Aberdeen International Airport

Aberdeen International Airport Limited
Dyce, Aberdeen
AB21 7DU
Scotland

T: +44 (0)870 040 0006
W: aberdeenairport.com

FAO Christine McGhie
Marine Directorate

Via Email

ABZ Ref: ABZ3392

27th April 2026

Dear Christine

Ref: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm

I write in relation to the above application.

The proposed development has been examined from an aerodrome safeguarding perspective and does not conflict with safeguarding criteria. We, therefore, have no objection to this proposal.

Yours Sincerely

[redacted]

Kirsteen MacDonald

Safeguarding Manager
Aberdeen Airport
[redacted]
abzsafeguard@aiairport.com

British Telecom

From:	radionetworkprotection@bt.com
To:	MD Marine Renewables
Cc:	[Redacted] radionetworkprotection@bt.com
Subject:	WID14301 - MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response Required by 6 June 2026
Date:	17 April 2026 14:49:38
Attachments:	image003.png RE WID13403 - SCOP-0043 - Bellrock Offshore Wind Farm Limited Bellrock Offshore Wind Farm Scotwind E1E Site - Scoping Consultation - Response Required by 08 May 2024 - End of Consultation.msg

General

BT Group

OUR REF: WID14301 & PREV WID13403

Thank you for your email.

We have studied this proposal with respect to EMC and related problems to BT point-to-point microwave radio links. As there appears to be no changes from the proposed location on the original attached, the conclusion is the project indicated should not cause interference to BT's current and presently planned radio network. If there are any changes, we have missed please confirm and we will reassess for you.

BT requires 100m minimum clearance from any structure at height to the radio link path. It should be noted that this decision is for the date of its issue, includes no micro-siting, as the use of the spectrum is dynamic and can change on an ongoing basis. Therefore, please reconsult us if there are any changes during the planning process with heights and locations of any structures, and its finalisation, as we may have new links assigned by Ofcom over its duration.

Please note this refers to BT Radio Links only, you will need to contact other providers separately for information relating to other supplier links / equipment.

Please direct all queries to radionetworkprotection@bt.com

Kind Regards

Lisa Smith
National Radio Planner
Radio & Satellite Platforms

BT Group

General

From: MD.MarineRenewables@gov.scot <MD.MarineRenewables@gov.scot>
Sent: 16 April 2026 15:49
To: MD.MarineRenewables@gov.scot
Cc: [Redacted]
Subject: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response Required by 6 June 2026

Dear Sir/Madam,

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

MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm - 120km East of Stonehaven

On 2 April 2026, Bellrock Offshore Wind Farm Limited submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate the Bellrock Offshore Wind Farm.

The application for section 36 consent, marine licence application, Environmental Impact Assessment Report and supporting documentation can be accessed via the following links:

Section 36 Consent - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven | marine.gov.scot

Marine Licence Application - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven - 00011977 | marine.gov.scot

Please forward your comments on these proposals via electronic communication to MD.MarineRenewables@gov.scot by **6 June 2026**. If you are unable to meet

this deadline, please contact the Marine Directorate – Licensing Operations Team on receipt of this e-mail.

Kind regards,

Christine McGhie
Marine Licensing and Consenting Casework Officer, Licensing Operations Team, Marine Directorate
Scottish Government | Marine Laboratory | Aberdeen | AB11 9DB
Email: [Redacted]
General Email: MD.marinerenewables@gov.scot

The Scottish Government

To see how we use your personal data, please view our
Marine licensing and consenting: privacy notice - gov.scot (www.gov.scot)

DEE DISTRICT SALMON FISHERY BOARD

Dee District Salmon Fishery Board

Marine Directorate
Marine Licensing and Consenting
Scottish Government
Marine Laboratory
Aberdeen
AB11 9DB

By email to MD.MarineRenewables@gov.scot
28th May 2026

Dear MD Team,

Bellrock Offshore Wind Farm Ltd – EIA Section 36 consent and Marine Licence Applications – Consultation Response Request.

On behalf of the Dee District Salmon Fishery Board (Dee DSFB) we welcome the opportunity to respond to the Bellrock Offshore Wind Farm Limited - EIA Section 36 consent and Marine Licence Application Consultation Request.

Designations & Conservation Status - Atlantic Salmon

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 International Union for Conservation of Nature's (IUCN) latest Red List of Threatened Species (December 2023) reclassified Atlantic salmon from 'Least Concern' to 'Endangered' in Great Britain because of a 30-50% decline in British populations since 2006 and 50-80% projected between 2010-2025. The Scottish Government has released a Scottish Wild Salmon Strategy which calls on government agencies, as well as the private sector, to prioritise the protection and recovery of Scotland's wild Atlantic salmon populations.

Salmon and many other key species of diadromous fish have also been identified as Priority Marine Features and UKBAP Priority Species.

Designations & Conservation Status - Other Species

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.

Comments

The Dee DSFB welcomes the opportunity to respond to the EIA. In general we find it difficult to comment on the approaches and findings outlined in the EIA in relation to Atlantic salmon due to lack of robust scientific research, a key requirement to fully understand potential interactions.

We would request that where evidence of negative impact on a protected species is inconclusive and impacts of development are uncertain, reasonable efforts should be made to fill evidence gaps and decision makers should apply precaution within an overall risk-based approach. The following comments are provided, and we would also draw attention to Fishery Management Scotland's response to the 'Offshore Wind Policy Statement: Scotland's Offshore Wind Ambition" and highlight our previous comments from November 2025 in respect of the Bellrock Offshore Wind Farm Limited – Virtual Consultation.

1. For diadromous fish, there is a lack of current information on their use of the marine environment, and an apparent lack of ambition and resource to study and understand the potential impacts of developments on diadromous fish.

2. We remain keen to work constructively with the developers, Marine Directorate and NatureScot to identify appropriate monitoring and research programmes which will allow us to be able to assess the acknowledged risks of proposed marine developments in a more appropriate manner. There is a clear and urgent need to fund, plan and start strategic research on the movement, abundance, swimming depth, feeding behaviour and impact pathways relevant to diadromous fish. Such research would clearly feed into the potential mitigation measures that might be deemed appropriate, and the conditions under which such mitigation should be enacted. Given the scale of development in the North Sea, developers should be required to work together to fund strategic monitoring, to allow more certainty for all involved.

   The scale of proposed offshore developments and other technical approaches to marine renewables development represents a step-change in the exposure of marine animals of high cultural and economic significance to attendant risks. As highlighted above, understanding of many of these risks is insufficient to support proposals for mitigation even at the stage when substantial developments are being submitted for licensing. The cumulative impact of such proposals, alongside those developments already submitted or likely to follow in the near future is potentially even greater. We believe that more needs to be done to ensure that the best

scientific talent is made available to find practicable ways to address the unresolved uncertainties.

3. We would request that the developer contributes to monitoring which could address evidence gaps identified the ScotMER Fish Specialist Receptor Group evidence map. With reference to DF.01-2022: Spatial and Temporal Distribution, DF.02-2022: Survival and progression rates in relation to passing through marine renewable areas, DF.03-2022 Influence on migratory patterns due to cable deployment (EMF), DF.04-2022: Effects on diadromous fish behaviour including fish aggregations around devices (ecological traps) and DF.05-2022: Impacts of noise, including particle motion and direct impact high intensity sound from pile driving and detonation of unexploded ordnance. Potentially causing both direct physical impact and displacement e.g. less foraging more predation.

4. A more widespread body of scientific research and its effective incorporation into environmental decision-making is required to achieve the dual objectives of marine development and ensuring that human impact on the marine environment is managed to protect and enhance important marine ecosystems and species. The Dee DSFB would recommend that further robust scientific research into salmonid migration and potential stressors within the marine environment is undertaken to protect this species, which is ecologically, culturally and economically important to Scotland.

5. Atlantic salmon are an iconic species and now endangered, they are ecologically, culturally and economically important to Scotland. We would request that large scale Marine Developments should financially support the protection and recovery of this species in both it's marine and freshwater phases by contributing to a collective fund for nature recovery.

If you require any further information, please do not hesitate to contact me.

Yours sincerely

Edwin third

River Operations Manager, Dee District Salmon Fishery Board

DEPARTMENT OF AGRICULTURE, ENVIRONMENT AND RURAL AFFAIRS

MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Marine and Fisheries Division Response

Marine Conservation Response

Marine Conservation Branch is content that the updated 2026 RIAA for Ornithology has appropriately considered relevant NI SPAs with large foraging ranges. We would highlight that Manx Shearwater, although not a qualifying feature, has recently been confirmed at Rathlin Island, however, this will not change the outcome of the RIAA.

Sea Fisheries Response

Sea Fisheries Inspectorate have considered the scoping report and are content that commercial fisheries are included. We note that Scottish Fishermen's Federation (SFF), Local Fishers and Marine Directorate Licensing Operations have been consulted and are content that any concerns with this proposal will accordingly have been raised.

Marine Licensing Response

Marine Licensing Branch have no comment to make at this stage. As the Regulatory Authority we will only comment on individual projects and on a case-by-case basis.

EDINBURGH AIRPORT

From: Safe Guarding
To: MD Marine Renewables
Cc: Safe Guarding
Subject: MD-00011977 - Bellrock Offshore Wind Farm Limited
Date: 14 May 2026 16:12:23
Attachments: image001.png

Good afternoon,

In respect of the above, I can confirm the location of this development falls out with our Aerodrome Safeguarding zone for Edinburgh Airport therefore we have no objection/comment.

With best regards,
Claire

Claire Brown
Aerodrome Safeguarding & Compliance Officer

Edinburgh Airport
Where Scotland meets the world

Our values

[redacted]
My working hours are Monday-Friday
www.edinburghairport.com

Edinburgh Airport Limited
2nd Floor Terminal Building
EH12 9DN, Scotland

FLOTATION ENERGY

c/o CENOS & GREEN VOLT OFFSHORE WIND FARMS

By email

05 June 2026

Our reference: CEN001-FLO-CON-CAG-LET-0013
GRE001-GVP-CON-CAG-LET-0004

Dear Sir / Madam

ELECTRICITY ACT 1989

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

The Electricity (Applications for Consent) Regulations 1990

MARINE (SCOTLAND) ACT 2010

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

MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007

Marine Directorate Case Reference 00011977 - Bellrock Offshore Wind Farm – 120 kilometres east of Stonehaven, Scotland.

Thank you for the opportunity for Green Volt Offshore Windfarm Ltd (Green Volt) and Cenos Offshore Windfarm Ltd (Cenos) to comment on the Section 36 consent, Marine Licence applications, Environmental Impact Assessment Report (EIAR) and supporting documentation for Bellrock Offshore Windfarm Development Area (Bellrock), submitted to the Scottish Ministers on 2 April 2026. Bellrock will be located in the North Sea, approximately 120 kilometres (km) east of Stonehaven on the Aberdeenshire coast in Scotland.

As Green Volt and Cenos are both floating windfarms located in the Central North Sea being developed under the Joint Venture formed by Flotation Energy Ltd (Flotation Energy) and Vårgrønn AS (Vårgrønn), a joint response has been prepared. Flotation Energy, headquartered in Edinburgh, Scotland, sits at the heart of the energy transition. It's determined to support the big switch to sustainable, clean and affordable energy through the application of innovative offshore wind technology. Founded in 2018, the company is pioneering the deployment of floating offshore wind in Scotland, the UK and internationally. Vårgrønn is an agile, Norway-based offshore wind company dedicated to powering the energy transition through the development, construction, operation, and ownership of offshore wind projects and related infrastructure. Vårgrønn is a joint venture between Plenitude, an Eni-controlled company, and Norwegian energy entrepreneur and investor HitecVision.

Green Volt was granted consent (Section 36 and Marine Licences) by the Scottish Ministers on 19 April 2024, together with planning permission by Aberdeenshire Council for onshore activities on 21 March 2024. Green Volt is located approximately 107 km from the Bellrock Wind Farm Development Area.

Cenos submitted its Scoping Report for offshore activities in April 2024 and its HRA Screening Report in May 2024 and received a Scoping Opinion from Scottish Ministers on 10 September 2024. The Cenos EIAR was submitted to Scottish Ministers in January 2025 and consultation on our application closed in June 2025. The

Project is awaiting determination at the time of writing. Cenos is located approximately 61 km from the Bellrock Wind Farm Development Area.

Green Volt and Cenos are broadly supportive of the continued development of floating offshore wind projects within Scottish waters and recognise the important contribution that projects such as Bellrock can make towards the delivery of Scotland's renewable energy and net zero ambitions.

Having reviewed the Environmental Impact Assessment and supporting documentation submitted for the Wind Farm Development Area, Green Volt and Cenos have no objection to the proposed development and no specific concerns regarding the conclusions of the assessments presented.

We note that the current application relates to the Wind Farm Development Area only, with offshore and onshore transmission infrastructure to be progressed through separate consent applications. As such, Green Volt and Cenos consider that there is limited scope at this stage to comment on potential interactions associated with future transmission infrastructure, export cable routes, landfall arrangements and grid connection works.

Green Volt and Cenos welcome the Applicant's commitment to ongoing stakeholder engagement and encourage continued collaboration with offshore wind developers operating within the region. We would welcome continued engagement as the Offshore Transmission Development Area and Onshore Transmission Development Area proposals are developed, including in relation to:

- cumulative and in-combination effects assessments;
- construction and installation programming;
- offshore vessel activity and logistics;
- commercial fisheries interactions; and
- offshore environmental receptors where regional-scale considerations may be relevant.

Overall, Green Volt and Cenos have no objection to the Bellrock Offshore Wind Farm proposals presented within the applications and support the continued progression of offshore renewable energy developments within Scottish waters.

Yours faithfully

[redacted]

Adam Payne

For and on behalf of Green Volt Offshore Windfarm Ltd and Cenos Offshore Windfarm Ltd

Head of Consents, Flotation Energy
[Redacted]

HISTORIC ENVIRONMENT SCOTLAND

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

By email: MD.MarineRenewables.gov.scot

Marine Directorate
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131 668 8716
HMConsultations@hes.scot

Our case ID: 300072479
Your ref: MD-00011977
22 April 2026

Dear Marine Directorate

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, The Marine Works (Environmental Impact Assessment) Regulations 2007 – Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – 120km East of Stonehaven

Thank you for consulting us on this Environmental Impact Assessment (EIA) Report and Marine Licence application. We received the consultation on 16 April 2026. We have reviewed the report and considered the proposed development in terms of our historic environment interests. This covers cultural 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.

Your archaeological and cultural heritage advisors and the relevant local authority will also be able to offer advice on impacts on the historic environment. This may include topics covered by our advice-giving role, and also other topics such as unscheduled archaeology, category B and C listed buildings, and conservation areas.

Our advice

We are content that the EIA report provides sufficient information to come to a view on the application. We **do not object** to the application and believe that the proposed development can be accommodated in this location without raising impacts on assets in our remit which may raise issues of national interest.

We note that the applicant has included a Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD). We welcome the commitments set out within the documentation. This mitigation aligns to the original comments provided in our response at scoping stage dated 8 May 2024. We have no further comments to add.

Our comments are provided as a material consideration, and this advice should be taken into account in your decision making. Our decision not to object should not be taken as

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

Further information

Decisions that affect the historic environment should take the Historic Environment Policy for Scotland (HEPS) into account as a material consideration. HEPS is supported by our Managing Change guidance series.

We hope this is helpful. If you would like to submit more information about this or any other proposed development to us for comment, please send it to our consultations mailbox, hmconsultations@hes.scot. If you have questions about this response, please contact Kevin Mooney at [Redacted]

Yours sincerely

Historic Environment Scotland

Joint Radio Company

From:	Joint Radio Company
To:	MD Marine Renewables
Cc:	[Redacted]
Subject:	Re: Bellrock Offshore WF, MD-00011977
Date:	07 May 2026 17:36:37

If any details of this proposal change, particularly the position or scale of any structures (including turbine(s)), this clearance will be void and re-evaluation of the proposal will be necessary.

