV Dounreay West substation which is consented, but is yet to be constructed (planned completion Q3 2022)
- An installed capacity of up to 100 MW with a proposed 25-year consent period.

Deemed planning consent is proposed for the associated onshore infrastructure as part of the Section 36 application.

NatureScot, Battleby, Redgorton, Perthshire PH1 3EW
Tel: [redacted] E-mail: chris.eastham@nature.scot nature.scot

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 update to the Dounreay Trì Project that was consented in 2017, but not constructed.

Highland Wind Limited is currently exploring the option of utilising the existing Section 36 and deemed planning consent for the Dounreay Trì Project to construct and operate a demonstration project in advance of the wider Pentland Floating Offshore Wind Farm (PFOWF) array. The Demonstrator and wider PFOWF array will be consented and constructed separately.

We are aware that Highland Wind Limited is currently in consultation with Marine Scotland to discuss the options to vary the existing Dounreay Trì Project consent. It is proposed that the Demonstrator would be constructed and operational by mid-2023.

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] which balances 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 and secures the right development in the right place with most benefit for climate change reduction, and takes account of and lessens impacts in respect of the biodiversity crisis.

Assessment Approach

The EIAR should consider the impact of all phases of the proposed development on the receiving environment, including effects from pre-construction activities and decommissioning as well as the construction and operation phases. Increasingly, there is a need to understand potential impacts holistically at a wider ecosystem scale in addition to the standard set of discrete individual receptor assessments. This assessment should focus on potential impacts across key trophic levels particularly in relation to the availability of prey species. This will enable a better understanding of the consequences (positive or negative) of any potential changes in prey distribution and abundance from the development of the wind farm on seabird and marine mammal (and other top predator) interests and what influence this may have on population level impacts.

The impact of climate change effects should be considered, both in future proofing the project design and how certain climate stressors may work in combination with potential effects from the

[1] Scottish Government Energy Strategy 2017: https://www.gov.scot/Publications/2017/12/5661/3
[2] https://www.gov.scot/Publications/2015/03/6517

proposed wind farm. The EIAR should also consider the carbon cost of the wind farm (including supply chain) and to what extent this is offset through the production of green energy.

Habitats Regulations Appraisal (HRA)

We strongly advise the production of an HRA screening report for this proposal. We advise this should be submitted for comment at the earliest opportunity and in advance of the EIAR in order to fully inform our HRA advice for this project. We would be happy to provide ongoing advice as the HRA progresses.

Design envelope

It is proposed to undertake a 'design envelope' approach during the EIA to retain scope for adaptation within the project description. Although this approach is currently used to manage change within the project, it requires impact assessment of the complete range of options including the worst case scenarios. We advise that the project envelope is refined as much as possible prior to assessment and submission.

Natural heritage interests to be considered

Below, we provide a summary of our scoping advice for PFOWF in relation to key natural heritage interests. Further detail is provided in receptor-specific technical appendices.

We will continue to engage with Highland Wind Limited and have sought to identify within each Appendix where there is the need for further discussion to refine and agree assessment methods.

- **Ornithology**

Advice on ornithological interests is provided in Appendix A. The HRA Screening Report has not yet been provided – we provide detailed advice to aid both the EIA and HRA processes together with guidance on expected assessment methods.

Key impacts include displacement of birds and / or the risk of collision from the operation of the wind farm. Impacts associated with the installation of the export cables require consideration especially in relation to the overlap with the North Caithness Cliffs SPA.

We strongly advise that further information on the data analysis methodologies is submitted and agreed prior to submission.

- **Marine mammals**

Key species to be addressed for this proposal are harbour porpoise, bottlenose dolphin, white beaked dolphin, minke whale, Risso's dolphin, harbour seal and grey seal. Advice is provided in Appendix B on the expected assessment methods required for HRA, EIA and European Protected Species (EPS) licensing.

Further detailed advice will be provided once the HRA screening report is submitted.

- **Benthic interests**

Advice on benthic interests is provided in Appendix C. Assessment of any potential impacts to Priority Marine Features both within the wind farm site and along the cable corridor route will be important to consider. The introduction of hard structures will also require consideration.

- **Fish and shellfish interests**

Advice on fish and shellfish interests is provided in Appendix D. Key species to be assessed include diadromous fish as well as PMFs which are ecologically important as a key prey species – this will help inform the impact assessment for seabirds and marine mammals. Habitat loss and disturbance (both temporary and long term) from the wind farm on these prey species is a key impact that should be considered across their life history stages.

We recognise the continued lack of knowledge on individual river populations for diadromous species which are SAC qualifying interests, and so currently we continue to advise that the assessment of these should be covered within the EIAR rather than the HRA.

- **Onshore impacts**

Advice on onshore impacts in relation to designated sites and protected species is provided in Appendix E.

- **Seascape, landscape and visual interests**

We will provide advice in relation to seascape, landscape and visual interests on the 1st March 2021. We apologise for the detail in submitting this advice – this is due to current staffing resources.

- **Physical processes / environment**

We will provide advice in relation to physical processes / environment on the 1st March 2021. We apologise for the detail in submitting this advice – this is due to current staffing resources.

Further information and advice

NatureScot can provide further advice on natural heritage interests, at appropriate stages, as work is undertaken by the applicant in support of their formal submission. We are happy to discuss further any aspect of our advice prior to and after the issue of a formal scoping opinion. Please contact myself, Chris Eastham or Erica Knott in the first instance for any further advice.

Yours sincerely,

Chris Eastham

Marine Sustainability Adviser

chris.eastham@nature.scot

[Redacted]

NatureScot ADVICE FOR THE PENTLAND FLOATING OFFSHORE WIND FARM

APPENDIX A – ORNITHOLOGICAL INTERESTS

Baseline surveys

We note the results Tables at 8.10 and 8.11 give actual detections only. There are no associated design or model-based population estimates or densities, despite these being presented in the original HiDef report of these surveys. We would want to see a plan on how they intend to combine these datasets for analysis. It is also worth noting that great black-backed gull were recorded with a peak in August and further consideration is required on what implications there are cumulatively with terrestrial windfarms.

For Dounreay Tri a 2km buffer was considered appropriate due to the small scale of the proposal. The current proposal is larger than Dounreay Tri and has also employed a 2km buffer. Current guidance for offshore wind farms is that a 4km buffer is used, although this can vary depending on species present. Based on the analysis of available data to date, we request further clarification on the appropriateness of a 2km buffer for the Pentland Floating Offshore Wind Farm.

Key species

We anticipate that the main focus of the ornithological assessment will cover impacts to SPA/pSPA qualifying interests including migratory species.

There is still a need to complete the long list process despite the preceding ornithological assessment undertaken for the Dounreay Trì Project- this does provide a good indication of the likely key species to be considered.

- **SPA connectivity**

We recommend (for the long list) using foraging ranges as published in Woodward *et al*. (2019)[3] to derive connectivity with SPA colonies and with additional colonies that may be used by seabirds foraging within the pSPA. The mean-maximum range +1SD should be used. The exceptions to this are outlined below.
After consideration of the long list it may be that just the mean or mean-maximum value will be used for apportioning, depending on the number of sites considered to have connectivity to the development. This is considered a precautionary approach, in that the long list is devised in such a way that it is unlikely that impacts are overlooked, but the apportioning of impacts is undertaken in a manner that does not make it an overly onerous task, nor lead to excessive dilution of impacts across multiple populations.

[3] Woodward, I., Thaxter, C.B., Owen, E., and Cook, A.S.C.P. 2019. Desk-based revision of seabird foraging ranges used for HRA screening. BTO research report number 724.

We therefore advise mean max + 1SD should be used to screen in connectivity to SPAs with the following exceptions:

1. For guillemot and razorbill use of mean max +1SD, including data from Fair Isle for all Northern Isles designated sites. For all designated sites south of the Pentland Firth (i.e. excluding the Northern Isles), use of mean max +1SD discounting Fair Isle values. North Caithness Cliffs SPA is considered to lie south of the Pentland Firth.

2. For gannet we recommend using mean max +1SD for all colonies without site specific maximum values. However, the site specific maximum should be used for the following SPA colonies:
    - Forth Islands,
    - Grassholm and
    - St Kilda

3. For species with insufficient data to calculate MM +1SD then the closest metric is to be used in the following order of preference:
    - Mean Max,
    - Max,
    - Mean.

We note the list of SPAs presented in Table 8.9. However, there is no indication of how these were selected. We advise that the initial list of SPAs to be considered should be based on connectivity (i.e. foraging range) with the proposed wind farm.

Regarding marine pSPAs, the list of SPAs should also include Scapa Flow pSPA rather than the Orkney Inshore Waters pSPA. Also note that the Pentland Firth pSPA has been withdrawn and is no longer afforded policy protection

- **Seabird sensitivity**

Sensitivity assessments for judging plausible impact pathways for entry onto the long list should consider Furness & Wade (2012)[4], Furness *et al*. (2013)[5] and Wade *et al*. (2016)[6].

- **Reference populations**

For the vast majority of colonies and species the 4th National Seabird Census, 'Seabird Count' has produced updated counts. Although these have not been collated and published, they are available from the Seabird Monitoring Programme Database[7] – please seek further guidance from JNCC at SMPWebsiteAdmin@jncc.gov.uk. Where possible, we therefore advise use of these latest figures for assessment of impacts on breeding populations. For any sites or species without

[4] https://www2.gov.scot/resource/0038/00389902.pdf
[5] Furness, R.W., Wade, H.M. and Masden, E.A. 2013. Assessing Vulnerability of Marine Bird Populations to Offshore Wind Farms. Journal of Environmental Management, 119, 56-66.
[6] Wade, H.M., Masden, E.A., Jackson, A.C. and Furness, R.W. 2016. Incorporating data uncertainty when estimating potential vulnerability of Scottish seabirds to marine renewable energy developments. Marine Policy, 70: 108-113
[7] https://app.bto.org/seabirds/public/about.jsp

updates, then we advise use of Seabird 2000 consensus figures (Mitchell *et al*. 2004)[8]. For comparative purposes (e.g. apportioning) where colonies included in apportioning do not have updates, then all colonies will need to use values taken from a similar time period.

Key impact pathways to consider

- **General comments**

The key impact pathways (collision risk, displacement, disturbance and impacts to prey species) have been captured in Table 8-13. We note that disturbance from noisy pre-construction activities (such as UXO detonation and geophysical surveys) have not been considered. However, we acknowledge there is limited evidence available to indicate that significant disturbance from underwater noise is likely. Mitigation measures necessary to reduce impacts to marine mammals species will help reduce any impacts to diving seabird species in the absence of such evidence.

We agree that pollution impacts are scoped out. However, we note this table does not consider impacts associated with the installation of the export cable. This is less likely to cause an adverse impact given the slow speed employed by the installation vessel(s), but additional detailed information on cabling activities and associated vessel movements/sizes, including nature of works, locations, duration and timing, will be required to assess potential impacts on seabirds. The cable landfall occurs within the North Caithness Cliffs SPA, therefore assessment of the export cable route and activities will need to be included and justified in the EIAR and HRA.

Approach to impact assessment

We set out below our outline advice with respect to assessment methodologies to be used for those key impact pathways as discussed above. Overall, we are content with the approach outlined in table 8.14 of the Scoping Report for impact assessment. We will continue to engage throughout the pre-application process and have sought to identify below where we envisage the need for further discussion to refine and agree assessment methods.

NatureScot guidance on seasonal definition for birds in the Scottish Marine Environment should be used for breeding and non-breeding season definitions[9] - this has recently been updated to include the need for 5 years phenology data for use in any local variation.

- **Barrier/displacement**

Displacement should be assessed using the SNCB (2017) matrix methods[10] for the three auk species during both the breeding and non-breeding season. We support the use of the SeaBORD tool (Searle *et al*. 2018) for assessing barrier/displacement during the breeding season for those

[8] P. Ian Mitchell, Stephen Newton, Norman Ratcliffe & Tim E. Dunn (eds) 2004. 'Seabird Populations of Britain and Ireland', T & AD Poyser

[9] Tyler. 2018. Seasonal Periods for Birds in the Scottish Marine Environment - https://www.nature.scot/guidance-suggested-seasonal-definitions-birds-scottish-marine-environment

[10] Joint SNCB Interim Displacement Advice Note 2017 - http://data.jncc.gov.uk/data/9aecb87c-80c5-4cfb-9102-39f0228dcc9a/Joint-SNCB-Interim-Displacement-AdviceNote-2017-web.pdf

species with tracking data. The displacement rate and mortality rates to be used should be discussed and agreed in consultation with Marine Scotland. For the non-breeding season, population sizes should be derived from the zones determined by the BDMPS Report (Furness, 2015). The exception to this being guillemot where the population and impacts should be based on an assessment area derived from the breeding season foraging range.

We have recently updated our advice on assessing displacement impacts on gannet. On further consideration of 1) emerging (but as yet unpublished) evidence from post consent monitoring indicating gannets may displace over larger distances; and 2) the increased number of windfarms being proposed and therefore larger cumulative effect, we consider it is appropriate to start to include displacement impacts within assessments for gannet.

For kittiwake, collision risk and displacement were previously considered to be mutually exclusive impacts, and as such we advised that assessment focuses on collision risk as the impact of most concern (presenting a greater risk of population consequences). However, we advise that further discussion and agreement on impact pathways and assessment methods in consultation with Marine Scotland is required for this species.

- **Collison risk**

Biological parameters

We expect the BTO Birdfacts[11] to be the main reference source for biological parameters to be used in the collision models. These should be discussed and agreed in advance in consultation with Marine Scotland. It would also be helpful to agree the definition to be used for consideration of nocturnal activity (i.e. civil twilight). Nocturnal activity scores haven't changed from those previously used, other than for gannet, where values derived from the recent review of tagged birds (Furness, 2018)[12] should be used.

Densities

Further discussion and agreement in consultation with Marine Scotland is needed to decide which monthly values (e.g. mean monthly or monthly max) are used for density estimates.

Models, options and scenarios

We expect the basic and extended Band (2012)[13] models to be used primarily with option 2 and 3 for the worst case and most likely scenario. For flight speed, we rely on published data (i.e. Pennycuick 1997; Alerstam *et al*. 2007), however we recognise 'in the field' measurements are contributing to new evidence so would welcome further discussion on appropriate, evidence-based values to be used, in consultation with Marine Scotland.

