SCOP-0020 - MarramWind Scoping Consultation Responses

Shenton A (Anna)

From: radionetworkprotection@bt.com

Sent: 24 February 2023 14:57 **To:** MS Marine Renewables

Cc: Mcginn T (Toni-Marie); Malcolm J (Jessica); radionetworkprotection@bt.com

Subject: WID13002 - SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore

Windfarm - Scotwind NE7 Site - Scoping Consultation - Response Required by 17 March 2023



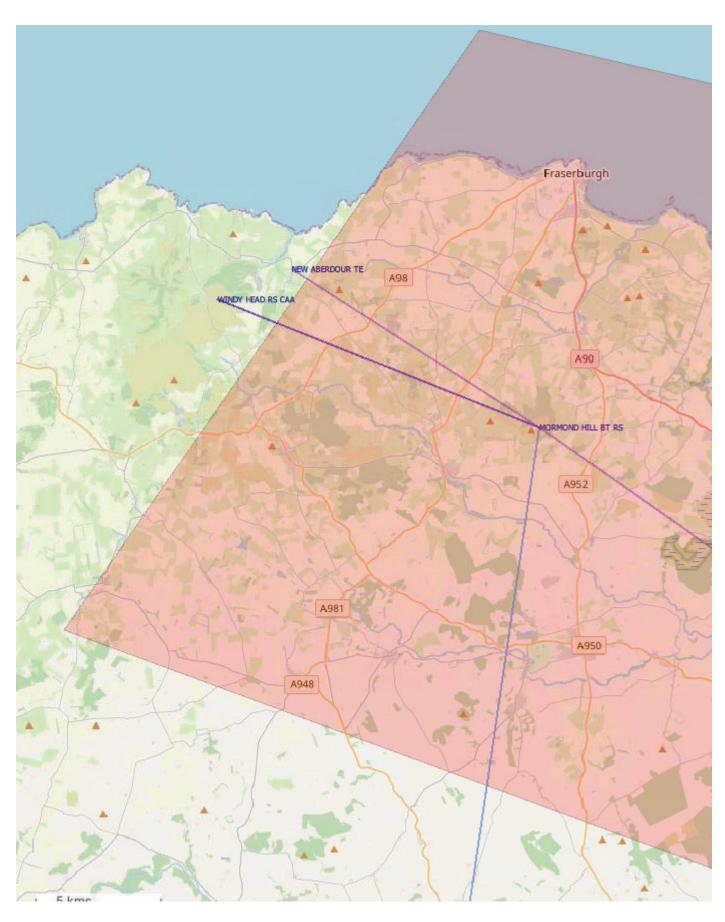
OUR REF: WID13002

Thank you for your email dated 15/02/2023.

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

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

For info see the active radio links (blue and purple lines) we have below within the onshore boundary. As there is no mention of structures of height onshore we could see within the documentation this should not affect our network. If these have been missed and there are any structures at height please advise and we will happily reassess.



Kind Regards

Lisa SmithNational Radio Planner Network Planning



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Dee District Salmon Fishery Board



Marine Licensing and Consenting Casework Officer
Marine Planning & Policy
Scottish Government
Atlantic Quay
Glasgow
G2 8LU

By email to MS.MarineRenewables@gov.scot 17th March 2023

Dear Sirs,

MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind NE7 Site - Consultation on Request for Scoping Opinion

On behalf of the Dee District Salmon Fishery Board (Dee DSFB) we welcome the opportunity to respond to the MarramWind Offshore Wind Farm Limited - Consultation on Request for Scoping Opinion.

Designations & Conservation Status

As a statutory body charged with the protection of Atlantic salmon and sea trout stocks within its district, the Dee DSFB has a duty to ensure that there are no significant adverse impacts upon the populations of these species.

The Dee has been designated as a Special Area of Conservation under the EC Habitats Directive 92/43 EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna for Atlantic salmon (the principal species for which it receives this designation). The Dee District also supports populations of trout, eels and brook, river and sea lampreys.

Sea trout, common to all the rivers within the Dee District, are a priority species under the United Kingdom's Biodiversity Action Plan (UKBAP).

All lamprey species are protected under the EC Habitats Directive whilst river and sea lampreys are additionally protected under the UKBAP priority list.

Eels are a UKBAP priority species, critically endangered under the IUCN red list and protected under CITES.

Wild Salmon Strategy and Conservation regulations

In January 2022, the Scottish Government released its Wild Salmon Strategy which gave a clear message that there is sadly now unequivocal evidence that populations of Atlantic salmon are at crisis point. The Strategy calls on government agencies, as well as the private sector, to prioritise the protection and recovery of Scotland's wild Atlantic salmon populations.

One of the key pressures identified in the strategy is marine development, with marine renewables highlighted as having the potential to impact salmon through noise, water quality and effects on electromagnetic fields (EMFs) used by salmon for migration.

Furthermore, the Conservation of Salmon (Scotland) Regulations 2016 has led to the production of stock assessments for all Scottish salmon rivers, based on catch data. The assessments estimate whether the number of adults returning to the river in each of the previous five years will produce enough eggs to keep the population size above a critical threshold.

For the Dee, like other north-east rivers, the assessments have shown a declining trend in catches since 2011. Nonetheless, the Dee has been categorised as a Grade 1 river, meaning that the stocks have most likely been above the critical threshold - the Conservation Limit - over the last five years.

Assessment of the juvenile salmon stocks in the Dee through the National Electrofishing Programme for Scotland (NEPS) has evaluated juvenile stocks in the Dee as Grade 2, suggesting that there are significant issues with recruitment and survival within the catchment (Malcolm *et al* 2020). With greater pressures on marine survival such that only approximately 3% of smolts return to the river as adults, we need to address any pressures within the freshwater and marine environments to protect Dee salmon stocks.

Position

The Dee DSFB welcomes the opportunity to respond to the scoping opinion and would wish to be consulted further during this process with specific interest in the migratory fish species Atlantic Salmon and sea trout.

We note that the location of the proposed site, cable corridor and landfall are out with the Dee District Salmon Fishery Board district and that the Dee SAC is approximately 39km southwest from the fish scoping boundary. However, due to the migratory nature of Atlantic salmon and sea trout we are pleased to see that these migratory fish have been considered and 'scoped in' to the assessment on a range of 'activities ad impacts' at this stage. The likelihood of encountering stock from the Dee within the proposed development site boundary is unknown, but evidence suggests that that the proposed development site is within typical migration routes for adult and juvenile life stages of both species.

Table 5.4.3 in the 'Consultation' section of the report refers to the ScotMER Diadromous Fish Specialist Receptor Group. We note that this is the only reference to this group, and we would therefore suggest that further consultation takes place with Marine Scotland Science and Fisheries Management

Scotland with reference to broadening our understanding of any potential impact upon diadromo	us
fish as a result of this proposed development.	

Yours sincerely

[Redacted]

Jamie Urquhart
Fisheries Protection Manager, Dee District Salmon Fishery Board

Green Volt Offshore Windfarm Limited



17 March 2023

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

Dear Ms Shenton

Regulation 14 of The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Regulation 13 and Schedule 4 of The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2007

Regulation 12 of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

(collectively referred to as the "EIA Regulations")

SCOP-0020 - MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind NE7 Site

Thank you for consulting Green Volt Offshore Windfarm Limited on the scoping report submitted in respect of the proposed section 36 application and marine licence applications for the MarramWind Offshore Wind Farm – Scotwind NE7 Site.

Green Volt Offshore Windfarm Limited has been formed by Flotation Energy Ltd (Flotation Energy) and Vårgrønn AS (Vårgrønn), the developers of the Green Volt Offshore Windfarm ('Green Volt'). Flotation Energy is an offshore wind development company, headquartered in Edinburgh, UK. Founded in 2018, the company is pioneering the deployment of both floating and fixed offshore wind in Scotland, the UK and Internationally. Vårgrønn is a growing agile offshore wind company and established as a joint venture between Italian energy major Eni Plenitude and the Norwegian private equity manager and offshore energy serial entrepreneur HitecVision.

MarramWind is located approximately 9 km from the Green Volt windfarm site and 20 km from the offshore export cable route. Although, the MarramWind scoping report refers to the Green Volt offshore scoping report (2021), the applicant should be aware that the section 36 and marine licence applications for the Green Volt Offshore Windfarm were submitted to MS-LOT on 20 January 2023. The applicant may wish to revisit the EIA scope for the proposed project considering the proximity of both projects and that the Green Volt offshore applications have now been submitted with up-to-date project data and EIA information. The Green Volt offshore applications are available on the Green Volt website and on the Marine Scotland's website.



Offshore Aspects

Following an initial review of the MarramWind Offshore Wind Farm Scoping Report, we note that the proposed project's landfall search area extends from Sandhaven on the north coast of Aberdeenshire (west of Fraserburgh) to Sandford Bay (south of Peterhead). Therefore, there is potential for overlap with the primary landfall option for the Green Volt Offshore Windfarm (St Fergus South) that may require consideration by the applicant.

Additionally, it is noted the MarramWind offshore cable corridors are not yet defined due to ongoing engineering studies, and therefore there is potential for the offshore cables from the proposed project to cross the Green Volt offshore export cable corridors (Buzzard and landfall).

Based on these potential interactions with Green Volt, we would anticipate that the offshore EIA for the proposed MarramWind project would consider the following:

- impacts on the offshore elements of the Green Volt Offshore Windfarm project, including:
 - Windfarm site;
 - Offshore export corridor between the windfarm site and the Buzzard platform complex; and
 - Offshore export corridor between the offshore substation to the landfall, with two potential landfall options, including St Fergus South (north of Peterhead) primary option and the NorthConnect Parallel (south of Peterhead) secondary option.
 - increased vessel traffic and from the physical presence of MarramWind infrastructure that may lead to disruption or obstruction of the Green Volt activities.

Green Volt has an operational target date of 2027 and should be included in any cumulative assessments.

Onshore Aspects

It is noted that the proposed MarramWind project has two options for grid connection:

- A 3 GW connection in the vicinity of Peterhead; or
- A 1.5 GW connection in the vicinity of Peterhead, with the residual assumption of a 1.5 GW connection to New Deer.

Green Volt has been offered a grid connection at New Deer, subject to the Holistic Network Design (HND) Follow Up Exercise (FUE) confirmation. The scoping report for the onshore elements of the Green Volt Offshore Windfarm has been submitted to Aberdeenshire Council and is available on the <u>Green Volt website</u>, with submission of the

17 March 2023



onshore application and Onshore EIA Report for Green Volt planned for early summer 2023.

Given the potential for both the MarramWind and Green Volt projects to have a grid connection at New Deer, we would anticipate that the MarramWind onshore EIA would consider the following:

• Direct impacts on the onshore elements of the Green Volt, including onshore cable and substation.

We would welcome ongoing engagement with the MarramWind team throughout the EIA process, and particularly on the outcomes of any cumulative impact assessment undertaken by them. The Green Volt team can be contacted at hello@greenvoltoffshorewind.com

Yours sincerely, [Redacted]

Victoria Crossland Consent Lead, Green Volt Offshore Windfarm Ltd

Historic Environment Scotland



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 <u>HMConsultations@hes.scot</u>

> Our case ID: 300062420 Your ref: SCOP-0020 09 March 2023

Dear Marine Scotland

REGULATION 14 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2007
REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
SCOP-0020 – Marram Wind Offshore Wind Farm Limited – Marram Wind Offshore Wind Farm – Scotwind NE7 Site

Thank you for your consultation which we received on 15 February 2023 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).

Proposed Development

We understand that the proposed development comprises an off-shore wind farm with on-shore connections, with a total grid connection capacity of up to 3GW. The number and specifications of the wind turbines have not yet been agreed, but for the basis of assessment, each turbine will have an individual generation capacity of up to 25MW. The Project is expected to have in the region of 126 to 225 floating turbines, installed at water depths ranging from 87 to 117.5m.

This response relates to the marine elements of the proposed development.

Scope of assessment

We agree an environmental impact assessment of the proposed development is required and that marine archaeology & cultural heritage should be included for consideration in the EIA, as indicated in the Scoping report, section 5.11.

We are generally content with the proposed methodology for the Environmental Impact Assessment of the onshore elements of the proposed development, as laid out in section 5.11 of the scoping report. However, in our pre-application consultations we requested

Historic Environment Scotland – Longmore House, Salisbury Place, Edinburgh, EH9 1SH Scottish Charity No. **SC045925**

VAT No. GB 221 8680 15



further detailed information about the methodology, conclusions and rationale for chosen geophysical survey technical specifications, as noted in paragraph 5.11.9. We note that information from geophysical survey forms part of the baseline data provided here (para. 5.11.22), but we do not have a record of the requested information, and it does not appear to be provided in the scoping report. The Environmental Impact Assessment Report will need to include this information.

We are content that the impacts of the offshore development on onshore historic environment assets can be scoped out of this aspect of the environmental impact assessment (table 5.11.8).

We would be happy to continue to provide advice as the project progresses.

Further information

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at historic-environment-guidance-notes. Technical advice is available on our Technical Conservation website at https://conservation.historic-scotland.gov.uk/.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Mary MacLeod Rivett and they can be contacted by phone on 0131 886 8710 or by email on mary.macleod@hes.scot.

Yours faithfully

Historic Environment Scotland

The Highland Council



Marine Scotland (email only)

Please ask for/Foighnich airson: Jethro Watson

E-mail/Post-d:

Date/Ceann-là:

Jethro.Watson@highland.gov.uk 23/00789/MAR

OurRef/Ur n-àireamh-iùil: Your Ref/Ar n-àireamh-iùil:

SCOP-0020 15/03/2023

Dear Marine Scotland (FAO – Anna Shenton)

SCOP-0020 - MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind NE7 Site

Thank you for consulting the Highland Council on the above scoping report. This was registered on 15 February 2023. We have reviewed the accompanying information and have no scoping advice to provide in response to the information contained within the report. This is on the basis that due to the location and the details contained within the scoping document the development appears to hold limited relevance to the Highland Council's area.

The Highland Council does not deem it necessary to be consulted in subsequent phases of the development's route to consent. This position may be revised should any elements of the development subsequently evolve to include or impact upon the Highland Council area, for example through operation and maintenance plans.

Privacy

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

Our privacy notices for planning applications, consents and notice of review sets out our legal basis for collecting personal information and how we use it. To view the privacy notice please visit the Council's website:

https://www.highland.gov.uk/directory record/1052173/planning applications consents and notice of review

Yours faithfully

Jethro Watson

Coastal Planning Officer (Highlands wide)

ePlanning Centre: The Highland Council, Glenurquhart Road, Inverness, IV3 5NX

Email/Post-d: eplanning@highland.gov.uk Web/Lìon: www.highland.gov.uk

Ionad dDealbhaidh: Comhairle na Gàidhealtachd, Rathad Ghleann Urchadain, Inbhir Nis, IV3 5NX

JNCC

Shenton A (Anna)

From: JNCC Offshore Industries Advice <OIA@jncc.gov.uk>

Sent: 22 February 2023 15:41
To: MS Marine Renewables

Cc: Mcginn T (Toni-Marie); Malcolm J (Jessica)

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore Windfarm –

Scotwind NE7 Site - Scoping Consultation - Response Required by 17 March 2023

Good afternoon Anna,

Thank you for consulting JNCC on the MarramWind Offshore Windfarm Scoping Consultation which we received on 15/02/2023.

NatureScot is now authorised to exercise the JNCC's functions as a statutory consultee in respect of certain applications for offshore and offshore waters (0-200nm) adjacent to Scotland.

Therefore, NatureScot should provide a full response. However we will check with NatureScot if they require any input from JNCC on this consultation and provide feedback directly to NatureScot where this is required.

Kind regards,

Jon Connon

Offshore Industries Advice Officer
Marine Management Team
JNCC, Inverdee House, Baxter Street, Aberdeen, AB11 9QA
Tel: 01224 083522
Mobile [Redacted]

Email: jon.connon@jncc.gov.uk





JNCC have been monitoring the outbreak of COVID-19 closely and developed a response plan. As a result, the vast majority of our staff are working from home and adhering to the government's advice on social distancing and travel restrictions. Whilst we are taking these actions we are available for business as usual. We will respond to enquiries as promptly as possible. However, there may be some delays due to the current constraints and we ask for your understanding and patience.

Maritime and Coastguard Agency (MCA)





Vaughan Jackson

Maritime and Coastguard Agency UK Technical Services - Navigation Bay 2/24 Spring Place 105 Commercial Road Southampton SO15 1EG

www.gov.uk/mca

Your Ref: SCOP-0020

Date: 16th March 2023

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

Via email: MS.MarineRenewables@gov.scot

Dear Mrs Shenton

REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 AND MARINE LICENCE APPLICATIONS FOR THE MARRAMWIND OFFSHORE WIND FARM LIMITED SCOTWIND NE7 SITE- UNDER THE EIA REGULATIONS.

The MCA has reviewed the scoping report provided by MarramWind Offshore Wind Farm Limited as detailed in your correspondence of 15th February 2023 and would comment as follows:

The Environmental Impact Report 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.

The development area carries a moderate amount of traffic with several important commercial shipping routes to/from UK ports and the North Sea. Attention needs to be paid to routing, particularly in heavy weather so that vessels can continue to make safe passage without large-scale deviations. The likely cumulative and in combination effects on shipping routes should be considered for this project. It should consider the proximity to other windfarm developments, other infrastructure, and the impact on safe navigable sea room.