Dear Sir/Madam,

Our previous response to clear the offshore turbine array of the windfarm on 14/05/2024 remains valid with the latest consultation information. However, we will update our clearance below to include the latest design parameters. However, this clearance does not include the onshore components of the proposed development and we will provide further comments on the onshore part of the development when we are consulted on that separate planning application.

Planning Ref: MD-00011977

Name/Location: Bellrock Offshore wind farm

Turbine Array Area (NGR boundary and centre):

Point	Easting (m)	Northing (m)
1	672596	631003
2	702616	630883
3	702766	630244
4	689101	630289
5	681556	629611
6	673269	629648
Centre	680797	630413

Hub Height: Up to 185m **Rotor Radius**: Up to 150m

This **offshore component** of the proposal is **cleared within the Array area-** with respect to radio link infrastructure operated by the local energy networks.

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

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

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

It should be noted that this clearance pertains only to the date of its issue. As the use of the

spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, developers are advised to seek re-coordination prior to considering any design changes.

Regards

Wind Farm Team

Friars House
Manor House Drive
Coventry CV1 2TE
United Kingdom

Office: 02476 932 185

JOINT NATURE CONSERVATION COMMITTEE

From:	JNCC Offshore Industries Advice
To:	MD Marine Renewables
Cc:	[Redacted] JNCC Offshore Industries Advice
Subject:	RE: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response Required by 6 June 2026
Date:	21 April 2026 14:27:15
Attachments:	image002.png image003.png

Good Afternoon,

Thank you for contacting JNCC regarding the Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application, which we received on 16/04/26.

JNCC's role in relation to offshore renewables in Scottish waters has been delegated to NatureScot.
NatureScot is now authorised to exercise the JNCC's functions as a statutory consultee in respect of certain applications for offshore renewable energy installations in inshore and offshore waters (0-200nm) adjacent to Scotland.

We have engaged with NatureScot and they have confirmed this application is only for the Array and not the cable corridor, and as the Array area is not near an MPA NatureScot will provide a response to this application under the delegation.
As such JNCC will not be providing further comment.

Kind regards,

Jon Connon
Offshore Industries Advice Officer
Marine Management Team
JNCC, Inverdee House, Baxter Street, Aberdeen, AB11 9QA
[redacted]
Working pattern: Monday to Friday
Website **Twitter** **Facebook** **LinkedIn**
Sign up to the JNCC Nature News monthly enewsletter

-

From: MD.MarineRenewables@gov.scot <MD.MarineRenewables@gov.scot>
Sent: 16 April 2026 15:49
To: MD.MarineRenewables@gov.scot
Cc: [Redacted]
Subject: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response Required by 6 June 2026

Dear Sir/Madam,

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

MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm - 120km East of Stonehaven

On 2 April 2026, Bellrock Offshore Wind Farm Limited submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate the Bellrock Offshore Wind Farm.

The application for section 36 consent, marine licence application, Environmental Impact Assessment Report and supporting documentation can be accessed via the following links:

Section 36 Consent - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven | marine.gov.scot

Marine Licence Application - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven - 00011977 | marine.gov.scot

Please forward your comments on these proposals via electronic communication to MD.MarineRenewables@gov.scot by **6 June 2026**. If you are unable to meet this deadline, please contact the Marine Directorate – Licensing Operations Team on receipt of this e-mail.

Kind regards,

Christine McGhie
Marine Licensing and Consenting Casework Officer, Licensing Operations Team, Marine Directorate
Scottish Government | Marine Laboratory | Aberdeen | AB11 9DB
Email: [Redacted]
General Email: MD.marinerenewables@gov.scot

The Scottish Government

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In the service of Scotland
Integrity Inclusivity Innovation Collaboration Kindness

MARINE ANALYTICAL UNIT

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Bellrock Offshore Wind Farm

Marine Analytical Unit ("MAU") Response
Marine Directorate

A section 36 consent, marine licence application, Environmental Impact Assessment ("EIA") report and supporting documentation has been provided by Bellrock Offshore Wind Farm Limited. The EIA report includes a description of a range of potential impacts, of which this response focuses only on the assessment of social and economic impacts.

Methodology

Socioeconomic impacts have been considered at two broad study areas to capture wider supply chain and labour market effects. These are:

- Scotland; and
- The UK.

Additionally, the applicant has also assessed impacts at a local level. As the port locations for construction, and operation and maintenance (O&M) are not yet known, a number of potential port locations have been presented alongside their local study areas. The local study areas are defined as the electoral ward or local authority area where the port is located. Eleven ports and corresponding study areas have been considered for the construction phase and nine for the O&M phase. Impacts have not been considered at the local study area for the decommissioning phase. The MAU suggests that the decommissioning impacts should also be considered at the local study area or reasoning as to why it has not should be included. Similarly, when assessing the cumulative effects, the MAU suggest that these should be assessed at the local level or reasoning as to why they cannot should be included. The applicant does provide some reasoning for the omission of cumulative impacts at the local level, highlighting the unknown location of the port for assembly and integration. However, this would not prevent the applicant undertaking scenario analysis as was done previously in the assessment.

The assessment combines the anticipated magnitude and sensitivity of an effect to identify the significance of the effect. A major or moderate effect is considered to be significant in EIA terms. Professional judgement has also been used, where appropriate, to determine significance.

The criteria used to determine the magnitude or significance of an impact differs depending on what is being assessed. For economic impacts, sensitivity considers how well the economy can absorb change without altering its present character or value. For magnitude, an impact is considered high at the UK, Scotland or local level if peak annual Gross Value Added (GVA) or employment change is greater than, or equal to 1% and negligible if it is less than 0.25%. Given that the average rate of Gross Domestic Product (GDP) per capita growth in the UK was 1% per annum between 2002 and 2024, and the number of jobs increased by 1% per annum

between 2000 and 2023, this criterion seems high. Similarly, a social impact is only considered to have a high magnitude if the change in residual population was equivalent to 100% or more of the projected annual growth.

A realistic worst-case scenario has been used to assess the magnitude and significance of the potential effects. These are derived from the project design envelope to ensure that all other design scenarios would have equal or less impact.

Assessment of impacts

The assessment uses the "source-pathway-receptor" model to identify potential socio-economic impacts resulting from the project.

The assessment considers the following impacts during construction, O&M, and decommissioning:

- Increase in employment and GVA
- Demographic changes
- Changes to housing demand
- Changes to other local public and private services
- Socio-cultural effects
- Changes to tourism and recreation receptors

Cumulative, inter-related and interactions between impacts have also been considered. Transboundary impacts have been scoped out.

Impacts

The assessment anticipates a major (significant) beneficial impact in terms of employment and GVA at the local level during the construction and O&M phases. It is unclear as to why these impacts have not been considered at the local level during the decommissioning phase. During O&M, the applicant mentions that the eventual port location could secure contracts and activities worth £10 million in revenue annually. There is limited information on how this figure has been estimated.

The assessment anticipates a range of significance based on the study area during the construction phase. The impacts on demographic changes; housing demand; local and private services; and socio-cultural impacts range from non-significance to major significance depending on port location. A full breakdown can be found in Table 16.36;16.38;16.40;16.42 respectively. Impacts on tourism and recreation were predicted to be non-significant.

The assessment anticipates a range of significance based on the study area during the operation and maintenance phase. The impacts on demographic changes; housing demand; local and private services; and socio-cultural impacts range from non-significance to major significance depending on port location. A full breakdown can be found in Table 16.52 for demographic changes and Table 16.55 for local and private services. Breakdowns were not provided by location for housing demand and socio-cultural impacts. Impacts on tourism and recreation were predicted to be non-significant.

The impacts of decommissioning were predicted to be similar to those during construction, with the exception of demographic changes, which were considered to be too far in the future to accurately predict.

The assessment also considers the impacts of changes in commercial fisheries, and shipping and navigation on employment and GVA, as a result of any significant impacts anticipated in their corresponding chapters in the EIA. The employment and GVA impacts are anticipated to be negligible and not significant during all phases of the project. Paragraph 160 assumes a 75% displacement rate but with limited evidence of how this number has been calculated. The logic then follows that turnover would reduce by 25%. It does not appear that additional costs associated with displacement have been considered. The MAU recommends that more information be provided on the methodology.

With regards to interactions between impacts, no impact greater than for each individually assessed impact for each phase has been anticipated.

With regards to cumulative effects, no significant impacts have been anticipated for employment and GVA during the construction and O&M phases. However, this may be because the impacts were not considered at the local study area.

With regards to cumulative effects, no impact greater than for the project alone has been anticipated for the economic impacts. Similarly, no additional impacts are anticipated when assessing the overall impact of the offshore project and the onshore transmission works project. The combined effects across the project lifetime are not assessed to be of greater significance than is reported in each phase.

For social impacts, the lack of port information has prevented the applicant from being able to assess the significance of any cumulative effects. The social impacts have not been assessed for the overall Bellrock project.

A number of mitigation and enhancement measures have been outlined within the socio-economic impact assessment. However, applicants should endeavour to include affected communities in decision-making, in line with the MAU's advice on best practice.

Consultation and engagement

The applicant details the pre-application consultation that took place. This states that a range of engagement methods were used to ensure opportunities for accessible and constructive dialogue. This includes:

- In-person and virtual public consultation events;
- Sector-specific events;
- Targeted meetings and workshops;
- Project update letters;
- Science, technology, engineering and mathematics (STEM) and community initiatives;
- Digital channels; and
- Supply chain engagement.

The stakeholder groups that were involved included:

- Local communities, representative groups, Councils, and elected representatives;
- Sector specific stakeholders, such as commercial fisheries stakeholders;
- Education providers focusing on skills and STEM; and
- Local and regional supply chain organisations.

Specific to the socio-economic impacts, the applicant mentions that consultation has taken place to date. This is primarily related to the scoping report. The applicant notes that they plan to develop a "*Stakeholder Engagement Plan, which will set out ongoing communication with local authorities, community councils, and other relevant stakeholders throughout the project lifecycle".* However, the MAU cannot comment on consultation exercises that take place post consent. As such the MAU recommends that local communities and stakeholders are consulted sufficiently at all stages of the development and application.

Summary

An assessment of socio-economic impacts has been conducted by the applicant. The MAU believes that the assessment would be improved if all impacts were assessed at the local level. It also would also benefit from more information on the methodology for assessing the wider economic impacts on commercial fisheries. In terms of consultation and engagement, the MAU recommends engaging with communities and stakeholders as part of the project.

MARINE DIRECTORATE –

SCIENCE, EVIDENCE, DATA & DIGITAL

E: MD-SEDD-RE_Advice@gov.scot

CHRISTINE MCGHIE
MARINE LICENSING AND CONSENTING CASEWORK OFFICER
LICENSING OPERATIONS TEAM
MARINE DIRECTORATE
SCOTTISH GOVERNMENT

22/06/2026

RE: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm - 120km East of Stonehaven – EIA Section 36 consent and Marine Licence Application

Advisors from the SEDD Marine Renewables & Ecology Team have reviewed the above request and provide the following advice.

Commercial fisheries Advice

A moderate adverse (significant in EIA terms) effect was found during all phases of the development for the demersal otter trawl receptor targeting Nephrops in relation to the impact pathway “Reduction in Access to, or Exclusion from Established Fishing Grounds within the WFDA”. MD-SEDD note that no additional mitigation has been proposed to reduce the significant effect, but that the significant effect is viewed as a precautionary outcome. The assessment suggests than in reality the effect is anticipated to be lower and not significant due to the commitment to “ongoing engagement with affected fishers and implementation of fisheries liaison, monitoring measures, and ongoing review of the construction programme, vessel movements, and working practices”. MD-SEDD agree however that for the purpose of this assessment the effect should remain significant in EIA terms as the applicant has stated the details of these measures cannot yet be confirmed.

Cumulative effects

MD-SEDD note that a moderate adverse (significant) cumulative effect was found for the reduction in access to grounds for the demersal otter trawl receptor targeting Nephrops. MD-SEDD support the commitment by the applicant to participate in regional scale monitoring initiatives through a Regional Commercial Fisheries Working Group to help address the limited data on cumulative effects to the fishing industry. MD-SEDD advise that the above commitment forms part of consent and licence conditions.

Physical Processes Advice

The MD-SEDD oceanography advisor has reviewed the following chapter of the Bellrock offshore wind farm EIA report focusing on the potential impact to water column processes including tides, stratification and frontal systems, and on the potential impact to the wave climate.

- Volume II Chapter 6 - Marine Geology, Oceanography and Physical Processes
- Volume IV Appendix 6.1 – Bellrock WFDA Stratification Baseline
- Volume IV Appendix 6.2 – Stratification Analysis Report

In general, the applicant has not undergone any additional modelling work for the EIA assessment and has relied in part on the EIA conducted for similar wind farms within the region, mainly Muir Mhor. The EIA examines the similarities and difference between the Muir Mhor and Bellrock developments in order to confirm the applicability of the Muir Mhor specific results. In general the environments are similar, with the most relevant (physical process related) differences being current speeds are lower at Bellrock (almost half the speed) and therefore the region has a smaller tidal ellipse and generally muddier bed sediments (smaller grain sizes). Perhaps most notably, the Bellrock development is likely to have almost twice the number of wind turbines, although the drafts of the floating foundations are predicted to be a little shallower (30 m compared to 40 m).

MD-SEDD advise that water column processes (tides, stratification and frontal systems) and the surface the wave climate are most likely to be impacted during operation and maintenance. The tidal and wave regime impacts assessments relied on Muir Mhor modelling. The Bellrock development is likely to be larger than the Muir Mhor development, but the foundations are likely to be slightly shallower and spaced slightly further apart. Overall, MD-SEDD advise that there is likely to be a larger near-field impact on wave and

tidal regimes from Bellrock compared to Muir Mhor. However, MD-SEDD agree with the applicants summary of (operational) changes to the tidal and wave regimes (scale, duration, frequency, degree of change) presented in Tables 6.21 and 6.22, respectively, despite the differences in the tidal regime between Muir Mhor and Bellrock.

For the stratification assessment, the applicant has used a semi analytical method outlined by Carpenter et al. (2016) to assess the potential extra mixing imposed on the water column due to the OWF structures. They considered how long this mixing might take to break down the stratification and compared this with the natural (predominantly tidally driven) advective time scale in the area. The applicant concluded that the OWF structures may weaken stratification, but not completely break it down. (Note there is a typo in paragraph 192 of chapter 6 that indicates the opposite to this.) It is not clear how the key parameters required for this analysis were arrived, e.g. the maximum potential energy anomaly, and thermocline thickness. MD-SEDD assume they were derived from the analysis of baseline data specific to the Bellrock development area, rather than from similar projects in the region. One notable omission from the assessment is that of the potential wind wake on regional stratification. MD-SEDD however advise that there is not any pragmatic assessment methodology available for quantitatively assessing this, i.e. it is still an area of ongoing research. MD-SEDD agree with the applicants summary of changes to water column structure (scale, duration, frequency, degree of change) presented in Table 6.24.

There are a few other planned (ScotWind and INTOG) developments in the region and MD-SEDD advise there is potential for there to be cumulative impacts on stratification, frontal systems and associated primary productively/biogeochemistry. This is an area of active research but there is emerging consensus that large floating structures could enhance productivity (due to enhanced mixing) close to the wind farms a certain times of the year. MD-SEDD advise that MD-LOT take every opportunity to encourage data gathering by developers in a regionally coordinated manner to increase the evidence base and reduce the uncertainty of environmental impact for future developments.

Yours sincerely,

Marine Renewables and Ecology Team
Marine Directorate – Science, Evidence, Data and Digital

MARITIME AND COASTGUARD AGENCY

Vaughan Jackson
Maritime and Coastguard Agency
Marine Safety and PNT Services
105 Commercial Road
Southampton
SO15 1EG

www.gov.uk/mca
5th June 2026

Licensing Operations Team,
Marine Directorate,
Scottish Government,
Marine Laboratory,
Aberdeen,
AB11 9DB.