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[11] Robinson, R.A. 2005. BirdFacts: profiles of birds occurring in Britain & Ireland. BTO, Thetford http://www.bto.org/birdfacts

[12] Furness, R.W., Garthe, S., Trinder, M., Matthiopoulos, J., Wanless, S. and Jeglinski, J., 2018. Nocturnal flight activity of northern gannets Morus bassanus and implications for modelling collision risk at offshore wind farms. Environmental Impact Assessment Review, 73, pp.1-6. https://doi.org/10.1016/j.eiar.2018.06.006

[13] Band collision risk model, guidance and model spreadsheets - https://www.bto.org/our-science/wetland-and-marine/soss/projects

We note and support the intention to also use the stochastic collision risk model (sCRM) developed by Masden (2015).

Avoidance rates

SNCB guidance (2014)[14] on avoidance rates should be used with a standard deviation of +/- 2. For species where there are no agreed avoidance rates we recommend use of 98% as default. Where there are terrestrial estimates based on the species in question those rates should be used. Any deviations from this advice will require clear justification and evidence.

Presentation of outputs

Outputs from each model should be supplied in full as appendices with input parameters stored. There is not as yet a standard approach for sCRM output reports, but as a minimum presentation of results should be accompanied by input values used. Where tables are used column titles should be standardised as far as possible to allow comparisons to be made where this is appropriate.

Strategic collision risk

Potential collision risk to migratory species should be assessed qualitatively with reference to the survey results and the Marine Scotland commissioned strategic level report (Marine Scotland, 2014)[15]. To note, MS are also in the process of commissioning an updated strategic review of migratory routes via ScotMER. This update should be used if available within assessment timescales.

- **Apportioning**

In order to consider any population consequences arising from displacement and estimated collisions, the overall impacts will need to be apportioned by season, between SPAs and across age classes.

Age class apportioning should be based on stable age population models. For half months the collisions calculated for that month should be split equally between breeding and non-breeding period. In respect of sabbaticals we recommend that all adults recorded during survey work are considered as breeding adults. This is a precautionary assumption and it may be possible to refine it, depending on the choice and structure of population models. For the breeding season, we recommend apportioning between adults and immatures on the basis of developers site-specific survey work.

Breeding season

Emerging Marine Scotland guidance (due to be published imminently) should be used for guillemot, razorbill and kittiwake (and shag, if required) and for all other species that require detailed consideration in the assessment we advise use of our (2018) interim guidance[16].

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[14] https://www.nature.scot/sncb-position-note-avoidance-rates-use-collision-risk-modelling

[15] Marine Scotland strategic CRM, report available from: http://www.gov.scot/Resource/0046/00461026.pdf

[16] NatureScot (SNH) guidance on apportioning breeding season impacts - https://www.nature.scot/interim-guidance-apportioning-impacts-marine-renewable-developments-breeding-seabird-populations

Non-breeding season

The BDMPS Report (Furness, 2015) should be used for species where the majority of birds are wintering elsewhere rather than in the northern North Sea. Further discussion will be needed to finalise the approach, with respect to birds who largely remain in the northern North Sea during the non-breeding season. Currently, however, if non-breeding season assessment of displacement of guillemot is required, then we would wish to see the non-breeding season population defined in terms of the mean maximum foraging range (Woodward *et al*. 2019)[17]. Please note that a review of tagging data for both guillemot and razorbill wintering distributions is due to be published. Once published we will consider whether our advice can be updated for these species.

- **Population consequences (PVA)**

The impacts of collision and displacement will need to be considered in the context of relevant SPA breeding colonies particularly where the assessed effects exceed a change to the adult annual survival rate of 0.2%. Where apportioned impacts are large and / or the SPA populations are small, it is likely that population models will be required to establish whether or not there could be long-term impacts on population viability.

We highlight that it is more difficult to make predictions over a longer time-frame as uncertainty in the model outputs increases with the length of model run. For SPA seabird species this may make it harder to conclude no long-term impacts on population viability and no adverse impact on site integrity.

Type of model

We recommend the NE PVA tool is used[18]. Impacts should be applied to all ages in agreement with the age apportioning approach, and sabbatical rates of adult birds should be taken into account.

PVA metrics to be presented

We advise the two ratio metrics[19] which are generally termed 'Counterfactual (ratio) of final population size' and 'Counterfactual (ratio) of population growth-rate' should be presented.

Cumulative impacts

In addition to the list presented in section 8.5.9, cumulative assessment should include other consented wind farms in the Moray Firth. Further discussion and agreement is needed in consultation with Marine Scotland.

Breeding season

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[17] Woodward, I., Thaxter, C.B., Owen, E., and Cook, A.S.C.P. 2019. Desk-based revision of seabird foraging ranges used for HRA screening. BTO research report number 724

[18] Searle, K., Mobbs, D., Daunt, F. & Butler, A. 2019. A Population Viability Analysis Modelling Tool for Seabird Species. Natural England Commissioned Reports, Number 274. http://publications.naturalengland.org.uk/publication/4926995073073152 also see https://github.com/naturalengland/Seabird_PVA_Tool

[19] Cook, A.S.C.P. & Robinson, R.A. 2016. Testing sensitivity of metrics of seabird population response to offshore wind farm effects. JNCC Report No. 553. JNCC, Peterborough.

For the breeding season, the cumulative assessment should consider effects from projects within mean-max foraging range of the colony SPA under consideration, based on Woodward *et al*. (2019).

Non-breeding season

Cumulative assessment in the non-breeding season should include all relevant developments within the region defined for the species, either by BDMPS or other agreed approach.

Mitigation and monitoring

Where significant impact pathways have been identified, we advise that the full range of mitigation techniques and published guidance is considered and discussed in the EIAR.

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APPENDIX B – MARINE MAMMALS

Baseline / Key species

We are aware that the IAMMWG (2015) [20] MU abundance estimates are currently being updated by JNCC. However, please note the MU boundaries are not currently being revised. Abundance estimates have been updated recently for some cetacean MUs in Scottish waters, a summary can be found in Table 3 of the recently published Regional Baselines Report[21]. For baseline surveys w advise further discussion is required regarding correction factors for availability bias and data analysis.

Key impact pathways

We broadly agree with potential impacts to be scoped in and out as per Table 8.7 and provide some additional advice below.

Pre-construction noise impacts
There are a range of activities likely to be undertaken during the pre-construction period which can emit significant underwater noise e.g. potential UXO clearance and some geophysical surveys. Impacts will require consideration under EPS licensing and potentially in combination with other noisy activities depending on the noise outputs, timings and duration. These should be considered in the EIAR rather than solely post-consent.

Disturbance due to physical presence of vessels
It is very difficult to separate disturbance caused by vessel presence from vessel noise. We know that vessel construction activity can show considerable disturbance to harbour porpoise (e.g. during offshore wind farm construction it has shown to cause disturbance prior to ADDs being used). We are content that 'physical presence' is scoped out providing disturbance from vessel activity is fully considered within the underwater noise assessment.

Approach to underwater noise modelling

The methodology and metrics for underwater noise modelling and assessment of cumulative effects should be discussed and agreed with Marine Scotland and NatureScot. To assist this process we provide initial advice as outlined below.

- **Marine mammal densities**

[20] IAMMWG. 2015. Management Units for cetaceans in UK waters (January 2015), JNCC Report No. 547
[21] E L Hague, R R Sinclair and C E Sparling. 2020. Regional baselines for marine mammal knowledge across the North Sea and Atlantic areas of Scottish waters. Scottish Marine and Freshwater Science Vol 11 No 12.

Marine mammal densities within the zone of impact are required in order to predict the number of individuals which might be impacted by underwater noise. Information should be available from SCANS for cetaceans[5] and from SCOS / Marine Scotland for seals (Russell *et al*. 2017)[22].

Population consequences and cumulative impacts

In order to consider the significance of underwater noise disturbance to marine mammals and the consequences of this on relevant populations, we advise the application of the iPCoD approach (interim population consequences of disturbance model)[23].

Any requirements for population modelling will be determined by the outputs from underwater noise modelling, and will only apply to key species. Therefore, at the appropriate time, any requirements for population modelling should be discussed and agreed.

We will also need to agree the approach to cumulative impact assessment for marine mammal interests for HRA, EIA and EPS licensing requirements.

Mitigation and monitoring

Where impact pathways have been identified, we advise that the full range of mitigation techniques and published guidance is considered and discussed in the EIAR.

[22] Russel et al. 2017. Updated Seal Usage Maps: The Estimated at-sea distribution of grey and harbour Seals. Scottish Marine and Freshwater Science Vol 8, No 25. https://data.marine.gov.scot/sites/default/files/SMFS%200825.pdf and data available through NMPI.

[23] http://www.marine.gov.scot/information/interim-population-consequences-disturbance-model-ipcod

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APPENDIX C – BENTHIC INTERESTS

Key species and habitats

Consideration should be given to Priority Marine Features (PMFs)[24] and key Annex 1 habitats of conservation importance.

Key impact pathways to consider

We broadly agree with the potential impacts outlined in Table 8.1 and provide the following advice below.

- **Introduction of marine non-natives**

We advise that the introduction of marine non-natives is scoped in. Although the Doureay Tri EIA assessed this impact as minor, the proposed developed is larger with a variety of different types of infrastructure proposed.

- **Colonisation of hard structures**

This is important in considering the potential spread of marine invasive non-native species and ensuring appropriate mitigation is embedded to combat this, both of which may differ depending on the type of substructures and anchors to be used. This will also be of use from an engineering perspective - depending on the hard structure in question, removal of encrusted growth may be necessary throughout the lifetime of the wind farm development, and if so, should be factored in.

The introduction of hard structure (e.g. floating substructures, scour protection and cable protection) could also result in a change in community type from species typical of sedimentary habitats to those typical of hard substrata. We recognise that the long-term effect of such introduction is not fully understood at present, and that this change may provide positive and/or negative effects for different receptors and as such should be carefully considered. This will also help inform how any local increase in species diversity may influence prey species availability.

Where protective material cannot be avoided, we recommend using a more targeted placement method e.g. fall pipe vessel rather than using vessel-side discharge methods. We also recommend that consideration is given to minimise the amount of hard substrate material used during the operations, and maintenance, of the wind farm and that the worst-case quantity is assessed for the lifetime of the project. Where materials have to be used we also encourage that consideration is given to choice of materials (composition and size) and their ability to be recovered during decommissioning.

[24] https://www.nature.scot/professional-advice/protected-areas-and-species/priority-marine-features-scotlands-seas

Approach to impact assessment

Table 8.2 provides information on impact assessment methodologies for benthic interests.

Pre-construction baseline surveys should seek to answer the following:

- Are there any benthic habitats or species of note present (i.e. Priority Marine Features[25], rare, protected or invasive)?
- What is the spatial distribution and abundance of these species?
- How will these habitats or species be affected by the development?
- What would be the significance or implications of any loss incurred?

We advise that the EIAR presents clear information on, and identification of, the main biotopes found within the proposed development site. The biotopes / habitat map should be used by the applicant to inform their finalised mooring location and cable route. Consideration should also be given to indirect impacts on birds, fish and marine mammals, where appropriate.

[25] www.snh.gov.uk/protecting-scotlands-nature/safeguarding-biodiversity/priority-marine-features/

NatureScot ADVICE FOR THE PENTLAND FLOATING OFFSHORE WIND FARM

APPENDIX D – FISH AND SHELLFISH INTERESTS

Key species and habitats

We agree with the species identified in section 8.3.8, but advise that potential impacts be considered at all life stages.

We also advise that Priority Marine Features (PMFs) which are ecologically important as a key prey species should be considered.

- **Marine fish**

In order to inform impact assessment for seabirds and marine mammals, the EIAR should consider those fish species which provide an important function as a key prey resource, noting many of these are PMFs. Relevant species are likely to include herring, sandeels and sprat.

Key impact pathways to consider

We broadly agree with the impact pathways listed in Table 8.4 and provide the following information.

- **EMF**

We advise that potential impacts from EMF are scoped in. This is particularly relevant for floating wind farm where the inter-array cables are within the water column.

- **Fish aggregation around the floating structures and associated infrastructures**

Offshore infrastructure may act as a fish aggregation device (FAD), and may attract larger predators. As little is known regarding the FAD effect of floating offshore wind farms, and the potential impacts to other receptors, we advise that this should be scoped in.

Approach to impact assessment

We advise that the assessment should quantify where possible the likely impacts to key PMFs and consider whether this could lead to a significant impact on the national status of the PMFs being considered[26].

[26] https://www.nature.scot/priority-marine-features-guidance

NatureScot ADVICE FOR THE PENTLAND FLOATING OFFSHORE WIND FARM

APPENDIX E – ONSHORE IMPACTS

In summary, the main onshore sensitivities are:

- **Sandside Bay SSSI –** the onshore works area would lie adjacent to this SSSI, protected for its sand dune habitat. The scoping report states that there will be no overlap between the onshore works and the SSSI, so impacts appear unlikely. However, we note the location of some of the elements has not been finalised and we would still expect assessment of the potential impacts to the SSSI within the final report/EIAR.
- **North Caithness Cliffs SPA –** the onshore works area will lie adjacent to the marine extension area of this SPA and ~1km from the nearest land-based section of the SPA. Potential impacts from disturbance to SPA birds should be considered and the proposed update to survey work will help inform this.
- **Caithness Lochs SPA –** the onshore works area will lie within foraging range and suitable habitat for feeding geese associated with the SPA (greylag geese and Greenland white-fronted geese). It's good to see the SPA being considered in more detail with the scoping report and the proposed update to the survey work will provide information to inform assessment of any potential impacts.
- **Caithness & Sutherland Peatlands SPA –** the onshore works are lies within foraging range for some species associated with this SPA and updated survey work will help inform assessment of the potential impacts.
- **Protected species –** good to see they plan to update the protected species surveys. Standing advice is available on our website for some species described in the scoping report (e.g. otter at https://www.nature.scot/species-planning-advice-otter). Also pleased to see they will update surveys for Scottish primrose and any mitigation proposed to avoid impacts to this species should be included in any future report / EIAR.

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

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03 March 2021

Our ref: CNS REN OSWF DEMONSTRATION SITE Project Highland

Dear Sophia

PENTLAND FLOATING OFFSHORE WIND FARM – HIGHLAND WIND LIMITED

NatureScot SCOPING ADVICE IN RELEATION TO SEASCAPE, LANDSCAPE AND VISUAL IMPACT ASSESSMENT AND PHYSICAL PROCESSES

Thank you for consulting NatureScot on the scoping report submitted by Highland Wind Limited. The advice provided below is in addition to the advice sent on the 18th February 2021, and covers the seascape, landscape and visual impact assessment, and physical processes.