A Navigational Risk Assessment will need to be submitted in accordance with MGN 654. This NRA should be accompanied by a detailed MGN 654 Checklist which can be found at https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping

A vessel traffic survey will be undertaken to the standard of MGN 654 – 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. We understand from the information presented in table 5.10.5 that the summer vessel survey carried out from 29th July- 14th Aug 2022 was to the MGN 654 standard. It is also noted that the data presented in figure 5.10.2 in Appendix 1a will be updated further once the project-specific winter vessel traffic survey has been completed in 2023.

The Development Specification and Layout Plan referred to in Table 5.10.6, M-043, 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 654 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.

In Table 5.10.6, M-044, compliance with regulatory expectations on moorings for floating wind and marine devices (HSE and MCA, 2017) is identified as a potential mitigation for floating infrastructure. This guidance should be followed, and a Third-Party Verification of 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). The report must recognise 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)). A SAR checklist will also need to be completed in consultation with MCA, as per MGN 654 Annex 5 SAR requirements.

MGN 654 Annex 4 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.

It is noted that HVAC and HVDC transmission infrastructure maybe installed. In the case of HVDC installation, consideration must be given to electromagnetic deviation on ships' compasses. The MCA would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five degrees will be attained. The MCA would however expect a deviation survey post the cable being laid; this will confirm conformity with the



consent condition. The developer should then provide this data to UKHO via a hydrographic note (H102), as they may want a precautionary notation on the appropriate Admiralty Charts.

On the understanding that the Shipping and Navigation aspects are undertaken in accordance with MGN 654 and its annexes, along with a completed MGN checklist, MCA is likely to be content with the approach.

Yours sincerely, [Redacted]

Vaughan Jackson Offshore Renewables Project Lead UK Technical Services Navigation



NATS



Technical and Operational Assessment (TOPA)

For MarramWind Offshore Windfarm Limited

NATS ref: SG31442

Scottish Government ref: SCOP-0020

Issue 2

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Publication History

Issue	Month/Year	Change Requests and summary		
1 February 2021		Pre-planning enquiry		
2	February 2023	Scoping Request		

Document Use

External use: Yes

Referenced Documents

1. Background

1.1. En-route Consultation

NATS en-route plc is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of RADAR's, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility <u>NATS</u> is a statutory consultee for all wind farm <u>applications</u>, and as such assesses the potential impact of every proposed development in the UK.

The technical assessment sections of this document define the assessments carried out against the development proposed in section 3.

2. Scope

This report provides NATS En-Route plc's view on the proposed application in respect of the impact upon its own operations and in respect of the application details contained within this report.

Where an impact is also anticipated on users of a shared asset (e.g. a NATS RADAR used by airports or other customers), additional relevant information may be included for information only. While an endeavour is made to give an insight in respect of any impact on other aviation stakeholders, it should be noted that this is outside of NATS' statutory obligations and that any engagement in respect of planning objections or mitigation should be had with the relevant stakeholder, although NATS as the asset owner may assist where possible.

3. Application Details

Scottish Government submitted a request for a NATS technical and operational assessment (TOPA) for the development at MarramWind Offshore Wind Farm. It will comprise turbines as detailed in Table 1 and contained within an area as shown in the diagrams contained in Appendix B.

Turbine	Lat	Long	East	North	Tip Height (m)
1	58.3659	-0.6534	478879	942727	350
2	58.2852	-0.4963	488275	933935	250
3	58.1910	-0.4263	492622	923547	250
4	58.0093	-0.4564	491315	903274	250
5	58.0147	-0.8001	470997	903463	250
6	58.0288	-0.8061	470610	905030	250
7	58.1126	-0.7432	474151	914428	250
8	58.1551	-0.8687	466681	919022	250

Table 1 - Turbine Details

4. Assessments Required

The proposed development falls within the assessment area of the following systems:

En-route Surv	Lat	Long	nm	km	Az (deg)	Туре
Alanshill Radar	57.6431	-2.1655	49.2	91.1	57.6	CMB
Perwinnes Radar	57.2123	-2.1309	64.6	119.6	39.7	CMB
En-route Nav	Lat	Long	nm	km	Az (deg)	Туре
None						
En-route AGA	Lat	Long	nm	km	Az (deg)	Туре
None						

<u>Table 2 – Impacted Infrastructure</u>

4.1. En-route RADAR Technical Assessment

4.1.1. Predicted Impact on Allanshill RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the portion of the development that lies within 60nm of the radar is likely to consistently cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated.

4.1.2. Predicted Impact on Perwinnes RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the portion of the development that lies within 60nm of the radar is likely to consistently cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated.

4.2. En-route Navigational Aid Assessment

4.2.1. Predicted Impact on Navigation Aids

No impact is anticipated on NATS' navigation aids.

4.3. En-route Radio Communication Assessment

4.3.1. Predicted Impact on the Radio Communications Infrastructure

No impact is anticipated on NATS' radio communications infrastructure.

4.4. Operational Assessment

4.4.1. Aberdeen Offshore

Zone NE7 lies within the area of responsibility of the two Aberdeen Offshore sectors. This zone lies beneath the northerly section of the North Sea track structure used by Aberdeen-based helicopters, although the shape of the zone limits the number of individual tracks that overfly this area due to its alignment. The tracks in this area are frequently used by helicopters operating between Aberdeen offshore installations such as Beryl, Brae and Piper.

Helicopter pilots typically require 1000ft vertical separation from en-route obstacles. Pilots may elect to operate at an altitude high enough to provide suitable obstacle clearance but this may not always be possible restricting the tracks that are available and requiring a routing around the windfarm

Helicopters inbound to the Piper oil field may be restricted on the point at which they can commence their descent. This in turn may create additional conflictions between such helicopters and those inbound to Aberdeen.

The turbines may also lie close to the Goldeneye/Buzzard fields to the southwest, but further analysis would be required to determine if the presence of turbines in NE7 would affect the ability of helicopters to safely arrive at and depart from these installations.

The above means that this development is likely to have a 'High' operational impact and would therefore be **unacceptable** without further mitigation.

4.4.2. Prestwick Centre

Without further mitigation the scale of the area affected by the predicted clutter would lead to an **unacceptable** impact on the en-route air traffic operation at Prestwick Centre.

5. Conclusions

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, this has been deemed to be <u>unacceptable</u> without further work to identify and develop mitigation options.

Appendix A - Background RADAR Theory

Primary RADAR False Plots

When RADAR transmits a pulse of energy with a power of P_t the power density, P, at a range of r is given by the equation:

$$P = \frac{G_t P_t}{4\pi r^2}$$

Where G_t is the gain of the RADAR's antenna in the direction in question.

If an object at this point in space has a RADAR cross section of σ , this can be treated as if the object re-radiates the pulse with a gain of σ and therefore the power density of the reflected signal at the RADAR is given by the equation:

$$P_{a} = \frac{\sigma P}{4\pi r^{2}} = \frac{\sigma G_{t} P_{t}}{(4\pi)^{2} r^{4}}$$

The RADAR's ability to collect this power and feed it to its receiver is a function of its antenna's effective area, A_e , and is given by the equation:

$$P_{r} = P_{a}A_{e} = \frac{P_{a}G_{r}\lambda^{2}}{4\pi} = \frac{\sigma G_{t}G_{r}\lambda^{2}P_{t}}{(4\pi)^{3}r^{4}}$$

Where G_t is the RADAR antenna's receive gain in the direction of the object and λ is the RADAR's wavelength.

In a real world environment this equation must be augmented to include losses due to a variety of factors both internal to the RADAR system as well as external losses due to terrain and atmospheric absorption.

For simplicity these losses are generally combined in a single variable L

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4 L}$$

Secondary RADAR Reflections

When modelling the impact on SSR the probability that an indirect signal reflected from a wind turbine has the signal strength to be confused for a real interrogation or reply can determined from a similar equation:

$$P_{r} = \frac{\sigma G_{t} G_{r} \lambda^{2} P_{t}}{(4\pi)^{3} r_{t}^{2} r_{r}^{2} L}$$

Where $\mathbf{r_t}$ and $\mathbf{r_r}$ are the range from RADAR-to-turbine and turbine-to-aircraft respectively. This equation can be rearranged to give the radius from the turbine within which an aircraft must be for reflections to become a problem.

$$r_{r} = \sqrt{\frac{\lambda^{2}}{(4\pi)^{3}}} \sqrt{\frac{\sigma G_{r} G_{r} P_{r}}{r_{r}^{2} P_{r} L}}$$

Shadowing

When turbines lie directly between a RADAR and an aircraft not only do they have the potential to absorb or deflect, enough power such that the signal is of insufficient level to be detected on arrival.

It is also possible that azimuth determination, whether this done via sliding window or monopulse, can be distorted giving rise to inaccurate position reporting.

Terrain and Propagation Modelling

All terrain and propagation modelling is carried out by a software tool called ICS Telecom (version 11.1.7). All calculations of propagation losses are carried out with ICS Telecom configured to use the ITU-R 526 propagation model.

Appendix B - Diagrams



Figure 1: Development shown with Aberdeen Sectors overlaid

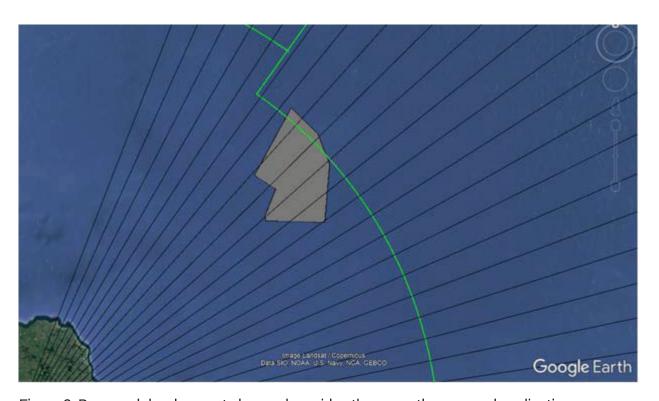


Figure 2: Proposed development shown alongside other recently assessed applications



Natural England

Date: 15 March 2023

Our ref: 421815 Your ref: SCOP-0020

Marine Scotland Scottish Government Atlantic Quay Glasgow G2 8LU

BY EMAIL ONLY



Natural England Lancaster House Hampshire Court Newcastle Upon Tyne NE4 7YH T 0300 060 3900

Dear Anna

SCOP-0020 - MarramWind Limited – MarramWind Offshore Windfarm – Scotwind NE7 Site - Scoping Consultation

Thank you for your consultation which we received 20th February 2022 consulting Natural England on the MarramWind Environmental Impact Assessment (EIA) Scoping Report. The following constitutes Natural England's formal statutory response. This is without prejudice to any comments we may wish to make in light of further submissions or on the presentation of additional information.

The advice contained within this letter is provided by Natural England, which is the statutory nature conservation body within English territorial waters (0-12 nautical miles). We have delegated responsibility from JNCC to also advise on offshore wind farms in all English waters out to 200 nautical miles or the median line. As the application is located outside English waters, advice from NatureScot and JNCC, the statutory nature conservation bodies for Scottish waters, should be sought.

The response in this letter is based on the consultation documents received:
Environmental Impact Assessment – Scoping Report. MarramWind Offshore Wind Farm, January 2023 plus accompanying figures.

Due to our remit, we have limited our advice to chapters 5.6 (marine mammals), 5.7 (ornithology) and 5.8 (fish ecology). Withing these bounds we have also restricted our advice to species from English Marine Protected Areas and to species in English waters. We defer to NatureScot and JNCC for advice on Scottish matters.

Should the proposal be amended in a way which significantly affects its impact on the English natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

General advice

We would like to direct the applicant to our <u>advice on the environmental considerations and use of data and evidence to support offshore wind and cable projects in English waters</u>. We recognise this will not all be applicable for all aspects of the project but will provide a guide for assessments concerning England.

Chapter 5.6 marine mammals; Chapter 5.7 ornithology; Chapter 5.8 fish ecology

Natural England considers that all matters in which we have an interest in English waters have been adequately considered in the Environmental Impact Assessment.

For any queries relating to the advice in this letter please contact me using the details below. For any new consultations, or further consultations on this development, please send your correspondence to consultations@naturalengland.org.uk.

Yours sincerely,

Ruth Cantrell

Marine Senior Adviser, Northumbria area team, Natural England

E-mail: ruth.cantrell@naturalengland.org.uk

NatureScot



Anna Shenton

Marine Scotland – Licensing Operations Team
By email: ms.marinerenewables@gov.scot

17 March 2023
Our ref: CNS/REN/OSWF/MARRAMWIND—
NE7 — PRE-APPLICATION

Dear Anna

MarramWind Offshore Wind Farm - ScotWind NE7 Site

NatureScot advice on Environmental Impact Assessment (EIA) Scoping Report

Thank you for consulting NatureScot on the Environmental Impact Assessment (EIA) Scoping Report submitted by MarramWind Limited for the MarramWind offshore wind farm site.

Our advice on the natural heritage interests to be addressed within the Environmental Impact Assessment Report (EIA Report) is outlined below. Please note that the advice contained in this letter is in relation to the offshore components (seawards of MHWS) only. We will respond separately to any consultation on the onshore components of the project.

Policy context

We are currently facing two crises, that of climate change and biodiversity loss and as the Scottish Government's adviser on nature, our work seeks to inspire, enthuse and influence others to manage our natural resources sustainably. We recognise that this proposal is a lease awarded through the ScotWind process in an area identified in the Sectoral Marine Plan for Offshore Wind.

Proposal

The proposal uses a project design envelope approach, as such we recommend recent Scottish Government guidance on this approach¹. The proposal comprises of:

- 126 to 225 wind turbine generators (WTGs) with a generating capacity of up to 25MW per WTG;
- WTG foundations being considered are a range of floating structures (spar, semi-submersible, barge, tension leg platform, and/ or semi-spar);
- A maximum blade tip height of 350m above MHWS and a minimum blade tip clearance of 24m above MHWS;
- A grid connection capacity of up to 3GW;

 $^{^1}$ <u>https://www.gov.scot/publications/guidance-applicants-using-design-envelope-applications-under-section-36-electricity-act-1989/</u>

- Offshore Substation Platforms (OSPs) (number yet to be defined), alongside possible
 accommodation platforms within the array, and possible reactive compensation platform
 midway between the array and landfall(s), all of which are likely to have fixed foundations
 but may use floating foundations if appropriate technology is available;
- Inter-array cabling and interconnector cabling;
- Up to 8 export cables, each of a length of up to 120km; and
- Landfall locations at Sandhaven (west of Fraserburgh) and Sandford Bay (south of Peterhead), with possible installation techniques including open-cut trenching, cut-and-fill trenching or Horizontal Directional Drilling (HDD), with grid connection locations to be confirmed following the conclusion of the HND FUE².

Content of the Scoping Report

We are generally content with the Scoping Report, which is well laid out, easy to navigate and read.

Assessment approach

The EIA Report should consider the impact of all phases of the proposed development on the receiving environment, including effects from pre-construction activities as well as the construction, operation and maintenance and decommissioning phases. We recommend that the following aspects are considered further and included in the EIA Report.

Ecosystem assessment

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.

Wet storage

Wet storage could represent a very significant impact pathway with respect to floating wind. It is unclear from the scoping report if there are any plans for wet storage of assembled and/or component parts of floating turbines in the construction, and operation and maintenance phases, and what this would entail or potential locations identified. Consideration of wet storage, including potential impacts on receptors, needs to be addressed with the EIA and forthcoming HRA.

Climate change and carbon costs

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

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² Holistic Network Design Follow-Up Exercise

proposed wind farm. The EIA Report 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.

Blue carbon

In addition to the climate change assessments mentioned in the scoping report, we recommend that consideration is given to impacts on blue carbon and whether or not an assessment can be undertaken. This should expand on the information and assessment conducted for benthic ecology to focus on the potential impacts of the proposed development on marine sediments.

Habitats Regulations Appraisal (HRA)

Our preference is for an HRA screening report to be submitted at the same time as the EIA scoping report. The HRA screening report should identify sites for which there may be a likely significant effect (LSE). We request that such a report is produced and submitted for comment at the earliest opportunity, in order to fully inform our HRA advice for this project.

Positive Effects for Biodiversity/ Biodiversity Net Gain

We recommend both the consideration of Positive Effects for Biodiversity/ Biodiversity Gain as well as nature inclusive design aspects at an early stage and can provide further information if required, whilst not policy as part of our ability to address both the climate and biodiversity crises we encourage developers to consider this as part of their application.

Mitigation

We welcome the embedded environmental measures described each of the relevant sections of the Scoping Report (for example Table 5.1.5). We advise that the full range of mitigation and monitoring measures, and published guidance, are considered and discussed in the EIA Report.

Natural Heritage interests to be considered

We provide advice as detailed below within receptor-specific and impact-pathway specific technical appendices for key natural heritage interests to be considered in the EIA Report and HRA:

- Advice on ornithological interests is provided in **Appendix A**.
- Advice on marine mammal interests is provided in **Appendix B**.
- Advice on seascape, landscape and visual impact assessment (SLVIA) is provided in Appendix C.
- Advice on benthic, epibenthic and intertidal interests is provided in **Appendix D**.
- Advice on fish and shellfish interests is provided in **Appendix E**.
- Advice on marine and coastal processes is provided in **Appendix F**.
- Advice on underwater noise is provided in **Appendix G**.