By email to MD.MarineRenewables@gov.scot

Dear Marine Directorate,

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND MARINE LICENCE UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND PART 4 OF THE MARINE AND COASTAL ACCESS ACT 2009 FROM BELLROCK OFFSHORE WIND FARM LIMITED TO CONSTRUCT AND OPERATE THE BELLROCK OFFSHORE WIND FARM.

Thank you for the opportunity to comment on the applications for consent under Section 36 of the Electricity Act 1989 and marine licence under the Marine (Scotland) Act 2010 for the Bellrock Offshore Wind Farm.

The Maritime and Coastguard Agency (MCA) is an Executive Agency of the Department for Transport and is responsible throughout the UK for implementing and developing the UK Government's maritime safety and environmental protection policy. This includes co-ordinating maritime Search and Rescue (SAR) through His Majesty's Coastguard 24 hours a day and checking that ships meet UK and international safety rules. The MCA works to prevent the loss of lives at the coast and at sea, to ensure that vessels are safe, and to prevent coastal pollution. The UK Technical Services Navigation Branch is responsible for UK radiocommunication and navigation policy. This primarily covers SOLAS Convention (Safety of Life at Sea Convention 1974, as amended) Chapters IV and V; the COLREG Convention (International Regulations for Preventing Collisions at Sea 1972, as amended); and the ITU Convention (International Telecommunications Convention 1932, as amended).

The Navigation Risk Assessment (NRA) and the shipping and navigation elements of the Environmental Impact Assessment Report have been reviewed, and we would like to comment as follows:

Navigation Risk Assessment
Anatec Limited has undertaken a detailed NRA in accordance with MCA guidance (MGN 654) and NRA risk assessment methodology. This NRA, which is presented in Volume 4, Appendix 12.1, informs the Shipping and Navigation chapter of the EIA presented in Volume 2, Chapter 12.

We are satisfied that appropriate traffic data has been collected in accordance with MGN 654, which includes an additional August 2023 summer survey, as a secondary data source. Two further 14-day marine vessel traffic surveys within the 24-month validity period were also carried out in August 2024 (16^{th} - 30^{th}) and an AIS only survey in December 2024 (4^{th} – 17^{th}). Owing to the more remote location of the Bellrock Offshore Wind Farm Development Area (WFDA), the higher occurrence of inclement weather conditions and the low occurrence of observed non-AIS traffic in the previous summer 2023 and summer 2024 surveys, it was agreed that an AIS only 14 day winter 2024 traffic survey for the WFDA would be carried out.

With the additional full summer survey in August 2023, and with a full year 2023 AIS data set, we continue to be content that appropriate and representative traffic data has been collected. As always, we continue to assess each project on a case-by-case basis and this does not set a precedent for any future applications. The site-specific survey details are all presented in Table 12.7 and paragraph 12.5.2.1 of Chapter 12 of the EIA and Table 5.1 of the NRA in Volume 4, Appendix 12.1.

The MCA is content that the hazard log presented in Annex B, Table B.1 of the NRA is a reasonable and proportional assessment of the risks. A completed MGN 654 Checklist has also been provided in Annex A, Table A-1 as part of the NRA, and we are satisfied that all recommendations have been addressed.

It is noted that some of the older studies carried out by the MCA regarding Navigation, Communication, and Position Fixing Equipment are referred to in Section 15 of the NRA. These are supported by other more recent studies which is welcomed. There may be additional benefit in referring to more recent helicopter trials and documents written by the MCA in 2019, titled: “MCA report following aviation trials and exercises in relation to offshore windfarms” and “MCA report following aviation trials at Hornsea Project 1 windfarm”. However, we are content with the conclusions of the impact on navigation, communication and position fixing equipment presented by the applicant.

Emergency Response and Search and Rescue

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

During SAR discussions, particular consideration will need to be given to the implications of the site size and location. As there are various possible scenarios regarding the planned layout of turbines within the WFDA as detailed in Volume 2 chapter 4: Project Description, and section 6.1 of the NRA, it would be beneficial for the applicant to confirm the final build out scenario as early in these SAR discussions as possible.

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

Cumulative Impacts

A Cumulative Effects Assessment (CEA) has been made based on existing and proposed developments in the study area as explained in Chapter 5, Volume 2 EIA Methodology. As stated in Appendix 5.3, Cumulative Effects Assessment Long List of Projects: ‘*A CEA has been undertaken for each technical topic in Chapters 6-19 (Volume 2) of the Bellrock WFDA EIA Report’.*

The main commercial routes and those with potential for deviations have also been identified. 10 routes are highlighted and presented in Table 11.1 of the NRA. Expected cumulative deviations are also represented, with 6 routes being identified and presented in figure 14.2 and Table 14.2. We are content with this approach to the CEA at this stage.

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

Marking, Lighting and Construction Programme
The MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with the MCA and the NLB. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN 654 Annex 5. We would also expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.

Wet Storage
It is noted from the non-technical summary and project description that Bellrock Offshore Wind Farm will be utilising floating structures in the final design of the wind farm. The MCA agree that wet storage options for these structures, especially around fully constructed floating WTGs, as mentioned in section 6.4 of the NRA, are yet to be fully explored. We would encourage the applicant when discussing any potential options to consult other relevant maritime stakeholders including the MCA and NLB.

Regarding any storing of components on the seabed within the array area, as the charted depths range from approximately 69m-121m, it is not expected that any storage would increase the risk to surface navigation. However, the MCA will need to be informed of materials to be stored within the array (and along the export cable corridor, although noted this does not form part of the application) and made aware of any that will exceed a 5% reduction in surrounding depth referenced to Chart Datum.

Mooring Arrangements
As Bellrock Offshore Wind Farm will include floating structures, third party verification of the mooring arrangements for all floating devices will be required prior to construction to provide assurance against loss of station. Ideally this will be a condition of the marine licence. Guidance on regulatory expectations on mooring arrangements can be found on our website: https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping.
Compliance with regulatory expectations on moorings for floating wind and marine devices (Health and Safety Executive (HSE) and MCA, 2017), has been listed as embedded mitigation measure WFDA-43 which is welcomed by the MCA.

We note that loss of station has formed part of the scope of assessment, being considered in sections 12.8 of Chapter 12 and sections 17-18 of the NRA. As such, there is an expectation from the MCA that a system of continuous monitoring for each individual floating WTG be incorporated. We welcome the acknowledgment in paragraphs 397-399 of the NRA that a system will be developed in line with

Regulatory Expectations. The use of GPS in this system would be expected but inclusion of AIS on all floating structures, the overall particulars of this system and recovery arrangements in case of a loss of station will need further discussion with the MCA and NLB prior to construction.

Hydrographic Surveys
MGN 654 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. Further information can be found in MGN 654 Annex 4 supporting document titled 'Hydrographic Guidelines for Offshore Developers', available on our website: https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping. This includes surveys during the pre-construction, post-construction and post-decommissioning stages. We would like to highlight the need to provide the data in either GSF or CARIS format and that Total Vertical and Horizontal Uncertainty (TVU & THU) calculations must be provided.

Cable Routes
As stated in Paragraph 2 of the NRA '*Other elements of the Bellrock Offshore Transmission Infrastructure, including interconnector cables, offshore export cables, associated cable protection, and reactive compensation station(s) (which are surface piercing infrastructure) outside the Bellrock WFDA will be considered in a separate application for the Bell rock OfTDA, inclusive of the elements geographically located within the Bellrock WFDA'.* As such we will comment separately on the Transmission infrastructure application.

However, it is noted that for the WFDA inter array cables a Cable Burial Risk Assessment (CBRA) and Inter array Cable Plan (IA-CaP) will be submitted prior to construction and is listed as embedded mitigation measure WFDA-5 in Volume 4 Appendix 5.1: Mitigation and Monitoring Register. Any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum.

We note in table 12.2 of chapter 12, in response to our query on High Voltage Direct Current (HVDC) usage, that High Voltage Alternating Current (HVAC) will be used for the Inter array cables. Therefore, a pre-construction compass deviation study will not be required.

Safety Zones
The requirement and use of safety zones as detailed in the application, specifically as mitigation measure WFDA-36 in table 4.1 of Volume 4, Appendix 5.1: Commitments Register, is noted. MCA supports the use of safety zones and will comment on the safety zone application once submitted, as a statutory consultee.

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

Embedded Mitigation
We have the following comments on the proposed risk controls in section 20, Table 20.1 of the NRA:

1. Cable Burial Risk Assessment;

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

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

Conclusion

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

Yours faithfully,

[redacted]

Vaughan Jackson
Offshore Renewables Project Lead
Marine Safety and PNT Services

MINISTRY OF DEFENCE

Defence Infrastructure Organisation

Wendy Talbot
Assistant Safeguarding Manager
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Your Ref: MD-00011977

DIO Ref. DIO10062574

Christine McGhie
Scottish Government
Licensing Operations Team
Marine Directorate
Marine Laboratory
ABERDEEN
AB11 9DB

10 July 2026

Dear Christine

ELECTRICITY ACT 1989
The Electricity Works (Environmental Impact Assessment)) (Scotland) Regulations 2017
The Electricity (Applications for Consent) Regulation 1990
MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

MD-00011977 – Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – 120km East of Stonehaven

Thank you for consulting the Ministry of Defence (MOD) on the section 36 and Marine Licence applications for the Bellrock Offshore Wind Farm. Consultation correspondence was received by this office on 16 April 2026 and additional information provided by the applicant on 2 June 2026.

The Defence Infrastructure Organisation (DIO) Safeguarding Team represents the Ministry of Defence (MOD) as a consultee in UK planning and energy consenting systems to ensure that development does not compromise or degrade the operation of defence sites such as aerodromes, explosives storage sites, air weapon ranges, and technical sites or training resources such as the Military Low Flying System.

I write to advise the safeguarding position of the MOD in relation to the above applications to construct and operate Generating Station of the Bellrock Offshore Wind Farm.

The scheme will comprise of **either**:-

- up to 90 wind turbine generators (WTGs) with a maximum height to blade tip of 335 metres (m) above mean sea level (MSL)

or

- up to 132 WTGs with a maximum height to blade tip of 271m above MSL

The principal concerns of the MOD with respect to this proposed wind farm relate to the impact of the development on the operation and capability of air defence radar systems and the potential to create a physical obstruction to air traffic movements.

At this time the MOD must **object** to the proposed development on the basis that the scheme would have a significant and detrimental impact on the effective operation and capability of the air defence radar deployed at Remote Radar Head (RRH) Buchan.

Air Defence (AD) Radar

The proposed WTGs would be located approximately 118.1km from, and some of the WTGs at blade tip height of 335m will be detectable by, and will cause unacceptable interference to, the AD radar deployed at RRH Buchan.

WTGs have been shown to have detrimental effects on the operation of radar. These include the desensitisation of radar in the vicinity of the WTGs, and the creation of "false" aircraft returns. The probability of the radar detecting aircraft flying over or in the vicinity of the WTGs would be reduced, hence WTG proliferation within a specific locality can result in unacceptable degradation of the radar's operational integrity. This would reduce the RAF's ability to detect and deter aircraft in United Kingdom sovereign airspace, thereby preventing it from effectively performing its primary function of Air Defence of the United Kingdom.

Our assessments have determined that, when operational, turbine numbers 1, 2, 3, 13, 15, 17, 37, 40, 63 and 89, which form part of the 90 WTG at 335m to blade tip scheme, will cause unacceptable and unmanageable interference to the effective operation of an air defence radar deployed at RRH Buchan.

The MOD has no objections with any of the turbines which form part of the 132 WTG at 271m to blade tip scheme.

The need to mitigate the impacts of the proposed development upon the effective operation of RRH Buchan has been recognised by the applicant and is set out in Volume 2, Chapter 13, Aviation and Radar of the Environmental Impact Assessment Report (EIAR). To overcome a radar objection the MOD expects a technical mitigation proposal to be submitted, which will be subject to technical and operational assessments. If deemed viable, the MOD may then be in a position to offer a suspensive planning condition to secure radar mitigation. Although mitigation is discussed within the Aviation and Radar chapter of the EIAR – specifically at WFDA-68 of Table 13.10 Embedded Mitigation Measures Relevant to Aviation and Radar, and sections 13.8.1.3.4 & 13.8.2.3.4 Secondary Mitigation – at this stage the applicant has not proposed or submitted a mitigation proposal to the MOD. It is an applicant's responsibility to provide mitigation. The MOD would welcome engagement on this matter and the submission of a technical mitigation proposal.

Therefore, on the basis of the information provided, and until a suitable mitigation scheme has been submitted, assessed, and accepted, the MOD must **object** to this proposal due to the impact it will have on the AD radar deployed at RRH Buchan.

Physical Obstruction

In this case the development falls within Low Flying Area 14 (LFA 14). Within this area fixed wing aircraft may operate as low as 250 feet or 76.2 metres above surface level to conduct low level flight training. The addition of turbines and other structures in this location would introduce a physical obstruction to low flying aircraft operating in the area.

In the event that the applicant is able to overcome the objection listed above regarding air defence radar the MOD would require that conditions are added to any consent issued requiring the submission, approval and implementation of an aviation lighting scheme, and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction. The Applicant

has acknowledged the MOD requirement for MOD accredited aviation safety lighting WFDA-40 in Table 13.10 of Vol 2, Chapter 13 Aviation and Radar in the EIAR and Vol 5 Outline Lighting and Marking Plan of the EIAR addresses the aviation lighting but not the submission of sufficient data to enable charting of the structures.

Summary

For the avoidance of any doubt, MOD must **object** to the application on the grounds of the unacceptable impact that the development would have on air defence radar systems deployed at RRH Buchan.

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

Yours sincerely

[redacted]

Wendy Talbot
Assistant Safeguarding Manager

NATS UK

From:	NATS Safeguarding
To:	MD Marine Renewables
Cc:	[Redacted] NATS Safeguarding
Subject:	RE: [SG37263] MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response Required by 6 June 2026
Date:	17 April 2026 14:21:58
Attachments:	image002.png image003.png image004.png image006.png image007.png image008.png image009.png

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Due to the reduction in the maximum turbine dimensions since scoping the proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

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

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

Yours Faithfully

NATS

NATS Safeguarding

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Fareham, Hants PO15 7FL
www.nats.co.uk

NATS Internal

From: MD.MarineRenewables@gov.scot <MD.MarineRenewables@gov.scot>
Sent: 16 April 2026 15:49
To: MD.MarineRenewables@gov.scot
Cc: [Redacted]
Subject: [SG37263] MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation – Response

Required by 6 June 2026

Dear Sir/Madam,

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

MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm - 120km East of Stonehaven

On 2 April 2026, Bellrock Offshore Wind Farm Limited submitted an application to the Scottish Ministers, in accordance with the above legislation, to construct and operate the Bellrock Offshore Wind Farm.

The application for section 36 consent, marine licence application, Environmental Impact Assessment Report and supporting documentation can be accessed via the following links:

Section 36 Consent - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven | marine.gov.scot

Marine Licence Application - Construction and Operation of Generating Station - Bellrock Offshore Wind Farm - 120km East of Stonehaven - 00011977 | marine.gov.scot

Please forward your comments on these proposals via electronic communication to MD.MarineRenewables@gov.scot by **6 June 2026**. If you are unable to meet this deadline, please contact the Marine Directorate – Licensing Operations Team on receipt of this e-mail.

Kind regards,

Christine McGhie
Marine Licensing and Consenting Casework Officer, Licensing Operations Team, Marine Directorate
Scottish Government | Marine Laboratory | Aberdeen | AB11 9DB
Email: [Redacted]
General Email: MD.marinerenewables@gov.scot

The Scottish Government

Scottish Government
Riaghaltas na h-Alba

To see how we use your personal data, please view our
Marine licensing and consenting: privacy notice - gov.scot (www.gov.scot)

Natural England

Date: 05/06/2026
Our ref: 546291
Your ref: MD-00011977

Licensing Operations Team
Marine Directorate
Scottish Government
Marine Laboratory
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Tyneside House,
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0300 – 060 3900

Via email only

Dear Christine

Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application

Thank you for seeking our advice on Bellrock Offshore Wind Farm (OWF) in your consultation which we received on 16/4/2026.