Seascape, landscape and visual interests

The proposal is not part of a plan led approach (as recently undertaken through the Sectoral Marine Plan for Offshore Wind) and there are significant differences, in terms of turbine numbers and height, between the consented Doureay Tri project and the current proposal. Cumulative impacts with proposals coming forward for the ScotWind N1 plan option will require careful consideration.

Further information and advice

NatureScot can provide further advice on natural heritage interests, at appropriate stages, as work is undertaken by the applicant in support of their formal submission. We are happy to discuss further any aspect of our advice prior to and after the issue of a formal scoping opinion. Please contact myself, Chris Eastham or Erica Knott in the first instance for any further advice.

Yours sincerely,

Chris Eastham

Marine Sustainability Adviser

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[redacted]

NatureScot ADVICE FOR THE PENTLAND FLOATING OFFSHORE WIND FARM

APPENDIX A – SEASCAPE, LANDSCAPE AND VISUAL IMPACT ASSESSMENT

There is a large amount of wind and other energy production infrastructure in this area - including pylons and the Dounreay facility – which gives the landward area an existing energy production context. Notwithstanding this the vertical scale of the turbines, each located on a yellow floating platform / support structure, heightens their visibility as an unfamiliar and uncharacteristic feature in the remote seascape of the Pentland Firth.

In relation to the onshore part of the development, and the potentially more localised landscape/visual impacts, we are content to defer to the landscape expertise provided by The Highland Council.

Study area
A 50km ZTV and study area would not generally be extensive enough for turbines of this height so close to the coast. However, we have considered the coverage of the 50km ZTV and the coastal alignment and topography and judged that this is acceptable for this proposal. We caveat this with a note that we might request further details subsequently should a very sensitive receptor / context become apparent.

The SLVIA should, therefore, focus on the following seascape, landscape and visual impacts within the 50km study area.

Landscape designations
The SLVIA should consider likely effects on the Special Qualities (SQ) of Kyle of Tongue National Scenic Area (NSA) and Hoy and West Mainland NSA. With separation distances from the proposed site of 23km and 30km respectively. We advise that a precautionary approach is taken and effects on both NSAs are considered. We also advise that cumulative effects and effects of aviation lighting are included in the scenic qualities assessment.

Local landscape designations
The SLVIA should consider the likely effects on Farr Bay, Strathy and Portskerra Special Landscape Area (SLA) and on Dunnet Head SLA.

Wild Land Areas
A wild land assessment should be carried out for East Halladale Flows Wild Land Area (WLA 39), located just to the south of the project site. We also advise that a wild land assessment is carried out for Hoy Wild Land Area (WLA 37). Both assessments should take into account the effects of aviation lighting on the wildness qualities.

Landscape character and coastal character
There is potential for significant impacts and cumulative impacts on landscape character and coastal character.

Effects on the following Landscape Character Types (LCTs) (SNH / NatureScot Landscape Character Assessment 2019) should be considered in the SLVIA:

- Sweeping Moorland and Flows LCT
- Farmed Lowland Plain LCT

- High Cliffs and Sheltered Bays LCT
- Sandy Bays/ Beaches and Dunes LCT: Strathy Bay LCU
- Coastal Crofts and Small Farms LCT: Melvich LCU.

We note and agree with the proposal (Table 9-10) to omit Halladale LCU and Strathy LCU from the assessment.

The SLVIA should include the following regional coastal character areas (RCCAs) as detailed in Coastal Character Assessment – Orkney and North Caithness[1]:

- Scarfskerry and Dunnet Head Remote High Cliffs (RCCA 44)
- Brims Ness Rocky Coastline Open Sea Views (RCCA 46)
- Portskerra Remote High Cliffs (RCCA 47)
- Farr Point Remote High Cliffs (RCCA XX)

There is also potential for significant effects on local coastal character areas (LCCAs) as shown in Orkney and North Caithness Coastal Character Assessment[2]. In particular sections of coastal character and high sensitivity visual receptors extending between LCCAs 35 to 41 between Strathy and Strathy Point to Ness of Litter.

Viewpoints and visual receptors

The proposed list of 8 viewpoints (Figure 9-17) and principle visual receptors noted in para 9.5.14 covers a good range of receptors. However, the final list is the responsibility of the landscape consultant and we advise that individual viewpoints should be micro-sited to show the worst case scenario. We defer to The Highland Council with regards to locally sensitive viewpoints and reserve the option to request further viewpoints if particular issues occur as the project progresses.

Aviation lighting assessment

To accord with civil aviation and navigation requirements, the turbines and supporting structures will be lit in poor lighting conditions and at night. In our experience the lights will be clearly visible at this distance from the coastline as dominant, eye-catching, uncharacteristic features in this remote seascape. An assessment of the effect of hub-height lighting should be carried out for representative onshore viewpoints and sensitive receptors. In particular the assessment should consider the effects on the scenic and wild land qualities along the Caithness coast and on the ferry route from Scrabster to Orkney. We note (para 9.5.16) that there is no proposal to undertake a lighting assessment for remote views in the hours of darkness. However, we advise that a suitable viewpoint should be included within the East Halladale Flows WLA (possibly proposed viewpoint 1 Beinn Ratha).

Cumulative assessment

A cumulative assessment should be carried out which includes all relevant offshore and onshore energy-related development and other large-scale developments in the study area, such as Sutherland SpaceHub. Scotwind N1 plan option and other developments within Table 9-8 should also be included. An up-to-date list of onshore wind farms should be obtained from The Highland Council and should include wind farms at scoping stage that are within 20km of the site.

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[1] https://www.nature.scot/coastal-character-assessment-orkney-and-north-caithness:

[2] https://www.nature.scot/sites/default/files/2018-11/Coastal%20Character%20Assessment%20-%20Orkney%20and%20North%20Caithness.pdf

Visualisations
We agree with the suggestion (para 9.5.5) that they follow the agreed approach used for the Moray West Offshore Wind Farm SLVIA.

Design
We understand that the exact design of the yellow sub structure supporting the turbines is yet to be agreed. We welcome Figure 5-4 which illustrates the range of characteristic technologies and advise that where possible the maximum anticipated dimensions (124m x124m x 54.25m, para 9.5.1) should be indicated on the supporting visualisations.

NatureScot ADVICE FOR THE PENTLAND FLOATING OFFSHORE WIND FARM

APPENDIX B – PHYSICAL PROCESSES

Sandside Bay SSSI

The report scopes out impacts on the 'SSSI seabed and morphology' because construction activities would not overlap the SSSI (Table 7-1). However, as the sand dunes SSSI feature is conditioned by marine energy and sediment supply, it can be affected by activities outwith the SSSI.

The boundary of the potential landfall corridor has been extended westward (relative to Dounreay Tri) right up to the SSSI's north-east boundary (Figure 5-13). It appears that the landfall could, if HDD is not chosen, involve some form of hard protection such as rock armour in the nearshore (5.2.6). Although the potential for disruption to hydrodynamics and sediment transport seems relatively low, there is a clear impact pathway, and we advise that these impacts should be scoped in.

The non-HDD landfall option (5.3.1.1) is "pinning the cable to the disused cooling water intake at Dounreay" – no location given. If the developer can confirm that the extended landfall corridor would only be used for the HDD option, then we agree with the above impacts being scoped out.

Other comments

We are content with the remainder of the scoping for Offshore Physical Environment (Table 7-1) and Onshore Physical Environment (Table 10-2), with two comments:

- for the impact 'increase in suspended sediments', the assessment methodology needs to include the potential use of specific analysis, such as modelling, and

- for 'impacts on local sediment transport', the project elements needing to be considered should include scour protection.

Bamlett R (Rebecca)

From: Chris Eastham <Chris.Eastham@nature.scot>
Sent: 03 September 2021 15:52
To: MS Marine Renewables
Cc: Bamlett R (Rebecca)
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Follow Up Flag: Follow up
Flag Status: Completed

Hi Rebecca,

Thanks for the email. Please find below clarification on the points raised:

- In relation to Benthic Ecology, you advised that key Annex 1 habitats of conservation importance are considered; however, in the scoping report the Developer has considered that Annex 1 habitats are not within the Proposed Development site. Could you please clarify your advice on this point. Do you wish a consideration of Annex 1 habitats in the vicinity of the Proposed works in the EIA Report? Is this a comment on the proposed study area – should it be widened etc (if so, by how much)?
  As we have yet to see the results from the geophysical and benthic surveys from the proposed study area, we recommend that Annex 1 habitats are scoped in.

- In relation to Fish & Shellfish Ecology, you note that consideration should be given to Priority Marine Features (PMFs) which are ecologically important as a key prey species. Could you please clarify which PMFs you are expecting to be scoped into the EIA Report.
  These are any PMF fish species that are important prey for marine predators such as seabirds and marine mammals. So species such as sandeel, herring and sprat.

- In relation to Seascape, Landscape and Visual Impact Assessment, the Hoy Wild Land Area is referred to as WLA 37 – could you please confirm whether you meant WLA 41?
  Yes, we mean WLA 41.

Kind regards

Chris

North and East Coast Regional Inshore Fishery Group

MacFarlane M (Marc)

From: Jennifer Mouat [redacted]
Sent: 03 February 2021 15:03
To: Irvine S (Sophia)
Cc: MacFarlane M (Marc)
Subject: RE: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder
Attachments: Highland Wind Limited.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Sophia

Please find attached comments from the North & East Coast Regional Inshore Fishery Group.

Kindest

Jennifer

------ Original Message ------
From: Sophia.Irvine@gov.scot
To: j[redacted]
Cc: Marc.MacFarlane@gov.scot
Sent: Tuesday, 2 Feb, 2021 At 14:20
Subject: RE: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

Good afternoon Jennifer,

MS-LOT is content to grant an extension to 3 February 2020.

Kind regards,

Sophia

Sophia Irvine
Marine Licensing Casework Officer

Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

From: Jennifer Mouat [redacted]
Sent: 01 February 2021 13:58
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Subject: Re: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

Mark

I am struggling to get my response completed and would appreciate if I could extend by a day please?
Kindest
Jennifer

------ Original Message ------
From: MS.MarineRenewables@gov.scot
To: MS.MarineRenewables@gov.scot
Cc: Giulia.Agnisola@gov.scot; Sophia.Irvine@gov.scot; Marc.MacFarlane@gov.scot
Sent: Monday, 25 Jan, 2021 At 12:52
Subject: Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation - By 1 February 2021 - One Week Reminder

Dear Sir/Madam,

Please note that the consultation period for the below will conclude in one week's time. If you intend to reply, and have not submitted a response already, please do so by 1 February 2021.

Kind regards,

Marc

From: MS Marine Renewables
Sent: 21 December 2020 14:03
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: MacFarlane M (Marc) <Marc.Macfarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);

REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and

REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer

Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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****
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****

Jennifer Mouat, MA (EPS), Bsc Hon, PG Dip EDM
The Aegir Consultancy Limited

Email - [redacted]

Mobile - [Redacted]

Jennifer Mouat, MA (EPS), Bsc Hon, PG Dip EDM
The Aegir Consultancy Limited

Email - [redacted]

Mobile - [Redacted]

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Thank you for the opportunity to comment on the Highland Wind Limited - Pentland Floating Offshore Wind Farm - Dounreay, Caithness - Scoping Consultation. I am replying on behalf of the North & East Coast Regional Inshore Fishery Group (NECRIFG). It is my understanding that this is a scheme based on a previous application which was given consent. I am not familiar with the previous application and it would have been helpful to have a much fuller comparison to allow industry to compare and comment on the new application.

The inshore area is of most concern to the NECRIFG membership and by definition it will be the cable route which is of most interest. It is my understanding that there are active shellfish areas within the new development area and this includes, crab, lobster and scallop fishing. Inevitable impacts on these fisheries should be scoped in going forward and working with industry is key to ensure that the best information is available.

We would have hoped to have much more clarity on the issue of the connecting cable. As mentioned above it is essential that those fishers mentioned above are involved at an early stage to try to position the cable route with the least impact but still full fills the need of the developer. This should involve discussion on the issue of over trawl surveys which we would like to see acknowledged and specifics of what work will be undertaken included in the next stages. It is noted that Chapter 7 makes mention of the requirement for 2 cables and therefore the impacts are doubled depending in how this is taken forward.

We are concerned that the document does not mention specifically the parts of the Scottish National Marine Plan which refer to fishing, we see this as fundamental to the document and would like to see due reference to this document going forward.

As far as the future decommissioning of the development it has been made very clear to me that the only option should be reinstatement of the site safeguarding the area for future use.

Northern Lighthouse Board

MacFarlane M (Marc)

From: Adam Lewis <Adam.Lewis@nlb.org.uk> on behalf of navigation <navigation@nlb.org.uk>
Sent: 22 December 2020 15:05
To: MS Marine Renewables
Cc: Irvine S (Sophia)
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: O6_17_674 - Response.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Good afternoon,

Please find attached the NLB response to the Pentland Floating Windfarm EIA Scoping Consultation.

Regards

Adam

Official - Northern Lighthouse Board Email

Adam Lewis
Coastal Inspector

Navigation Department
Northern Lighthouse Board
84 George Street
Edinburgh
EH2 3DA

e: adam.lewis@nlb.org.uk
t: 0131 4733197
m: [Redacted]

www.nlb.org.uk

Follow NLB on:

From: MS.MarineRenewables@gov.scot [mailto:MS.MarineRenewables@gov.scot]
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot

Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer

Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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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: Pentland Floating OWF – EIA Scoping Request
Our Ref: AL/OPS/ML/O6_02_669

Ms Sophia Irvine
Marine Licensing Casework Manager
Marine Scotland – Marine Planning and Policy
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

22 December 2020

HIGHLAND WIND LIMITED – PENTLAND FLOATING OFFSHORE WIND FARM – DOUNREAY, CAITHNESS – SCOPING CONSULTATION

Regulation 14 of the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (As Amended);
Regulations 12 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (As Amended);
Regulation 17 of the Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (As Amended)

Thank you for your e-mail correspondence dated 21st December 2020, requesting Northern Lighthouse Board's comment on the proposed Section 36,Marine Licence, and local planning consent applications for the Pentland Floating Offshore Wind Farm, 6 kilometres offshore Dounreay, Caithness, in relation to the above proposed works under the EIA Regulations.