We note there are some aspects of the scoping report where there is ambiguity and or lack of certainty on some of the impact assessment tools and techniques that will be deployed. This may be due to the novel nature of floating wind particularly at this distance and in these depths of waters. We will engage with MarramWind Offshore Wind Farm Limited and have sought to

identify within each Appendix where there is the need for further discussion to refine and agree assessment methods.

Further information and advice

We hope this advice is of assistance to help inform the scoping opinion, noting that there may be aspects where limited further engagement is required to assist in undertaking the EIAR. Please contact me in the first instance for any further advice, using the contact details below, copying to our marine energy mailbox – marineenergy@nature.scot.

Yours sincerely

Malcolm Fraser

Marine Sustainability Adviser, Sustainable Coasts and Seas

malcolm.fraser@nature.scot

[Redacted]

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix A – Ornithological interests

Introduction

Offshore and intertidal ornithological interests are considered in Section 5.7 of the Scoping Report and we respond to the scoping questions raised in our advice below. These questions are presented in text boxes to clearly identify them.

Our advice aligns with, and makes references to, our new suite of "Guidance to Support Offshore Wind Applications: Marine Ornithology"³.

In general the proposed approach aligns with our guidance. However, some proposed approaches/methods deviate, in particular we do not endorse the approach outlined for displacement assessment, and we recommend the use of tools such as MRSea and SeabORD.

Key species

Results from the first 10 monthly Digital Aerial Surveys (DAS) show that the following species are most abundant in the region: guillemot, razorbill, fulmar, gannet, and kittiwake. Storm petrel and great skua also appear to be present in moderate numbers in the late summer, and great blackbacked gull (GBBG) in winter. The report states that these have been statistically analysed, but it is not clear how this analysis has been undertaken so our advice is provided based on an assumption that design-based methods have been used to produce abundance estimates.

The Scoping Report identifies the following species as likely to require assessment:

- Kittiwake
- GBBG
- Herring gull
- Common guillemot
- Razorbill
- Puffin
- Gannet

Based on findings from the year 1 DAS, <u>storm petrel and great skua may need to be taken forward for consideration</u>, depending on year two survey findings. <u>At this stage we advise that no species are scoped out, due to year 1 data being incomplete</u>.

Study area

We are content with the overall study area as proposed in Section 5.7.6-7 and Figure 5.7.1, which is broadly comprised of the Option Agreement Area (OAA) and offshore export cable corridor search area.

³ https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/marine-renewables/advice-marine-renewables-development

This overall area is used to define two specific study areas:

- Offshore ornithology study area; and
- Intertidal ornithology study area

Offshore ornithology study area

This study area is comprised of the offshore scoping boundary, plus a 4km buffer around the OAA, and includes the nearshore environment seaward of MHWS. Ornithology data was collected via a site-specific Digital Aerial Survey (DAS) campaign within the OAA and 4km buffer, as previously agreed with NatureScot.

Intertidal ornithology study area

This study area is comprised of the coastal area between MHWS and MLWS at the proposed landfall locations. It includes a 500m survey buffer extending seawards of MHWS.

Baseline characterisation and approach to assessment

Baseline characterisation

Scoping questions (from Section 5.7.65)

Do you agree that the above information being made available would be sufficient to appropriately characterise the baseline environment for offshore and intertidal ornithology? If the answer is no, please provide details of any additional information that would be required.

Do you agree that population modelling using MRSea to determine seabird abundance and density estimates is not required for the Project?

We generally support the proposed approach for the baseline technical report, and confirm that surveys use appropriate methods and buffers.

One exception to this is the stated intention to survey the intertidal region (for cable landfalls) only during the non-breeding season. We have confirmed (by email dated 08 March 2023) that this approach is not sufficient, and that <u>a full calendar year of intertidal bird surveys, ideally taking place over 12 consecutive months</u>, is required for baseline characterisation.

Additionally, two surveys were missed during year 1 DAS. Extra surveys are planned to make up for those missed during the appropriate months, but we recommend that maximum monthly density estimates are used for the assessment, rather than the mean, as a more precautionary approach due to this missing data.

Given the offshore location of this proposal, it is likely that the Buckingham et al. (2022)⁴ paper will be a key resource for the desk-based study undertaken for EIA.

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⁴ Buckingham, L., Bogdanova, M.I., Green, J.A., Dunn, R.E., Wanless, S., Bennett, S., Bevan, R.M., Call, A., Canham, M., Corse, C.J. and Harris, M.P., 2022. Interspecific variation in non-breeding aggregation: a multi-colony tracking study of two sympatric seabirds. Marine Ecology Progress Series, 684, pp.181-197.

The applicant proposes to not use MRSea to produce density and abundance methods – opting instead to use design-based methods. This proposed approach is based on the location of the project and the environmental covariates commonly used for MRSea including bathymetry, distance to shore etc, due to relatively deep and uniform depth of water of the proposal's location. They also state that it is apparent from the year 1 DAS dataset that the majority of raw count data are so low as to mean it would be difficult or not possible to run MRSea in a meaningful manner.

We do not support these justifications for not using MRSea, and we advise that MRSea should be used for density modelling approaches, as per our Guidance Note 2^5 . In addition we note that low count data may be a symptom of missed surveys from the year 1 DAS (see above).

However, if the number of data points for a species is less than 10, or the species are present in a uniform distribution it may not be possible to run the spatial element of MRSea. If this applies we will require this explanation to be set out for any relevant species and design-based estimates can be used. The applicant has not presented the raw counts, so we are unable to comment on this further at this stage, but generally our position is that MRSea should be applied wherever possible.

Seasonal definitions

Scoping questions (from Section 5.7.73)

Do you agree the proposed seasons presented in Table 5.7.11 match the SNCB generic seasonal guidance based on NatureScot (2020d) for assessment?

Do you agree that based on review of the first year of data for the project, there is potential that refinements to the seasonal definitions based on NatureScot (2020d) guidance note is appropriate for the Project?

We confirm that our seasonal definitions guidance⁶ should be used for the assessment. In general we advise that where surveys require a cut-off date for the middle of the month that the 15th/16th of the month is used.

The report states the proposed approach for kittiwake is to present the assessment using two and three season options; using two seasons defined by NatureScot guidance and three seasons by incorporating the migratory periods pre- and post-breeding defined in Furness (2015)⁷. This is suggested to maximise interpretation of peak abundance estimates and behaviour over the study area of this species. For gannet, three seasons are proposed to account for extensive population movements occurring during migratory periods.

The report states that based on the first year of survey that refinements to the seasonal definitions might be appropriate. However, to agree a site specific change in dates we would

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⁵ <u>https://www.nature.scot/doc/guidance-note-2-guidance-support-offshore-wind-applications-advice-marine-ornithology-baseline</u>

⁶ https://www.nature.scot/sites/default/files/2020-10/Guidance%20note%20-

^{%20}Seasonal%20definitions%20for%20birds%20in%20the%20Scottish%20Marine%20Environment.pdf

⁷ http://publications.naturalengland.org.uk/publication/6427568802627584

require approximately 5 years of temporal data for the colony or designated site, such as arrival, lay, hatch or departure dates, showing consistently different periods to those outlined in the table. Given the issues with missed surveys for this data set and also the temporal span of the data collection for this project it is unlikely that this project will record enough data on temporal changes at this site to provide evidence of consistency of this behaviour. We therefore do not agree with the request to refine seasonal definitions for this project.

Reference populations

Scoping questions (from Section 5.7.79)

Do you agree with the approach taken for deriving species regional breeding season population described above, include the exceptions described above?

Do you agree on the use of the Seabird Monitoring Programme database for deriving the latest colony counts for all Scottish sites? If the answer is no, please provide alternative data source where the latest colony count can be derived from.

Do you agree with the non-breeding populations being derived from Furness (2015)?

In general the proposed approaches to reference populations for use in the EIA (and HRA) are appropriate. We refer the applicant to our full advice on recommendations for marine bird population estimates and various scenarios in Guidance note 5⁸. Details of site-specific reference populations for marine SPAs are also available in Guidance note 5.

In general we agree with the proposed approach to deriving regional breeding populations. The developer intends to use the foraging ranges (mean max +1SD) as defined in Woodward et al. (2019)⁹. They identify one important exception to this (for guillemot and razorbill), however, there is an additional exception for gannet which should be incorporated into their assessment, the specifics of which are detailed in Guidance Note 3¹⁰.

We confirm that the Seabird Monitoring Programme (SMP) should be used to derive latest colony counts for all Scottish sites, also noting that the national gannet census was completed during 2013-2014 and this time period should be used for gannets. With respect to correction factors for colony counts, the proposed approach is that colony counts expressed as AON, AOT, AOB will be corrected where 1 AON = 2 breeding individuals. We confirm this is an accepted method. Additionally, for guillemots and razorbills, colony counts of individuals should be multiplied by a 1.34 to obtain a whole colony estimate¹¹.

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⁸ https://www.nature.scot/doc/guidance-note-5-guidance-support-offshore-wind-applications-recommendations-marine-bird-population

⁹ Woodward, I., Thaxter, C.B., Owen, E. & Cook, A.S.C.P. (2019). Desk-based revision of seabird foraging ranges used for HRA screening. BTO research report number 724.

 $^{^{10}\,\}underline{\text{https://www.nature.scot/doc/guidance-note-3-guidance-support-offshore-wind-applications-marine-birds-identifying-theoretical}$

¹¹ Harris, M. P., Heubeck, M., Newell, M. A., & Wanless, S. (2015). The need for year-specific correction factors (k values) when converting counts of individual Common Guillemots *Uria aalge* to breeding pairs. Bird Study, 62(2), 276-279.

We confirm that non-breeding populations should be derived from Furness (2015). The exception to this is common guillemot as more recent studies show they largely remain in the broad vicinity of their breeding colonies during the non-breeding season (Buckingham et al. 2022). For this species, we advise the non-breeding season population comprises the breeding population found within the MMFR+1SD (mean max foraging range) of the development + age classes, as per our Guidance note 4^{12} .

We also advise that for herring gull the regional breeding population (within mean max +1SD foraging range) with a correction factor is used as the non-breeding population. A correction factor should be applied to account for the influx of continental breeding birds into eastern Scotland during the non-breeding season. The correction factor should be calculated from the proportions of overseas and western UK birds in the UK North Sea and Channel BDMPS (Furness 2015). In the recent application submitted for Berwick Bank - the correction factor was calculated to be 0.67 (volume 3, appendix 11.5)¹³.

Demographic rates for PVA

Scoping Question (from Section 5.7.82)

Do you agree with the average mortality rates presented in Table 5.7.12? If the answer is no, please provide further detail on your preferred method for derivation of population level mortality rates.

The Scoping Report states that the assessment will use generic mortality rates as per Horswill & Robinson (2015)¹⁴, this is consistent with our advice in Guidance note 11¹⁵. We advise for GBBG that survival rates are taken as per herring gull, but with the addition that juvenile herring gull survival rate should be used for juvenile GBBG, and an 'average' survival for juvenile and adult herring gull for immature GBBG.

Displacement analysis

Scoping questions (from Section 5.7.87)

Do you agree on the use of the matrix approach only described above for assessment of disturbance and displacement?

Do you agree with the list of VORs and corresponding displacement and mortality rates for assessment? If the answer is no, please provide your preferred displacement and mortality rates.

Do you agree with kittiwake displacement analysis not being required based on the above information, if the answer is no, it would be useful to understand your justification and any

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¹² https://www.nature.scot/doc/guidance-note-4-guidance-support-offshore-wind-applications-ornithology-determining-connectivity

¹³ https://marine.gov.scot/ml/berwick-bank-offshore-wind-farm

¹⁴ Horswill, C. & Robinson R. A. 2015. Review of seabird demographic rates and density dependence. JNCC Report No. 552. Joint Nature Conservation Committee, Peterborough.

¹⁵ https://www.nature.scot/doc/guidance-note-11-guidance-support-offshore-wind-applications-marine-ornithology-recommendations

preferred worst-case scenario displacement and mortality rates to be applied and the method to determine / estimate the risk.

Do you agree with the proposed displacement rates in Table 5.7.13, if the answer is no, please provide the SNCB preferred displacement rates so these can be incorporated when undertaking displacement analysis, alongside the Applicant's preferred approach.

Do you agree that in the case of this proposed Array Area it is too distant from seabird colonies to enable a meaningful assessment of displacement through the use of SeabORD and as such would SNCBs recommend the use of the 'matrix approach' in its place (SNCBs, updated 2022).

We advise the use of the displacement and mortality rates presented within the Joint Statutory Nature Conservation Bodies (SNCB's) Interim Displacement Advice Note¹⁶.

The Scoping Report states an intention to use the applicant's own proposed displacement and mortality rates as the primary basis for the assessment (Section 5.7.14. We advise that our review of the application will be based on the SNCB agreed displacement and mortality rates and that these should form the main basis of the assessment. Any other rates presented will not form the basis of NatureScot's assessment of the application.

The Scoping Report also states that a disturbance and displacement assessment is not required for kittiwake, due to the vulnerability scores from Bradbury et al. (2014)¹⁷. We advise that an assessment for displacement should be undertaken for kittiwake and that impacts for both kittiwake and gannet for displacement and collision are considered as additive, as per our Guidance note 8¹⁸. This is standard industry practice in Scotland and is a precautionary approach due to evidence that supports mixed responses from kittiwake to offshore wind farm developments (i.e. some birds are displaced and others are not and so are therefore at risk of collision).

The Scoping Report states that the project does not intend to use SeabORD for the assessment of disturbance and displacement (Section 5.7.86). The justification for this is that the project area falls outside of the mean max foraging range for the majority of guillemot and razorbill colonies along the North East. We do not support this justification and advise that SeabORD be used to undertake an assessment of puffin, guillemot, razorbill and kittiwake. The matrix approach should be used to assess these species outside of the chick rearing period as per our Guidance note 8.

Collision risk modelling

Scoping questions (from Section 5.7.98)

Do you agree with the sCRM being run stochastically for informing collision risk estimates?

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¹⁶ https://data.jncc.gov.uk/data/9aecb87c-80c5-4cfb-9102-39f0228dcc9a/joint-sncb-interim-displacement-advice-note-2022.pdf

¹⁷ Bradbury G, Trinder M, Furness B, Banks AN, Caldow RWG, Hume D (2014) Mapping Seabird Sensitivity to Offshore Wind Farms. PLoS ONE 9(9): e106366. https://doi.org/10.1371/journal.pone.0106366

¹⁸ https://www.nature.scot/doc/guidance-note-8-guidance-support-offshore-wind-applications-marine-ornithology-advice-assessing

Based on the first year of survey data do you agree with the proposed VORs (see Table 5.7.15 requiring collision risk modelling? If the answer is no, please provide further details of other species you feel should be included.

Do you agree with the proposed input parameters for modelling in Table 5.7.15 below? If the answer is no, please provide reference and justification for your preferred rates.

Do you agree will the proposed additional modelling for gannet in order to resolve the issue of overestimating combined displacement and collision risk predicted impacts?

Our advice on collision risk modelling is presented in Guidance note 7¹⁹. The Scoping Report states the proposed approach is to use the stochastic collision risk model defined in McGregor et al (2018)²⁰, we confirm this is in line with our advice. More specifically we advise the use of the 2022 update to the sCRM tool shiny app (Caneco 2022)²¹. This update should also be used to run deterministic output (with values specified to enable repeatability). We require that outputs for both stochastic and deterministic CRM are presented using this tool.

In general we support the list of species included for collision risk assessment, but advise year 2 DAS outputs will also influence this list. Based on numbers of great skua recorded in the first year surveys we advise that this species is taken forward for collision risk assessment.

The Scoping Report states that for all species Band Option 2 will be applied using generic flight height distributions from Johnston et al (2014). In addition and where applicable, Band Option 3 will be run for species with available avoidance rates (Section 5.7.89).

As stated in the Scoping Report, there is an update to avoidance rates currently pending publication, we advise that these updated avoidance rates be used once the report is published.

The Scoping Report states that: "As gannet has been scoped in for assessment of both displacement and collision risk, it is likely that there will be significant over estimation of predicted impacts on the species when the two impacts are combined, as a bird which is displaced would not be at risk of collision and vice versa. In order to resolve this issue, the Project suggests that additional modelling with reduced densities based on the suggested displacement rates in Table 5.7.15 be undertaken." (Section 5.7.97). We do not endorse adjustment of densities in order to resolve over estimation of predicted impacts. There is work ongoing to look at how gannet behave with respect to macro and meso avoidance and means of quantifying this but this research is not currently published. Until such a point as the research is published we advise that collision and displacement are considered as additive for both gannet and kittiwake.

¹⁹ https://www.nature.scot/doc/guidance-note-7-guidance-support-offshore-wind-applications-marine-ornithology-advice-assessing

²⁰ McGregor, R., King, S., Donovan, C., Caneco, B., and Webb, A., 2018. A Stochastic Collision Risk Model for Seabirds in Flight. Report by Marine Scotland Science. 61 p.

https://www2.gov.scot/Topics/marine/marineenergy/mre/current/StochasticCRM

²¹ https://dmpstats.shinyapps.io/sCRM/

We advise that flight type for gannet should be set as gliding, not flapping, as is presented in Table 5.7.15.