ELECTRICITY ACT 1989

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

MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

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). As the application is located outside English territorial waters then the advice from NatureScot, the statutory nature conservation body in offshore Scottish waters should be sought.

Due to our remit, our advice on this consultation is restricted to species within England and to protected species from English designated sites which may be impacted by the proposed wind farm.

We provide our advice based on the following documents:

- bellrock_eia_-_non-technical_summary.pdf
- bellrock_eia_-_volume_6_-_riaa_-_part_3_-_special_protection_area_ramsar_assessments_-_ornithology.pdf
- bellrock_eia_-_volume_4_-_appendix_10.3_-_displacement_assessment_technical_report.pdf
- bellrock_eia_-_volume_4_-_appendix_10.5_-_offshore_ornithology_apportioning_technical_report.pdf
- comprebellrock_eia_-_volume_4_-_appendix_10.1_-_offshore_ornithology_digital_aerial_survey_baseline_report.pdf
- bellrock_eia_-_compvolume_4_-_appendix_10.4_-_offshore_ornithology_population_viability_technical_report.pdf
- bellrock_eia_-_volume_4_-_appendix_10.2_-

_ornithology_collision_risk_modelling_technical_report.pdf
- bellrock_eia_-_volume_2_-_chapter_10_-_offshore_ornithology_0.pdf
- bellrock_eia_-_volume_6_-_riaa_-_part_2_-_special_area_of_conservation_assessments_-_marine_mammals.pdf
- bellrock_eia_-_volume_5_-_outline_marine_mammal_mitigation_protocol.pdf
- bellrock_eia_-_volume_6_-_shadow_habitats_regulations_appraisal_derogation_case.pdf

Summary of advice

Natural England do not agree with all of the conclusions of the Applicant's Report to Inform Appropriate Assessment. Natural England advise adverse effects on integrity (AEoI) cannot be ruled out for more species and sites than the RIAA currently concludes. In some instances this relates to the lack of an assessment for that feature or assemblage component.

Coquet Islands SPA

Seabird assemblage (kittiwake, puffin) – cannot rule out AEoI alone or in-combination.

Farne Islands SPA

Guillemot – cannot rule out AEoI alone or in-combination.

Seabird assemblage (guillemot, puffin) – cannot rule out AEoI alone or in-combination.

Seabird assemblage (kittiwake) – whereas the Applicant cannot rule out AEoI in-combination, Natural England considers AEoI can be excluded.

Flamborough and Filey Coast SPA

Kittiwake – cannot rule out AEoI in-combination

Guillemot – cannot rule out AEoI in-combination.

Gannet – agree with Applicant's conclusion that AEoI alone or in-combination can be ruled out.

Razorbill – agree with Applicant's conclusion that AEoI alone or in-combination can be ruled out.

Seabird assemblage (guillemot, puffin, kittiwake) – cannot rule out AEoI alone or in-combination.

In addition to the above, we consider that AEoI can be ruled out alone or in-combination for Arctic tern, common tern and roseate tern for the Farne Islands SPA and Arctic tern, common tern, roseate tern and Sandwich tern for the Coquet Island SPA.

Assessment methodologies

NatureScot's advice on ornithological impact assessment methodologies differs from that provided by Natural England in some respects. Natural England do not expect Applicants in Scottish waters to undertake a separate impact assessment for all seabird receptors based on Natural England's advice. We do however seek additional assessments in line with our advice where an appropriate assessment (or our advice) has identified adverse effects or been unable to rule them out on English SPA features. However, we do note Marine Directorate's position that the provision or use of additional 'English methodologies' assessments in such circumstances is not appropriate.

We can confirm that the proposed works are located at a location which may be used by birds from Farne Islands SPA, Coquet Island SPA and Flamborough and Filey Coast SPA or mammals from Southern North Sea SAC and Berwickshire and North Northumberland Coast SAC .

Farne Islands SPA, Coquet Island SPA and Flamborough & Filey Coast SPA

Likely significant effect, appropriate assessment required
Natural England is of the view that it cannot be excluded, on the basis of the objective information supplied by the Applicant, that the application will have significant effects on Farne Islands SPA, Coquet Island SPA and Flamborough & Filey Coast SPA. This is because there is a risk that it will affect the following features of the designated site(s):

- Coquet Island SPA:
  - Seabird Assemblage (kittiwake and puffin)
- Farne Islands SPA:
  - Guillemot
  - Seabird Assemblage (guillemot and puffin)
- Flamborough and Filey Coast SPA:
  - Kittiwake
  - Guillemot
  - Seabird Assemblage (kittiwake, guillemot and puffin)

Under regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), Natural England advises that the Marine Directorate should undertake an Appropriate Assessment of the implications of this proposal against the site's conservation objectives. Appendix 1 of this letter contains our advice on the scope and content of this Appropriate Assessment.

Southern North Sea SAC and Berwickshire and North Northumberland Coast SAC

No likely significant effect
Natural England advises that providing the works are carried out in strict accordance with the details of the application submitted, it can be excluded that the application will have a significant effect on any SAC, SPA or Ramsar site, either individually or in combination with other plans or projects. Therefore it is our view that an Appropriate Assessment of the implications of this proposal on the site's conservation objectives should not be required.

Marine and Coastal Access Act 2009

The works, as set out in the information supplied by the Applicant, are not sited within or near to a Marine Conservation Zone. Natural England have not identified a pathway by which impacts from the development would affect the interest features of any MCZ. We are therefore confident that the works will not hinder the conservation objectives of such a site.

Other Relevant Matters

We direct the Applicant to our guidance on Environmental considerations for offshore wind and cable projects. We expect all English matters to be addressed by the Applicant following that guidance.

Natural England recognises that ornithology advice from NatureScot differs slightly from that provided by Natural England. Natural England do not expect Applicants in Scottish waters to undertake a separate impact assessment for all seabird receptors based on Natural England's advice. However, there may be instances where an additional assessment in line with our advice is needed to be able to adequately assess the effects on English SPA features. This would be where Applicants identify an

AEoI or are unable to rule one out on an English SPA feature, either alone or in-combination; or where, following consultation, Natural England identifies an AEoI or is unable to rule one out.

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

We would like to draw the attention of the Applicant to our Discretionary Advice Service. The Applicant may wish to engage with us to address our comments on their documents.

For any queries relating to the content of this letter please contact me using the details provided below. To provide the further information requested in this advice and for subsequent consultations, please email consultations@naturalengland.org.uk

Yours sincerely

[redacted]

Marine Higher Officer
Northumbria Marine Team
[redacted]

Appendix 1: Summary of NE advice on seabird impacts compared to Applicant's conclusions.

Natural England advise that due to methodological differences between Natural England and NatureScot some seabirds were not scoped into the assessment, and some seabird impact calculations may be underestimated (or overestimated in some instances) compared to NE's advised method. Therefore, in some circumstances we advise AEoI can't be ruled out on following English SPA seabird features due to the absence of an assessment (or one based on English methodologies), rather than due to the values provided in the assessment being of concern. Further details on these reasons and methods are provided in Appendix 2.

Site	Feature	Applicant's Approach	Natural England Conclusion	Reason
Coquet Island SPA	Seabird assemblage (kittiwake and puffin)	No AEoI alone or in-combination	Can't rule out AEoI	Kittiwake Impacts on this seabird assemblage component have not been assessed. Puffin Impacts in the non-breeding season on this named seabird assemblage component have not been assessed.
Farne Islands SPA	Guillemot	Not assessed	Can't rule out AEoI	Guillemot Impacts in the non-breeding season have not been assessed.
Farne Islands SPA	Seabird assemblage (kittiwake, guillemot and puffin)	Can't rule out AEoI in-combination	Can't rule out AEoI	Guillemot Impacts in the non-breeding season have not been assessed. Kittiwake Applicant concluded AEoI in-combination could not be ruled out on this named assemblage component. A combination of the low predicted impact and the likely outcome of NE advised approach being applied means that NE advises an AEoI in-combination can be ruled out. Puffin Impact in the non-breeding season on this named assemblage component have not been assessed.
Flamborough and Filey Coast SPA	Guillemot	Not assessed	Can't rule out AEoI	Guillemot Impacts in the non-breeding season have not been assessed.
Flamborough and Filey Coast SPA	Gannet	No AEoI alone or in-combination	No AEoI alone or in-combination	N/A - Agree with Applicant's conclusion.
Flamborough and Filey Coast SPA	Kittiwake	Can't rule out AEoI in-combination	Can't rule out AEoI in-combination	N/A - Agree with Applicant's conclusion, however NE advised approach would mean that predicted impacts likely lower than Applicant's figures.

Flamborough and Filey Coast SPA	Razorbill	No AEoI alone or in-combination	No AEoI alone or in-combination	N/A - Agree with Applicant's conclusion.
Flamborough and Filey Coast SPA	Seabird assemblage (kittiwake, guillemot and puffin)	No AEoI alone or in-combination	Can't rule out AEoI	<u>Guillemot</u> Impacts in the non-breeding season have not been assessed. <u>Puffin</u> Impacts in the non-breeding season on this assemblage component have not been assessed. <u>Kittiwake</u> AEoI in-combination cannot be ruled out, however NE advised approach means impacts likely lower than Applicant's figures.

Appendix 2: Offshore Ornithology – Detailed Comments

NE Ref	Topic	Comment	NE Advice
1	General comment - Stable age apportioning	NE note that stable age structure apportioning was used for several bird species in the assessment.	Natural England advise that, where possible, site-specific ageing data (e.g. from Digital Aerial Surveys (DAS)) be used to age-apportion birds. Where this data is not available, Natural England advise that all 'adult-type' birds are apportioned as adults. Natural England does not support the use of the stable age structure approach for age apportioning, due to: a) uncertainty regarding survival rates – in particular for immature age classes, b) lack of information about non-breeding adult components of populations, and c) the underlying assumption that populations are stable (which is not the case for many populations)
2	General comment - Spatial approach to displacement in buffer zones		Note that the joint-SNCB (2022) guidance on displacement assessment states that "no gradient of impact of displacement level should be applied to the buffer zone, as there is not sufficient evidence to underpin any such gradient application on a species-by-species basis". Natural England therefore advise that the same displacement and mortality rates should be applied throughout the project area and any buffer area. *Joint SNCB Interim Displacement Advice Note (jncc.gov.uk) (*https://jncc.gov.uk/resources/9aecb87c-80c5-4cfb-9102-39f0228dcc9a *)*
3	General comment - Sabbatical rates	NE note that sabbatical rates were assumed for several bird species in the assessment.	If there is clear evidence relating to the proportion of adults within the population likely to be taking a sabbatical in any given year, then this can be considered at the population modelling stage. The weight of evidence is on demonstrating: a) the proportion of breeding adults in the population likely to be taking a

NE Ref	Topic	Comment	NE Advice
			sabbatical in any given year b) whether the SPA population estimates include or exclude sabbatical birds, and c) whether or not sabbatical birds are likely to use the area of sea around the SPA colony. This evidence can be used to inform whether and how sabbaticals are best incorporated in a Population Viability Analysis (PVA). In the absence of such evidence, Natural England's standard advice is to assume no sabbaticals, i.e. to assume all adult birds are breeding birds. Natural England advise that we do not agree with the use of sabbatical rates to exclude sabbatical birds from impact assessment, nor do we consider the inclusion of sabbatical rates to be appropriate within the apportioning process.
4	General comment - Displacement and mortality rates for auks	Natural England note that the upper ends of the ranges of displacement and mortality rates used in the displacement assessment by the Applicant in the "NatureScot Approach" are not as high as the upper ends of these ranges that Natural England would advise for auks. The upper ends of the ranges used by the Applicant in the "NatureScot Approach" to assess displacement of auks are a Displacement Rate of 60% and a Mortality Rate of 3-5% (breeding season for guillemot, razorbill and puffin) or 1-3% (non-breeding season for guillemot and razorbill only). The upper ends of the ranges advised by Natural England for guillemot, razorbill and puffin would be a Displacement Rate of 70% and a Mortality Rate of 10%, to be presented for all seasons in a matrix, with 30% displacement and 1% mortality as the lower end.	Natural England advises that for auks, a Displacement Rate of 70% and a Mortality Rate of 10%, is to be presented for all seasons in a matrix, with 30% displacement and 1% mortality as the lower end, accompanied by an assessment of where within this range the impacts are most likely to fall.

NE Ref	Topic	Comment	NE Advice
		Natural England note that assessing displacement impacts using the upper ends of the ranges advised by Natural England for displacement and mortality rates would likely increase the upper end of the predicted range of impacts on guillemot, razorbill, and puffin at English SPAs.	
5	General comment - razorbill and guillemot foraging ranges	Natural England note that the Applicant has used foraging ranges for guillemot and razorbill for sites other than Northern Isle colonies of 95.2km and 122.2km, respectively. Natural England note that this follows NatureScot's advice. However, Natural England advises the use of the Woodward et al (2019) foraging ranges plus 1SD for guillemot and razorbill for all colonies when assessing SPA connectivity: 153.7km for guillemot and 164.6km for razorbill. However, Natural England note that the use of our advised foraging ranges would not change the outcome of the assessment as regards the breeding season, as the foraging ranges for these species from English SPAs do not intersect with the Bellrock array area (closest is Farne Islands SPA at 154 km).	No further advice.
6	General comment - HPAI and baseline data	Natural England note that the baseline survey period includes months before and after the highly pathogenic avian influenza (HPAI) outbreak.	Natural England advise that, where baseline survey periods include months during and outside of the recent HPAI outbreaks, extra consideration should be given to the representativeness of the baseline data, and other datasets / information that could be used to contextualise the baseline should be included where possible.
7	Coquet Island SPA, Farne	Natural England note that non-breeding season impacts on puffin are not scoped in to the	Natural England advise AEoI cannot be ruled out for puffin in the non-breeding season for Coquet Island SPA, Farne Islands SPA and

NE Ref	Topic	Comment	NE Advice
	Islands SPA and Flamborough and Filey Coast SPA non-breeding season impacts on puffin	assessment. Natural England advise that impacts are assessed for puffin in the non-breeding season. Natural England note that following the Natural England approach would likely increase predicted impacts on puffin at English SPAs.	Flamborough and Filey Coast SPA due to lack of assessment.
8	Flamborough and Filey Coast SPA razorbill	As noted in comment 4, Natural England note that the impacts to Flamborough and Filey Coast razorbill were assessed using lower displacement and mortality rates than NE advise. Meaning impacts are likely underestimated compared to NE methodology. Despite this, it is unlikely that using NE methodology would increase razorbill mortalities to a level of a significant impact.	NE advise that AEoI can be ruled out alone and in-combination for Flamborough and Filey Coast SPA.
9	Farne Islands SPA and Flamborough and Filey Coast SPA guillemot	NE note guillemot were not screened in to the assessment due to Bellrock being outwith guillemot breeding colony foraging range and because of the basis that in the non-breeding season, guillemot do not disperse far from breeding colonies. NE do not agree with this approach to non-breeding season guillemot.	NE advise that AEoI cannot be ruled out guillemot in the non-breeding season for Farnes Islands SPA and Flamborough and Filey Coast SPA due to lack of assessment.
10	Farne Islands SPA kittiwake	Natural England note that the Applicant has assessed kittiwake for displacement impacts, as per NatureScot's advice. Natural England do not currently advise assessment of displacement impacts for Kittiwake. Natural England note that excluding displacement impacts for kittiwake would likely reduce the predicted impacts on kittiwake at the Farne Islands SPA, even when sources of potential under-estimation e.g. stable age apportioning are taken into account.	We advise that AEoI in-combination can be ruled out for the Farne Islands SPA kittiwake named component of the seabird assemblage feature.