Northern Lighthouse Board note within Sections 5.2.8 (Safety Requirements) and 5.6.1.3 (Colour Scheme, Marking & Lighting) that the applicant has already given consideration to navigational lighting and marking throughout the Construction, Operations & Maintenance and Decommissioning phases of the wind farm project. Highland Wind Limited will be required to submit a Marking and Lighting Plan for approval as part of the consenting process, and subsequently adhere to that plan. Allowing for the likelihood of changing windfarm design, NLB wish to remain in frequent dialogue with the applicant to ensure that the most appropriate lighting and marking scheme is provided, that remains in line with IALA Recommendation 0-139 (The Marking of Man-Made Offshore Structures).

Northern Lighthouse Board have no objection to the content of the Scoping Report, and if any further information is required, please do not hesitate to contact the Navigation team at navigation@nlb.org.uk,

Yours sincerely
[Redacted]

Peter Douglas
Navigation Manager

Northern District Salmon Fisheries Board

MacFarlane M (Marc)

From: Alexa MacAuslan <ndsfbclerk@gmail.com>
Sent: 29 January 2021 10:02
To: MS Marine Renewables
Subject: Re: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: Dounreay Offshore WF 280121.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Sirs
Please find attached a response from the Northern District Salmon Fishery Board in relation to the proposed Pentland Floating Offshore Wind Farm.

Kind regards
Alexa

Alexa MacAuslan
Clerk
The Northern District Salmon Fishery Board

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

On Mon, Dec 21, 2020 at 2:03 PM <MS.MarineRenewables@gov.scot> wrote:

> Dear Sir/Madam,
>
> **REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);**
>
> **REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and**
>
> **REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").**
>
> **Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness**
>
> In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under

section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer

Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

The Northern District Salmon Fishery Board

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

28th January 2021

Email: ms.marinerenewables@gov.scot

Dear Sirs

Highland Wind Ltd – Pentland Floating Offshore Wind Farm : Scoping Report

You requested an opinion from the Board re. the floating windfarm development proposed by Highland Wind Limited for an area 6km offshore near Dounreay in northern Caithness.

A number of the Northern area's rivers are likely to be affected by the proposed development because the WRG Site and the Export Cable Corridor sit astride the major route for adult salmon returning to Scottish rivers from the northern ocean and possibly also some of the outward routes for salmon smolts leaving the northern rivers for the sea.

The Scoping Report cites Malcom et al.'s report of 2010 on the importance of the development area for salmon, sea-trout and eels. However, this consideration work should be updated in the Scoping Report to include studies completed since 2010, particularly by Marine Scotland Science.

In addition, a report by the Flow Country Rivers Trust "Fishermen's Knowledge: Salmon in the Pentland Firth" can be downloaded at https://caithness.dsfb.org.uk/publications/). The report shows that the WTG Site and the Export Cable Corridor span the major throughway for adult salmon returning from the ocean to salmon rivers in the Northern area (including the Rivers Naver and Borgie SACs) but also including all the other rivers of the Northern area. Furthermore, many (or perhaps most) of the salmon returning to all the rivers of the east and west coasts of Scotland traverse the proposed development area and this is the general context in which regional should be considered.

Because the Scoping Report lacks substance, the Board considers that Table 8.4 is defective. The table scopes out all categories of potential effects of the development (construction and operation) on salmon on the flimsiest of grounds. Instead, the Board wishes to see **a full consideration of the potential effects of the proposed development on salmon leaving and returning to the Northern area's rivers, including the Rivers Naver and Borgie SACs.**

Furthermore, Table 8.4 scopes in cumulative impacts associated with future development of additional offshore windfarms of the North coast. This also is not good enough. In the case of salmon, at least, the potential interactions of the proposed windfarm extend to existing and planned non-wind renewables installations. The Board therefore wishes to see **a full consideration of interactions with other marine renewables developments - extant and proposed - and the cumulative effects of development.**

Kind regards,

Yours faithfully,

Mrs Alexa MacAuslan
Clerk, NDSFB

Royal Society for the Protection of Birds

MacFarlane M (Marc)

From: Bea Ayling <Bea.Ayling@rspb.org.uk>
Sent: 29 January 2021 09:41
To: MS Marine Renewables
Cc: Catherine Kelham; eplanning@highland.gov.uk
Subject: Pentland Floating Offshore Wind Farm – Scoping Request Response
Attachments: Pentland Floating Offshore Wind Farm - RSPB Scoping Response.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Marine Scotland,

Please find attached RSPB Scotland's response to the scoping request and report for the Pentland Floating Offshore Wind Farm off Dounreay.

Please don't hesitate to contact me if you have any questions.

Kind regards,

Bea Ayling
Conservation Officer – North Highland

North Scotland Regional Office Etive House, Beechwood Park, Inverness, IV2 3BW
Tel 01463 715000
Mobile [Redacted]

rspb.org.uk

Let's give nature a home in Scotland

giving nature a home
rspb
Scotland

giving nature a home
Scotland

Email: MS.MarineRenewables@gov.scot
Cc: eplanning@highland.gov.uk

Date: 29th January 2021

Dear Sir / Madam,

Pentland Floating Offshore Wind Farm – EIA Scoping Request – RSPB Scotland Response

RSPB Scotland welcomes this opportunity to comment on the scoping report for the above proposed offshore windfarm. Our comments focus primarily on ornithological matters. Although comments have been requested in relation to the EIA (Environmental Impact Assessment) we have also provided advice to assist in assessment of the proposed development in relation to HRA (Habitat Regulations Appraisal).

RSPB Scotland is supportive of the renewable technology that is needed to achieve our Net-Zero emission targets but believes projects must be carefully selected to avoid negative impacts on sites and species of conservation importance. Compared to traditional bottom-fixed technologies, floating offshore wind can exploit wind resource in deeper areas of sea which can be further from shore. In such areas, risks to seabirds are likely to be less and therefore environmental risks in this regard can also be lessened. However, all proposed projects must be supported by a sound understanding of site-specific environmental sensitivities with use made of the latest and best available science.

The Pentland Floating Offshore Wind Farm overlaps the offshore element of the North Caithness Cliffs Special Protection Area (SPA) and individual seabirds from other SPA colonies may interact with the project site. Given this proximity, this project poses significant risk to these seabird populations and therefore the potential of adverse effects on integrity of the site cannot be ruled out either in isolation or in-combination.

The onshore boundary and proposed extension to the Marine Licence Area (as shown on Figure 3-1 of the EIA Scoping Report) lies adjacent to the Sandside Bay Site of Special Scientific Interest (SSSI), designated for its sand dune habitats.

We note it is proposed to deviate from normal method of using two years' worth of site specific data collected within the last five years. We have concerns with this approach as older data may increase uncertainty in the assessment of impacts.

We would welcome an opportunity to discuss our comments outlined in the Annex below further and would be pleased to provide additional advice on the assessment as it progresses.

Yours faithfully,
[Redacted]

Bea Ayling
Conservation Officer
bea.ayling@rspb.org.uk

North Scotland Office
Etive House
Beechwood Park
Inverness
IV2 3BW

Fax 01408 715315

rspb.org.uk

ANNEX

Ornithological Surveys

We consider it is best practice to undertake two full years of survey within five years of the application, even if the development size is small and there is past data. 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 enough to characterise temporal and spatial variability in seabird numbers within the survey area.

We note that the first year of site-specific surveys were completed in December 2015. This data is now beyond the five -year limit which reduces the reliability of this dataset.

We understand there is also data from a site immediately west of the proposed development, collected between May 2015 and April 2016. This data does not appear to be presented in the scoping report and is also approaching its five-year limit. We consider that data collected at a nearby the site should only be used for contextualisation within the assessment rather than relied upon as a proxy to dedicated site survey.

We welcome the proposal to undertake new aerial surveys between September 2020 and August 2021 and we would strongly recommend that a second full year of survey data is collected. We would also highlight that a new methodology for combining data from different survey platforms is about to be published by Marine Scotland Science, and recommend that, where appropriate, these methods are adopted for this contextual assessment.

Notwithstanding the above, should the decision be made to continue the application using the data as proposed, we believe sufficient and scientifically robust justification for deviating from the normal best practice approach and demonstration that the baseline data set is adequate to inform the assessment must be provided.

Assessment of Impacts

Available Information

We consider that a number of relevant papers and guidance documents are missing or need updating from the list in Section 8.5.3 Available Information. For example, Table 8-14 includes reference for the old Band model rather than the stochastic Band model[1] and reference to the SNH interim guidance on apportioning impacts to breeding seabirds[2] is missing but later included in Table 8-14.

SPA Connectivity

We encourage the adoption of a precautionary approach to the identification of relevant sites for seabirds with clear methodology on the exclusion of sites and species. We welcome the reference to Woodward *et al.* (2019) but would also recommend that site specific data are examined and where the maximum foraging range from the colony exceeds the generic value, the site-specific value should be used instead.

We consider the proposed development has potential to impact SPA sites beyond those listed in Table 8-9 in section 8.5.7.1 (Designated Sites). Other SPAs that should be assessed to establish whether the qualifying interest features (species) are within foraging range include: East Caithness Cliffs SPA, Pentland Firth Islands SPA, Auskerry SPA, Copinsay SPA, Noss SPA, Foula SPA, Sumburgh Head SPA, and the Hermaness, Saxa and Valla Field SPA.

[1] McGregor, R.M., King, S., Donovan., C.R., Caneco, B. and Webb. A (2018) A Stochastic Collision Risk Model for Seabirds in Flight. Marine Scotland. Document number: HC0010-400-001

[2] NatureScot (2018) Interim Guidance on Apportioning Impacts from Marine Renewable developments to Breeding Seabird Populations in Special Protection Areas. Updated November 2018.

Potential Impacts

We broadly agree with the potential impacts upon ornithological features to be considered within the EIA listed in Table 8-13. However, there are a couple of additional impacts that we feel should be addressed in the EIAR. These are:

- Collision risk to nocturnally active seabirds - some of the species recorded in the 2015 surveys of the site (Tables 8-10 to 8-12), such as fulmar and petrels, are known to fly at night[3]; and
- Impacts of lighting and collision with infrastructure - shearwaters and petrels are known to be attracted to artificial lights and can become disorientated, often with fatal consequences.

We also note that 'Potential accidental release of pollutants' is scoped out due to the embedded mitigation implemented during construction and operation. It would be useful to have more detail on this provided. Wind Turbine Generators contain large amounts of oil, which should it leak, could have serious impacts on seabirds.

Cumulative Impacts

Species such as common scoter and red- and black-throated divers, associated with terrestrial SPAs (such as the Caithness and Sutherland Peatlands SPA) may be encountered by surveys during the breeding season as they are known to forage at sea whilst breeding.

If this is the case, then in-combination impacts with onshore wind farm developments should be considered as they have the potential to cause cumulative collision and/or displacement effects. In this situation we request that the following developments are included in a cumulative impact assessment: the Limekiln wind farm extension (proposed), Ackron wind farm (proposed), Drum Hollistan 2 wind farm (proposed), Strathy North (operational), Strathy South (consented), Strathy Wood (proposed), the Strathy Wood grid connection (proposed), Space Hub Sutherland (consented), Armadale wind farm (scoping), Bettyhill Extension wind farm (scoping) and Tormsdale wind farm (scoping).

Method of Assessment

Table 8-14 includes description of the proposed ornithological EIA methods. We generally agree with the proposed approach but have the following comments:

- Breeding Birds:
    - The assessment should also use the data from the latest Seabird Census (Seabirds Count), where available.
- Apportioning:
    - Best available methods for apportioning should be used, including consideration of the apportioning tool that has been developed for Scottish waters by CEH and RSPB, on behalf of Marine Scotland, where appropriate
- Collision risk:
    - We note Table 5-1 states that there will be a 22m minimum blade clearance distance from sea level, independent from tide state. Increasing this minimum distance should be considered as a key mitigation measure as 22m is relatively close to the sea level and within potential collision height for many seabirds.
    - The modelling methods (and corrigendum) presented in the Johnson *et al.* (2014)[4] paper should be used alongside accurate information on flight heights if possible and subject to validation from the Hi-Def surveys.

[3] https://www.gov.scot/publications/vulnerability-scottish-seabirds-offshore-wind/pages/11/ Section 3.4 Nocturnal flight activity

[4] Johnston, A., Cook, A., Wright, L., Humphreys, E. and Burton, N. (2014). Modelling flight heights of marine birds to more accurately assess collision risk with offshore wind turbines. Journal of Applied Ecology. 51. 10.1111/1365-2664.12191.

    - We recommend the use of the stochastic CRM shiny app developed by Marine Scotland Science, and that the full output reports are provided. We welcome further discussion on the model options used and parameterisation of them.
    - We note that the avoidance rates to be used will be informed using Smart Wind (2014) and the "Joint Response from the Statutory Nature Conservation Bodies to the Marine Scotland Science Avoidance Rate Review 25th November 2014". We are in agreement with the published avoidance rates within the latter, except that for gannet during the breeding season where we advocate that the default avoidance rate of 98% should be used. This is because gannet change their flight behaviour during the breeding season, (Lane *et al.*, 2020)[5] which is likely to alter their avoidance behaviour. The review on which the SNCB based their guidance is almost entirely drawn from studies on non-breeding gannet (Cook *et al.*, 2014).[6]
- Disturbance and Displacement
    - We welcome the use of the SeaBORD modelling tool, supported by a matrix approach where SeaBORD is not applicable. We welcome further discussion around displacement and mortality values to be used in the model.
- Population Consequences:
    - Where apportioned impacts are large and / or the SPA populations are small, it is likely that population models will be required to establish whether or not there could be long-term impacts on population viability
    - We recommend that the NE PVA shiny tool[7] is used to assess population scale impacts for both projects alone and in-combination assessments, where relevant.
    - We advise the two ratio metrics[8] which are generally termed 'Counterfactual (ratio) of final population size' and 'Counterfactual (ratio) of population growth-rate' should be presented.

Consultation on these methods should be ongoing and RSPB Scotland can participate in discussions, along with NatureScot and MSS, as to the most appropriate methods. As part of this, consideration must be given into how variability and uncertainty is incorporated and presented in the assessment. There should be an intention to refer to additional guidance as it emerges and to engage in discussion regarding the correct use of these.

We would also recommend that the findings of the Marine Bird Impact Assessment Guidance Workshop[9] held by NatureScot on 20th February 2020 be taken into account.

<u>Onshore Biological Environment</u>

We understand that new bird surveys will be undertaken in 2021, however no detail is provided in the scoping report as to what they will entail.

The 2015 Caledonian Conservation Ltd ornithology surveys should be repeated, as per standard methodology guidance, for wintering wildfowl (foraging/roosting), Breeding Bird Surveys (primarily for waders), as well as breeding seabird and raptor surveys. It will be key to ensure standard survey timings are followed as there were some discrepancies in 2015.