The Scoping Report states that flight height data derived from site-specific DAS surveys will be provided but anticipates that this will not be robust enough to include in the assessment of collision. As per our Guidance note 7, Johnston et al. (2014) currently remains the recommended reference for generic flight heights and is the default within the sCRM tool. We acknowledge uncertainty remains around best practice for flight height data collection methods, primarily due to absence of agreed validation of techniques. Further discussion and agreement on use of flight height data derived from the site-specific surveys is required for use in either Band Options 2 or 3. If site-specific flight height data are to be presented for context we expect a full description of method, accuracy, precision and comparison with Johnston et al. (2014), with explanation of any differences to inform discussions with NatureScot. We note that use of site-specific flight height for sCRM requires recalculations of avoidance rates. Our assessment will be based on the use of generic flight height data.

Population viability analysis (PVA)

Scoping questions (Section 5.7.100)

Do you agree with the use of the Seabird PVA tool (Searle et al. 2019) for informing population level effects?

Do you agree with the proposed general threshold for further investigation of impacts through the use of PVA?

We agree that the Natural England PVA Tool (Searle et al., 2019)²² should be used to undertake PVA.

No threshold is proposed in the Scoping Report, however our Guidance note 11 states that: "the impacts of collision and distributional responses, such as 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 0.02 percentage point change. For example, if a survival rate was estimated at 80% and this decreased to 79.98% when including the impacts of apportioned collision or distributional responses, a PVA should be undertaken."

Potential impacts

We are broadly content that the standard pathways of collision, disturbance, displacement and barrier effects have been captured. However, Section 5.7.52 states that barrier effects are scoped out. We disagree that these should be scoped out of assessment. However, we accept that this impact pathway can be difficult to separate from displacement, and we agree that these can both

 $^{^{22}}$ 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

be dealt with together in the assessment. As a general comment – we are moving towards terming these "distributional responses".

Barrier impacts to migrating birds should also be scoped in. Marine Scotland are undertaking an update to the Strategic assessment of collision risk of Scottish offshore windfarms to migrating birds²³. Marine Scotland are best placed to advise when this report will be published.

We agree with the applicant's decision to scope out operational disturbance and displacement within the offshore export cable corridor.

Cumulative impacts

We are broadly content with the proposed approach to cumulative assessment described in Sections 5.7.54-57. However the Scoping Report states (Section 5.7.55) that cumulative impacts during construction and decommissioning phases are anticipated to be scoped out. We advise that this should be scoped in to assessment at this stage.

Section 4.2.53 of the Scoping Report states the intention to use the Cumulative Effects Framework (CEF) when available, we support this intention. The CEF is expected in April 2023, so we anticipate it will be in place for use in the EIA Report and HRA for this project.

Transboundary impacts

We note the proposed approach to Transboundary impacts set out in Section 5.7.59 and Appendix 4A. We recommend further discussion on this topic with Marine Scotland and NatureScot following submission of the MarramWind HRA Screening Report and final Ornithology Baseline Report. It is likely that impacts will occur to seabird populations that breed outside Scotland.

pdf/govscot%3Adocument/00461026.pdf

²³ https://www.gov.scot/binaries/content/documents/govscot/publications/impact-assessment/2014/10/scottish-marine-freshwater-science-volume-5-number-12-strategic-assessment/documents/00461026-pdf/00461026-

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix B – Marine mammal interests

Marine mammal interests are considered in Sections 5.3 (underwater noise) and 5.6 (marine mammals) of the Scoping Report and we respond to the scoping questions raised in our advice below.

Scoping questions

These are set out in Table 5.6.3, and repeated here for convenience, questions are presented in text boxes to clearly identify them.

Can the regulators advise on the potential need for PAM for the MarramWind project?

We suggest that this is considered by the developers in relation to what information Passive Acoustic Monitoring (PAM) data will add to the MarramWind project, and there should be a supporting paper that sets out the benefits for this project in relation to the assessment. In addition, we note that the DAS campaign is due to complete this month, and the window for including PAM as part of baseline characterisation has passed.

However, we recommend that PAM should still be considered for pre-, during and post-construction monitoring. Given the location of the site, the lack of knowledge of cetacean distribution in this offshore area, and the new technologies in use at MarramWind, it is likely we will advise that marine mammal monitoring is secured.

Can the regulators advise on an approach to assessing collision risk with floating foundation mooring lines?

We are not yet certain of a collision risk from floating foundation mooring lines, our understanding is that the impact pathway may be more around the mooring lines having ghost gear entanglement and this then causing an entanglement issue. At this stage we suggest there may be value in carrying out a review of other static, moored objects (oil & gas platforms, moored vessels) to understand if collisions have been recorded.

Are there any data sources that should be considered that were not noted in the workshop (i.e. as presented in this Section)?

This is addressed in the "Baseline Characterisation" section below.

How has NatureScot calculated the EDR for the four marine mammals in their comments on the ECC EPS risk assessment?

We previously responded to this question by email to MS-LOT dated 10 October 2022, and we repeat this advice here for convenience:

Using a 5km EDR, so 5 is the radius (r). [EDR – effective deterrence radius]

Area (of a circle) is calculated as $\pi r^2 = 78 \text{km}^2$

rounded to whole animal

Species	Density	# within area 78km ²
HP	0.599	47
BND	0.03	2
WBD	0.243	19
MW	0.039	3

Note that densities are based on SCANS III data.

Can MS-LOT advise on what point in time the cumulative effect assessment should start, e.g. forward from MarramWind, or from the first offshore wind project in Scotland, or some other time?

We defer to MS-LOT to respond to this point.

Study area

The marine mammal study area is described in Sections 5.6.6-11, and comprises the Option Agreement Area (OAA) and offshore export cable corridor, plus a 60km buffer. This is based on:

- a Zone of Influence (ZOI) based on the propagation of underwater noise; as well as
- for cetaceans
 - o relevant marine mammal management units (MUs); and
 - o Effective Deterrent Ranges (EDRs) for relevant activities;
- for seals
 - o relevant seal management areas (SMAs).

We note that the study area will be reviewed and amended in response to refinement of the project envelope, identification of impact pathways and feedback from consultation, and we offer the following comments.

It is not clear how the 60km buffer has been determined or what it will be used for. If it is intended as the area against which impact assessment will be carried out, then we instead recommend using the relevant MU for the wider context, and the relevant SCANS block(s) for regional context, as well as determining the most relevant impact area for specific pathways, e.g. underwater noise.

We do not advise using the EDR of 26km for UXO clearance, or 15km for piling as these are not site-specific and should be considered on a case-by-case basis. Instead, we would expect to see underwater noise modelled in order to better understand the distance at which noise may impact marine mammals. For geophysical surveys, however, we recommend using a 5km EDR as a precautionary approach, as recommended in JNCC's guidance on noise management in SACs²⁴.

Baseline characterisation

²⁴ https://hub.jncc.gov.uk/assets/2e60a9a0-4366-4971-9327-2bc409e09784

We broadly agree that the relevant legislation and policy (Table 5.6.1), technical guidance (Table 5.6.2) and data sources (Table 5.1.7) have been identified. However we offer the following comments:

Table 5.6.1

- o incorrectly identifies seal (pinniped) species as European protected species (EPS);
- should be updated to include Scottish legislation relating to the Habitats Directive –
 i.e. the Conservation (Natural Habitats, &c.) Regulations 1994, and the Offshore
 Marine Regulations 2017;
- incorrectly identifies cetaceans as being protected under the Wildlife and Countryside Act 1981, Schedule 5 - in Scotland cetaceans were removed from this Schedule as they are offered better protection via the Habitats Regulations;
- incorrectly refers to seal SACs being designated under the Marine (Scotland) Act
 2010 this should only refer to designated seal haul-out sites;

• Table 5.6.2

- JNCC guidance (2010) on explosives should be replaced with the more recent JNCC guidelines for minimising the risk of disturbance and injury to marine mammals whilst using explosives (2021)
- this table may need to include, if relevant, JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys (seismic survey guidelines) (2017)

Table 5.6.7

- we recommend using Carter et al. (2020) and (2022), rather than Russell et al (2017), as the more up to date references for at-sea distributions of seals;
- SCANS IV took place during 2022, and the outputs from that survey should be included, if available in time.

Section 5.6.29 states that SCANS-III density maps will be used to calculate site-specific densities. We support this approach for most species, but for bottlenose dolphin in the inshore cable route, the recently published "East coast of Scotland bottlenose dolphins: estimate of population size 2015-2019"²⁵ should be used.

We support the statements on seal haul-out sites set out in Sections 5.6.40-41. There are no designated harbour seal haul-out sites, and only a single grey seal haul-out (Ythan River Mouth), within the study area. This lies 20km south of the scoping corridor, so will not be directly impacted by the proposal.

With regard to seal count data presented in Table 5.6.9, we note that these are August counts for both harbour and grey seals. We advise that numbers of grey seals will be far higher within the SACs during the breeding season, which is the rationale for designation of grey seal SACs. At other times of year, numbers are much lower. It would be useful to present both the August counts and the pup production numbers for grey seals within the SACs, as this would give a much more accurate picture. The EIA and HRA will need to consider the breeding numbers, but we note that

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 $^{{}^{25}\}underline{\text{https://www.nature.scot/doc/east-coast-scotland-bottlenose-dolphins-estimate-population-size-2015-2019}}$

all the SACs mentioned will be outside the 20km (grey seal) and 50km (harbour seal) connectivity distances, so an assessment for HRA is unlikely to be needed.

Potential impacts

We are broadly content with the impacts that are to be scoped in/ out of assessment, as described in Table 5.6.11, and Section 5.6.53-59. We note that geophysical surveys are not included in the list of activities/ impacts, however it's not clear if these will be assessed separately to the EIA process.

Little detail is provided on the underwater noise entry in Table 5.6.11, but it is important to ensure that noise from all sources are included, not just piling – e.g. geophysical surveys, UXO, vessel movement, rock placement, trenching, etc plus operational noise.

Approach to assessment

We are broadly content with the proposed approach to assessment set out in Sections 5.6.65-72. However we offer the following comments.

As noted above, we advise that further discussion on the use and value of PAM will be required between Marine Scotland and NatureScot.

Section 5.6.68 states that iPCoD will be used to consider disturbance for the five key species. We advise that it is likely that the Cumulative Effects Framework (CEF) which incorporates iPCoD will be ready in time to be used in cumulative assessment. We note that the other species will be assessed qualitatively due to lack of demographic data.

Cumulative impacts

The approach to cumulative impacts assessment for marine mammal interests for HRA, EIA and EPS licensing requirements will also require agreement in advance of submission of the application.

Mitigation and monitoring

Table 5.6.11 seems to indicate that monitoring will be carried out for habitat change and entanglement. This is welcome, but depending on the outcome of the EIA, it is likely that some of the other potential effects may also require monitoring.

We welcome the embedded environmental measures described in Table 5.6.10. We advise that the full range of mitigation and monitoring measures, and published guidance, are considered and discussed in the EIA Report.

Transboundary impacts

We agree that transboundary effects should be considered further.

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm Appendix C – Seascape, landscape and visual impact assessment (SLVIA)

SLVIA is considered in Section 5.12 of the Scoping Report.

Due to the location of this proposal, the distance from shore, as well as the advice we provided during the Sectoral Marine Plan consultation²⁶, we advise that SLVIA for the offshore elements located within the Option Agreement Area (OAA) is not required and can be scoped out of assessment.

For the additional offshore elements located outwith the OAA (i.e. the HVDC Substation/ Reactive Compensation Platform), this is a novel aspect in respect of our experience of dealing with offshore windfarms. Due to uncertainty around the location of these components, and their visibility, we suggest a workshop is held prior to the finalisation of the scoping opinion to consider this aspect further, with Marine Scotland, the relevant Local Authorities and ourselves. Prior to the workshop we suggest a Zone of Theoretical Visibility (ZTV) and wireframe(s) from the closest view point are produced alongside drawings of the likely design of the platform(s).

²⁶ <u>https://www.nature.scot/doc/sectoral-plan-consultation-summary-and-design-guidance</u>

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix D – Benthic, epibenthic and intertidal interests

Benthic, epibenthic and intertidal interests are considered in Section 5.5 of the Scoping Report.

Study area

We are content with the overall study area as proposed in Section 5.5.6-8 and Figure 5.5.1, which is broadly comprised of the Scoping Boundary plus a secondary impact Zone of Influence (ZOI). This ZOI has been informed by tidal excursion extent and coastal processes, and extends to 15km around the array Scoping Boundary and 15km around the offshore export cable corridor. We note that this 15km distance is precautionary and expected impacts are within 7km.

We are also content with the proposed intertidal ecology study area, which is defined as the intertidal zone up to MHWS within the offshore export cable corridor Scoping Boundary.

Baseline characterisation

We agree that the relevant legislation and policy (Table 5.5.1), technical guidance (Table 5.5.2) and data sources (Table 5.5.7) have been identified.

We support the species and habitats of conservation importance that have been identified (Sections 5.5.39-5.5.45), as well as the relevant designated sites that have been identified (Table 5.5.10).

We note that the Scoping Report does not address the use of eDNA as a sampling method for baseline characterisation. However we understand from email communication with the applicant that eDNA sampling and analysis will be carried out, and a technical report will be prepared. We suggest this is included as part of the EIA Report with a caveat indicating the novel nature of this technique.

Potential impacts

We are broadly content with the impacts that are to be scoped in/out of assessment, as described in Table 5.5.12, and Sections 5.5.59-63, noting that whilst some potential impacts may be screened out, they may still contribute to cumulative impacts. There does not need to be a spatial or temporal overlap for there to be cumulative impacts.

Approach to assessment

We are content with the proposed approach to assessment.

Cumulative impacts

We are broadly content with the proposed approach to cumulative assessment described in Sections 5.5.60-47. However we are concerned with the likelihood of multiple offshore export cables making landfall in the area around Peterhead, and the potential for cumulative impacts arising from construction and associated geophysical, geotechnical and environmental survey programmes. We recommend that this is assessed in the EIA Report.

Transboundary impacts

We advise that there are unlikely to be any transboundary impacts.

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix E – Fish and shellfish interests

Fish and shellfish interests are considered in Sections 5.3 (underwater noise), 5.4 (EMF) and 5.8 (fish and shellfish) of the Scoping Report. Our advice below focusses on:

- fish and shellfish species, and their associated habitats where appropriate, that are protected features of European sites or Nature Conservation MPAs; and
- species of conservation interest including PMFs and key prey species.

Study area

We are broadly content with the fish and shellfish study area as defined in Section 5.8.6 and Figure 5.8.1, which comprises:

- the offshore Scoping Boundary together with the Zone of Influence (ZOI) up to the MHWS mark;
- the ZOI is based on the tidal excursion, coastal processes and potential spread of underwater noise;
- the ZOI buffer encompasses the area over which suspended sediments may travel following disturbance as a result of the Project's activities, extending 15km around the array Scoping Boundary and a distance of 15km surrounding the offshore cable corridor; and
- noting that species which require a larger study area will be considered as appropriate.

We note that further refinement of the study area will be reviewed and amended in response to refinement of the project envelope, identification of impact pathways and feedback from consultation. We therefore advise that underwater noise modelling outputs and suspended sediment modelling outputs may help determine the boundary.

Baseline characterisation

We are content that Table 5.8.1 correctly identifies the relevant legislation and policy for this topic.

Table 5.8.2 correctly identifies most of the relevant technical guidance for this topic. We recommend inclusion of the NatureScot Commissioned Report 791 "Understanding the potential for marine megafauna entanglement risk from renewable marine energy developments"²⁷. Other guidance that may become applicable later in the EIA process will likely include: JNCC guidance on underwater noise²⁸, unexploded ordnance clearance - joint interim position statement²⁹ and the

 $^{^{27} \, \}underline{\text{https://www.nature.scot/doc/naturescot-commissioned-report-791-understanding-potential-marine-megafauna-entanglement-risk}$

²⁸ https://jncc.gov.uk/our-work/marine-mammals-and-noise-mitigation/

 $^{^{29}\,\}underline{\text{https://www.gov.uk/government/publications/marine-environment-unexploded-ordnance-clearance-joint-interimposition-statement}$

Scottish Marine Wildlife Watching Code³⁰. We also confirm that Table 5.3.2 correctly identifies the most relevant technical guidance on underwater noise and fish receptors.

We are content that Table 5.8.8 captures most of the relevant baseline datasets, but recommend inclusion of "Essential Fish Habitat Maps for Fish and Shellfish Species in Scotland" developed by the Scottish Marine Energy Research (ScotMER)³¹ programme, which is due for publication shortly. We also recommend inclusion of the Feature Activity Sensitivity Tool (FEAST)³², which is due to be updated with fish and shellfish information by the end of March 2023.

With regard to data sources relating to fish and EMF, we recommend that a recent MSc paper by Lucie Hervé "An evaluation of current practice and recommendations for environmental impact assessment of electromagnetic fields from offshore renewables on marine invertebrates and fish" is included as a data source in Table 5.4.4. We can supply a copy of this paper on request.

We support the proposed approach of carrying out a desk-based review of existing fish and shellfish ecology data, focusing on sourcing data that has been collected within or in close proximity to the study area. This will be supplemented by fish and shellfish information obtained from site-specific benthic ecology surveys, although no direct fish survey will be completed for this development site.