NE Ref	Topic	Comment	NE Advice
		More generally, the predicted collision-only impact value of 0.439 adults and 0.048 subadults per annum could, being closer to 0 than 1 bird, be considered to be an immaterial contribution to the in-combination total, particularly considering the impacted species forms part of the seabird assemblage rather than a qualifying feature of the SPA.	
	Coquet Island SPA kittiwake	Natural England note that kittiwake as a seabird assemblage component of Coquet Island SPA has not been screened in for assessment, despite being within foraging range of the array.	Natural England advise that breeding and non-breeding kittiwake at Coquet Island SPA be screened in to the assessment. We advise impacts to the Coquet Island SPA kittiwake are scoped into the assessment. The above comment on Farne Islands SPA kittiwake may indicate that AEoI may not arise on the Coquet Island seabird assemblage, however at present we do not have the mortality estimates for Coquet Island SPA kittiwake to advise similarly here.
11	Flamborough and Filey Coast SPA kittiwake	Natural England note that the Applicant has assessed kittiwake for displacement impacts, as per NatureScot's advice. Natural England do not currently advise assessment of displacement impacts for kittiwake. Natural England note that excluding displacement impacts for kittiwake would likely reduce the predicted impacts on kittiwake at Flamborough and Filey Coast SPA, even when sources of potential under-estimation e.g. stable age apportioning are taken into account.	We advise that despite the likely reduced Flamborough and Filey Coast SPA kittiwake mortalities using NE advised methodology, the scale of the predicted impact on this colony means that AEoI in-combination cannot be ruled out.
12	Flamborough and Filey Coast SPA gannet - macro-avoidance rates	Natural England note that the Applicant has not applied a macro-avoidance rate to the assessment of collision impacts on gannet. Natural England note that this follows NatureScot's advice, but highlight that Natural England advise the use of macro-	Natural England advise that following the Natural England approach would result in a significant decrease in the predicted impacts on gannet at Flamborough and Filey Coast SPA. As a result, we consider that AEoI can be ruled out.

NE Ref	Topic	Comment	NE Advice
		avoidance rates when considering gannet collision.	
13	Recalculation of impacts following NE methodologies	Natural England do not agree that all English SPA seabirds have been screened into the assessment. Therefore, we advise AEoI can't be ruled out on these seabird features. Natural England further note that due to methodological differences between Natural England and NatureScot seabird impact calculations, some impacts calculated by the Applicant may be underestimated compared to NE's advised method. Therefore, in such instances we advise AEoI can't be ruled out on several English SPA seabird features.	Natural England advise that if further advice on Natural England's integrity judgements is sought, impacts would need to be calculated or recalculated using Natural England methods for the following sites and features/assemblage feature components. Farnes Island – puffin and guillemot Coquet Island SPA – kittiwake and puffin Flamborough and Filey Coast SPA – kittiwake, puffin and guillemot Guidance can be found here Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards - Phase III: Expectations for data analysis and presentation at examination for offshore wind applications. (Please note that this Guidance is held on a SharePoint Online site, for non-Defra staff, access needs to be requested at neoffshorewindstrategicsolutions@naturalengland.org.uk.
14	Compensation	Natural England note the Applicant concluded AEoI for English SPA features, and that at present NE advise further AEoI cannot be ruled out. As the level of impact on different sites and species is not yet clear, we are unable to provide detailed comment on the Ornithology Compensation Plan.	We note that guillemot is not included in the Ornithology Compensation Plan (Table 2.2) and advise that this may require compensation following the outcome of further consideration based on above advice. Should this project be consented, we wish to be further consulted on the Ornithology Compensation Plan.

NATURAL RESOURCES WALES

Eich cyf/Your ref: MD-00011977
Ein cyf/Our ref: AOS-26001-0002-MD-00011977

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Dyddiad/Date: 04/06/2026

Annwyl/Dear Sir/Madam,

CONSULTATION: Bellrock Offshore Wind Farm

APPLICANT: Bellrock Offshore Wind Farm Limited

EICH CYFEIRNOD / YOUR REFERENCE: MD-00011977

EIN CYFEIRNOD / OUR REFERENCE: AOS-26001-0002-MD-00011977

Thank you for your consultation received by Cyfoeth Naturiol Cymru / Natural Resources Wales' (NRW) on 16th April 2026.

We understand that the Scottish Ministers have received an application in accordance with the below legislation, to construct and operate the Bellrock Offshore Wind Farm.

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

MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

Please find NRW Advisory's (NRW (A)) comments on this application below.

NRW Advisory Comments:

Marine Ornithology

NRW Advisory (A) advises that there is little viable connectivity between the proposed Bellrock Offshore Wind Farm and Welsh Special Protection Areas (SPAs). Although Biologically Defined Minimum Population Scales (BDMPS) may initially screen Welsh marine bird features in, tracking evidence demonstrates that seabirds from Welsh colonies generally migrate southwards, and are unlikely to head into eastern Scottish waters. In the breeding season, the majority of SPA features at Welsh SPAs are either located outside of foraging range or tracking data suggests that breeding adults do not forage in Scottish waters. Therefore, there is evidence to support screening these features out.

As there is unlikely to be an impact pathway between the Bellrock Offshore Wind Farm and seabird features of Welsh SPAs, NRW (A) has taken the decision not to review or provide further ornithological, or other receptor-specific, advice for the application. Accordingly, we are content to defer to our colleagues at NatureScot.

Please do not hesitate to contact [Redacted]
should you require any further clarification.

Yn gywir / Yours sincerely,

Bridget Randall-Smith
Senior Marine Advisory Officer
Marine Area Advice and Management Team

NATURESCOT

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

Christine McGhie
Marine Directorate
Scottish Government
Marine Laboratory
Aberdeen
AB11 9DB

03 June 2026

Our ref: CNS REN OSWF E1 - Bellrock

Sent by email only

Dear Christine,

BELLROCK OFFSHORE WIND FARM

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND MARINE LICENCES UNDER THE MARINE (SCOTLAND) ACT AND PART 4 OF THE MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE THE BELLROCK OFFSHORE WIND FARM

Thank you for consulting NatureScot on the Section 36 and Marine Licence Application submitted by Bellrock Offshore Wind Farm Limited (the Applicant) for the proposed Bellrock Offshore Wind Farm Development Area (WFDA). These are accompanied by an Environmental Impact Assessment Report (EIA Report), Nature Conservation Marine Protected Area (NCMPA) Assessment, Report to Inform the Appropriate Assessment (RIAA) and a Derogation Case – submitted on a without prejudice basis.

Our advice in this letter is in relation to the WFDA only. Offshore Transmission Infrastructure is subject to separate Marine Licence applications and as such is described separate to this application, as the Offshore Transmission Development Area (OfTDA).

Onshore Transmission Infrastructure is to be located within the Onshore Transmission Development Area (OnTDA) and will be subject to separate terrestrial planning applications.

The separation of the OfTDA from the WFDA is stated as due to uncertainty around grid connection options, but it raises some concern. We request that the OfTDA application(s) fully consider all of the potential impacts to enable full consideration of any mitigation requirements for the proposal.

Policy context

Working within the context of a climate emergency and a biodiversity crisis, we seek to provide advice that is enabling and secures the right development in the right place with most benefit for climate change reduction and that which avoids damage, and where possible, achieves restoration and enhancement of biodiversity.

As a statutory consultee, NatureScot works in support of the Scottish Government's vision for a Blue Economy with its six outcomes acting as focal points to ensure the marine environment supports ecosystem health, improved livelihoods, economic prosperity, social inclusion and wellbeing.

We provide advice in the spirit of Scottish Government's ambition for Offshore Wind as outlined in the Sectoral Marine Plan for Offshore Wind Energy (SMP-OWE) published in 2020 and now undergoing an Iterative Plan Review (IPR) (anticipated publication later this year) and the Offshore Wind Policy Statement – 40 GW by 2040[1]. The SMP-OWE aims to balance the promotion of the sustainable development of offshore wind, whilst protecting and restoring our biodiversity.

We also acknowledge the Energy Act 2023 has enabled reform for the consideration and delivery of compensation, where required. We anticipate the guidance on the changes to be published shortly.

In response to the new Scottish Biodiversity Strategy to 2045, we support the current work of the Scottish Government in considering a new policy direction of nature positive requirements for marine industries, including Offshore Wind. We seek further consideration and engagement on what might be possible in terms of biodiversity enhancement that would also align with the renewable energy production aims and objectives of this proposal, in the context of the climate emergency and biodiversity loss crisis, if consented.

Background

The Applicant proposes to develop this plan option area as a floating offshore wind farm as part of the ScotWind Leasing Round.

The Proposed Development

The proposed development is located approximately 120 km east of Stonehaven and 116 km southeast of Peterhead, Aberdeenshire. The WFDA will cover an area of approximately 280 km^2, with an expected export capacity of up to 1.8 GW and an operational lifespan up to 35 years. The proposal, which is following a Project Design Envelope (PDE) approach, comprises:

- Two Wind Turbine Generator (WTG) scenarios are under consideration:
    - 'Type 1' - of which up to 132 WTGs would be installed. With maximum rotor diameter of 236m, maximum rotor blade tip height of 271m above sea surface and minimum blade clearance above sea surface of 22m.
    - 'Type 2' – of which up to 90 WTGs would be installed. With a maximum rotor diameter of 300m, maximum rotor blade tip height of 335m above sea surface and minimum blade clearance above sea surface also 22m.

[1] https://www.gov.scot/publications/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition-2/

- Three floating substructure (FSS) design options are under consideration: tension leg platform, semi-submersible and barge.
- Up to 9 anchors per FSS with driven pile, suction pile, drag embedment anchor and gravity-based anchors under consideration. Shared anchors are also under consideration dependent on compatibility with anchor type.
- Up to 9 mooring lines per FSS with catenary, taut, semi-taut and tension moorings under consideration.
- Associated scour protection options including concrete mattresses, rock placement, grout bags and artificial frond mats.
- Inter-array cabling (IAC) includes both static and dynamic cables, with maximum total IAC length of 300 km. The worst-case parameters for IAC comprise:
    - Maximum 225 km of buried IAC
    - Maximum of 92.4 km dynamic IAC
- Static cables are to be buried where possible, minimum target burial depth of 0.5m and cable burial techniques include jet trenching, mechanical trenching and cable ploughing. Cable protection where burial is not possible include concrete mattresses, rock placement, grout bags and cast-iron shells.
- Dynamic cable section configurations include free hanging, lazy “S” wave and steep wave options. Ancillary elements that may be required include buoyancy modules, bend stiffeners, bend restrictors, abrasion protection and connectors.
- Up to 18 subsea cable hubs could be utilised to connect multiple IACs before connection to Offshore Substations (OfSS). The OfSS form part of the Bellrock OfTDA and are subject to separate application(s).
- Mooring, metocean and marker buoys are anticipated, further ancillary infrastructure is yet to be determined.
- Site preparation and surveys are to be undertaken including geophysical, geotechnical and ROV surveys. Seabed preparation activities including sand wave levelling, boulder clearance, pre-lay grapnel run and UXO clearance may be required.

The Applicant has proposed up to 10% overplanting, which is reflected within the assessments undertaken in the technical chapters. Overplanting is the installation of additional capacity to allow additional energy generation during periods of low wind speed or maintenance, noting that the maximum export capacity at any given time would remain as 1.8 GW.

The construction phase is expected to take up to seven years with commencement in 2031, dependent on grid connection. This excludes site preparation works, which are anticipated to begin in 2030. It is expected that construction will be undertaken on a seasonal basis typically between March and October due to the distance of the WFDA from shore. Commercial operation is expected in 2037. The operational phase is anticipated to be 35 years; this will include a programme of maintenance.

Decommissioning is briefly addressed in Section 4.9 of the Project Description (EIA Report Volume II, Chapter 4). We advise that that development of a Decommissioning Plan/Programme post-

consent should be informed by current requirements and predicted on full removal of all infrastructure in line with current policy[2].

Storage and assembly of turbines (wet storage) and construction activities

The Applicant is not applying for consent of wet storage as part of this Application. Section 4.4.3 of the Project Description (EIA Report Volume II, Chapter 4) notes the Applicants expectation that temporary mooring of Floating Substructures and/or Floating Offshore Unit (FOU; i.e. WTG together with FSS) at 'wet storage' locations will be considered through separate consenting processes.

Assessment approach

The Applicant has largely followed standard EIA and HRA processes. Information contained within the Offshore EIAR and RIAA has been laid out sufficiently.

We note that figures have been included separately to the main chapters and appendices. From our perspective embedding these within the main chapters would have been more convenient and efficient than having to open each figure individually.

Cumulative assessment

The screening for the cumulative assessment has been based on a four-month cut-off period pre-submission for all receptors, other than marine mammals and ornithology, which used a six-month cut-off as well as utilising the North East and East Ornithology Group (NEEOG) led cumulative work, respectively. This is shorter than the six-month period proposed in the Scoping Report. It is unclear whether this has been agreed with MD-LOT in advance of the Application and we note that this would potentially result in more developments being screened into the cumulative assessment for the relevant receptors.

NatureScot advice

We provide a short summary of our advice under relevant subheadings below.

Marine Physical Processes – EIA

The assessment of marine geology, oceanography and physical processes concludes **no significant impacts**, both alone and cumulatively. Whilst we broadly agree with the overall conclusions reached in EIA terms, **we advise that further advice should be sought from MD-SEDD in relation to both the potential effects from changes to the wave climate and mixing and seasonal stratification.** Following consideration of advice from MD-SEDD there may be potential implications for our advice in relation to both benthic and fish receptors, and Nature Conservation Marine Protected Areas.

Further advice is provided in **Appendix A.**

[2] https://www.gov.scot/publications/offshore-renewable-energy-decommissioning-guidance-scottish-waters/

Benthic Ecology – EIA

The assessment for Benthic Ecology concludes **no significant impacts, both alone and cumulatively.** Overall, we agree with this conclusion – noting our advice in relation to the need for further advice from MD-SEDD regarding physical processes.

Further advice is provided in **Appendix B.**

Fish and Shellfish Ecology – EIA

The assessment for Fish and Shellfish Ecology concludes **no significant impacts, both alone and cumulatively.** Overall, we agree with this conclusion – noting our advice in relation to the need for further advice from MD-SEDD regarding physical processes. We also advise that MD-LOT should seek advice from MD-SEDD in relation to the assessment of potential impacts from changes in fishing activity, given linkages with the commercial fisheries chapter of the EIA Report.

Further advice is provided in **Appendix C.**

Marine Mammals – EIA

The assessment for marine mammals concludes all potential impacts to be of negligible or minor adverse significance and therefore not significant in EIA terms, either alone or cumulatively.

We are mostly in agreement with the Applicant's conclusions for project alone impacts; however, **we conclude disturbance from piling to minke whale and harbour porpoise to be significant**.

For disturbance from piling, we also conclude there to be **significant cumulative impacts for harbour porpoise, bottlenose dolphin, white-beaked dolphin and minke whale**. As such, **should Scottish Ministers grant consent, we advise that:**

- **Further refinement of the project design envelope is required alongside post-consent monitoring and mitigation. These must be secured via appropriate post-consent plans (e.g. Piling Strategy and Marine Mammal Mitigation Protocol), to be prepared in consultation with MDLOT and NatureScot.**

For the Southern Trench NCMPA, we advise that in relation to disturbance from piling:

- For the project alone, we advise that **the proposal is capable of affecting the minke whale protected feature of the Southern Trench NCMPA. However, these effects are insignificant**; and
- Currently we advise based on the EIA Report worst-case scenario **for cumulative effects, that the predicted disturbance from piling is capable of affecting protected features, other than insignificantly, but effects can be avoided.**
- Our understanding is that if consented, there is likely to be changes to the project design envelope and as such the noise modelling from piling will require recalculation, based on final project parameters. The Applicant has **given commitment to mitigation and monitoring post-consent (e.g. Piling Strategy and Marine Mammal Mitigation Protocol).**

Further advice is provided in **Appendix D.**

Marine Mammals – RIAA

We are content that there is **no Likely Significant Effect (LSE) and therefore no Adverse Effect on Site Integrity (AEoSI) for the following European sites**:

- Scottish portion of the Berwickshire and North Northumberland Coast SAC – Grey seal
- Isle of May SAC – Grey seal
- Firth of Tay & Eden Estuary SAC – Harbour seal

For the bottlenose dolphin feature of the Moray Firth SAC, based on our understanding of the Applicants modelled underwater noise contours, **we provisionally conclude no LSE and therefore no AEoSI (either project alone or in-combination). To finalise our advice on this SAC we request a point of clarification in relation to results of the Applicant's underwater noise modelling.**

Further advice is provided in **Appendix D.**

Offshore Ornithology – EIA

We agree with the Applicant's conclusion of **no significant impact** for proposal alone impacts under EIA.