[5] Lane, J. V., Jeavons, R., Deakin, Z., Sherley, R. B., Pollock, C. J., Wanless, R. J., & Hamer, K. C. (2020). Vulnerability of northern gannets to offshore wind farms; seasonal and sex-specific collision risk and demographic consequences. Marine Environmental Research, 162, 105196.
[6] Cook, A. S. C. P., Humphreys, E. M., Masden, E. A., & Burton, N. H. K. (2014). The avoidance rates of collision between birds and offshore turbines. Scottish Marine Freshwater Sci 5 (16): 247 pp. Edinburgh: Scottish government.
[7] Searle, K., Mobbs, D., Daunt, F. & Butler, A. 2019. A Population Viability Analysis Modelling Tool for Seabird Species. Natural England Commissioned Reports, Number 274.
[8] Cook, A.S.C.P. & Robinson, R.A. 2016. Testing sensitivity of metrics of seabird population response to offshore wind farm effects. JNCC Report No. 553. JNCC, Peterborough.
[9] https://www.nature.scot/bird-impact-assessment-guidance-workshop-offshore-wind-report-and-presentations

The Highland Raptor Study Group should be contacted for up to date records for peregrine within 2km minimum of the onshore study area.

We consider section 11.2.9 on Cumulative Impacts is missing the same projects as mentioned above in relation to potential in-combination impacts. In addition to those listed above, we recommend the following developments are also included in a cumulative impact assessment: Forss wind farms (operational), Baillie Hill wind farm (operational), Forss III wind farm (proposed), Hill of Lybster wind farm (proposed) and Cairnmore Hill wind farm (proposed).

Additional Comments

The north Caithness coast contains important, localised great-yellow bumblebee populations and further data should be requested from the Bumblebee Conservation Trust BBCT for the onshore study area via their local officer Katy Malone: katy.malone@bumblebeeconservation.org.

The Environmental Impact Assessment should also consider the overall carbon payback period for the development, including any impacts on 'blue carbon' from habitats affected by the proposal.

Monitoring programme

Many uncertainties remain around the impacts of all types of offshore wind on wildlife and birds. A condition to implement an environmental monitoring programme should be appended to any consents that may be granted and results should be made public. Such a condition is considered reasonable to better understand not only the use of the sea and airspace around the development by seabirds and other marine wildlife but also the interactions of these species with the turbine structures. Monitoring trends in seabird populations, species' distribution at sea and habitat impacts of cable laying, would also be key aspects to include in a monitoring package, particularly as there are no other offshore sites in this region. We would also strongly support tagging and tracking of seabirds in the monitoring package for this reason.

Such efforts could help improve certainty in environment assessments and prove vital as a means to inform decision-making around any future proposals for larger scale projects in nearby locations or elsewhere in Scottish or UK waters.

Royal Yachting Association

MacFarlane M (Marc)

From: Pauline McGrow <Pauline.McGrow@ryascotland.org.uk>
Sent: 26 January 2021 11:56
To: MS Marine Renewables
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: Pentland Floating Offshore Wind Farm`.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Sophia,

Thank you for your email. Please find attached RYA Scotland's response to the Pentland Floating Offshore Windfarm.

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: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot

Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Dear Sir/Madam,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED) (collectively referred to as the "EIA Regulations").

Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

In respect of the proposed marine licence applications under the Marine (Scotland) Act 2010, the section 36 consent application under the Electricity Act 1989 and request for deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended) for the above, Highland Wind Limited has requested the Scottish Ministers adopt a scoping opinion in relation to the above proposed works under the EIA Regulations.

Highland Wind Limited propose to install a floating offshore wind farm (between 6 and 10 floating substructures and WTGs) with an installed capacity up to 100 megawatt with the aim to test and demonstrate a technology solution for floating offshore wind in Scotland. The Pentland Floating Offshore Wind Farm is an update to the Dounreay Tri Project that was consented in the same location for Hexicon AB in 2017.

The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

To assist the Scottish Ministers in adopting a comprehensive scoping opinion, which will outline the scope and level of detail of information to be provided in the Environmental Impact Assessment ("EIA") Report to be submitted by the applicant with their proposed marine licence applications, please review the scoping report and advise on what you consider should be included within or excluded from the scope of the EIA for the proposed works. In doing so you may wish to consider any comments you may have regarding data sources, proposed methodologies or the requirement for specific studies.

Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries.

RYA Scotland

Royal Yachting Association Scotland

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T +44 (0)131 317 7388
E admin@ryascotland.org.uk
W www.ryascotland.org.uk

26 January 2021

Sophia Irvine, Marine Scotland – Marine Planning and Policy
Scottish Government, Marine Laboratory,
375 Victoria Road, Aberdeen, AB11 9DB

Dear Ms Irvine,

Highland Wind Limited – Pentland Floating Offshore Wind Farm

I have read the scoping report on behalf of RYA Scotland. I note that a Navigational Risk Assessment will be carried out and look forward to contributing to it. I do not foresee any major issues.

MGN 543 is currently being revised and the RYA is currently considering its response. I consider that the UK Coastal Atlas of Recreational Boating, which is available on NMPi, is now the best source of data on the movements of recreational vessels in these waters. About 25% of cruising recreational vessels in the Pentland Firth and Northern Isles transmit an AIS signal and I consider that their routes are a good representation of the routes of all recreational vessels. Recreational vessels in this area largely go from Cape Wrath, Loch Eriboll or the anchorages off the Kyle of Tongue to Stromness or through the Pentland Firth or *vice versa*. Very few vessels pass through between October and April. MGN 543 requires AIS observations but these should only be considered as a check on the coastal atlas, particularly as it is unclear what the impacts of Cocid-19 and Brexit will have on traffic this year. Sailors in these waters are generally very experienced and no problems are envisaged when there is good visibility and moderate winds. Indeed, most boats will be further offshore. What is more important is the routes taken by recreational vessels in adverse weather conditions. For example, a boat heading to Stromness from Loch Eriboll in a NE wind in poor visibility would be likely to pass close to the site. Timing of such a passage is crucial as safe entry to Hoy Sound is only possible at certain states of tide.

MGN 543 suggests the promulgation of information and warnings through Notices to Mariners, which we support. However, it can be difficult for recreational sailors on passage to find the relevant Notices to Mariners due to the number of organisations now issuing them. It is important that NtMs are made available on the project website and for them to be passed on to Kingfisher, which RYA Scotland is starting to encourage recreational sailors to use. It is also important to post relevant NtMs at marinas and harbours that might be stopping points for vessels passing through the Pentland Firth. When the scheme is consented the editor of the *Clyde Cruising Club Sailing Directions and Anchorages* publications needs to be informed of the location of the devices so that this information can be incorporated in the electronic updates to the *Orkney and Shetland including North and Northeast Scotland* volume published in 2020. The next edition should be published in about five years' time.

Yours sincerely,

[Redacted]

Dr G. Russell FRMetS MCIEEM
Planning and Environment Officer, RYA Scotland

sport scotland
LOTTERY FUNDED

Scottish Fishermen’s Federation

MacFarlane M (Marc)

From: Malcolm Morrison <M.Morrison@sff.co.uk>
Sent: 02 February 2021 12:04
To: Irvine S (Sophia)
Cc: MacFarlane M (Marc); Bamlett R (Rebecca)
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021
Attachments: 20201201-MM Scoping response.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Sophia, thanks for your patience, and here it is!
I have discussed this morning with Hannah and she had nothing to add to it.

I think having one amalgamated response is far simpler than having a response from all 450 vessels we represent
Best Malcolm

From: Sophia.Irvine@gov.scot <Sophia.Irvine@gov.scot>
Sent: 01 February 2021 16:23
To: Malcolm Morrison <M.Morrison@sff.co.uk>
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Hi Malcolm,

Many thanks for confirming that is really helpful to know.

We look forward to receiving your response.

Kind regards,

Sophia

From: Malcolm Morrison <M.Morrison@sff.co.uk>
Sent: 01 February 2021 15:28
To: Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Cc: MacFarlane M (Marc) <Marc.MacFarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Sophia et al,
That address may be defunct, but don't worry all the 8 associations in the SFF get sent the initial papers to read, then my response, and very occasionally they ask me to change something, but generally they are happy to support! It may be that Hannah is not in the office every day, so I will check to be sure she has seen my response before I send it,
Best, Malcolm

From: Sophia.Irvine@gov.scot <Sophia.Irvine@gov.scot>
Sent: 01 February 2021 12:51
To: Malcolm Morrison <M.Morrison@sff.co.uk>
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Hi Malcolm,

Many thanks for the update. No worries, should you require a longer timeframe to provide a response just let me know.

On another note, I received an error message when trying to email Orkney Fisheries Association in relation to this consultation. The email address we have for them is orkneyfisheries@btconnect.com but it appears that their inbox is full. As they are members of the SFF, I was hoping you could advise if you have been in touch with them regarding this consultation or if you can provide an alternative email address? I understand that the SFF response will represent their views.

Kind regards,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
Website: https://www2.gov.scot/Topics/marine/Licensing/marine

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From: Malcolm Morrison <M.Morrison@sff.co.uk>
Sent: 01 February 2021 12:24
To: MS Marine Renewables <MS.MarineRenewables@gov.scot>
Cc: MacFarlane M (Marc) <Marc.MacFarlane@gov.scot>; Bamlett R (Rebecca) <Rebecca.Bamlett@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: RE: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation – By 1 February 2021

Sophia,
Apologies, I underestimated the amount of response needed, but will get it finished later and with you by breakfast time, if that's ok?
Best, mm

From: MS.MarineRenewables@gov.scot <MS.MarineRenewables@gov.scot>
Sent: 21 December 2020 14:03
To: MS.MarineRenewables@gov.scot
Cc: Marc.MacFarlane@gov.scot; Rebecca.Bamlett@gov.scot; Sophia.Irvine@gov.scot
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Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness

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The scoping report submitted by the applicant can be found at: Scoping - Pentland Floating Offshore Wind Farm | Marine Scotland Information

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Please submit your response electronically to ms.marinerenewables@gov.scot by 1 February 2021. If you are unable to meet this deadline, please contact us as soon as possible to discuss the possibility of an extension to the consultation period. If you have no comments to make please submit a "nil return" response.

Please be advised that the scoping report and this consultation request relate to the proposed marine licence applications and section 36 consent application for the offshore elements and the deemed planning permission for the onshore elements of the works.

Yours faithfully,

Sophia

Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

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

Email: sophia.irvine@gov.scot
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SCOTTISH FISHERMEN'S FEDERATION

Our Ref: MM/

Your Ref:

1 February 2021

E-mail: MS.MarineRenewables@gov.scot

Scottish Fishermen's Federation
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Aberdeen, AB10 1XE
Scotland UK

T: +44 (0) 1224 646944
F: +44 (0) 1224 647058
E: sff@sff.co.uk

www.sff.co.uk

Dear Sirs

Highland Wind Ltd Scoping Consultation

The Scottish Fishermen's Federation is pleased to respond to this consultation on behalf of the 500 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 and Shetland Fishermen's Association.

While acknowledging that the previously consented Dounereay Tri is the basis for the new application, when defining them it would be helpful to have direct comparisons, eg 2017 Consented area = 25km2 ; new application nothing? This is constant throughout the paper? SFF also acknowledge that the 2017 Consented area was of no impact on Commercial Fisheries.

In terms of the wider area, we have had representations from members on a Haddock fishery, described as the Middens, which provides a winter fishery. There may also be a latent Squid fishery, and a high chance of Scallop fishing and Creel fishing on the export cable route, especially as Crab fishing has grown exponentially since the original application. All of which need to be include in the scoping, to ensure the value of them is recognised going forward.

As there is such a wide range of material in the paper provided, in the summary points following, some will be particularly referring to scoping and others will be comments/ responses to specific statements.

The introduction (chapter 1) indicates that the farm could be 5 times the size of the 2017 consent, without being overly clear on what that means. Nevertheless, the new parameters are quite likely to interfere with fishing activity, described above.

Moving on to 2.3, the paper falls foul of the common mistake, in describing the sections of the Scottish National Marine Plan which suit it, whilst ignoring to quote the Fisheries policies, which generally are very protective of fisheries place in Scottish waters. Speaking of Scottish Planning

Policy, it highlights a glaring mistake; the policy is meant to set out the weighting for decisions, but ultimately avoids the issue by saying it's a personal decision by the assessors.

On to Chapter 5, on Infrastructure, and the list of Key Development Sensitivities (KDS), which could be a solution to the weighting problem if commercial Fisheries were identified as KDS. In the discussion on the potential plan, it is clear that micro-siting is a needful tool, which if thought about at an early stage, with fishing input might help towards co-existence. Clarity will be needed as to what the minimal spacing of 800m refers to; between Platforms or Anchors.

Part 5.2.6 really does need to be much more specific about cable burial, as this has been problematic in every development to date. SFF will not be satisfied with a simple claim of 80% burial without evidence to back it up. SFF would recommend a discussion with area fishers on suitable areas for mattresses or rock dumping, this discussion could also apply to any need for scour protection to avoid creating new problems.

The description, in 5.2.7.4, of installing the inter-array cables would need to be clarified as it reads like, de facto closure to mobile fisheries. 5.2.7.5 really should be quite clear about the post-lay actions, such as the discussion with fisheries on the as laid route, burial status and any need for over-trawl trials. Scour protection and future work needing reburial should also include that discussion.

Chapter 5.5 on decommissioning, should, as in previous developments at sea, have a default position of reverting to the initial state. There should be a clear plan, including financial aspects, to show removal. There should not be the lazy option of looking at how "good" it would be for the environment to leave them in place. The Scottish Government has precedent for this in that many MPAs can have the definition recover or re-instate without qualification.

The SFF remains to be convinced about the safety of the practice of cutting cables, taking away any bare ones, but leaving buried ones. Similarly with rock dump & scour protection, the development should be clear as to how that is cleaned up after 25 years.

In 6.3, the SFF would expect any environmental designations including fisheries management be considered in the Cumulativeimpacts.

Moving to chapter 7, in 2.9, the description gives sight of the "need" for 2 export cables, which should be assessed as an extra risk. Table 7.1 proposes that leaving the export cable in the seabed could be beneficial, which the SFF takes issue with on safety grounds, and would insist on reinstatement.

Again, in Table 8.1, decommissioning has aspects claimed to be beneficial, but the SFF, on safety grounds disagrees, and seeks reinstatement.