We note the allocation of fish into broad receptor groups: pelagic; demersal; elasmobranchs; migratory fish; and shellfish.

Pelagic fish

Table 5.8.9 lists pelagic fish, this should be updated to identify blue whiting as a Scottish PMF species.

Demersal fish

We support the specific consideration of sandeel as a key prey species (Sections 5.8.38-39) and note the presence of high intensity spawning grounds for this species within the study area, as well as low intensity spawning grounds for cod, plaice, saithe and whiting (Sections 5.8.37). All of these species are sensitive to impacts caused by offshore wind developments.

Elasmobranchs

Further consideration of this group should be undertaken in respect of dynamic cabling and EMF effects.

Migratory/ diadromous fish

Table 5.8.12 correctly identifies European eel as a conservation priority across several criteria. However very little is known about their migratory pathways, either as juveniles or adults.

³⁰ https://www.nature.scot/doc/scottish-marine-wildlife-watching-code-smwwc

³¹ https://www.gov.scot/policies/marine-renewable-energy/science-and-research/

³² http://www.marine.scotland.gov.uk/FEAST/

Malcolm et al. (2010)³³ contains a review of available data in relation to migration routes and behaviour, and Gill & Bartlett (2010)³⁴ on effects of noise and electromagnetic fields (EMF) on European eel as well as sea trout.

Atlantic salmon are undergoing a significant decline across their global range, and numbers in Scotland have declined dramatically since 2010. This has led to the recent publication of the Scottish Wild Salmon Strategy (Scottish Government, 2022)³⁵, and continuing high levels of mortality at sea is a significant issue.

Sea trout support a number of fisheries in Scotland and many of these fisheries have undergone declines in the last 25 years. Note that juvenile Atlantic salmon and trout (including those that will become sea trout) can also be a host species for freshwater pearl mussel (FWPM).

Due to uncertainty on where migratory fish (Atlantic salmon, sea trout and sea and river lamprey) go within marine waters and any connectivity back to natal rivers we consider these species should be considered and assessed through EIA only and not through HRA. We are aware of work being led by ScotMER on the Review of Evidence of Diadromous Fish, and this is an area of research which may change conclusions on how diadromous fish are treated in both EIA and HRA going forward.

Shellfish

Table 5.8.13 focuses mainly on commercial shellfish species, and should be updated to include other shellfish species that may be in the study area such as flame shell, horse mussel etc, which are PMFs and will require consideration.

Designated sites

Table 5.8.14 should be updated to include the minke whale feature of the Southern Trench MPA (currently only burrowed mud is included). Minke whale prey on sandeel, herring and mackerel they are sensitive to prey depletion and this predator/ prey relationship should be explored for this development site.

Potential impacts

Table 5.8.16 summarises the impacts proposed to be scoped into assessment.

Habitat loss and disturbance

³³ Malcolm, Iain & Godfrey, J & Youngson, Alan. (2010). Review of migratory routes and behaviour of Atlantic salmon, Sea trout and European eel in Scotland's coastal environment: implications for the development of marine renewables. Marine Scotland Science. 1.

³⁴ Gill, A.B. & Bartlett, M. (2010). Literature review on the potential effects of electromagnetic fields and subsea noise from marine renewable energy developments on Atlantic salmon, sea trout and European eel. Scottish Natural Heritage Commissioned Report No.401

³⁵ https://www.gov.scot/publications/scottish-wild-salmon-strategy/

Habitat loss and disturbance (temporary and long-term) is a key impact pathway identified for the construction, operation and maintenance, and decommissioning stages. We recommend that any relevant pre-construction seabed preparation works are also included in assessment.

Underwater noise and vibration

We support scoping in the effect of underwater noise during construction and decommissioning phases, and the effects of UXO clearance.

We support scoping in the effects of underwater noise during the operation and maintenance phase. These effects arising from floating wind turbine generators, their anchoring systems and cabling are not well understood at present. This will require further discussion and agreement with Marine Scotland and NatureScot.

We note that Section 5.3.12 (Underwater noise and vibration) states that impulsive underwater noise will be assessed for relevant fish (and marine mammal) species. We advise that this should also include vibration (particle motion) for fish and shellfish. Sensitive fish species have not been specified but we would expect to see sandeel, cod and herring eggs if appropriate to the study area.

Increased hard substrate and structural complexity

We support scoping in the loss of suitable substrate or sensitive habitats of importance to fish receptors via the introduction of project elements. The effects of introducing floating wind turbine generators, anchoring systems and cabling are not well understood at present, and so we recommend that colonisation of hard structures is scoped into assessment. This potential impact is also linked to the potential need to remove marine growth, and methods for achieving this.

EMF

We welcome the scoping in of EMF effects on fish and shellfish receptors as another impact pathway that is not well understood at present, to increase our understanding of the effects of dynamic cables, particularly as floating wind becomes an established technology.

We note that cable burial/ Cable Burial Risk Assessment are listed as embedded environmental measures (Table 5.8.15). However we highlight research by Hutchinson et al. (2020)³⁶ which establishes that cable burial may actually generate a response from sensitive species, as it reduces EMF levels to the 'normal' range that species use to hunt prey or navigate.

Potential impacts on Southern Trench MPA

There may be impacts on the minke whale protected feature of the Southern Trench MPA via impacts on prey fish species from the export cable route and we recommend this is scoped into assessment.

Changes in prey species availability

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³⁶ Hutchison, Zoe & Gill, A. B. & Sigray, Peter & He, Haibo & King, John. (2020). Anthropogenic electromagnetic fields (EMF) influence the behaviour of bottom-dwelling marine species. Scientific Reports. 10.

More consideration is required in the EIA Report to ensure that impacts to key prey species (such as sandeel, herring, mackerel and sprat) and their habitats are considered for this development and in combination with other wind farms. As mentioned above we recognise that most EIA Reports concentrate on receptor specific impacts. However, increasingly we need to understand impacts at the ecosystem scale. Therefore, consideration across key trophic levels will enable better understanding of the consequences (positive or negative) of any potential changes in prey distribution and abundance on marine mammal (and other top predator) interests and how this may influence population level impacts. Consideration of how this loss and or disturbance may affect the recruitment of key prey (fish) species through impacts to important spawning or nursery ground habitats should also be assessed. In addition, the PrePARED (Predators and Prey Around Renewable Energy Developments)³⁷ project will also assist in the understanding of predator-prey relationships in and around offshore wind farms which started in 2022 and will run for five years.

Invasive non-native species (INNS)

We advise that the EIAR should provide details on how INNS will be considered, monitored and recorded as well as being taken into account of in biosecurity plans for each phase of the development.

Impacts to be scoped out

We agree with the proposed impacts to be scoped out for fish and shellfish: accidental pollution, and collision risk and entanglement.

Approach to assessment

We broadly support the approach to assessment set out in Sections 5.8.15-17.

Priority Marine Features (PMFs)³⁸

We recommend that the assessment should quantify, where possible, the likely impacts to key fish and shellfish PMFs. It should assess whether these could lead to a significant impact on the national status of the PMFs being considered³⁹.

Cumulative impacts

We note the anticipated list of impacts likely to be scoped into cumulative assessment in Section 5.8.66. The cumulative assessment should consider the cumulative effect of key impacts such as habitat loss/ change particularly in relation to diadromous fish, as well as key fish and shellfish species that contribute ecological importance as a prey resource. This may differ depending on the life stage being considered.

Mitigation and monitoring

Silvan House, 3rd Floor East, 231 Corstorphine Road, Edinburgh EH12 7AT

³⁷ https://owecprepared.org/

³⁸ https://www.gov.scot/policies/marine-environment/priority-marine-features/

³⁹ https://www.nature.scot/doc/priority-marine-features-guidance

We welcome the embedded environmental measures described in Table 5.8.15. We advise that the full range of mitigation measures and published guidance is considered and discussed in the EIA Report.

No specific monitoring for fish and shellfish is mentioned in the Scoping Report, although the list of embedded environmental measures includes a commitment to implement a Project Environmental Monitoring Plan which will set out commitments to environmental monitoring. Further information on proposed monitoring should be discussed in the EIA Report.

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix F – Physical processes

Physical processes are considered in Section 5.1 of the Scoping Report.

Study area

We are content with the study area as proposed in Section 5.1.8 and Figure 5.1.1, and which comprises:

- the Option Agreement Area and entire marine area within the Scoping Boundary;
- the wider marine area around the project, as based on region-scale marine geology, oceanography, and physical processes; including
- prevailing wave direction, tidal excursion distances and sediment transport pathways.

Baseline characterisation

We agree that the relevant legislation and policy (Table 5.1.1), technical guidance (Table 5.1.2) and data sources (Table 5.1.4) have been identified.

We note that the baseline for physical processes has not yet been fully characterised. Section 5.1.28 describes how further investigation into sand wave fields is needed. One potential implication of mobile sandwaves would be that cable(s) buried through them might over time become naturally re-exposed, necessitating additional armouring that would increase the overall effect of the operational phase on seabed sediment transport and morphology. We recommend that sand wave fields should be mapped; there should be a desk-based assessment of potential mobility; and the results should be explicitly incorporated into assessment of the two impacts: "changes to sediment transport" and "impacts to seabed morphology".

Potential impacts

We are broadly content with the impacts that are to be scoped in/out of assessment. However, we note that potential scour around structures on the seabed is not included in the list of impacts to be assessed. We recommend that scour should, at the least, be taken fully into account in assessment of "impacts to seabed morphology".

Approach to assessment

We are generally content with the approach to assessment as described, however we note that definitions of magnitude and sensitivity for the impact assessment have not been set out in Section 5.1. It is unclear why these have not been included as they are described in detail in other topic sections.

We also note the proposed approach to assessing "changes to the wave regime" includes numerical modelling. We recommend that NatureScot are be consulted on details of the modelling methodology (including how results will be presented) at an interim stage before the EIA Report is produced.

Cumulative impacts

We are content with the proposed approach to cumulative assessment described in Sections 5.1.46-47.

Transboundary impacts

We advise that there are unlikely to be any transboundary impacts.

NatureScot advice on EIA Scoping Report for the MarramWind Offshore Wind Farm

Appendix G – Underwater noise

Underwater noise is considered in Section 5.3 of the Scoping Report.

Study area

We are content with the study area as proposed in Section 5.3.7, which is based on the sensitivities of the relevant receptors (marine mammals, fish and shellfish, commercial fisheries, infrastructure and other marine users). We agree that the study area should be reviewed and amended in relation to the impact pathways as identified through the EIA assessment

Baseline characterisation

We agree that the relevant legislation and policy (Table 5.1.1), technical guidance (Table 5.1.2) and data sources (Table 5.1.4) have been identified. However we advise that Tougaard et al, 2020 is a paper for consideration rather being agreed technical guidance.

We also recommend that the applicant refers to any information on the noise characteristics of operational floating wind turbines emerging from Hywind and Kincardine floating offshore wind farms, or from projects located in other countries. It is likely that any comparison would be qualitative, but an understanding of the likely characteristics and/ or the variability in operational noise emissions would be useful for MarramWind.

Table 5.3.3 sets out Scoping questions, and we refer you to Appendix B of this letter where these have been answered.

Potential impacts

We are broadly content with the impacts that are to be scoped in/out of assessment, and have offered comments, where appropriate, in Appendices B (marine mammals) and E (fish and shellfish) of this letter.

Approach to assessment

We are generally content with the approach to assessment as described in Sections 5.3.13-15.

Our advice on marine mammals and underwater noise is contained in Appendix B.

With regards to fish, we highlight that impact ranges can vary dramatically based on the model and parameters being used (e.g. static vs fleeing animal response). We recommend that the assessment is supported by a review of fish responses to piling, particularly examining the effect of different fleeing speeds.

Cumulative impacts

We are content with the proposed approach to cumulative assessment described in Sections 5.3.22-23.

Transboundary impacts

We advise that there are unlikely to be any transboundary impacts.

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Your Ref: SCOP-0020

Our Ref: AL/OPS/ML/O6_25_780

Ms Anna Shenton
Marine Licensing Casework Officer
Marine Scotland – Marine Planning and Policy
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

16 February 2023

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

REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT)
(SCOTLAND) REGULATIONS 2007

REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND)
REGULATIONS 2017 (collectively referred to as the "EIA Regulations").

<u>SCOP-0020 – MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind</u> NE7 Site

Thank you for your e-mail correspondence dated 15th February 2023 relating to the Scoping Report submitted by **MarramWind Offshore Wind Farm Ltd** in relation to the proposed development of a 6GW floating offshore wind farm located between 75-110 kilometres (km) offshore of the northeast Aberdeenshire coast.

Northern Lighthouse Board note the inclusion of Section 5.10 – Shipping and Navigation within the report, with particular reference to Table 5.10.6, detailing the Environmental Measures Proposed to ensure safety of navigation throughout the lifetime of the project. This includes the development of a Lighting and Marking Plan (LMP) and Navigational Safety Plan (NSP).

NLB also note the inclusion of Cumulative Effects (Section 7.4.23 - 25) within this chapter, and the factors upon which other cumulative projects will be screened in or out of the assessment.

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SCOP-0020
Pg. 2

NLB have no objection to the content of the Scoping Report, and no suggestions for additional content.

Yours sincerely
[Redacted]

Peter Douglas
Navigation Manager

Ms A Shenton

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Royal Yachting Association Scotland (RYA)



Royal Yachting Association Scotland

RYA Scotland

Caledonia House 1 Redheughs Rigg South Gyle Edinburgh EH12 9DQ

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

22 February 2023

Anna Shenton
Marine Scotland – Marine Planning and Policy
Scottish Government
Marine Laboratory,
375 Victoria Road,
Aberdeen,
AB11 9DB
MS.MarineLicensing@gov.scot

Dear Ms Shenton,

MarramWind Offshore Windfarm – Scotwind NE7 Site - Scoping Consultation

I have read the relevant parts of the scoping report on behalf of RYA Scotland and make the following comments.

I agree that navigation should be scoped in and that recreational boating should be included. RYA Scotland will be happy to take part in the Navigational Risk Assessment. Rather few recreational craft pass through the lease area and these will be on passage between Scotland and Scandinavia and *vice versa*. I estimate that about a quarter of them will transmit an AIS signal and that rather more will be able to receive one. In the open sea, as here, the tracks of AIS transmitting craft are expected to be typical of the tracks of all recreational craft. The routes taken will depend *inter alia* on the wind direction and so may vary from year to year. Recreational craft can be difficult to spot using radar, particularly in rough seas. It is unclear to me that much will be gained by trying to gain an accurate assessment of the number of recreational craft passing through the lease area. It can be safely assumed that a small number will do so each year. However, skippers of recreational craft in these waters will be used to navigating in proximity to oil and gas installations.





Royal Yachting Association Scotland

RYA Scotland

Caledonia House 1 Redheughs Rigg South Gyle Edinburgh EH12 9DQ

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Over the past few years there has been a surprisingly large number of cases where lights or signals from wind farm installations have failed and it has often taken several weeks for a repair to be made due to adverse weather. Thus following NLB prescriptions for marking and lighting is necessary but not sufficient mitigation. It is important that there is a mechanism to ensure that failures are remedied quickly, perhaps by installing duplicate systems. It is often assumed in risk assessments that factors are independent. However, the same storm that damages the lights will also make repairing them quickly difficult and may also have washed away the navigational aerials on a yacht.

I do not expect there to be any issues related to the landfall in the neighbourhood of Peterhead provided that normal best practice is followed. However, RYA Scotland will be happy to confirm whether that is the case with the developer once the location has been decided.

Yours sincerely,

[Redacted]

Dr G. Russell FCIEEM(retd) FRMetS Planning and Environment Officer, RYA Scotland



Scottish Water



Marine Licensing 375 Victoria Road

Aberdeen

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

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



Dear Customer.

MarramWind Offshore Wind Farm, , Aberdeenshire, AB43 8QZ

Planning Ref: SCOP-0020 Our Ref: DSCAS-0081197-L2R

Proposal: MarramWind Offshore 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. Please read the following carefully as there may be further action required. Scottish Water would advise the following:

Asset Impact Assessment

Scottish Water records indicate that there is live infrastructure in the proximity of your development area that may impact on existing Scottish Water assets.

The applicant must identify any potential conflicts with Scottish Water assets and contact our Asset Impact Team via <u>our Customer Portal</u> for an appraisal of the proposals.

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

Written permission must be obtained before any works are started within the area of our apparatus

Drinking Water Protected Areas

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

The proposed site drains into the Ugie River approximately 9.5 km of the Forehill river abstraction. In view of the distances involved the risk is likely to be low. However, the normal precautions will be required for mitigation and we should add that we should be notified of any pollution incidents that impact surface water drainage in the catchment as detailed above.

Scottish Water have produced a list of precautions for a range of activities. This details protection measures to be taken within a DWPA, the wider drinking water catchment and if there are assets in the area. Please note that site specific risks and mitigation measures will require to be assessed and implemented. These documents and other supporting information can be found on the activities within our catchments page of our website at www.scottishwater.co.uk/slm

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

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

Surface Water

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

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

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection

request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

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

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

Yours sincerely,

Ruth Kerr.