We conclude that the cumulative effects are **significant** in EIA terms for:

- Guillemot – displacement
- Razorbill – displacement
- Puffin – displacement
- Kittiwake – combined collision and displacement
- Gannet – combined collision and displacement

In line with established EIA practice, we expect the full mitigation hierarchy to be considered where a significant adverse effect is identified.

Without prejudging the outcome of the Appropriate Assessment (discussed further in Appendix G to our advice), we anticipate, should consent be granted, that compensatory measures would need to be secured for kittiwake, razorbill, gannet and puffin. We consider that agreed compensation measures would be sufficient to address impacts predicted under EIA for these species.

As guillemot were not assessed in the RIAA, there is no compensation proposed in the derogation case. Impacts to guillemot occurring from the Bellrock proposal must be addressed through the EIA mitigation hierarchy, through **offsetting.** We encourage the Applicant to engage with NatureScot and MD-LOT to secure measures to offset (compensate) impacts to guillemot.

Further advice is provided in **Appendix E.**

Offshore Ornithology – RIAA

We agree with the Applicant's proposal alone conclusion of no AEoSI for all species and sites assessed.

In situations where Berwick Bank has reached AEoSI for a feature, and therefore compensation should be provided as a condition of the consent, we have considered the 'excluding Berwick Bank' mortality values when reaching a conclusion of adverse effect. This is under the assumption

that Berwick Bank will compensate for those impacts and is in line with the approach taken by the Applicant when reaching their own conclusions.

The Applicant has also excluded impacts from the Green Volt wind farm, for those SPA populations which an AEoSI could not be excluded as a result of Green Volt, and for which compensation is required as a condition of the Green Volt consent.

No other compensated for impact has been removed for any other consented wind farm, although we note that Appendix B to the RIAA Part 3 includes an update with mortalities from additional offshore wind farm applications between March 2025 and February 2026 and we provide further advice on this in **Appendix E** below.

For the qualifying species and sites listed below, we have concluded **AEoSI** in-combination with other offshore wind farm projects:

- Kittiwake at Buchan Ness to Collieston Coast SPA
- Kittiwake at East Caithness Cliffs SPA
- Kittiwake at Fair Isle SPA
- Kittiwake at Fowlsheugh SPA
- Kittiwake at Hoy SPA
- Kittiwake at Troup, Pennan and Lion's Heads SPA
- Kittiwake at West Westray SPA

- Razorbill at East Caithness Cliffs SPA
- Razorbill at Forth Islands SPA
- Razorbill at Fowlsheugh SPA

- Puffin at North Caithness Cliffs SPA

- Gannet at Forth Islands SPA

For the qualifying species and sites listed below, we are **unable to conclude beyond reasonable scientific doubt that there will be no AEoSI** from Bellrock in-combination with other offshore wind farm projects:

- Kittiwake at Forth Islands SPA
- Kittiwake at North Caithness Cliffs SPA

For the qualifying species and sites listed below, we have been **unable to conclude beyond reasonable scientific doubt that there will be no AEoSI** from Bellrock in-combination with other offshore wind farm projects, however we note that the mortality predicted is less than a bird over the entirety of the operational period:

- Razorbill at Troup, Pennan and Lion's Heads SPA
- Razorbill at North Caithness Cliffs SPA

Based on our assessment and conclusions reached above, we advise that Marine Directorate should undertake an Appropriate Assessment. **We advise that Natural England should be consulted on impacts and conclusions for English SPAs,** particularly when AEoSI has been concluded and compensation measures are required.

Further advice is provided in **Appendix E.**

Blue Carbon – EIA

We agree with the assessment for Blue Carbon which concludes **no significant impacts, both alone and cumulatively.**

Further advice is provided in **Appendix F.**

Migratory bats

Potential impacts to migratory bats were not raised within our Scoping advice on the proposed Bellrock Offshore Wind Farm. However, since this advice was issued in 2024, applications from other proposed east coast developments (e.g. Ayre and Bowdun) have presented an assessment of potential impacts to migratory bats. Given the evidence gaps associated with migratory bats crossing the northern North Sea from Denmark and Norway to the east coast of Scotland, and the unknown potential for impacts from offshore wind farms, we advise that Bellrock collaborates with other proposed developments to deliver a systematic, targeted monitoring approach for migratory bats to address some of the current uncertainty.

Derogation and Compensation Measures under HRA

The Applicant has provided a derogation case alongside the Section 36 and Marine Licence applications for Bellrock Offshore Wind Farm. This includes high level information on each measure and roadmap to delivery, with a detailed Seabird Compensation Plan proposed to be developed and submitted post-consent.

We advise there is insufficient information at this stage to have confidence that the proposed measures could compensate for the predicted impacts of the proposal to seabirds.

Further advice is provided in **Appendix G.**

[redacted]

Yours sincerely,

Erica Knott

Head of Marine Energy – Sustainable Coasts and Seas.

Contents

NATURESCOT ADVICE ON BELLROCK OFFSHORE WIND FARM

Appendix A – Marine Geology, Oceanography and Physical Processes

Marine geology, oceanography and physical processes are considered in Chapter 6 (Volume 3) and the following supporting appendices:

- Voume 3, Chapter 6: Marine Geology, Oceanography and Physical Processes Figures
- Volume 4, Appendix 6.1: Stratification Baseline
- Volume 4, Appendix 6.2: Stratification Analysis

The assessment in Chapter 6 concludes **no significant impacts**, both alone and cumulatively. Noting that we require clarification from Marine Directorate on issues set out below; **we broadly agree with the overall conclusions reached of Not Significant in EIA terms**.

The advice we provide within this Appendix addresses specific elements of the assessment that we do not necessarily support, noting that we did not provide any Physical Processes advice at Scoping. **We advise that MD-LOT should seek advice from MD-SEDD in relation to the potential effects of changes to the wave climate** and, where relevant, this advice should be considered in relation to biological interests.

In addition, **we also recommend that advice should be sought from MD-SEDD on mixing and seasonal stratification**. The potential impact of large-scale Floating Offshore Windfarms on mixing and seasonal stratification is an emerging topic with significant uncertainties. In our view, there is opportunity for floating Offshore Wind developers to contribute towards addressing evidence gaps through pre- and post-construction monitoring and we provide further comments below.

Furthermore, NatureScot have previously raised the need for strategic consideration of impacts to physical processes by both Scottish Government (Offshore Wind and Marine Directorates) and the National Electricity System Operator (NESO) with regard to cumulative coastal impacts from cables. We continue to recommend a strategic approach to consideration of coastal cumulative impacts and the future proofing of landfalls to coastal change due to climate change including increased storms.

A.1 Study area

Section 6.5.1 describes how the study area for marine geology, oceanography and physical processes has been informed. It is stated that "*the ZoI varies depending on activity/infrastructure type*" and that "*The total ZoI is the sum of the spatial extent of the Bellrock WFDA and the zones of influence for all impacts, moderated by the direction and length of the tidal ellipse excursions across the Bellrock WFDA*." Whilst Table 6.8 sets out the maximum ZoI per pathway, the overall spatial extent of the study area / total ZoI has not been clearly stated.

Figure 6.1 (volume 3, chapter 6) shows the ZoI as a buffer of <10 km around the WFDA. According to Table 6.8, the tidal excursion ellipse is shown in Figure 6.1; this is described as "*Length: Between 3.8 km in the north, south and southeast, and between 4.0 km and 4.7 km in the west and northeast*". The other maximum ZoI(s) described in Table 6.8 (i.e. changes to wave regime, changes to tidal regime, changes to water circulation, change to SSC and changes to bedload sediment transport) have not been illustrated in Figure 6.1.

We are generally content to accept the study area, noting that in the Scoping Report this was described as a "*tide-parallel 10 km wide buffer*" and was accepted in the Scoping Opinion. However, please see narrative below (Section A.3.1) in relation to the potential for a wave shadow effect which could extend considerably further than 10 km.

A.2 Baseline characterisation

The baseline is characterised by appropriate data sources and site-specific surveys, as described in Table 6.9 and Table 6.10.

However, please note our comments below in relation to wave climate and the Applicant's use of an analogy approach based on data from the Muir Mhòr Offshore Wind Farm Marine Processes Modelling Report.

A.3 Impact assessment

A.3.1 Potential changes to wave climate

Overall, in our view the assessment of potential changes to waves in Chapter 6 appears insufficient.

As described in Sections 6.7.3.5 and 6.7.3.6 the assessment uses a comparative assessment based on the Muir Mhòr Offshore Wind Farm EIA Report. It is stated that compared to Muir Mhòr the proposed Bellrock WFDA has a "*smaller infrastructure footprint in the water column*" (Paragraphs 161 and 168); we do not support this statement given the parameters set out in Table 6.18. In particular we note the Bellrock WFDA Project Design Envelope (PDE) includes more wind turbines and larger floating substructures.

Given this, we consider it possible that changes to waves resulting from the Bellrock WFDA proposal could be greater than those predicted by Muir Mhòr and we are not convinced by the argument presented in Paragraph 162 - that predicted effects from Muir Mhòr are likely to be greater than or equal to those from the Bellrock WFDA proposal.

Paragraphs 167-168 cite the modelled Muir Mhòr wave shadow as extending >70 km, although at that distance it would not be appreciable (1% reduction in wave height). On this basis we surmise that the Bellrock wave shadow could also extend to >70 km. We note that the Turbot Bank NCMPA is located 62 km northwest of the proposed WFDA and the East of Gannet and Montrose Fields NCMPA is located approximately 47 km northeast of the proposed WFDA.

We advise MD-LOT to seek further advice from MD-SEDD on this topic. Given their lead role in conservation advice for NCMPAs beyond 12 nautical miles, we have also discussed with JNCC the need for further advice from MD-SEDD in relation to wave shadow and potential for any subsequent wave height reduction.

A.3.1.1 Cumulative changes to wave climate

Chapter 6 assesses changes to wave climate under "degree of change" (6.7.3.6.1) and so the assessment considers this as a pathway and not as a scoped-in impact (see Section 6.8.1 and Table 6.27). While there is logic to this approach, it appears to have resulted in the Applicant providing insufficient consideration of potential changes to wave climate. Within Table 6.28 a wide range of Offshore Wind Farm proposals have been screened-in, but only for *Impact O3: Changes to water column structure*.

For waves from between northeast and east, there could be potential for the appreciable wave shadow from Bellrock to combine with that of other Offshore Wind Farms in the E1 option area before reaching the Firth of Forth Banks Complex NCMPA (Montrose Bank compartment). Similarly, with waves travelling from a south-southwest and west direction, appreciable wave shadows from the E1 option area projects could combine with that of Bellrock and reach East of Gannet and Montrose Fields NCMPA, located 47 km to the Northeast.

As above, **we advise that MD-LOT should seek further advice from MD-SEDD in relation to cumulative effects of changes to the wave climate and to consider whether any further assessment is required from the Applicant.**

A.3.2 Changes in Suspended Sediment Concentration

The assessment of changes to SSC is also based on a comparative assessment with the Muir Mhòr Offshore Wind Farm EIA Report.

Table 6.18 shows that volumes of sediment released from construction of the Bellrock WFDA could be as little as a sixth of those predicted for the Muir Mhòr Array Area. We find this surprising, given that the proposed Muir Mhòr Array Area is ~30% smaller than the Bellrock WFDA and the number of proposed WTGs is less (~ half). We recommend that the Applicant should further clarify these differences in anticipated sediment release and provide clarification in relation to any potentially affected biological receptor(s). It may be that the considerably smaller area of bedforms within the Bellrock WFDA may be a contributing factor.

A.3.3 Changes to Tidal Regime

The degree of change in tidal flow *at the 'scale of individual structures'* appears to be underestimated in Table 6.21. Applying the criteria set out in Table 6.17, we consider the 'scale' would be "medium," the 'duration' would be "high," and the 'frequency' would be "high" (every tide would be altered). This could amount to a "high" degree of change, though only at this local scale. Seabed scour could also contribute, and we disagree that in this instance scour protection "will prevent scour" as suggested in Table 6.26.

A.3.4 Changes to Bedload Sediment Transport and Seabed Morphology

On the basis of the impact assessment methodology set out in Section 6.4, we do not necessarily agree with the rational set out by the Applicant in support of the "Minor adverse" conclusion for the seabed bedform receptor and impacts C2 and O2 *"changes to bedload* sediment *transport and seabed morphology"* (as discussed in Sections 6.8.1.2 and 6.8.2.2).

We do not agree that there is sufficient evidence to assume that any bedform disturbed (e.g. by levelling) would "*re-form within months to years"* as suggested in Paragraph 220). Meaning that the bedforms do not demonstrably have high recoverability; lack of evidence of high recoverability also means the effect could last for most (or all) of the proposals 35-year lifetime. Given this, we consider the potential impact may have been underestimated; however, we acknowledge the 'low value' as per Table 6.4 and so can accept the Applicants overall conclusion in this instance. We would welcome, if the proposal is consented, further consideration being given to micro-siting of cables to avoid bedforms where possible.

A.4 Mitigation

Because all impacts are assessed as not significant, no additional mitigation measures are proposed beyond the embedded mitigation outlined in Table 6.26, which is largely the production of and adherence to post-consent plans and programmes. We highlight that plans and programmes themselves do not strictly constitute mitigation – it is the measures contained within the plan that will mitigate impacts. However, in-line with other similar developments, we are content for this to be addressed through the development of the post-consent plans.

A.5 Monitoring

We note that the ScotMER research project "Development of marine physical process modelling guidelines for offshore wind farm environmental impact assessments" is about to, or has recently, completed. Whilst this application is too late to consider the outputs of this research project, however, it would be useful to consider the research outputs when designing monitoring, if consented.

The following research programmes are also relevant, and research outputs should be considered when designing physical processes monitoring:

- ECOWind "Physics-to-Ecosystem Level Assessment of Impacts of Offshore Windfarms" (PELAgIO) [3]
- Enabling Sustainable Wind Energy Expansion in Seasonally Stratified Seas (eSWEETS3)[4]
- Ecological Effects of Floating Offshore Wind (ECOFlow)[5]

[3] https://ecowind.uk/projects/pelagio/
[4] https://pcwww.liv.ac.uk/%7Ejons/research.htm
[5] https://www.ecoflow.org.uk/

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Appendix B – Benthic ecology

Benthic interests are considered in Chapter 7 (Volume 2) and the following relevant supporting appendices:

- Volume 4, Appendix 7.1: Benthic Ecology Baseline Report
- Volume 4, Appendix 7.2: Environmental Baseline Survey 2023 Report
- Volume 4, Appendix 7.3: Benthic Characterisation Survey 2023 Report
- Volume 4, Appendix 8.1: Electromagnetic Fields Assessment Report
- Volume 5: Invasive Non-native Species Mitigation Plan

Overall, the documents provide an appropriate level of detail and were presented well. The assessment for Benthic Ecology concludes **no significant impacts, both alone and cumulatively,** which we support.

In this Appendix, we provide comments and advice which addresses elements of the assessment process but does not affect the outcome of the assessment or the overall conclusion of our advice.

B.1 Study area

The study area includes the Array Area with a buffer of 4.7 km, which equates to approximately one spring tidal ellipse. We are content with this approach.