Chapter 8.3, points 7 & 8, would be strengthened by the addition of a baseline for commercially significant fish in order to assist in full and proper monitoring.

Table 8.4 scopes out EMF, the SFF would contend that there is insufficient evidence to do so, therefore scope in. It gives Aggregations on Turbines as minor impact, which seems to be contradictory to other lines, so should be scoped in. Then we have the scoping in of Ghost Fishing, which will be interesting to see the justification and the outputs.

Moving on to chapter 9, reliance on AIS may not be the whole picture. The 2017 consent area avoided fishing grounds, the expansion may not. Table 9.1 is not clear on Habitat recovery post decommissioning. Table 9.7 seems very positive about Tourism, Socio-economics etc, the SFF would like to see that assessed in future to verify the assumptions the development is making.

Table 13.1 seems to underplay the "wave regime" it will also impact on construction and decommissioning. As there is little real evidence available EMF/Heat should be scoped in. And, finally, fish aggregation should be scoped in so that it can be assessed against the claims made for its benefits.

Yours faithfully

Malcolm Morrison
Fisheries Policy Officer, Scottish Fishermen's Federation

Scottish Water

MacFarlane M (Marc)

From: Planning Consultations <PlanningConsultations@scottishwater.co.uk>
Sent: 19 February 2021 16:14
To: MS Marine Renewables
Subject: SW Ref: DSCAS-0032446-B6L - Your Ref: Pentland Floating Offshore Wind Farm
Attachments: Planning Consultation Pentland Floating Offshore Wind Farm.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear MS.MarineRenewables@gov.scot,

Please see the attached letter regarding SW Case: **DSCAS-0032446-B6L** (Your Ref: **Pentland Floating Offshore Wind Farm)**

If you have any questions then please do not hesitate to contact Scottish Water.

Kind Regards,

Angela Allison.

Friday, 19 February 2021

MS.MarineRenewables@gov.scot

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

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

Dear Sir/Madam

SITE: Pentland Floating Offshore Wind Farm
OUR REF: DSCAS-0032446-B6L
PROPOSAL: Wind Farm

Please quote our reference in all future correspondence

Audit of Proposal

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced and would advise the following:

Water Capacity Assessment

Scottish Water has carried out a Capacity review and we can confirm the following:

- There is currently sufficient capacity in the Loch Calder Water Treatment Works to service your development. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us.

Waste Water Capacity Assessment

- Unfortunately, according to our records there is no public Scottish Water, Waste Water infrastructure within the vicinity of this proposed development therefore we would advise applicant to investigate private treatment options.

Please Note

- The applicant should be aware that we are unable to reserve capacity at our water and/or waste water treatment works for their proposed development. Once a formal connection application is submitted to Scottish Water after full planning permission has been granted, we will review the availability of capacity at that time and advise the applicant accordingly.

Asset Impact Assessment

According to our records, the development proposals impact on existing Scottish Water assets.

The applicant must identify any potential conflicts with Scottish Water assets and contact our Asset Impact Team via our Customer Portal to apply for a diversion.

The applicant should be aware that any conflict with assets identified may be subject to restrictions on proximity of construction. Please note the disclaimer at the end of this response.

Drinking Water Protected Areas

A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.

Surface Water

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

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

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

General notes:

- Scottish Water asset plans can be obtained from our appointed asset plan providers:

- Site Investigation Services (UK) Ltd
- Tel: 0333 123 1223
- Email: sw@sisplan.co.uk
- www.sisplan.co.uk

- Scottish Water's current minimum level of service for water pressure is 1.0 bar or 10m head at the customer's boundary internal outlet. Any property which cannot be adequately serviced from the available pressure may require private pumping arrangements to be installed, subject to compliance with Water Byelaws. If the developer wishes to enquire about Scottish Water's procedure for checking the water pressure in the area, then they should write to the Customer Connections department at the above address.

- If the connection to the public sewer and/or water main requires to be laid through land out-with public ownership, the developer must provide evidence of formal approval from the affected landowner(s) by way of a deed of servitude.

- Scottish Water may only vest new water or waste water infrastructure which is to be laid through land out with public ownership where a Deed of Servitude has been obtained in our favour by the developer.

- The developer should also be aware that Scottish Water requires land title to the area of land where a pumping station and/or SUDS proposed to vest in Scottish Water is constructed.

- Please find information on how to submit application to Scottish Water at our Customer Portal.

Next Steps:

All Proposed Developments

All proposed developments require to submit a Pre-Development Enquiry (PDE) Form to be submitted directly to Scottish Water via our Customer Portal prior to any formal Technical Application being submitted. This will allow us to fully appraise the proposals.

Where it is confirmed through the PDE process that mitigation works are necessary to support a development, the cost of these works is to be met by the developer, which Scottish Water can contribute towards through Reasonable Cost Contribution regulations.

Non Domestic/Commercial Property:

Since the introduction of the Water Services (Scotland) Act 2005 in April 2008 the water industry in Scotland has opened to market competition for non-domestic customers. All Non-domestic Household customers now require a Licensed Provider to act on their behalf for new water and waste water connections. Further details can be obtained at www.scotlandontap.gov.uk

Trade Effluent Discharge from Non Dom Property:

- Certain discharges from non-domestic premises may constitute a trade effluent in terms of the Sewerage (Scotland) Act 1968. Trade effluent arises from activities including; manufacturing, production and engineering; vehicle, plant and equipment washing, waste and leachate management. It covers both large and small premises, including activities such as car washing and launderettes. Activities not covered include hotels, caravan sites or restaurants.
- If you are in any doubt as to whether the discharge from your premises is likely to be trade effluent, please contact us on 0800 778 0778 or email TEQ@scottishwater.co.uk using the subject “Is this Trade Effluent?". Discharges that are deemed to be trade effluent need to apply separately for permission to discharge to the sewerage system. The forms and application guidance notes can be found here.
- Trade effluent must never be discharged into surface water drainage systems as these are solely for draining rainfall run off.
- For food services establishments, Scottish Water recommends a suitably sized grease trap is fitted within the food preparation areas, so the development complies with Standard 3.7 a) of the Building Standards Technical Handbook and for best management and housekeeping practices to be followed which prevent food waste, fat oil and grease from being disposed into sinks and drains.
- The Waste (Scotland) Regulations which require all non-rural food businesses, producing more than 50kg of food waste per week, to segregate that waste for separate collection. The regulations also ban the use of food waste disposal units that dispose of food waste to the public sewer. Further information can be found at www.resourceefficientscotland.com

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

Yours sincerely,

Angela Allison
Development Operations Analyst
developmentoperations@scottishwater.co.uk

Scottish Water Disclaimer:

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

The Highland Council

MacFarlane M (Marc)

From: Simon Hindson <Simon.Hindson@highland.gov.uk>
Sent: 05 February 2021 17:41
To: MS Marine Renewables
Subject: 20/05164/SCOP - Pentland Offshore Wind Farm
Attachments: 2005164SCOP - THC Response to ECU.pdf

Sophia,

Thank you for the extension of time to respond to the above Scoping Report.

Please find attached the response from the Highland Council.

Please do not hesitate to contact me if you would like to discuss.

Kind Regards,

Simon

Simon Hindson
Team Leader – Strategic Projects Team

Environment and Infrastructure Service
Council Headquarters
Glenurquhart Road
Inverness
IV3 5NX

Telephone: 01463 785047
E-mail: simon.hindson@highland.gov.uk

Please note I am currently working from home and may not be able to respond to your email within normal working hours.

The Highland Council
Comhairle na Gàidhealtachd

Highland Wind Limited
c/o Sophia Irvine
Marine Licensing Casework Officer
Marine Scotland

By email only to:

ms.marinerenewables@gov.scot

Please ask for: Simon Hindson
Direct Dial: 01463 785047
E-mail: simon.hindson@highland.gov.uk
Our Ref: 20/05164/SCOP
Your Ref:
Date: 05 February 2021

Dear Sophia,

HIGHLAND COUNCIL REFERENCE: 20/05164/SCOP
DEVELOPMENT: PENTLAND FLOATING OFFSHORE WIND FARM
LOCATION: DEVELOPMENT SITE 6KM NW OF DOUNREAY NUCLEAR RESEARCH ESTABLISHMENT, DOUNREAY

Thank you for consulting The Highland Council on the Environmental Impact Assessment Scoping Request for the above project.

The applicant has recently utilised our Pre-Application Advice Service as noted in the scoping report, as the project progresses and the scale of the project is refined we would recommend that the applicant uses the service again to provide detailed advice on the project.

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED); and
REGULATION 17 OF THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED)

SCOPING RESPONSE TO MARINE SCOTLAND

Applicant:	**Highland Wind Limited**
Project:	**Pentland Floating Wind Farm**
Project Address:	**Development Site 6KM NW Of Dounreay Nuclear Research Establishment Dounreay**
Our Reference	**20/05107/SCOP**

This response is given without prejudice to the Planning Authority's right to request information in connection with any statement, whether Environmental Impact Assessment Report or not, submitted in support of any future application. These views are also given without prejudice to the future consideration of and decision on any planning application received by the Council.

The Highland Council request that any Environmental Impact Assessment Report (EIAR) submitted in support of an application for the above development take the comments highlighted below into account; many of which are already acknowledged within the Scoping Report submitted. In particular, the elements of this report as highlighted in parts 3, 4 and 5 should be presented as three distinct elements.

Where responses have been received by internal consultees these are attached and should be taken as forming part of the scoping response consultation from The Highland Council. If any further responses are received these will be forwarded to you as soon as practicably possible.

1.0 Description of the Development.

1.1 The description of development for an EIAR is often much more than would be set out in any planning application. An EIAR must include: -

- a description of the physical characteristics of the whole development and the full land-use requirements during the operational, construction and decommissioning phases. These might include requirements for borrow pits, local road improvements, infrastructural connections (i.e. connections to the grid), off site conservation measures, etc. A plan with eight figure OS Grid co-ordinates for all main elements of the proposal should be supplied.
- a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
- the risk of accidents, having regard in particular to substances or technologies used;
- an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light / flicker, heat, radiation, etc.) resulting from the operation of the development.
- The estimated cumulative impact of the project with other consented or operation development.

2.0 Alternatives

2.1 A statement is required which outlines the main development alternatives studied by the applicant and an indication of the main reasons for the final project choice. This is expected to highlight the following: -

- the range of technologies that may have been considered;
- locational criteria and economic parameters used in the initial site selection;
- options for access;
- design and locational options for all elements of the proposed development (including grid connection);
- the environmental effects of the different options examined.

Such assessment should also highlight sustainable development attributes including for example assessment of carbon emissions / carbon savings.

3.0 Environmental Elements Affected

3.1 The EIAR must provide a description of the aspects of the environment likely to be significantly affected by the development and considered interms of the on-shore and off-shore elements. You have a good understanding of the effects based upon the previous development and decisions. The following paragraphs highlight some principal considerations. There are a number of on-shore wind energy developments in the area and you are encouraged to use your understanding of these in assessing your development. The EIAR should fully utilise this understanding to ensure that information provided is relevant and robustly grounded.

Land Use and Policy

3.2 The EIAR should recognise the existing land uses affected by the development having particular regard for The Highland Council's Development Plan inclusive of all statutorily adopted supplementary guidance. Particular attention should be paid to the provisions of the Onshore Wind Energy Supplementary Guidance inclusive of any Landscape Sensitivity Appraisal. This is not instead of but in addition to the expectation of receiving a Planning Statement in support of the application itself which, in addition to exploring compliance with the Development Plan, should look at Scottish Planning Policy and Planning Advice Notes which identify the issues that should be taken into account when considering significant development. Scottish Government policy and guidance on renewable energy and wind energy should be considered in this section. Wider energy policy should also be considered within this section. The purpose of this chapter is to highlight relevant policies not to assess the compatibility of the proposal with policy. You should also consider, the implications of the NPF4 position statement and other relevant national policy. Depending on the submission timescale of the proposal, other guidance and policy may have been developer at a national and local level. These should be taken into consideration where appropriate within the EIAR.

Landscape and Visual

3.3 The Council expects the EIAR to consider the seascape, landscape and visual impact of the development. The Council makes a distinction between these. While not mutually exclusive, these elements require separate assessment and therefore presentation of visual material in different ways. The Council, while not precluding the use of panoramic images, require single frame images with different focal lengths taken with a 35mm format full frame sensor camera – not an 'equivalent.' The focal lengths required are 50mm and 75mm. The former gives an indication of field of view and the latter best represents the scale and distance in the landscape i.e. a more realistic impression of what we see from the viewpoint. These images should form part of the EIAR and not be separate from it. Photomontages should follow the Council's Visualisation Standards:

https://www.highland.gov.uk/downloads/file/12880/visualisation_standards_for_wind_energy_developments

Separate volumes of visualisations should be prepared to both Highland Council Standards and NATURESCOT guidance. These should be provided in hard copy. It would be beneficial for the Highland Council volume to be provided in an A3 ring bound folder for ease of use. The use of monochrome for specific viewpoints is useful where there are a number of different wind farms either onshore / offshore in the view. Without seeing wireframes it is not possible to advise on these at this time. We are happy to provide advice on this matter going forward. All existing turbines must be re-rendered even if they appear to be facing the viewer in the photograph to ensure consistency.

3.4 This assessment should include the expected impact of supporting infrastructure, despite the fact that the principal structures will be a primary concern. All elements of a development are important to consider within any EIAR, including the visual impact of the onshore infrastructure. A cumulative assessment of the proposed grid connection should also be included where appropriate.

3.5 It should be noted that there are a number of applications in this area for wind energy development which are yet to be determined / concluded in the vicinity of this application, many of these have been identified in the scoping report, which may or may not help clarify the weight towards particular policy elements in the final planning balance. We consider that you should undertake the cumulative assessment over a study area the same as the visual assessment, however given the scale of the proposed turbines we would encourage an the study area to be a minimum 50km study area. We recommend that you utilise our interactive Wind Turbine map, which is up to date as of 15 January 2021, to identify other schemes within the study area which may be relevant. We consider that the cumulative project list within the Scoping Report to be too limited but note the figure outlining cumulative projects is more expansive. The map can be accessed on the link below:

http://highland.gov.uk/windmap

Consultation should also be undertaken with Energy Consents and Deployment Unit and Marine Scotland as to schemes which are currently at Scoping Stage as these may have advanced at the same pace as your proposal. This should be agreed with the Planning Authority and NatureScot at the earliest possible opportunity.