Development Services Analyst PlanningConsultations@scottishwater.co.uk

Scottish Water Disclaimer:

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

SEPA

Shenton A (Anna)

From: Planning.North <Planning.North@sepa.org.uk>

Sent: 17 February 2023 11:20
To: MS Marine Licensing
Cc: Shenton A (Anna)

Subject: SEPA Ref: 8248 - SCOP-0020

OFFICIAL

Dear Anna Shenton

Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 SCOP-0020

MarramWind Offshore Wind Farm
Scotwind NE7 Site

Thank you for the above consultation. Based on the information provided, it appears that this application falls below the thresholds for which SEPA provide site specific advice. Please refer to our standing advice and other guidance which is available on our website. In addition, please also refer to our SEPA standing advice for the Department for Business, Energy and Industrial Strategy and Marine Scotland on marine consultations available here.

If there is a significant site-specific issue, not addressed by our guidance or other information provided on our website, with which you would want our advice, then please reconsult us highlighting the issue in question and we will try our best to assist.

I trust these comments are of assistance - please do not hesitate to contact me if you require any further information.

Kind regards, Nicki Dunn Senior Planning Officer

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

OFFICIAL

Transport Scotland

Development Management and Strategic Road Safety Roads Directorate

5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU Direct Line: 0141 272 7593, Fax: 0141 272 7350 lain.clement@transport.gov.scot



Anna Shenton
Marine Scotland - Marine Planning & Policy
Scottish Government
Atlantic Quay
Glasgow
G2 8LU

Your ref:

Our ref: GB01T19K05

Date: 16/03/2023

ms.marinerenewables@gov.scot

Dear Sirs,

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

REGULATION 13 AND SCHEDULE 4 OF THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2007

REGULATION 12 OF THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

MARRAMWIND OFFSHORE WIND FARM - SCOTWIND NE7 SITE - SCOPING CONSULTATION

With reference to your recent correspondence on the above development, we acknowledge receipt of the Scoping Report (SR) prepared by MarramWind Ltd in support of the above development.

This information has been passed to SYSTRA Limited (SYSTRA) for review in their capacity as Term Consultants to Transport Scotland – Roads Directorate. Based on the review undertaken, Transport Scotland would provide the following comments.

Proposed Development

We understand that the proposed development comprises a floating offshore wind farm in the region of 126 to 225 wind turbines located approximately 75-110km offshore from the north-east Aberdeenshire coast. The Offshore Wind Farm will have a total grid connection capacity of up to 3GW. We note that the Project will also include onshore transmission infrastructure to facilitate connection of the MarramWind Offshore Wind Farm to the National Electricity Transmission System (NETS), and as such, the SR covers both onshore and offshore aspects.

It is currently anticipated that the full 3GW will be connected in the vicinity of Peterhead. While the Project's contracted grid connection to Peterhead remains to be finalised, the Scoping Report is based on the following options:

- · A full 3GW connection in the vicinity of Peterhead; or
- A 1.5GW connection in the vicinity of Peterhead, with the residual assumption of a 1.5GW connection to New Deer.

Assessment of Environmental Impacts

The proposed assessment of Traffic and Transport associated with the onshore elements of the Project are presented in Chapter 6.8 of the SR. This states that the thresholds as indicated within the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic are to be used as a screening process for the assessment.

The SR also indicates that potential environmental impacts such as severance, driver delay, pedestrian amenity, pedestrian delay, fear and intimidation and accidents and safety etc will be considered and assessed where the IEMA Guideline thresholds for further detailed assessment are breached. These specify that road links should be taken forward for detailed assessment if:

- Traffic flows will increase by more than 30%, or
- The number of HGVs will increase by more than 30%, or
- Traffic flows will increase by 10% or more in sensitive areas.

The SR indicates that the Study Area will comprise all roads as identified within Figure 1.1: Scoping Boundary presented in Appendix 1A. We note that this demonstrates a study area from Cruden Bay in the south to Rosehearty in the north. In addition to all local roads within this area, the A90(T) is included.

We note that base traffic data for the assessment will be extracted from sources such as:

- Traffic count data available from the Department for Transport (DfT)
- Data held by Local Roads Authorities
- Commissioned traffic counts to supplement the available traffic data from DfT and the Road Authorities.

Table 6.8.7 of the SR presents Annual Average Daily Traffic Flows for the study area. This includes the following trunk road locations:

- A90(T) Longhaven
- A90(T) between Blackhills Road and A982
- A90(T) between A950 and A982 (North Road)
- A90(T) St Fergus
- A90(T) North of Rathen.

The SR indicates that the future baseline will take into account traffic growth as a result of new development, which will be based on growth factors from the DfT National Trip End Model (NTEM) derived from the Trip End Model Presentation Programme (TEMPro).

Transport Scotland would state that it is considered acceptable to factor base traffic data to the construction year flows using National Road Traffic Forecasts (NRTF) Low Growth.

We note that operation and maintenance activities as well as decommissioning activities of both onshore and offshore phases are to be scoped out of the assessment. This is considered acceptable in this instance. We also note that the onshore impacts of the offshore cable route, turbines and other required infrastructure (materials and staff) associated with the Offshore Construction Phase "could be scoped out subject to further project development". Transport Scotland would seek justification for this, in the form of a threshold assessment to demonstrate that there is no impact to the A90(T).

The SR states that a Construction Traffic Management Plan (CTMP) will be developed in support of the application. This is welcomed.

Abnormal Loads Assessment

The SR indicates that additional technical documents will be identified through the Environmental Impact Assessment (EIA) process, including an Abnormal Indivisible Load (AIL) Study. It should be noted that Transport Scotland will require to be satisfied that the size of loads proposed 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 EIA Report at application stage 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 but should you wish to discuss any issues raised in greater detail, please do not hesitate to contact me or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on 0141 343 9636.

Yours faithfully

[Redacted]

lain Clement

Transport Scotland Roads Directorate

cc Alan DeVenny – SYSTRA Ltd.

UK Chamber of Shipping

Shenton A (Anna)

From: Robert Merrylees <RMerrylees@ukchamberofshipping.com>

Sent: 11 March 2023 23:01
To: MS Marine Renewables

Cc: Mcginn T (Toni-Marie); Malcolm J (Jessica)

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore Windfarm –

Scotwind NE7 Site - Scoping Consultation - Response Required by 17 March 2023

Dear Marine Scotland Renewables Team,

The UK Chamber of Shipping welcomes the opportunity to respond to the scoping report for the proposed MarramWind Offshore Wind Farm and would like to raise the following points.

The Chamber would strongly agree with the MCA's raising that the Project (once operational) could have cumulative vessel route impacts in the north to south direction and also out of the Moray Firth and their recommendation that coordination with other projects to avoid vessel deviation as much as possible would be essential.

The development presently appears to only be proposing 28 days of shipping activity to be studied as part of the NRA. Whilst perhaps in accordance with MGN 654 as a minimum, given the scale of the development the Chamber strongly advises and recommends that a full 12 month AIS data is obtained for seasonal variation and smoothing. The data is widely available, needn't be backed up with Radar and Visual Data and is now a commonplace inclusion in NRAs for other proposed developments.

The Chamber strongly advocates for examination of a longer period of MAIB than a single 10-year period. The Chamber, having consulted with the MAIB and been informed that digital spatial data exists and is accessible for developers dating back to 1992. The Chamber considers that a single 10-year period to be an unnecessarily short period for accident data to be used and that it may not accurately reflect historic accidents and safety to navigation, in particular given the scoping report states that the full lease agreement runs until 2080. It is now customary for developers to examine a 20-year period of which the Chamber would be more satisfied.

Figure 5.12.1 SLVIA study area shows that Green Volt Wind Farm is shaded as pre-planning status. This is incorrect as Marine Scotland LOT has recently held the Section 36 consultation on the proposed development. Up to date and correct status of developments through the planning process is essential for cumulative impacts to be considered correctly.

Future baseline as discussed within 7.4.13 refers to conservative increase following discussion with stakeholders. The Chamber would strongly advocate for a range of scenarios to be modelled in particular noting the large increase in renewable activity planned for the area with resulting project and third party project traffic.

The Chamber would assert that the below two activities should not only be scoped in during the operation and maintenance phase but across all phases as there is potential to be significant impact to navigation.

- 1. Interference with navigation, communications and position fixing equipment during the operation / maintenance phases (includes potential effects of electromagnetic interference)
- 2. Reduction of Search and Rescue capability during operation / maintenance due to surface infrastructure.

Paragraph 7.4.25 fails to include reduction in SAR capability as an impact from the Project that has the potential to act cumulatively with impacts from other developments to contribute to cumulative effects and should be included. Furthermore under 7.4.25, whilst it is also correct that there is increased vessel to vessel collision risk resulting from cumulative displacement, it is also true that cumulative displacement from multiple developments result in potentially significant impact to vessel's deviation, and accordingly scheduling, environmental impact and

economic/business cost basis and should be fully considered. This is especially true given the proximity of oil and gas fields adjacent to the proposed developments and their respective decommissioning schedules if relevant.

The Chamber trusts these comments will be factored in and offers its ongoing assistance to MS and the developers to ensure minimum impact upon navigational safety for commercial shipping.

Yours faithfully,
Robert
Robert Merrylees
Policy Manager (Safety & Nautical) & Analyst

UK Chamber of Shipping 30 Park Street, London, SE1 9EQ

DD +44 (0) 20 7417 2843 Mob [Redacted] rmerrylees@ukchamberofshipping.com www.ukchamberofshipping.com



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Highlands and Islands Airports Limited (HIAL)

Shenton A (Anna)

From: Nyree Millar Bell < NBell@hial.co.uk>

Sent: 24 March 2023 15:15 **To:** MS Marine Renewables

Cc: Malcolm J (Jessica); Mcginn T (Toni-Marie)

Subject: SCOP-0020 Proposal: MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind

Farm - Scotwind NE7 Site

Your Ref: SCOP-0020 Our Ref: 2023/068/INV

Dear Sir/Madam,

Proposal: MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind NE7 Site

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

Kind regards,

Nyree

Nyree Millar-Bell

Aerodrome Safeguarding and Operational Support Officer Highlands and Islands Airports Limited

NBell@hial.co.uk Visit our Website at www.hial.co.uk

Marine Analytical Unit



MarramWind Offshore Wind Farm Scoping Report

Marine Analytical Unit Response

The MarramWind Offshore Wind Farm scoping report includes descriptions of a range of potential impacts. This response focuses only on the assessment of social and economic impacts.

We recommend that a full Socio-Economic Impact Assessment be scoped into the Environmental Impact Assessment. We provide general advice on how to deliver this at Annex 1.

Overview

At the beginning of the socio-economic chapter, the developer acknowledges the knock on effects that impacts to other receptors may have for the socio-economic receptor. This is a welcome addition, but isn't really discussed again elsewhere in the chapter.

The developers also mention a range of guidance material upon which the assessment is based. This includes work by Glasson, Vanclay and Biggar economics. However, the principles of these guidance documents are not reflected in the rest of the report, nor the plans for the EIA, especially with regard to social impacts. For example the assessment will rely on a desk based study, will involve no primary data collection, and there will be little, if any, opportunity for communities and stakeholders to feed in to the assessment using participatory research methods.

Many impacts are scoped in, but these will all be assessed using a desk based study and expert opinion. There is very little detail about the methods that will be used in the assessment, apart from them being desk-based, and so it is not at all clear how the assessment will be done. We would argue that a desk based study is not an adequate way to assess social impacts in particular, and would recommend the collection of primary data (please see Annex 1 for suggestions for delivering socio-economic impact assessment from the Marine Analytical Unit).

Paragraph 7.3.8 states that wider socio-economic impacts covered by the 'Local Area' Marine Scotland, 2022, guidance, are excluded as they do not form part of planning assessment. Under the Marine Scotland Act 2010, Ministers must have regard to "other matters as the Scotlish Ministers consider relevant" (Part 4.27.1.b), our advice is that socio-economic impacts may be significant and should therefore be scoped in to the assessment, with a robust plan in place to understand those potential socio-economic impacts before they are discounted due to being 'wider'.

Scoping of impacts

GVA and Employment

We broadly agree with the scoping report's proposed approach to scope in GVA and employment impacts. We expect to see a detailed description of the methodology used to assess these impacts in the EIA, including specific details on the methodological approach taken and any key assumptions that underpin any estimates. This may be supplied in a technical annex if necessary.

At paragraph 7.3.49 the report states that a number of potential effects have been scoped out from further assessment due to a conclusion of no likely significant effect. We recommend that these effects are reported so that we can understand what has been considered. On the basis that social impacts depend on the views, values and perceptions of people, we recommend that they are scoped in as the degree of significance cannot robustly be assessed until those people are engaged.

Socio-cultural and distributional effects

The scoping report proposes to scope out socio-cultural and distributional effects. The reasoning given for this is stated in paragraph 7.3.50.:

"The concentration of impacts within specific groups or communities is not expected to occur due to the largely offshore location of the Project when constructed and the temporary nature of the onshore works. Socio-cultural and distributional effects are therefore scoped out as reported in Table 7.3.10 above."

There appears to be no supporting evidence provided to suggest that the concentration of impacts within specific groups or communities is not expected to occur due to the largely offshore location of the project. Furthermore, although the location of the project is offshore, significant socio-economic impacts may occur onshore. In the absence of any supporting evidence to suggest otherwise, it seems entirely possible that these impacts may be concentrated within specific groups or communities.

We therefore recommend that socio-cultural and distributional effects are scoped in to the EIA.

Distributional effects may occur on individuals according to their characteristics such as income level, geographical location, gender, age etc. We expect that the assessment will be conducted by someone with the required skills in economics and social research to carry out this type of assessment.

Knock-on socio-economic impacts of other impacts

The socio-economic impact assessment should assess the potential knock-on socio-economic impacts of other impacts identified in other chapters of the EIA (e.g. commercial fisheries). We welcome that this has been recognised in the scoping report, but feel that there is insufficient detail about whether and how this will be done.

Conclusions

We understand that at the point of applying for a license the developers may not know which ports or landfall locations they will use, nor where they will source their workforce from. Without this information it is difficult to plan primary research and provide a detailed assessment of social impacts, nevertheless we expect transparency on what has the potential to significantly impact but which cannot be assessed fully due to a lack of sufficient detail.

Annex 1: General Advice for Socio-Economic Impact Assessment Marine Analytical Unit, December 2022

This document sets out some suggestions for delivering socio-economic impact assessment drawing on the professional expertise of the Marine Analytical Unit.

Section 1. Some general best practice tips

- Take a proportionate approach to SEIA in line with the size and generating capacity of the development
- Consider offshore and onshore components of the development in the same assessment.
- Employ experts to design and carry out the assessment. The relevant expertise would include:
 - Social research and economist training, qualifications and experience
 - Familiarity and experience with appropriate methods for each discipline (including economic appraisal, social research methods such as surveys, sampling, interviews, focus groups and participatory methods)
- Consider potential secondary socio-economic impacts of any changes the affect the other relevant receptor groups covered in the wider EIA e.g. commercial fisheries, cultural heritage and archaeology and visual impacts.
- Include consideration of the cumulative impact of multiple offshore developments.
- Outline the rationale for scoping out impacts that are deemed to be minimal, including any evidence or analysis that has been used. If this is not provided it can be difficult for MAU to understand why impacts have been scoped out and we may suggest scoping them back in.

Section 2. Key components of a Socio-economic Impact Assessment

We set out below what we consider to be the key steps to an assessment. We recommend a combined approach so that social and economic impacts are covered together in the assessment, whilst acknowledging that different methodologies for social and economic impacts assessment are needed at certain stages, and that the two disciplines are distinct.

We wish to highlight the importance of stakeholder engagement throughout the assessment, and the use of social research methods to gather primary data and first hand perspectives from particular groups and communities that are affected. These are helpful in order to better understand the nature and degree of impacts that might be caused by changes that are expected occur. A change in itself may or may not bring about tangible impact, impacts may vary for different people or be perceived in different ways, are affected by individual values and attitudes, and conditioned by the context.

Stakeholder engagement and data collection can occur at a number of stages in the SEIA process and may involve similar methodologies but there are important differences to note. The primary aims of stakeholder engagement are to inform, consult or involve key stakeholders, and to communicate information and gather

feedback. Data collection, in contrast is a more rigorous analytical process involving:

- Setting out a planned methodology in advance with clear objectives of what you wish to achieve through data collection
- Sampling strategies that take account of the demographic variations in the population and the need to include difficult to reach groups
- Robust methods to collect information from people in a neutral and unbiased way
- Awareness of how data will be analysed and reported on to obtain and disseminate robust conclusions
- Taking account of research ethics including informed consent, and data protection requirements under GDPR

The stages below are divided into the activities that we suggest are **before** the developer submits a request for a scoping opinion and those that are done **after** the scoping phase. We recommend an iterative approach which means that steps inform each other, information is built up over time, and some steps may be repeated or done in a different order.