B.2 Baseline characterisation

Existing and site-specific data have been reviewed and clearly presented, with species and habitats of conservation value identified and considered, including various Scottish Priority Marine Features (PMFs). An Annex I habitat assessment was also undertaken, and no habitats met the criteria for definition as Annex I geogenic or biogenic reef.

The data collection methods for baseline characterisation follow standard methodologies for benthic and environmental sampling and refers to the relevant quality control protocols and guidance. It provides a suitable approach to characterising the baseline environment to inform the EIA.

B.3 Assessment approach

We are content with the approach to assessment for benthic ecology, including the impacts scoped in/out as per Table 7.14. This includes the potential risk of spreading or introducing marine Invasive Non-Native Species (INNS) through all vectors, rather than just marine traffic, as per NatureScot advice on the Scoping Report.

B.4 Impact assessment

Overall, we agree with the EIA Report assessment conclusion of not significant for construction, operation and maintenance and decommissioning phases for benthic receptors, with further commentary on specific impacts below.

B.4.1 Ocean quahog – habitat loss and disturbance

Ocean quahog were recorded across three grab samples within the Array Area, totalling 73 individuals (70 juveniles and three adults), which suggests a more localised distribution. Grab

sampling typically collects only the top 10-20 cm of sediment and penetration is often reduced in hard sediments. Ocean quahog, particularly adults, may be found deeper in the sediment than this (variable depths from upper few cm to 10 cm+). To that end, we expect that the grab sampling is likely to underestimate the number of individual animals present. We therefore recommend using the total extent of subtidal sands and gravels as a proxy for potential habitat for ocean quahog, whilst recognising this may over-estimate potential impacts. We note that an assessment of impacts to offshore subtidal sands and gravel has been considered, as this is deemed suitable habitat for ocean quahog.

The overall sensitivity for ocean quahog has been deemed as 'high', in line with FeAST[6], which reflects the conservation value of the species, as well as the low tolerance to most of the pressures and the likelihood of slow recovery, due to this species being slow-growing and long lived. We are content with this approach.

The majority of the survey area represented the offshore subtidal sands and gravel habitat, as per Appendix 7.2. However, it is unclear what proportion this represents. As such, we have assumed maximum area extents for this receptor.

As per Table 7.15, the maximum temporary habitat loss and/or disturbance is estimated as 3.64 km^2 during construction and 47.46 km^2 during the operation and maintenance phase. Permanent habitat loss during the operation and maintenance phase is estimated as 2.93 km^2.

Given the widespread nature of the sands and gravels habitat throughout the Scottish[7] and UK[8] waters, the magnitude of this impact is likely to be 'negligible', in line with the EIA Report conclusions. **Although a specific PMF assessment was not undertaken, based on previous experience, our assessment concludes that there is likely to be an impact on ocean quahog but without significant impact on national status.**

We agree with the EIA Report sensitivity of 'high' and magnitude of 'negligible', which results in a significance of minor using the Applicant's significance matrix (Table 7.10).

B.4.2 Electromagnetic Fields (EMF)

Appendix 8.1 presents the modelled EMF levels at different distances from a high voltage submarine cable used to connect the WTGs within the Array Area.

The embedded mitigation measure WFDA-5 in Table 7.16 states that the target burial depth will be between 0.5 to 2.5, to minimise the requirement for external cable protection. At a distance of 0.5 m from the cable, modelled EMF levels (B-field strengths) are expected to be 224 µT, decreasing to 54 µT at 1 m. The level at 0.5 m is above estimated background EMF levels, which vary between 22-67 µT (British Geological Survey)[9]. Detection thresholds of EMF likely vary among species and context-relevant studies that assess responses to anthropogenic EMF *in situ* are

[6] https://www.nature.scot/professional-advice/protected-areas-and-species/priority-marine-features-scotlands-seas/feature-activity-sensitivity-tool-feast
[7] https://marinescotland.atkinsgeospatial.com/nmpi/default.aspx?layers=953
[8] https://www.marlin.ac.uk/species/detail/1519
[9] "The Earth's Magnetic Field: An Overview," British Geological Survey, [Online]. Available: http://www.geomag.bgs.ac.uk/education/earthmag.html#_Toc2075549. [Accessed 16th April 2026].

lacking (Hutchison *et al.*, 2020)[10]. The proposed cable burial and protection will not necessarily fully mitigate the risks from EMF.

Given the modelled EMF levels and the proposed minimum burial depth of 0.5 m, we consider that the magnitude should be revised from 'negligible' to 'low'. With a sensitivity of 'low', this would change the overall significance conclusion to minor, which is not significant in EIA terms.

However, collectively our understanding of EMF effects remains poor, particularly in relation to in-field measurements of EMF and potential impacts to sensitive receptors. In-line with other recently consented offshore floating wind farm proposals, **we therefore advise that monitoring of EMF should be conducted to validate predicted emission (see below).**

B.5 Cumulative assessment

The cumulative impact pathways have been identified in Table 7.23, with an appropriate level of detail presented in Section 7.9.3, and we are content with the conclusion of **not significant** for cumulative impacts at all phases of the Proposed Development.

B.6 Mitigation

Because all impacts are assessed as not significant, no additional mitigation measures are proposed beyond the embedded mitigation outlined in Table 7.16, which is largely the production of and adherence to post-consent plans and programmes.

B.6.1 Invasive non-native species mitigation plan

We note that the Invasive Non-Native Species Mitigation Plan (INNSMP) is for the Bellrock Array Area only and a separate INNSMP will be prepared to support the subsequent Bellrock Offshore Transmission Development Area (OfTDA) Application.

The INNSMP seems to be a comprehensive mitigation and contingency plan with targeted monitoring, clearly presented and in line with guidance. Additionally, Section 6.6 includes a clear response strategy, should biosecurity measures for INNS fail.

B.7 Monitoring

No monitoring is proposed in relation to benthic interests. We understand that the ScotMER project 'A Targeted Approach to Characterising EMF from Subsea Cables and Understanding Potential Impacts on Fish and Benthic Species' is due to report shortly. Recommendations from this, together with those in FLOWERS – Floating Offshore Wind Environmental Response to Stressors – WP2 electromagnetic fields (EMFs), should be considered further to inform mitigation and or monitoring requirements. Advice from MD-SEDD may be helpful given their involvement and expertise.

As noted above, and in-line with other recently consented offshore floating wind farm proposals, we advise that monitoring of EMF should be conducted to validate EIA predictions. Should Scottish Ministers grant consent, we advise that:

[10] Hutchison, Z.L., Secor, D.H. and Gill, A.B., 2020. The interaction between resource species and electromagnetic fields associated with electricity production by offshore wind farms. *Oceanography*, *33*(4), pp.96-107.

- Monitoring of EMF either alone or in collaboration via strategic measures to contribute to the evidence gap in relation to EMF impacts and dynamic cables associated with a floating offshore wind farm (e.g., via ScotMER research campaign).

Where possible, we recommend that any data collected is shared with strategic monitoring, or research programmes such as ScotMER projects.

B.8 Designated sites

A Report to Inform Nature Conservation Marine Protected Area Assessment (Volume 7) has been provided and we note that both the East of Gannet and Montrose Fields ncMPA (45 km from the Array Area) and the Firth of Forth Banks Complex ncMPA (64 km from the Array Area) have been screened out of further assessment for benthic habitats due to distance. We highlight our advice in Appendix A on Physical Processes, whereby **we advise that MD-LOT should seek further advice from MD-SEDD in relation to potential changes to the wave climate and to consider whether any further assessment is required from the Applicant.**

We agree that the benthic habitat qualifying features and supporting prey species associated with the Southern Trench ncMPA can be screened out of further assessment due to the distance.

B.9 RIAA

No sites with Annex I habitats were advanced to the RIAA stage, which is in line with our advice on the HRA Screening Report.

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Appendix C – Fish and shellfish ecology

Fish and Shellfish ecology are considered in Chapter 8 (Volume 2) and the following relevant supporting appendices:

- Volume 3, Chapter 8: Fish & Shellfish Ecology Figures
- Volume 4, Appendix 8.1: Electromagnetic Fields Assessment Report
- Volume 4: Appendix 9.2: Underwater Noise Assessment

In addition, environmental surveys and benthic surveys are also referred to, including:

- Appendix 7.2: Bellrock WFDA Environmental Baseline Survey 2023 Report (Volume 4)
- Appendix 7.3: Bellrock WFDA Benthic Characterisation Survey 2023 Report (Volume 4)

The assessment for Fish and Shellfish ecology concludes **no significant impacts, both alone and cumulatively.** Overall, we agree with this conclusion.

Our interest in fish and shellfish species is as key prey species (such as herring, sandeels etc.) as well as fish Priority Marine Features (PMFs).

In this Appendix, we provide comments and advice which addresses elements of the assessment process but does not affect the outcome of the assessment or the overall conclusion. We highlight aspects where in our view further action would be required, should Scottish Ministers grant consent.

C.1 Study area

Section 8.5.1 of Chapter 8 describes two study areas, and these are illustrated in Figure 8.1 (Volume 3). The fish and shellfish ecology study area has been informed by ICES rectangles, and the regional study area by the boundary of the northern North biogeographic region (CP2). We consider these study areas to be appropriate and in-line with the Scoping Opinion.

C.2 Baseline characterisation

C.2.1 Data sources

Table 8.7 details the key data sources used to inform the fish and shellfish ecology baseline. Table 8.8 summarises benthic surveys and EMF modelling work that has been undertaken by the Applicant and has relevance to the fish ecology baseline.

Benthic surveys (including Particle Size Distribution) have been used to inform habitat suitability for herring and sandeel. In addition, eDNA samples have been used to inform and contextualise the baseline.

In relation to cod spawning and nursery grounds, maps from Coull et al. 1988 and Eillis et al. 2012 have been relied upon (as presented in Figure 8.3b and referred to in Table 8.13). We note that modelled data by Gonzalez-Irusta and Wright (2016) is listed in Table 8.7 and referred to within Table 8.2 in the context of our Scoping advice; however, this data has not been included within the maps and figures provided in Volume 3.

The output of the Gonzalez-Irusta and Wright (2016) model is available on NMPi and provides a heatmap for spawning grounds in the North Sea. The heatmap for cod indicates that within the

Bellrock WFDA boundary there are some areas of seabed that are characterised as occasional and/or recurrent spawning grounds for cod.

Moreover, we highlight that Figure 8.3b (for Cod, Lemon Sole, Ling and Plaice) appears to be a duplicate of the nursery ground maps presented in Figure 8.6b, rather than displaying spawning grounds as indicated by the figure title.

C.2.2 Existing environment

C.2.2.1 Spawning and Nursery Grounds

Section 8.7 sets out the existing environment, with receptor groups described in 8.7.2. Spawning and nursery grounds are discussed in Section 8.7.2.1; specific habitat types required for sandeel and herring spawning and associated sensitivity is discussed.

Cod

Within 8.7.2.1 it is outlined that cod have been considered less sensitive to localised seabed impacts as their eggs are pelagic. This rational does not recognise that cod use the seabed for mating and that spawning areas are chosen according to suitable substrate type, temperature and current flow. Once found, male cod will identify small territories (known as leks) and subsequently defend these from other males (Gonzalez-Irusta and Wright, 2016). During mating, males will patrol their leks, emitting grunting and rumbling sounds to attract females. Cod should be considered especially vulnerable while spawning as they are focussed on mating close to the seabed and unwilling to leave their leks.

We note that the impact assessment (e.g. 8.8.1.1.1.1) acknowledges that spawning grounds for species that spawn on (or utilise) the seabed, including cod, may be vulnerable to disturbance from construction activities. However, little detail has been provided for species other than herring and sandeel.

As highlighted in Section A.2.1, the output of the Gonzalez-Irusta and Wright (2016) heatmap for cod spawning grounds in the North Sea indicates that the Bellrock WFDA overlaps with some patches of seabed that are characterised as occasional and/or recurrent spawning grounds for cod. As such, disturbance during key life history stages (i.e. spawning) for cod should have been considered further.

We advise that, **should the proposal be consented, the presence of recurrent spawning grounds for cod should be considered further to inform potential options for micro-siting and timing of construction activities**.

C.2.2.2 Designated sites

As noted in Section 8.7.2.9, the fish and shellfish ecology study area does not directly overlap with any designated sites with fish or shellfish protected features.

As advised at Scoping, in this instance we are generally content that NCMPA's designated for fish and shellfish have been screened out of further assessment. However, **we highlight our comments regarding physical processes as set out in Appendix A where we advise further advice should be sought from MD-SEDD in relation to any potential effects from changes to wave climate upon NCMPAs.**

Please see further comments in relation to European Sites (i.e. SACs) below in Section C.7.

C.3 Approach to assessment

We are content with the approach to assessment for fish and shellfish ecology, including the impacts scoped in/out as per Table 8.9.

The assessment of potential impacts on fish ecology receptors from underwater noise has been informed by the supporting Underwater Noise Assessment (Appendix 9.2, Volume 4). We consider the underwater noise modelling approach presented in Appendix 9.2 to be appropriate and this applies recognised assessment criteria for fish (Popper et al. 2014).

C.4 Impact assessment

We are content with the potential impacts scoped in and scoped out of the fish ecology assessment (as summarised in Table 8.9) which are in-line with our expectations following Scoping. We provide comments below on specific elements of the impact assessment.

C.4.1 Impact C4 & O4: Changes in fishing activity

We acknowledge that the Applicant has included changes in fishing activity as a potential impact with the assessment of fish and shellfish ecology. However, **given the linkage between this impact pathway and Commercial Fisheries (Chapter 11, Volume 2) we recommend that advice is sought from MD-SEDD in relation to both the assessment and conclusions presented**.

C.4.2 Impact O1: Physical Disturbance and Temporary Habitat Loss

Section 8.8.2.1.3 sets out the significance of effect for physical disturbance and temporary habitat loss during the operation and maintenance phase. In this section for each receptor the Applicant concludes 'Negligible adverse' significance and therefore 'Not significant' in EIA terms.

We highlight that for herring and sandeel spawning grounds, on the basis of the 'High sensitivity' and 'Negligible magnitude' stated in Paragraph 219 and considering the significance matrix presented in Table 8.5, significance should instead be concluded as 'Minor adverse'. This would not alter the conclusion of 'Not significant' in EIA terms and would be consistent with the Applicants conclusions as summarised in Table 8.24.

C.4.3 Impact O6: Electromagnetic Fields (EMF)

We welcome the inclusion of EMF modelling, as included in Appendix 8.1: Electromagnetic Fields Assessment Report.

As set out in the Project Description (Table 4.11, Chapter 4), in the WFDA the maximum length of inter array cable (IAC) is 300 km; the proposed worst-case scenario is that up to 92.4 km of IAC will be dynamic in the water column whilst the remaining length (up to 225 km) is to be buried. Target burial depth is between 0.5 to 2.5 m (Table 4.12) and will be determined post-consent in the Cable Burial Risk Assessment (CBRA). We highlight that the proposed cable burial and protection will not necessarily fully mitigate the risks from EMF and that there is no mitigation for the dynamic cables.

Collectively our understanding of EMF effects remains poor, particularly in relation to in-field measurements of EMF and potential impacts to sensitive receptors, such as elasmobranchs (including basking sharks). In-line with other recently consented offshore floating wind farm proposals, **we advise that monitoring of EMF should be conducted to validate predicted emissions (see below)**.

C.5 Cumulative assessment

The Cumulative Effects Assessment (CEA) screening process is described in Section 8.9.2, with further detail provided in Appendix 5.3: CEA Long List of Projects (Volume 4).

We note some inconsistency between Section 8.9.2 and Appendix 5.3. In particular, Table 1.1 in Appendix 5.3 sets out the screening ranges for each EIA Report chapter and states that for fish and shellfish ecology the screening range is the Bellrock WFDA plus 10 km buffer. Table 1.1 also refers to an additional buffer for piling related effects defined as the Bellrock WFDA plus 60 m, we assume 60 m is an error and should instead be 60 km which is in line with the ZoI outlined in Figure 8.17 and Paragraph 331 of Section 8.9.2. We note that Section 8.9.2 and Figure 8.17 make no reference to a 10 km buffer or differing ZoI for piling / non-piling impacts.