3.6 Viewpoints (VP) for the assessment of effects of a proposed development must be agreed in advance of preparation of any visuals with The Highland Council. We acknowledge that there will be some micrositing of the viewpoints to avoid intervening screening of vegetation boundary treatments etc. We would recommend that the photographer has in their mind whether the VP is representative or specific and also who the receptors are when they are taking the photos it would be helpful. We have also found that if the photographer has a 3D model on a laptop when they go out on site it helps the orientation of the photography. It would be useful to use the viewpoints agreed for the earlier scheme in this location as a starting point.

3.7 Please consult us on the viewpoint locations again once prior to work commencing in detail on the LVIA. The viewpoints should assess a broad range of receptors in the area and include those who are off-shore as well as onshore. Consideration should be given to those receptors moving through the area as well and a sequential assessment should also be undertaken.

3.8 The detailed location of viewpoints will be informed by site survey, mapping and predicted Zones of Theoretical Visibility. Failure to do this may result in abortive work, requests for additional visual material and delays in processing applications/consultation responses. Community Council's may request additional viewpoints and it would be recommended that any pre-application discussions with the local community takes this into account. The final list of viewpoints should be agreed with the Planning Authority.

3.9 The purpose of the selected and agreed viewpoints shall be clearly identified and stated in the supporting information. For example, it should be clear that the VP has been chosen for landscape assessment, or visual impact assessment, or cumulative assessment, or sequential assessment, or to show a representative view or for assessment of impact on designated sites, communities or individual properties.

3.10 Given the scale of the turbined we would encourage the study area to a minimum 50km study area. Given the size of the turbines and we would expect a that a detailed assessment of effects should be undertaken for the whole study area. We would welcome early view of wirelines to identify effects from individual viewpoints.

3.11 When assessing the impact on recreational routes please ensure that all core paths, the national cycle network, long distance trails, and the North Coast 500 are assessed. It should be noted that these routes are used by a range of receptors.

3.12 The development will further extend the number of proposals of this type in the surrounding area, necessitating appropriate cumulative impact. It is considered that cumulative impact will be a significant material consideration in the final determination of any future application. The study area for cumulative impacts should extend to a minimum of 50km. Given the cumulative impact of renewable energy in this area it is expected that the Applicant should present images for presentation within the Panoramic Digital Viewer deployed by the Council – see visualisation standards document. If the applicant wished to utilise this tool there maybe an associated cost per image to be inserted which should be discussed with the Council prior to submission. To view current or determined schemes in the Council's Panoramic Viewer please see the link below:

http://www.highland.gov.uk/panoramicviewer

3.13 The NATURESCOT 2019 landscape character assessment should be used.

3.14 We expect an assessment of the impact on Wild Land Areas to be included within the EIAR given the proximity to a number of Wild Land Areas and the theoretical visibility of the scheme from within wild land areas. NATURESCOT will provide further advice on this matter but we would expect the 2020 guidance to be followed not the 2017 guidance.

3.15 We expect an assessment of the proposal against the criterion set out in the Council's Onshore Wind Energy Supplementary Guidance to be included within the LVIA chapter of the EIAR.

3.16 An assessment of the impacts of the proposal on landscape should assess the impacts on any landscapes designated at a national and local scale. As part of this the impact on the Special Landscape Areas (SLA) must be undertaken using the SLA citations available from the Council's website.

3.17 Aviation lighting will be a mandatory requirement due to the proposed scale and location of the turbines. Navigational lighting will also be required. The affect of the lighting should be assessed through the EIA process through a Lighting Impact Assessment. This is a matter that should be considered from all viewpoints. It should form part of the SLVIA chapter of the EIAR but should also be considered as part of the Wild Land Assessment.. Further advice on aviation lighting is available from NATURESCOT. A more comprehensive list will be required and should include at least, all viewpoints within designated landscapes, Special Landscape Areas and within Wild Land Areas. Further the assessment should consider all of the viewpoints which are sought through the assessment.

3.18 We are content that residential visual amenity is assessed within the LVIA chapter.

Ecology

3.19 The EIAR should provide a baseline survey of the bird and animals (mammals, reptiles, amphibians, etc) interest on site. It needs to be categorically established which species are present on the site, and where, before a future application is submitted. Further the EIAR should provide an account of the habitats present on the proposed development site. It should identify rare and threatened habitats, and those protected by European or UK legislation, or identified in national or local Biodiversity Action Plans. Habitat enhancement and mitigation measures should be detailed, particularly in respect to blanket bog, in the contexts of both biodiversity conservation and the inherent risk of peat slide (see later). Details of any habitat enhancement programme (such as native- tree planting, stock exclusion, etc) for the proposed site (onshore and offshore) should be provided. It is expected that the EIAR will address whether or not the development could assist or impede delivery of elements of relevant Biodiversity Action Plans.

3.20 The EIAR should provide a baseline survey of the ecology present on the site (onshore and offshore) to determine the presence of any rare or threatened species.

3.21 The EIAR should address the likely impacts on the nature conservation interests of all the designated sites in the vicinity of the proposed development. It should provide proposals for any mitigation that is required to avoid these impacts or to reduce them to a level where they are not significant. NATURESCOT can also provide specific advice in respect of the designated site boundaries for SACs and SPAs and on protected species and habitats within those sites. The potential impact of the development proposals on other designated areas such as SSSI's should be carefully and thoroughly considered and, where possible, appropriate mitigation measures outlined in the EIAR. NATURESCOT provide advice on the impact on designated sites. You should also note the representations from RSPB and take this into consideration in preparing your EIAR.

3.22 The EIAR needs to address the aquatic interests that may be affected by the development, for example bethnic impacts, increases in silt and sediment loads resulting from construction works; pollution risk / incidents during construction; obstruction to upstream and downstream migration both during and after construction; disturbance of spawning beds / timing of works; and other drainage issues. The EIAR should evidence consultation input from the local fishery board(s) where relevant.

3.23 Further advice can be found in NATURESCOT's consultation response on ecology in relation to the surveys required and the adequacy of the work already undertaken.

3.24 The EIAR should include an assessment of the effects on Ground Water Dependent Terrestrial Ecosystems (GWDTE) for the onshore elements.

3.25 While the scoping report seeks to scope out transboundary effects, given the location of the scheme and the potential impacts on water quality, it is considered that transboundary effects are assessed in the EIAR. It will be for Scottish Ministers to come to a view on this matter in relation to the relevant provisions of the EIA regulations.

Ornithology

3.26 The presence of protected species such as Schedule 1 Birds or European Protected Species must be included and considered as part of the planning application process, not as an issue which can be considered at a later stage. Any consent given without due consideration to these species may breach European Directives with the possibility of consequential delays or the project being halted by the EC. Please refer to the comments of NATURESCOT and RSPB in this respect.

3.27 An assessment of the impacts of to birds through collision, disturbance and displacement from foraging / breeding / roosting habitat will be required for both the proposed development site and cumulatively with other proposals. The EIAR should be clear on the survey methods and any deviations from guidance on ornithology matters.

Noise

3.28 Operational Noise

Given the location, there is little likelihood that operational noise will be an issue at noise sensitive receptors. However, the applicant will be required to submit a noise assessment with regard to the operational phase of the development. The assessment should be carried out in accordance with ETSU-R-97 "The Assessment and Rating of Noise from Wind Farms" and the associated Good Practice Guide published by the Institute of Acoustics. A cumulative assessment would only be required if predicted noise levels from this development were found to be within 10dB of levels arising from another wind farm development.

If the onshore element results in any additional operations noise through the provision of additional plant or equipment a noise assessment will be required for these elements as well. In this event we would recommend further consultation with our Environmental Health team.

3.29 Cumulative Noise

The noise assessment must take into account the potential cumulative effect from any other existing or consented or, in some cases, proposed wind turbine developments. Where applications run concurrently,

developers and consultants are advised to consider adopting a joint approach with regard to noise assessments. The noise assessment must take into account predicted and consented levels from such developments. The good practice guide offers guidance on how to deal with cumulative issues.

The assessment should include a map showing all wind farm developments which may have a cumulative impact and all noise sensitive properties including any for which a financial involvement relaxation is being claimed.

The assessment should include a table of figures which includes the following: -

- The predicted levels from this development based at each noise sensitive location (NSL) at wind speeds up to 12m/s
- The maximum levels based on consented limits from each existing or consented wind farm development at each NSL. If any reduction is made for controlling property or another reason, this should be made clear.
- The predicted levels from each existing or consented wind farm development at each NSL.
- The cumulative levels based on consented and predicted levels at each NSL.

The assessment should also include an outline for a mitigation scheme to be implemented should noise levels from the development be subsequently found to exceed consented levels.

3.30 Background Noise Measurements

Background noise surveys should be undertaken in accordance with ETSU-R-97 and the Good Practice Guide. It is recommended that monitoring locations be agreed with the Council's Environmental Health Officer however, it is unlikely that they will be able to attend the installation of equipment. Where possible, sites must avoid other noise sources such as boiler flues, wind chimes, squeaking gate, rustling leaves etc. Otherwise, the results may not be valid for any other property.

Difficulties can arise where a location is already subject to noise from an existing wind turbine development. ETSU states that background noise must not include noise from an existing wind farm. The GPG offers advice on how to approach this problem and in some cases, it may be possible to utilise the results from historical background surveys. It is advised that the developer consults the Councils Environmental Health Officer at an early stage to discuss the proposed methodology.

3.31 Construction Noise

Planning conditions are not used to control the impact of construction noise as similar powers are available to the Local Authority under Section 60 of the Control of Pollution Act 1974. However, where there is potential for disturbance from construction noise the application will need to include a noise assessment.

A construction noise assessment will be required in the following circumstances: -

- Where it is proposed to undertake work which is audible at the curtilage of any noise sensitive receptor, out with the hours Mon-Fri 8am to 7pm; Sat 8am to 1pm

OR

- Where noise levels during the above periods are likely to exceed 75dB(A) for short term works or 55dB(A) for long term works. Both measurements to be taken as a 1hr LAeq at the curtilage of any noise sensitive receptor. (Generally, long term work is taken to be more than 6 months)

If an assessment is submitted it should be carried out in accordance with BS 5228-1:2009 "Code of practice for noise and vibration control on construction and open sites – Part 1: Noise". Details of any mitigation measures should be provided including proposed hours of operation.

Regardless of whether a construction noise assessment is required, it is expected that the developer/contractor will employ the best practicable means to reduce the impact of noise from construction activities. Attention should be given to construction traffic and the use of tonal reversing alarms.

Amplitude Modulation

3.32 Research has been carried out in recent years on the phenomenon of amplitude modulation arising from some wind turbine developments. However at this time, the Good Practice guide does not provide definitive Planning guidance on this subject. That being the case, any complaints linked to amplitude modulation would be investigated in terms of the Statutory Nuisance provisions of the Environmental Protection Act 1990.

Noise Exposure

3.33 When assessing the cumulative impact from more than one wind farm, consideration must be given to any increase in exposure time. Regardless of whether cumulative levels can meet relevant criteria, if a noise sensitive property subsequently becomes affected by wind turbine noise from more than one direction this could result in a significant loss of respite.

Cultural Heritage

3.34 The EIAR needs to identify all designated sites which may be affected by the development either directly or indirectly. This will require you to identify: -

- the architectural heritage (Conservation Areas, Listed Buildings) and
- the archaeological heritage (Scheduled Monuments),
- the landscape (including designations such as National Parks, National Scenic Areas, Areas of Great Landscape Value, Gardens and Designed Landscapes, shipwrecks and general setting of the development.
- the inter-relationship between the above factors.

3.35 We would expect any assessment to contain a full appreciation of the setting of these historic environment assets and the likely impact on their settings. It would be helpful if, where the assessment finds that significant impacts are likely, appropriate visualisations such as photomontage and wireframe views of the development in relation to the sites and their settings could be provided. Visualisations illustrating views both from the asset towards the proposed development and views towards the asset with the development in the background would be helpful.

3.36 Historic Environment Scotland (HES) will provide comment on the assessment methodology for heritage assets within their remit.

3.37 It is anticipated that HES will provide further comments on the scope of the assessment and their requirements for supporting information (including visualisations) and the potential impacts on heritage assets in their consultation response.

3.38 There are a large number of heritage assets in the vicinity of the development, these need to be assessed. HES have provided detailed advice on potential setting impacts.

3.39 We recommend that you liaise with colleagues in the Council's Historic Environment Team on the scope of the archaeological assessments.

Water Environment

3.40 This section is focused on the onshore elements of the proposed development and we would anticipate further comments from Marine Scotland Science to address the offshore elements of the project. The

EIAR needs to address the nature of the hydrology and hydrogeology of the site, and of the potential impacts on water quality, water quantity and on aquatic flora and fauna. Measures to prevent erosion, sedimentation or discolouration related t othe onshore works will also be required, along with monitoring proposals and contingency plans. Assessment will need to recognise periods of high rainfall which will impact on any calculations of run-off, high flow in watercourses and hydrogeological matters. You are strongly advised at an early stage to consult Scottish Environment Protection Agency (SEPA) as the regulatory body responsible for the implementation of the Controlled Activities (Scotland) Regulations 2005 (CAR), to identify if a CAR license is necessary and the extent of the information required by SEPA to assess any license application.

3.41 If culverting should be proposed, either in relation to new or upgraded tracks, then it should be noted that SEPA has a general presumption against modification, diversion or culverting of watercourses. Schemes should be designed to avoid crossing watercourses, and to bridge watercourses where this cannot be avoided. The EIAR will be expected to identify all water crossings and include a systematic table of watercourse crossings or channelising, with detailed justification for any such elements and design to minimise impact. The table should be accompanied by photography of each watercourse affected and include dimensions of the watercourse. It may be useful for the applicant to demonstrate choice of watercourse crossing by means of a decision tree, taking into account factors including catchment size (resultant flows), natural habitat and environmental concerns. Further guidance on the design and implementation of crossings can be found on SEPA's Construction of River Crossings Good Practice Guide.

3.42 The need for, and information on, abstractions of water supplies for concrete works or other operations should also be identified. The EIAR should identify whether a public or private source is to be utilised. If a private source is to be utilised, full details on the source and details of abstraction need to be provided.

3.43 You should carry out an investigation to identify any private water supplies, including pipework, which may be adversely affected by the development and to submit details of the measures proposed to prevent contamination or physical disruption. Highland Council has some information on known supplies but it is not definitive. An on-site survey will be required.

3.44 It is anticipated that detailed comments will be provided on impacts on the water environment, in particular on buffers to water courses, by SEPA.