The key steps should include:

Pre-scoping activities

- 1) **Getting started:** Employ economist and social research experts and work with them to develop a plan for the SEIA that sets out data requirements, and the proposed social and economic data collection and impact assessment methodologies, timescales, any data protection considerations, risk assessment and ethical issues that might arise from the work.
- 2) Develop a detailed description of the planned development and consider the project phases where socio-economic impacts might be experienced (covering development, construction, operation and maintenance and decommissioning phases). Start to map out potential socio-economic impacts and initial consideration of areas of impact on land that will need to be covered.
- 3) **Initial scoping of impacts:** develop a broad list of potential impacts informed by experts (including social researcher, economist, local representatives from key groups, community stakeholders and others).
- 4) Define potential impact areas on land taking into account locations and connections between activities. Different types of impacts may be experienced at different geographic levels, some in the area nearest the landfall or the nearest coastline to the development at sea, and others much further away (at Scotland level, UK level and internationally). The geographical scale at which social impacts are experienced may be different for social impacts compared with economic impacts. There may be multiple epicentres from which impacts radiate including the site of the development, land-based areas such as landfall and grid connections, construction bases and places from which the development is visible. Activities that take place in the sea are also relevant for defining the impact area on land, for example the location of fishing activity and ports where

fish are landed. The definition of the impact area will inform which communities and which sectors are included in the assessment and vice versa, so this exercise needs to be done iteratively with step 3, the initial scoping of impacts.

5) Stakeholder mapping is required to identify all the people, groups and stakeholders who may be affected by the development and is a first step in order to conduct effective stakeholder engagement. This exercise is informed by the definition of the impact area. A broad approach is recommended. Stakeholders are likely to include local communities, businesses, workers, other users of the sea, interest groups, community councils and so on.

Steps 4 and 5 may lead to a change in the list of potential impacts so this will need refined/checked.

- 6) Stakeholder engagement (with those affected by the development, sea users, communities etc) is a key requirement of SEIA that is done at different stages of the process. We recommend doing some initial stakeholder engagement before submitting the scoping report. Stakeholder engagement will fulfil a number of requirements:
 - Provide information about the development so that those who might be affected are able to make an informed judgement about potential impacts
 - Present and refine list of potential impacts based on feedback identify impacts that are most relevant and add any additional ones that are identified
 - Collect initial data/ insights from stakeholders on what potential socioeconomic impacts (to be developed later)
 - Build relationships with the community and key groups affected for later stages of the SEIA process so that they can understand the decisions making process and how they can influence it.

There are many **participatory methodologies** that can be used for effective stakeholder engagement that provide a deliberative space for community discussions.

This stage may also require the setting up of governance structures and a community liaison officer. **Early engagement** with those who might be affected is very important, as is meaningful and inclusive engagement where people feel that they are being listened to and that their feedback will be acted upon. It is important to set out clearly how stakeholder engagement is being done for the SEIA specifically.

7) Gather contextual information to develop a social and economic profile of the area prior to the development that will help with setting the baseline and impact prediction, identifying potential industries and communities that might be affected and sources of data that can be used in the assessment. This might include primary data collection using social research methods (such as surveys,

interviews, focus groups) as well as desk based analysis (of existing data sets such as fishing data, population data).

Primary data collection may occur alongside participatory activities (e.g. engagement events) but must be done in a rigorous and systematic fashion and the findings should be robustly analysed and incorporated into the SEIA. Impacts that are identified for the other receptors in the wider EIA may also have socioeconomic consequences and so it may be important to include these in the SEIA.

8) Produce list of anticipated impacts to be covered in the scoping report setting out the range of potential impacts that could occur, building on what has already been done using data and insights that have been collected from various activities described above. Details of the methods that have been used should be included to enable Marine Scotland to determine if the analysis is based on a robust and appropriate approach. Justification should be provided for any impacts that are scoped in or out. This could be based on suggestions made by stakeholders and the public during stakeholder engagement or an assessment based on the analysis of primary and secondary data.

It is helpful if the scoping report includes details on the approach to be used for the SEIA including methods for data collection, planned stakeholder engagement activities and data-sets to be used.

Post scoping activities for the SEIA

The scoping opinion will advise on the final list of socio-economic impacts to be assessed in the SEIA. This may require additional data collection/ social research to enable a more rigorous assessment of a narrower set of anticipated impacts. It may also require further stakeholder engagement in order to check the significance of impacts with different groups, and the acceptability of mitigation options.

The data and information that has been collected throughout the scoping phase will be used to conduct steps 9, 10 and 11 below.

- 9) Conduct baseline analysis to assess the situation in the absence of the development, to provide a point of comparison against which to predict and monitor change. Appropriate social and economic measures should be used for the baseline and cover relevant issues (see section 4 for suggested data sources). Key stakeholders and other interested parties including affected communities and sectors may be aware of baseline data to be included, and this can be explored in the participatory approaches described above. The findings from social research can also be included in the baseline. Note that baseline data can be presented in the scoping report but is also the first stage of the SEIA and so should be included in the SEIA report.
- **10)Predict impacts and assess their significance (otherwise known as impact appraisal or options appraisal):** Through analysis, estimate the social and economic changes and their expected impacts, considering any alternative development options and how significant the impacts might be. This is the core part of the assessment and forms the main part of the assessment report.

Different methodologies and both primary and secondary data inform this part of the exercise.

Different phases of the development should be covered (development, construction, operation and maintenance) and also transitions between phases (if relevant).

The knock on socio-economic consequences of impacts in other parts of the EIA assessment should be assessed here, such as the impact on commercial fisheries, and impacts on related industries such as tourism could also be included.

It is important to consider distribution of impacts among different social groups (covering protected quality characteristics, socio-economic groups and geographic area where relevant to do so).

Economic impact appraisal should include consideration of:

- Direct, indirect and induced impacts
- Leakage, displacement and substitution effects
- Deadweight
- Cumulative impacts
- Sensitivity analysis to account for risk, uncertainty and optimism bias

There are a range of methodologies for calculating direct, indirect and induced impacts. These include the appropriate use of multipliers, a local content methodology, stakeholder involvement and expert opinion.

Modelling approaches should be realistic, based on robust data, and avoid over promising the economic impacts

All prices should be presented in real terms (excluding inflation) and should state which year the prices represent.

11) Development enhancement, mitigation strategy and complete SEIA report.

There may be an opportunity for adaptation or other approaches to mitigate potentially adverse impacts and to maximise positive opportunities. This may include engagement with the community to develop a strategy for enhancing benefits and mitigating against impacts; or development of a Community Benefit Agreement (CBA). Again these activities should be done collaboratively with stakeholders where relevant and appropriate.

The SEIA report should clearly set out the methods used in the assessment, justification for decision made such as scoping certain impacts in or out of the assessment, and the approach to analysis. The report should cover the baseline analysis and results of the impact prediction or appraisal, and distributional impacts. Social and economic impacts can be set out separately (where this makes sense) and together where they overlap.

It is good practice for the report to be reviewed by the people (i.e. the wider group of stakeholders and communities) who were involved in providing data for its production.

Section 3. Examples of different types of socio-economic impacts

In the literature social and economic impacts are defined in many different ways. Sometimes social and economic impacts are covered separately, whilst other sources refer to socio-economic impacts.

The following table sets out some commonly identified socio-economic impacts.

Examples of Socio-economic Impacts from Glasson 2017¹

1. Direct economic:

- GVA
- employment, including employment generation and safeguarding of existing employment;
- 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

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

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

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:

Distributional analysis is a term used to describe the assessment of the impact of interventions on different groups in society. Interventions may have different effects on individuals according to their characteristics such as income level or geographical location

• effects on specific groups in society (eg: by virtue of gender, age, religion, language, ethnicity and location); environmental justice

Section 4: Useful Data Sources for Socio-Economic Impact Assessments

Name	Summary	Link to Source
Statistics.gov.scot	Contains a wide range of data by local authority and other geographic breakdowns. Has a search by subject and area option.	statistics.gov.scot
Marine Economic Statistics, 2019	Annual economic statistics publication including GVA and employment data for marine economy sectors.	Scotland's Marine Economic Statistics 2019 - gov.scot (www.gov.scot)
Scottish Sea Fisheries Statistics, 2021	Provides data on the tonnage and value of all landings of sea fish and shellfish by Scottish vessels, all landings into Scotland, the rest of the UK and abroad, and the size and structure of the Scottish	Summary - Scottish Sea Fisheries Statistics 2021 - gov.scot (www.gov.scot)

	fishing fleet and employment on Scottish vessels.	
Scottish Shellfish Farm Production Survey 2021	Statistics on employment, production and value of shellfish from Scottish shellfish farms.	Scottish Shellfish Farm Production Survey 2021 - gov.scot (www.gov.scot)
Scottish Annual Business Statistics 2020	Scottish Annual Business Statistics (SABS) presents estimates of employment, turnover, purchases, Gross Value Added and labour costs. Data are provided for businesses that operate in Scotland. Data are classified according to the industry sector, location and ownership of the business.	Scottish Annual Business Statistics 2020 - gov.scot (www.gov.scot)
Sub-Scotland Economic Statistics Database	The Sub-Scotland Economic Statistics Database provides economic, business, labour market and population data for Scotland, and areas within Scotland.	Sub-Scotland Economic Statistics Database - gov.scot (www.gov.scot)
Nomis Official Labour Market Statistics	Labour market statistics including data on employment, unemployment, qualifications, earnings etc.	Nomis - Official Labour Market Statistics (nomisweb.co.uk)
Economics of the UK Fishing Fleet 2020	Economic estimates at UK, home nation and fleet segment level for the UK fishing fleet. The estimates are calculated based on samples of fishing costs and earnings gathered by Seafish as part of the 2020 Annual Fleet Economic Survey.	Economics of the UK Fishing Fleet 2020 — Seafish

Scotland's Census, National Records of Scotland	Census data that provides information about the characteristics of people and households in the country.	Scotland's Census National Records of Scotland (nrscotland.gov.uk)
Scottish Index of Multiple Deprivation	Collection of documents relating to the Scottish Index of Multiple Deprivation - a tool for identifying areas with relatively high levels of deprivation.	Scottish Index of Multiple Deprivation 2020 - gov.scot (www.gov.scot)
The Green Book	HM Treasury guidance on how to appraise and evaluation policies, projects and programmes.	The Green Book: appraisal and evaluation in central government - GOV.UK (www.gov.uk)
The Magenta Book	HM Treasury guidance on evaluation. Chapter 4 provides specific guidance on data collection, data access and data linking.	The Magenta Book - GOV.UK (www.gov.uk)
Enabling a Natural Capital Approach (ENCA)	Supplementary guidance to The Green Book. ENCA resources include data, guidance and tools to help understand natural capital and know how to take it into account.	Enabling a Natural Capital Approach (ENCA) - GOV.UK (www.gov.uk)

Section 5: Further sources of guidance:

HM Treasury guidance on how to appraise and evaluate policies, projects and programmes: The Green Book: appraisal and evaluation in central government

Best practice in Social Impact Assessment according to the International Association for Impact Assessment: <u>Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects</u>

The project A two way Conversation with the People of Scotland on the Social Impacts of Offshore Renewables (CORR/5536) has developed elements of a conceptual framework on social values that can be used to support and inform existing processes for assessing the potential social impacts of offshore renewables plans: Offshore renewables - social impact: two way conversation with the people of Scotland

Best practice guidance for assessing the socio-economic impacts of OWF developments: Guidance on assessing the socio-economic impacts of offshore wind farms (OWFs)

Marine Scotland Science





T: +44 (0)131 244 2500 F-[Redacted]

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

16 March 2023

SCOP-0020 - MarramWind Offshore Windfarm - Scotwind NE7 Site

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

Commercial Fisheries

MSS are content that all impact pathways have been scoped into the assessment for commercial fisheries, and that the overall approach to the assessment is appropriate.

MSS note that currently only the demersal otter trawl fleet is identified as a receptor in Table 5.9.9. Given that other demersal gear types such as demersal seine and beam trawl were identified within the study area in the MMO fisheries statistics, MSS suggest that this receptor is referred to more broadly as the 'demersal trawl fleet', rather than specifically the 'otter trawl fleet'.

MSS note that the study area covers the ICES rectangles which the development overlaps with, but no adjacent rectangles. The document, "Assessing fisheries displacement by other licensed marine activities: good practice guidance" [1] recommends that the study area should include adjacent rectangles, if there is a risk that fishing effort may be displaced to them. MSS therefore advise that the developer widens the study area to better assess potential fisheries displacement, given the size of the proposed array area and the higher likelihood of fisheries exclusion in a floating offshore wind farm due to safety concerns over snagging fishing gear on subsea infrastructure.

MSS advise that a few additional data sources mentioned within the 'Good Practice Guidance' document^[1] could be utilised in the EIA Report:

- 1. The Marine Scotland VMS data, which provides finer scale data on *Nephrops* trawling. This may be of particular use given *Nephrops* is an important species in the proposed study area.
- 2. The MMO surveillance sightings data which could provide insight into fishing activity nearer to shore.
- 3. The AIS vessel tracks which are available via EMODnet, which may be useful alongside the EMSA vessel route density data already proposed.

Further details on these data sources can be found within the 'Good Practice Guidance' document.







MSS advise that the ScotMap dataset should not be relied upon to provide information on the commercial fisheries baseline for the inshore fleet as it is out of date. MSS recommend this dataset is used as a starting point and that consultation should be the primary source of information for the under-10m fleet.

Finally the 2021 fisheries statistics are now available and should be used for the EIA Report - https://www.gov.scot/publications/scottish-sea-fisheries-statistics-2021.

References

[1] Marine Scotland (Xodus) 2022. Assessing fisheries displacement by other licensed marine activities: good practice guidance. <u>5 Good Practice Guidance: commercial fisheries data - Assessing fisheries displacement by other licensed marine activities: good practice guidance - gov.scot (www.gov.scot)</u>

Yours sincerely,

Renewable Energy Environmental Advice group Marine Scotland Science







Scottish Fisherman's Federation

Our Ref: MM/20/03

Scottish Fishermen's Federation

24 Rubislaw Terrace

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Scotland UK

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www.sff.co.uk

Your Ref:

20 March 2023

E-mail:

Marramwind Scoping Response SCOP-0020

This response to the scoping request is presented by the Scottish Fishermen's Federation on behalf of the 450 plus fishing vessels in membership of its constituent associations, the Anglo Scottish Fishermen's Association, Fife Fishermen's Association. Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association and Shetland Fishermen's Association. The chair of the NECrIFG has also been consulted.

Before addressing the details of the paper, I would like to note that having both Onshore and Offshore in one paper was time-consuming, and was not helped by the page numbering system which was not conducive to moving about the paper with ease. However herein is our detailed response.

Starting with the Introduction, para 1.1 the project must give clarity pre-consent to the decision making process for a 50/50 Joint Venture, to ensure there are no hold ups in the communications lines with stakeholders. Then in para 1.2 we are concerned by the statement that the impacts scoped will be based on "existing evidence", will that be sufficient? Table 1.3.1 highlights the fact that there are 2 (two) separate licences, Onshore and Offshore, being applied for, but still proposes to do 1 (one) EIA to cover both, which may or may not be convenient for the project, but is inconvenient for consultees.

Moving on to Ch2, para 2.2 and P4.8 para 4.2.19, whilst the fishing industry has come to terms with the "Rochdale envelope" approach giving projects much flexibility, the same should be given to the export cable corridor. This leads on to the fact that SFF can not accept that ongoing variations of the envelope are anything to do with benefitting the fishing industry (as in 4.2.21) Unless the project can quantify this benefit, it should be ignored.

Reference at 2.3.5 to Fig 1 in appendix A, is appreciated that the length of coastline in focus is ample, and now is the time to engage with fishers on the export cable route to utilise their knowledge of the seabed. Similarly, in 2.3.7, "optioneering" would be improved by incorporating fishers knowledge of seabed composition.

Regarding the infrastructure, P2.9, if there is no confirmation of design to be used, all must be scoped in. Furthermore on P2.13 (and more) this should include scoping of the seabed footprint of moorings and any levelling or scour protection, and where they will come into the decommissioning plans. In open waters the SFF, from a safety perspective would strongly oppose the use of concrete mattresses

Table 2.3.6 on P2.15 needs to give more clarity to the export cable parameters, the number of cables is not as important as the width of the corridor they are in is the important detail, especially if not safely buried. Then on P2.21 there is nothing to say how the project will ensure the safety of fishers by checking and clearing the export cable corridor. In my considered view, on P2.22, the many projects across the North Sea that think they are going to leave buried cables in situ is totally irresponsible. The project would need to prove that the seabed involved will not be needed again to bury cables. If not we run the risk of multiple generations of cable piling on top of each other, and along with all the protective measures turning the seabed into a dystopian nightmare ecosystem which no one can use.

P2.26, Table 2.4.1, and P2.27, early engagement with the fishing industry to utilise their knowledge of the seabed and add their constraints to the cable planning process would be essential.

Table 3.5.2 on P3.14 does give sight of Scotland's National Marine Plan, but in the appendix 3A misses the opportunity to give clarity on their ambition for co-existence, social benefits, fairness and engagement in the General Policies, and in the fishing specific policies misses out on natural & cultural heritage, tourism and biodiversity.

Considering the many subsidiary plans required, para 3.7.15, table 3.8.1; P5.16 table 5.1.5; P5.4.9, table 5.4.5; P5.5.31 table 5.5.11; P5.6.22, table 5.6.10; P5.8.32, table 5.8.15; P5.5.32, table 5.5.11; P5.9.18, table 5.9.8 there is a need for clarity on the best time for these to be produced, and for the SFF the best case is getting them approved pre-consent. Post consent is too late.

P4.3, para 4.1.1, should note that previous relationships are only part of the story, this new industry must reach further in order to properly assess such as export cable corridors.

The design evolution process described on P 4.6 if genuinely adhered to will be a welcome advance. In this process the project must be mindful of the simple fact that fishers do not work 9-5, and their time ashore can be valuable, so FLO appearing at all times of day or night is not the way to gain trust.