Geology, Hydrology and Geohydrology

3.45 The EIAR must consider the risks of engineering instability for the onshore elements of the project relating to presence to peat on the site. A comprehensive peat slide risk assessment in accordance with the Scottish Government Best Practice Guide for Developers will be expected. Assessment should also address pollution risk and environmental sensitivities of the water environment. It should include a detailed map of peat depth and evidence that the scheme minimises impact on areas of deep peat. The EIAR should include site-specific principles on which construction method statements would be developed for engineering works in peat land areas, including access roads, turbine bases and hard standing areas, and these should include particular reference to drainage impacts, dewatering and disposal of excavated peat.

3.46 The EIAR should include a full assessment on the impact of the development on peat. The assessment of the impact on peat must include peat probing for all areas where development is proposed. The Council are of the view this should include probing not just at the point of infrastructure as proposed by the scheme but also covering the areas of ground which would be subject to micrositing limits.

3.47 Carbon balance calculations should be undertaken and included within the EIAR with a summary of the results provided focussing on the carbon payback period for the wind farm.

3.48 The EIAR should fully describe the likely significant effects of the development on the local geology including direct effects and any indirect. Proposals should demonstrate construction practices that help to minimise the use of raw materials and maximise the use of secondary aggregates and recycled or renewable materials.

Roads Infrastructure

3.49 Highland Council's Transport Planning Teams interests will relate largely to the impact of development traffic on the Council maintained road network and its users during the construction phase of the project. It has confirmed that it is generally satisfied with the proposed changes to the methodology. The community have also raised concerns around these matters.

3.50 A Transport Assessment (TA), or section on traffic and transportation, within the Environmental Statement for the project will be required. The TA should identify all roads likely to be affected by the various stages of the development and consider in detail the impact of development traffic, including abnormal load movements, on these roads. Where necessary, the TA should consider and propose measures necessary to mitigate the impact of the development on the road network. Prior to preparation of the TA the developer should first carry out a detailed scoping exercise in consultation with the Council, as local roads authority and, as required, Transport Scotland as trunk roads authority.

3.51 Matters to be included in the Transport Assessment/Transport Statement:

- Identify all public roads affected by the development. In addition to transport of major components this should also include routes to be used by local suppliers.
- Establish current condition of the roads. This work which should be undertaken by a consulting engineer acceptable to the Council and will involve an engineering appraisal of the routes including the following:
    - assessment of structural strength of carriageway including construction depths and road formation where this is likely to be significant in respect of proposed impacts, including non-destructive testing and sampling as required.
    - road surface condition and profile
    - assessment of structures and any weight restrictions
    - road widths, vertical and horizontal alignment and provision of passing places;
    - details of adjacent communities
- Traffic resulting from the proposed development including: -
    - nos. of light and heavy vehicles
    - abnormal loads. In respect of long loads trial runs are required.
    - duration of works
- Current traffic flows including use by school buses, refuse vehicles, commercial users, pedestrians, cyclists and equestrians.
- Impacts of proposed traffic including: -
    - impacts on carriageway, structures, verges etc.
    - impacts on other road users
    - impacts on adjacent communities
    - swept path and gradient analysis where it is envisaged that passage of traffic could be problematic.
- Cumulative impacts with other developments in progress and committed developments.
- Proposed mitigation measures to address impacts identified above including: -
    - details of the proposed site access at its junction with the public road to the standards set out in The Highland Council's Roads and Transportation Guidelines for New Developments available online at:

http://www.highland.gov.uk/yourenvironment/roadsandtransport/roads/roadsandtransportguidelinesfornewdevelopments.htm

- carriageway strengthening
- strengthening of bridges and culverts
- carriageway widening and/or edge strengthening
- provision of passing places
- road safety measures
- traffic management including measures to be taken to ensure that development traffic does not use routes other than the approved routes.
- Details of residual effects.

3.52 The EIAR must consider the implications on the Trunk Road network as part of the EIAR process.

Socio-Economic, Recreation and Tourism

3.53 We consider that this should have its own chapter in the EIAR to ensure that these matters are appropriately addressed and not lost in other assessments. The EIAR should estimate who may be affected by the development, in all or in part, which may required individual households to be identified, local communities or a wider socio economic groupings such as tourists & tourist related businesses, recreational groups, economically active, etc. The application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development.

3.54 Estimations of who may be affected by the development, in all or in part, which may required individual households to be identified, local communities or a wider socio economic groupings such as tourists & tourist related businesses, recreational groups, economically active, etc should be included. The application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development. In this regard wind farm development experience in this location should be used to help set the basis of likely impact. This should set out the impact on the regional and local economy, not just the national economy. Any mitigation proposed should also address impacts on the regional and local economy.

3.55 Onshore element of the development is on land with access rights provided by the Land Reform Scotland Act. Access rights on a core path are not enhanced but they are more protected during construction and similar activities. In line with the policies and provisions of the Highland-wide Local Development Plan a plan detailing the following should be submitted as part of the EIAR:

- Existing public non-motorised public access footpaths, bridleways and cycleways on the site and any proposed access route from the public road infrastructure; and
- Proposed public access provision both during construction and after completion of the development, including links to existing path networks (where appropriate) and to the surrounding area, and access points to water.
- Impacts of the proposed development on the core paths and proposed mitigation if any.

The application should be accompanied by an Access Management Plan.

Effects on Existing Infrastructure

3.56 The EIAR needs to recognise community assets that are currently in operation for example TV, radio, tele-communication links, aviation interests including radar, MOD safeguards, etc. In this regard the applicant, when submitting a future application, will need to demonstrate what interests they have identified and the outcomes of any consultations with relevant authorities such as Ofcom, NATS, BAA, CAA, MOD, Highlands and Islands Airports Ltd, etc. through the provision of written evidence of

concluded discussions / agreed outcomes. We consider the results of these surveys should be contained within the EIAR to determine whether any suspensive conditions are required in relation to such issues.

3.57 There should be continued dialogue with HIAL over the impact on the radar at airports in the area.

3.58 If there are no predicted effects on communication links as a result of the development, the EIAR should still address this matter by explaining how this conclusion was reached.

Shadow Flicker

3.59 If there are no properties within 11 rotor diameters, which is the Council's approach to shadow flicker due to the lower sun given the latitude of the development, the matter of shadow flicker will not require detailed assessment but should still be addressed in the EIAR.

Other Matters

3.60 We consider that the EIAR needs to address existing air quality and the general qualities of the local environment including background noise, sunlight, prevailing wind. From this base data information on the expected impacts of any development can then be founded recognising likely impacts for each phases of development including construction, operation and decommissioning. Issues such as dust, air borne pollution and / or vapours, noise, light, shadow-flicker can then be highlighted.

3.61 Depending on the proximity of the working area for the onshore elements to houses etc. the applicant may require to submit a scheme for the suppression of dust during construction. Particular attention should be paid to construction traffic movements.

3.62 The EIAR needs to address all relevant climatic factors which can greatly influence the impact range of many of the preceding factors on account of seasonal changes affecting, rainfall, sunlight, prevailing wind direction, etc.

3.66 We note that the Report seeks to cover a number of the matters within the CEMD for the proposal. While acceptable in principle we would request that an Outline CEMD is included with the application.

4.0 <u>Significant Effects on the Environment</u>

4.1 Leading from the assessment of the environmental elements the EIAR needs to describe the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from: -

- the existence of the development;
- the use of natural resources;
- the emission of pollutants, the creation of nuisances and the elimination of waste.

4.2 The potential significant effects of development must have regard to: -

- the extent of the impact (geographical area and size of the affected population);
- the trans-frontier nature of the impact;
- the magnitude and complexity of the impact;
- the probability of the impact;
- the duration, frequency and reversibility of the impact.

4.3 The effects of development upon baseline data should be provided in clear summary points.

4.4 The Council requests that when measuring the positive and negative effects of the development a four point scale is used advising any effect to be either strong positive, positive, negative or strong negative.

4.5 The applicant should provide a description of the forecasting methods used to assess the effects on the environment.

5.0 Mitigation

5.1 Consideration of the significance of any adverse impacts of a development will of course be balanced against the projected benefits of the proposal. Valid concerns can be overcome or minimised by mitigation by design, approach or the offer of additional features, both on and off site. A description of the measures envisaged to prevent, reducing and where possible offset any significant adverse effects on the environment must be set out within the EIAR statement and be followed through within the application for development.

5.2 The mitigation being tabled in respect of a single development proposal can be manifold. Consequently the EIAR should present a clear summary table of all mitigation measures associated with the development proposal for both the onshore and offshore elements. This table should be entitled draft Schedule of Mitigation. As the development progresses to procurement and then implementation this carries forward to a requirement for a Construction Environmental Management Document (CEMD) and then Plan (CEMP) which in turn will set the framework for individual Construction Method Statements (CMS). Further guidance can be obtained at

http://www.highland.gov.uk/NR/rdonlyres/485C70FB-98A7-4F77-8D6B-ED5ACC7409C0/0/construction_environmental_management_22122010.pdf

5.3 The implementation of mitigation can often involve a number of parties other than the developer. In particular local liaison groups involving the local community are often deployed to assist with phasing of construction works – abnormal load deliveries, construction works to the road network, borrow pit blasting. It should be made clear within the EIAR or supporting information accompanying a planning application exactly which groups are being involved in such liaison, the remit of the group and the management and resourcing of the required effort.

If you would like to discuss this scoping response please contact the Planning Authority using the details at the end of this response.

Simon Hindson
Team Leader – Strategic Projects

Direct Dial: 01463 785047
E-mail: simon.hindson@highland.gov.uk

Tongue Community Council

MacFarlane M (Marc)

From: tmscc@btinternet.com
Sent: 29 December 2020 09:38
To: MS Marine Renewables
Subject: Highland Wind Limited – Pentland Floating Offshore Wind Farm – Dounreay, Caithness – Scoping Consultation

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear sirs,

I have no comment to make and so submit a 'nil return'.

Regards

Colin McDonogh (Tongue Community Council)

Transport Scotland

MacFarlane M (Marc)

From: Erskine A (Andrew)
Sent: 21 January 2021 15:04
To: MS Marine Renewables
Cc: McPhillips G (Gerard); LOGAN Lesley [redacted]
Subject: Pentland Floating Offshore WF Marine License TS Response Jan 21
Attachments: Pentland Floating Offshore WF Marine License TS Response Jan 21.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Saved in eRDM

Dear Sir/Madam,

Please find attached the Transport Scotland response to the Pentland Floating Offshore Wind Farm application.

Regards,

Andrew Erskine

Development Management and Strategic Road Safety
Roads Directorate

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF
Direct Line: 0141 272 7379, Fax: 0141 272 7350
gerard.mcphillips@transport.gov.scot

TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

Sophia Irvine
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

ms.marinerenewables@gov.scot

Your ref:

Our ref:
GB01T19K05

Date:
21/01/2021

Dear Sirs,

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED);

HIGHLAND WIND LIMITED – PENTLAND FLOATING OFFSHORE WIND FARM – DOUNREAY, CAITHNESS

With reference to your recent correspondence on the above development, we acknowledge receipt of the Scoping Report (SR) prepared by Xodus Group in support of the above development.

This information has been passed to SYSTRA Limited for review in their capacity as Term Consultants to Transport Scotland – Roads Directorate. Based on the review undertaken, we would provide the following comments.

Proposed Development

We understand that Highland Wind Limited is proposing to create a floating offshore wind farm with an installed capacity of up to 100MW approximately 6km off the coast of Dounreay, Caithness, to test and demonstrate a technology solution for floating offshore wind in Scotland. The development will have 6 - 10 floating substructures and turbines. The nearest trunk road to the site is the A9(T) which lies approximately 14km to the east.

The Scoping Report is based on the previous two-turbine Dounreay Tri Project Scoping Report, which was granted consent in 2017. This had an installed capacity of between 8 to 12 MW.

Assessment of Environmental Impacts

Chapter 12.5 of the SR considers the potential traffic and transport impacts generated by construction of the onshore components of the project. This states that all construction vehicles will require to access the site via the A836. As this is part of the local road network, Transport Scotland has no comment to make on the access point itself.

We note that construction materials may be sourced locally or brought to Caithness by sea, rail or road. Scrabster is the closest harbour to the project, therefore, materials brought by sea would be offloaded here and travel south on the A9(T) prior to joining the A836.

Traffic flow data has been obtained from count data available from the Department of Transport. We note that traffic flow data between 2014 – 2019 has been collated.

Table 12.9 indicates the location, AADF and percentage HGV for the study area. The trunk road locations include the following:

- Scrabter Harbour (A9T);
- Thurso – Pennyland (A9T);
- Thurso – Bridgend (A9T);
- Sordale, Halkirk (A9T);
- Achavanich, Latheron (A9T);
- Ousdale, Berriedale (A9T)

Table 12.11 of the SR provides a breakdown of the maximum number of vehicles per day associated with construction, as well as the maximum number of HGVs and the percentage increases associated with both. This demonstrates that the maximum percentage increase in total vehicles on the trunk road locations is 4.6%, while the maximum percentage increase in HGVs on the trunk road locations is 13.7%. These results indicate that the maximum number of both daily movements and HGV movements are well below the IEMA thresholds of 30% increase in average daily movements and below the 10% threshold associated with specifically sensitive areas. It has therefore been proposed that the assessment of the environmental impacts associated with increased traffic on the trunk road be scoped out of the forthcoming Environmental Impact Assessment Report (EIAR).

Transport Scotland agrees with this approach and is satisfied that no further assessment is required.

We note that there remains the potential for cumulative impacts associated with the new SHE-T Dounreay West Substation, the SHET Orkney – Caithness Interconnector project and the Pentland Floating Offshore Wind Demonstrator, as well as the consented Limekiln Windfarm and the proposed Drum Hollistan Wind Farm. The SR states that until a better understanding of the schedules of other projects in the vicinity of the development can be acquired, cumulative impacts are anticipated and will be scoped in for further assessment within the EIAR. Transport Scotland is satisfied with this approach.

Abnormal Loads Assessment

We note that there is potential for abnormal load deliveries. Transport Scotland will require to be satisfied that such loads can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path.

A full Abnormal Loads Assessment report should be provided with the EIAR that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken and details provided with regard to any required changes to street furniture or structures along the route.

I trust that the above is satisfactory and should you wish to discuss any issues raised in greater detail, please do not hesitate to contact myself or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on 0141 343 9636.

Yours faithfully

[Redacted]

Gerard McPhillips

Transport Scotland
Roads Directorate

cc Alan DeVenny – SYSTRA Ltd.