Further on, P4.14, para 4.2.38 refers to "professional" judgement on matters of value in the EIA, but the SFF would contend that comparing the fishing industry with the renewables industry is an impossible task, apples and oranges.

The SFF finds it absurd that on P4.17, para 4.2.56, it is proposed to narrow down the scope of cumulative impact assessment to new projects within 3 months of scoping. The SFF would contend that there is ample information to develop a worst case scenario for the entire Scotwind portfolio.

P5.1.17, table 5.1.6 and P5.4.4 table 5.4.2 would be improved by noting that any item scoped out without good reason would be monitored during the development lifeline. This includes the claim that decommissioning is a lesser impact. The table needs to include Thrumming and wake effects. P5.4.6- 5.4.9 regardless of citing many reports there is insufficient evidence to describe EMF as positive or negative.

For P5.8.19, para 5.4.35, the SFF would expect the project to adhere to the guidelines for protection of spawning herring.

On P 5.9.3 it should be mentioned that MPA are not fisheries management measures per se, although in some instances it is required.

P5.9.12, table 5.9.23 and further table 5.9.36, it is not enough to quote Scotmap, it was not a scientific assessment, so should be ground-truthed with the IFG in relevant harbours. Referring to P5.9.21, table 5.9.9 it should be incumbent on the project to have dialogue with the catching sector to develop meaningful mitigation. Para 5.9.24 and para 5.9.38 and para 5.9.39 the SFF is happy to give the developer a presentation on all these matters to help them better understand fishing.

Looking at P5.9.17, para 5.9.41, it is impossible at this stage to assume burial of the cable, nor is it possible to predict the quantity of scour protection, rock berms etc will be the result of the project.

Then para 5.9.42 regarding the possibility of complete loss to fishing, cannot be glossed over, and the SFF would expect the project to address this matter preconsent! Para 5.9.45 to the SFF is good practice and legislative requirements which is not mitigation for fishers. Similarly table 5.9.8 is a communications plan, not mitigation and the SFF would re-iterate this must be addressed preconsent.

Para 5.9.48 and table 5.9.9 is setting the scene for an EIA assessment of negligible or minor impact, but the SFF again re-iterate this is likely to be grounds lost to fishing so the mitigation must be agreed pre-consent. Displacement is not as straight forward as the paper suggests. Additional transitting & steaming will have a negative effect on the industry's low carbon footprint.

And finally, referring to para 5.9.57, the SFF would insist on properly designed specific surveys of commercial fisheries, pre, post and during construction, in the area to enable a full assessment of the impacts in due course.

Regards,

Malcolm Morrison

Scottish Hydro Electric Power Distribution

Shenton A (Anna)

From: Burnett, Robin < Robin.Burnett@sse.com>

Sent: 20 March 2023 16:45 **To:** MS Marine Renewables

Cc: Gallie, Sheena

Subject: FW: SCOP-0020 - MarramWind Limited - MarramWind Offshore Windfarm - Scotwind NE7 Site -

Scoping Consultation - Response Required by 18 March 2023

Hello,

Thank you for consulting with Scottish Hydro Electric Power Distribution (SHEPD) on this proposal. This response relates only to SHEPD Subsea cables.

The proposed project is not in proximity to any SHEPD subsea assets and as such we have no further comments to make.

Best regards, Robin.

Robin Burnett

Lead Marine Consents Manager – Subsea Cables

Scottish and Southern Electricity Networks

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sse.com



Scottish Hydro Electric Transmission Network



Scottish Hydro Electric Transmission Plc. 10 Henderson Road Inverness IV1 1SN

MarramWind Limited 50 Lothian Road Festival Square Edinburgh Scotland EH3 9WJ

and

Marine Scotland – Licensing and Operations Team

By email: MS.MarineRenewables@gov.scot

28 March 2023

Dear Sir/Madam,

REF: MarramWind Offshore Wind Farm Scoping Report, Marine Licence Application (00010244) and European Protected Species Licence Application (00010197)

Thank you for the opportunity to respond to the Scoping Report, Marine Licence Application (00010244), and European Protected Species Licence Application (00010197) associated with the MarramWind Offshore Wind Farm.

Scottish Hydro Electric Transmission Plc (SHE Transmission) welcomes the inclusion of the Eastern Green Link 2 project in the MarramWind offshore windfarm Scoping Report, and confirm that the EGL2 Marine Licence Application was submitted to MS-LOT in July 2022 under application number 00009943.

We note that final decisions on export cable routes and landfall locations for the MarramWind project have not yet been made. As part of our responsibilities to deliver and maintain critical national transmission infrastructure within and connecting the North of Scotland, which is required to support Net Zero targets, SHE Transmission is currently developing additional transmission subsea cable projects that interact with the identified scoping boundary and survey areas for the MarramWind Offshore Wind Farm, associated export cables, and potential landfall locations. These projects include future HVDC connections between England and Scotland (inc. the Eastern Green Link 3 project) and a subsea HVDC connection between Spittal, in Northern Scotland, and the Peterhead area.

SHE Transmission request that present and future cables, both power and telecoms, are given due consideration and that the provision is maintained for cables to cross both export cables and the generation site, and that the freedom of the seas is maintained. SHE Transmission remains committed to working with other legitimate users of the sea in a proactive manner, enabling all parties to deliver successful projects wherever reasonably possible. We suggest that ongoing discussion and consultation between both parties is maintained, and where necessary that proximity and crossing agreements are developed.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH which are members of the SSE Group www.ssen.co.uk





I would be happy to discuss any questions or concerns in relation to the above.

Yours Sincerely,

[Redacted]

Raeanne Miller

Marine Consents and Environment Manager

Raeanne.Miller@sse.com

Aberdeenshire Council



Our Ref: ENQ/2023/0224

Your Ref:

Ask for: Elizabeth Tully Tel: 01467 533417

Email: elizabeth.tully@aberdeenshire.gov.uk

Marine Scotland Scottish Government Atlantic Quay Glasgow G2 8LU

22 March 2023

Dear Sir/Madam

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

Consultation (14 days) for Offshore Wind Farm Project at MarramWind Offshore Wind Farm, North East Scotland

Grid Reference: 436383.889677

With regards the offshore aspect of the proposed development, Aberdeenshire Council are generally only concerned with potential effects upon the intertidal zone between mean high-water springs and mean low water springs. As such, our comments on the offshore development will be limited, with Marine Scotland being best placed to consider whether the offshore elements of the scoping report are acceptable and if the proposals can be adequately managed with low risk to the marine environment.

The main potential impacts relate to ecology and archaeology.

In terms of ecology, the proposed range of ecological surveys is considered to be comprehensive and covers the features that are potentially present within the study area. The project impacts for terrestrial ecology and ornithology that have been scoped into the EIA and the proposed approach to the assessments is acceptable.

Chapter 5.11 of the Scoping Report addresses Marine Archaeology and Cultural Heritage. The content of this was considered by the Council's Archaeology Service which provided the following comment. The Service noted that Section 5.11.24 should be expanded to include the Late Upper Palaeolithic period and not just the Mesolithic, given we now have identified lithic artefacts dating to this time occurring on land, including examples from just outside Peterhead. The Service also noted the intention to scope out Unexploded Ordnance (UXO). The Service was satisfied with this approach subject to the embedded measures being adopted and the application of a UXO Management Plan as noted at Section 5.13.49 of the Scoping Report.



The Archaeology Service also noted agreement with the basis for the scoping assessment and embedded environmental measures and welcomes the recognition that NPF4 introduces new requirements which will be taken into account of in the EIA and associated consenting documents. The Service agrees with the impacts which have been scoped out of the assessment.

Aside from ecology and archaeology, it should be noted there are a number of core paths and rights of way within the search area, including the coastal path, with beaches also used for walking and horse riding. Recreational access has been acknowledged within the traffic and transport chapter of the scoping report and will be considered within the EIA.

It is noted within the scoping report that the intertidal zone will be considered throughout all aspects of the environmental assessment subject to the matters which are noted for scoping out. This approach is welcomed, and the Planning Service has no objection to any of the matters noted for scoping out.

In conclusion, having assessed the offshore section of the Scoping Report and having received comment from the abovementioned consultees, who will also be formally consulted on the EIA, the Planning Service is content with the approach taken and the scope of the assessment, the environmental issues identified, and the methodology proposed.

Yours faithfully

[Redacted]

Paul Macari Head of Planning and Economy

Food Standards Scotland



T: 01224-285161 E: Krystle.boss@fss.scot

Our ref – MSA_SCOP-2023-001 Your ref – **SCOP-0020**

Marine Scotland 1A South Victoria Quay Edinburgh EH6 6QQ

15 March 2023 by email

FAO: Anna Shenton

Dear Anna,

SCOP-0020 - MarramWind Offshore Wind Farm Limited – MarramWind Offshore Wind Farm – Scotwind NE7 ACTIVITY: Wind Farm

I refer to the above application for a Marine Licence under the MARINE (SCOTLAND) ACT 2010

In our role as a consultee, Food Standards Scotland's assessment of the application is limited to potential risks to the safety of the human food chain that could result from the environmental impact of emissions from the installation to the surrounding area.

FSS notes that there is no food product production being proposed at this time but it is the responsibility of the operator to ensure that any product destined for the human food chain from the operation meets with the requirements of the Food Safety Act 1990. Furthermore it is the responsibility of the operator to comply with environmental legislation to mitigate the impact on species/fisheries products present.

FSS notes that the relevant Marine Scotland Guidance and all other relevant Guidance Notes and Regulations should be followed in order to mitigate any unacceptable effects on the human food chain from the emissions from this installation.

Yours sincerely [Redacted]

Miss Krystle Boss Scientific Adviser/PPC Assessment Officer



RSPB Scotland

Shenton A (Anna)

From: planning, scotland <scotland.planning@rspb.org.uk>

04 April 2023 15:43 Sent: To: MS Marine Renewables

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited - MarramWind Offshore Windfarm -

Scotwind NE7 Site - Scoping Consultation - Nil Return

Dear Anna,

I'm sorry for not getting back to you on this. Unfortunately our capacity was stretched and we did not manage to respond to this. I have provided some very brief comments below just in case it is not too late.

RSPB encourage the adoption of a precautionary approach to the identification of relevant protected sites for seabirds with clear methodology on the exclusion of sites and species.

We agree with the avoidance rates recommended by the Statutory Nature Conservation Bodies with the exception of breeding gannets where a 98% avoidance rate is more appropriate. This is because the figures used for the calculation of avoidance rates advocated by the SNCBs are largely derived from the non-breeding season for gannet (see Cook et al 2014 and 2018) and there is evidence that the foraging movements and behaviour of gannets will vary in relation to stage of the breeding season (see Lane et al 2020) and between the breeding and non-breeding season (see Cook et al 2018).

We advise the two-ratio metrics generally termed 'Counterfactual of population size' (CPS) and 'Counterfactual of population growth-rate' (CPGR) are presented. The CPS is especially important to aid understanding of impacts for a non-specialist whereas the numbers given by the CPGR are less understandable beyond a population modelling context. We suggest for each impacted SPA, a summary section is included which includes the ratio of impacted to unimpacted population growth rate and puts this into context of the lifetime of the windfarm (e.g. This means that after the x-year lifetime of the Offshore Wind Farm, the population size of the SPA is expected to be between min% and max% of what it would have been in the absence of the development)

It is inevitable that the Environmental Statement and RIAA will be complex and contain data, specialist models, and detailed analysis. Nevertheless, we welcome this being set out in a clearly logical way so the process, if not the details of the process, can be followed by the lay-person (and decision-maker) and easily scrutinised by technical

details of the process, can be followed by the lay person (and decision maker) and easily scrattinised by teermical
experts. Applicants can (and do) provide impact assessment information based on parameters and methods other
than those specified in the scoping opinion. We encourage this to be referred to as 'the developer approach' to
avoid confusion with impact assessed using the recommended parameters and methods,
Best wishes,

Catherine

Peterhead Fishery Office

Shenton A (Anna)

From: FO Peterhead
Sent: 30 March 2023 12:16
To: MS Marine Renewables

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore Windfarm –

Scotwind NE7 Site - Scoping Consultation - Nil Return

Good afternoon Anna, Please see the response below. Thanks, Billy

I had a quick look and can only say that the mara wind farm will have an effect on Prawn vessels and vessels sometimes fishing for haddock

From: MS Marine Renewables < MS.MarineRenewables@gov.scot>

Sent: 29 March 2023 13:05

To: FO Peterhead <FO.Peterhead@gov.scot>

Cc: Paterson CE (Craig) <Craig.Paterson@gov.scot>; Mcginn T (Toni-Marie) <Toni-marie.Mcginn@gov.scot>; MS Marine Renewables <MS.MarineRenewables@gov.scot>

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore Windfarm – Scotwind

NE7 Site - Scoping Consultation - Nil Return

Good Afternoon Billy,

I wondered if you had an update on when you expect to hear back from the skipper, and therefore when MS-LOT should expect a response by?

Many thanks, Anna

Anna Shenton (She/Her)
Marine Licensing and Consenting Casework Officer
Marine Scotland - Marine Planning & Policy

Scottish Government | Atlantic Quay | Glasgow | G2 8LU

Email: anna.shenton@gov.scot

Phone:

From: FO Peterhead < FO.Peterhead@gov.scot >

Sent: 21 March 2023 15:54

To: MS Marine Renewables < <u>MS.MarineRenewables@gov.scot</u>>

Cc: Paterson CE (Craig) < Craig.Paterson@gov.scot>

Subject: RE: SCOP-0020 - MarramWind Offshore Windfarm Limited – MarramWind Offshore Windfarm – Scotwind

NE7 Site - Scoping Consultation - Nil Return

Good afternoon Anna,

We're still waiting for a response from a skipper, so will get back to you soon.

Thanks, Billy

William A. Harris

Senior Fishery Officer

Marine Scotland - Compliance













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To see how we use your personal data, please view our privacy notice at https://www.gov.scot/Topics/marine/Compliance/Privacy

Salamander Offshore Windfarm

Simply Blue Energy (Scotland) Ltd.



E: salamanderwind@simplyblueenergy.com

W: https://salamanderfloatingwind.com/

3 April 2023

Response to the Marram Wind Offshore Wind Farm Scoping Report

To whom it may concern,

Salamander Offshore Wind Farm wishes to respond to the Marram Wind Offshore Wind Farm Scoping Report.

Salamander Offshore Wind Farm is being developed by Simply Blue Energy (Scotland) Limited (SBES), a joint venture partnership between Ørsted, Simply Blue Group and Subsea7.

Ørsted develops, constructs, and operates offshore and onshore wind farms, solar farms, energy storage facilities, and bioenergy plants, and provides energy products to its customers. Globally, Ørsted is the market leader in offshore wind and owns and operates the world's biggest offshore wind farms off the East Coast of the UK and thus we value the opportunity to participate in this consultation process.

Simply Blue Group is a leading blue economy developer focused on enabling a range of marine renewable energies. It develops pioneering blue economy projects – floating offshore wind, e-Fuels, wave energy, and low-impact aquaculture – all in harmony with the oceans.

Subsea7 is a global leader in the delivery of offshore projects and services for the evolving energy industry. Subsea7 creates sustainable value by being the industry's partner and employer of choice in delivering the efficient offshore solutions the world needs.

We would like to take this opportunity to clarify the stage of the Salamander Offshore Wind Farm:

- Salamander Offshore Wind Farm is being developed under the innovation track of the INTOG leasing round and submitted its EIA Scoping and HRA Screening Reports in February 2023;
- The Offshore Array Area for Salamander Offshore Wind Farm is approximately 35 km off the coast of Peterhead;
- The Offshore Export Cable is proposed to make landfall north of Peterhead, near Lunderton and Kirkton;
 and
- The Onshore Export Cable Corridor and other onshore infrastructure will be located north of Peterhead, close to the Export Cable landfall.

We note the Marram Wind Offshore Wind Farm project description, including the design envelope, is still in development but will be fully detailed in the Environmental Impact Assessment (EIA) Report, and will include indicative maximum project parameters, taking into account consultee feedback provided within the Scoping Opinion.

The Marram Wind Offshore Wind Farm has a Scoping Boundary which directly overlaps with the Scoping Boundary (both offshore and onshore) of the Salamander Offshore Wind Farm. We understand that the Marram Wind export cable routes under consideration would require crossing(s) of our export cables (either Marram crossing Salamander or vice versa depending on construction timelines). Therefore, there is the potential for our respective projects to interact and for both developments to have cumulative environmental effects on other receptors. We would therefore expect any EIA in respect of your proposals

Simply Blue Energy (Scotland) Ltd.



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to fully consider the potential effects on, and potential cumulative effects with, our Salamander Offshore Wind Farm.

Salamander Offshore Wind Farm is working with Marram Wind through the Peterhead Developers Forum, including regarding offshore survey planning to minimise disruption to other sea users and wishes to engage in any discussions and be kept informed of your proposals so that the two projects may consider each other cumulatively through the development process.

We are very pleased to have had the opportunity to input into your Scoping exercise at this stage and look forward to ongoing engagement in the future.

Yours sincerely,

Jennifer Brack Consents Manager, Salamander Offshore Wind Farm

Cc'd:

Marine Scotland – Licensing Operations Team [Email only] Aberdeenshire Council [Email only] Marram Wind [Email only]