As described in Section 8.9.3, cumulative effects are considered to be **not significant** by the Applicant. We agree with this conclusion.

C.6 Mitigation and monitoring

C.6.1 Mitigation

Embedded mitigation measures relevant to fish and shellfish ecology are outlined in Table 8.11, these are largely the production of and adherence to post-consent plans. Because all impacts have been assessed as not significant, no secondary mitigation measures are proposed.

We note that embedded mitigation measure WFDA-59 states "*Seabed contacting infrastructure will be micro-sited, where practicable, to avoid sensitive seabed habitats, low or limited mobility benthic species, such as Annex I habitats and Priority Marine Features. Micro-siting will be informed by surveys prior to the commencement of construction which will identify the location and extent of habitats and species".* As above, we advise that the presence of occasional / recurrent spawning grounds for cod should be explored further and suggest that consideration of micro-siting and timing of construction activities in relation to the cod spawning season could also be included within this embedded measure.

For basking shark, we note that the EIA Report (Section 8.8.1.5) refers to embedded mitigation measures; namely the implementation of a Vessel Management and Navigational Safety Plan (VMNSP) and the Environmental Management Plan (EMP), in order to minimise collision risk and reduce potential for adverse effects (Paragraph 208). This section makes reference to the inclusion of "specific guidance" and the Scottish Marine Wildlife Watching Code (SMWWC). However, on review of the outline VMNSP (Volume 5) we highlight that while marine mammals and ornithological sensitivities are referred to and the SMWWC cited, basking shark are not specifically mentioned. The outline EMP (Volume 5) makes reference to basking shark in relation to observed mortality and species licensing requirements but does not include mitigation measures or linkages to guidance or best practice as has been suggested in the EIA Report. We acknowledge that at this stage it is outline post-consent plans[11] that have been provided and expect that the outline VMNSP and EMP will be developed further, should consent be granted.

C.6.2 Monitoring

[11] https://www.gov.scot/publications/marine-licensing-and-consenting-offshore-renewable-energy-projects/pages/mitigation-and-monitoring-plans/

No monitoring is specifically proposed in relation to fish ecology; although, monitoring of mooring lines is to be included within the MMMP and OMP. At this stage the Applicant has not provided an outline Project Environmental Monitoring Programme (PEMP).

We understand that the ScotMER project 'A targeted Approach to Characterising EMF from Subsea Cables and Understanding Potential Impacts on Fish and Benthic Species' is due to report shortly. Recommendations from this together with those in FLOWERS – Floating Offshore Wind Environmental Response to Stressors - WP2 Electromagnetic fields (EMFs) WP2 should be considered further to inform mitigation and or monitoring requirements. Advice from MD-SEDD may be helpful given their involvement and expertise.

As noted above, and in-line with other recently consented offshore floating wind farm proposals, we advise that monitoring of EMF should be conducted to validate EIA predictions. **Should Scottish Ministers grant consent, we advise:**

- **Monitoring of EMF either alone or in collaboration via strategic measures to contribute to the evidence gap in relation to EMF impacts and dynamic cables associated with a floating offshore wind farm (e.g., via ScotMER research campaign).**

C.7 Report to Inform Appropriate Assessment

At the EIA Scoping and HRA Screening stage we provided our position on diadromous fish, whereby impacts should be assessed through the EIA process and not through HRA. This position reflects:

- Limited knowledge of spatial and temporal distribution and behaviour of these species in the marine environment,
- Lack of evidence to inform impact pathways, and,
- Lack of reference population figures which prevents impact apportioning to SACs.

Diadromous fish and SACs have been assessed through the EIA process, for example, in Sections 8.7.2.4 and 8.7.2.9 of Chapter 8. We are content with the Applicants conclusions under EIA that there is no significant impact on diadromous fish.

NATURESCOT ADVICE ON BELLROCK OFFSHORE WIND FARM

Appendix D - Marine Mammals

Marine mammal interests are considered in Chapter 9 (Volume 2) and the following relevant supporting appendices:

- Volume 3, Chapter 9: Marine Mammal Figures
- Volume 4, Appendix 9.1: Marine Mammals Technical Report
- Volume 4, Appendix 9.2: Underwater Noise Modelling Report
- Volume 4, Appendix 9.3: Unexploded Ordnance Assessment
- Volume 4, Appendix 9.4: Marine Mammals Cumulative Effects Assessment Screening
- Volume 4, Appendix 9.5: Marine Mammals Information and Modelling Methods for Disturbance
- Volume 5: Outline Marine Mammal Mitigation Protocol
- Volume 6: Report to Inform Appropriate Assessment (RIAA): Special Area of Conservation Assessments - Marine Mammals
- Volume 7: Report to Inform Nature Conservation Marine Protected Area Assessment (NCMPA)

D.1 EIA Summary

The assessment for marine mammals concludes all potential impacts to be of negligible or minor adverse significance and therefore not significant in EIA terms, either alone or cumulatively. On this basis no secondary mitigation measures have been proposed.

We are mostly in agreement with the Applicant's conclusions for project alone impacts; however, **we conclude disturbance from piling to minke whale and harbour porpoise to be significant**.

For disturbance from piling, we also conclude there to be **significant cumulative impacts for harbour porpoise, bottlenose dolphin, white-beaked dolphin and minke whale**. As such, **should Scottish Ministers grant consent, we advise that:**

- **Further refinement of the project design envelope is required alongside post-consent monitoring and mitigation. These must be secured via appropriate post-consent plans (e.g. Piling Strategy and Marine Mammal Mitigation Protocol), to be prepared in consultation with MDLOT and NatureScot.**

For the Southern Trench NCMPA, we advise that in relation to disturbance from piling:

- For the project alone, we advise that the proposal is capable of affecting the minke whale protected feature of the Southern Trench NCMPA. However, these effects are insignificant; and
- Currently we advise based on the EIA Report worst-case scenario **for cumulative effects, that the predicted disturbance from piling is capable of affecting protected features, other than insignificantly, but effects can be avoided.**
- Our understanding is that if consented, there is likely to be changes to the project design envelope and as such the noise modelling from piling will require recalculation, based on final project parameters. The Applicant has **given commitment to mitigation and monitoring post-consent (e.g. Piling Strategy and Marine Mammal Mitigation Protocol).**

- We welcome the monitoring and research related to minke whale that the Applicant is committed to and is contributing to, as noted in Table 9.2.

D.2 RIAA Summary

We are content that there is no LSE and therefore no AEoSI for the following European sites:

- Scottish portion of the Berwickshire and North Northumberland Coast SAC – Grey seal
- Isle of May SAC – Grey seal
- Firth of Tay & Eden Estuary SAC – Harbour seal

We provide further advice in relation to the bottlenose dolphin feature of the Moray Firth SAC. Based on our understanding of the Applicant's modelled underwater noise contours, we provisionally conclude no LSE and therefore no AEoSI (either project alone or in-combination). To finalise our advice on this SAC we request a point of clarification – see below.

D.3 Baseline characterisation (*Appendix 9.1 Marine Mammals Technical Report*)

The baseline is described in Appendix 9.1: Marine Mammals Technical Report. Overall, we consider the baseline characterisation provided to be comprehensive and clearly set out, albeit likely to be overly precautionary due to the current worst case project design envelope scenario. We are content with the study area presented and species scoped in for assessment, which are in-line with the findings from site-specific Digital Aerial Surveys (DAS).

D.3.1 Study area

Two study areas are presented in Section 2 of Appendix 9.1. We are content with the study areas as presented for cetaceans and seals (pinnipeds) which are based on the appropriate cetacean Management Units (MUs) and Seal Monitoring Units (SMUs).

D.3.2 Data sources

Table 3.5 (Appendix 9.1) outlines the data sources used in characterising the baseline.

We are content with the population and density estimates referred to within the Application documents. However, we wish to highlight that, should the proposal be granted consent, the post-consent plans (i.e. Piling Strategy and MMMP), should be based on the most up to date information available at that time. For example we would now except the following current information to be utilised:

- Population estimates from the most recent Special Committee on Seals (SCOS) Report, currently the 2025 SCOS Report[12]; and

[12] SCOS (2025). Scientific advice on matters related to the management of seal populations: 2025. Natural Environment Research Council Special Committee on Seals. Available online: https://www.smru.st-andrews.ac.uk/files/2026/02/SCOS-2025.pdf

- The most precautionary density estimates available from Gilles et al 2025 (Scans-IV)[13] and Carter et al 2026[14] should be considered. JNCC have also recently published updated habitats and species feature reports[15] and conservation status assessment for harbour seal[16].

NatureScot should be approached for the most up to date information sources to be used to inform any post-consent plans.

Table 6.1 sets out a clear summary of density estimates and reference populations that have been taken through to assessment; we are content with the densities provided.

For both grey seal and harbour seals the Applicant has provided bespoke densities; with a density estimate of 0.027 animals/ km^2 for grey seals and 0.000000014 animals/ km^2 for harbour seal. These bespoke density estimates are in-line with the relative density estimates also presented and as such are appropriate for use in the assessment.

We note the rationale in relation to qualitative assessment of killer whale, we agree with this approach. Qualitative assessment has also been undertaken for fin whale and humpback whale; we agree with the approach taken which uses minke whale assessment conclusions by proxy, as a precautionary approach.

We advise that for each species the UK portion of the MU should be used in the assessment, this advice does not appear to have been applied consistently between Chapter 9 of the EIA Report and Appendix 9.5 (iPCoD modelling) - see also our advice and comments below.

D.4 Assessment approach

D.4.1 Sensitivity and magnitude criteria

Section 9.4 (Chapter 9) details the Applicant's definitions of sensitivity and magnitude. Summaries of the sensitivity criteria are provided in Table 9.3, and the magnitude criteria has been outlined in Table 9.5.

In general, the Applicant has been relatively precautionary in their allocation of magnitude. With some exceptions we are broadly content with the magnitude and sensitivity scoring applied. There are instances in which we do not agree with the Applicant's conclusions, and we highlight where our appraisal and conclusions differ below in Section D.5.

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[13] Gilles, A, Authier, M, Pigeault, R, Ramirez-Martinez, NC, Benoit, V, Carlström, J, Eira, C, Geelhoed, SCV, Laran, S, Sequeira, M, Sveegaard, S, Taylor, NL, Saavedra, C, Vázquez-Bonales, JA, Hammond, PS (2025). Spatial models of cetacean density in European Atlantic waters based on SCANS-IV summer 2022 survey data. Final report published 14 May 2025. 31 pp plus Appendix. https://tinyurl.com/3rv246v5

[14] Carter, M. I. D., Aarts, G., van Beest, F. M., Bivins, M., Brasseur, S. M. J. M., Dietz, R., Duck, C. D., Galatius, A., Gilles, A., Haelters, J., Hastie, G. D., Jessopp, M., Morris, C. D., Moss, S. E. W., Nabe-Nielsen, J., Nachtsheim, D. A., Schaffeld, T., Schop, J., Siebert, U., … Russell, D. J. F. (2026). At-sea distribution of seals on the Northwest European Shelf: Towards transboundary conservation and management. *Journal of Applied Ecology*, 63, e70236. https://doi.org/10.1111/1365-2664.70236

[15] Offshore Regulations Reporting 2019–2024: Supporting information (Habitats and Species feature reports) 2026. Available online: https://jncc.gov.uk/resources/15a481c0-ac7a-4762-af58-d81566781677

[16] JNCC, Department of Agriculture, Environment and Rural Affairs, Natural England, Natural Resources Wales & NatureScot. (2026). Conservation status assessment for the species: S1365 Common seal (Phoca vitulina). Available online: https://data.jncc.gov.uk/data/15a481c0-ac7a-4762-af58-d81566781677/habs-regs-reporting-2019-2024-s1365-common-seal-assessment.pdf

D.4.2 Underwater noise

The assessment of underwater noise is supported by detailed technical appendices; we provide comments and advice in relation to these appendices below.

D.4.2.1 Results from iPCoD modelling

Section 9.4.1.2 explains that iPCoD modelling has been run using a >1% decline per year threshold as a marker of the overall significance of an impact; this approach of determining the significance of iPCoD outputs for disturbance has not been agreed with NatureScot. Our preferred approach is to review the results of iPCoD along with other indicators of impact magnitude, on a case and species-specific basis, rather than a threshold approach.

Chapter 9 outlines that for harbour porpoise, bottlenose dolphin, minke whale, grey seal and harbour seal the Applicant has assessed the proportion of the population(s) potentially impacted using the UK portion of the species MUs, as recommended by NatureScot. However, iPCoD project-alone outputs in Appendix 9.5 (Table 2) refer instead to the whole MU reference populations, rather than the UK portions; this means that the reference populations used in the modelling would be significantly larger (e.g. 346,601 instead of 159,632 for harbour porpoise and 20,118 instead of 10,288 for minke whale).

As such, the scale of predicted impacts is incorrect. This issue has implications for our advice in relation to the project-alone assessment and **we have taken a precautionary approach for both minke whale and harbour porpoise** – see Section D.5 below.

D.4.2.2 Swim speeds

The swim speeds listed in Section 9.4.4.1 are in line with our standard advice, and we are content with the inclusion of these in assessment of cumulative PTS.

D.4.2.3 Hearing ranges

As set out in Table 9.8, the Applicant has adopted Southall et al 2019 thresholds, this is as advised in our Scoping advice.

However, should the proposal be consented, we highlight that we would now advise the use of NMFS 2024 thresholds[17] for any future underwater noise assessments from the Applicant (i.e. for the Piling Strategy and MMMP).

D.4.2.4 Appendix 9.2: Underwater Noise Modelling Report

Overall, we consider the underwater noise modelling approach presented in Appendix 9.2 to be appropriate and consistent with scoping advice, applying recognised assessment criteria (Southall et al. 2019, as applicable at the time of writing) and adopting conservative assumptions.

Modelling has been undertaken at three representative locations within the proposed WFDA:

- NW corner – closest to Scottish coast
- SW corner – coastal transmission to south/west
- Eastern boundary midpoint – deepest water; transmission eastwards

[17] https://www.fisheries.noaa.gov/s3/2024-10/MM-Acoustic-Thresholds-OCT2024-508-secure-OPR1.pdf

The water depths of these modelling locations range from ~71 m to 82.5 m, with the deepest water at the eastern boundary midpoint identified as producing slowest attenuation.

Impact piling is identified as the dominant noise source, with modelling predicting very large zones of potential permanent threshold shift (PTS), particularly for low-frequency cetaceans (e.g. minke whale) for cumulative PTS. The assessment focuses primarily on impact piling, with other noise sources addressed via high-level modelling.

We accept the modelling locations provided for the WFDA Application. However, we note the Project Description (Volume 2, Chapter 4) states that across the WFDA depths range from 69 m – 121 m. We highlight that, should be proposal be consented, we would expect to see a greater variety of depths included in any post-consent modelling; particularly as the project envelope becomes further refined.

Moreover, should piling be required at depths greater than currently modelled (i.e. 82.5 m) we would need to understand how this could influence the modelled impact ranges and further modelling may be required.

D.4.2.5 Appendix 9.3: Unexploded Ordnance Assessment

An Unexploded Ordnance (UXO) Assessment is provided in Appendix 9.3; this assesses the potential underwater noise effects on marine mammals that may arise from UXO clearance activities. The assessment considers both auditory injury and disturbance effects for a comprehensive range of cetacean and pinniped (seal) species. Both low-order and high-order clearance scenarios are evaluated, in-line with NatureScot advice.

Worst-case impact ranges have been based on high-order clearance without noise mitigation, while recognising that low-order deflagration is anticipated to be the default method. A suite of mitigation measures is proposed, to be secured through a Marine Mammal Mitigation Protocol (MMMP) which is to be agreed with Marine Directorate and NatureScot prior to any UXO clearance works.

While the overall approach is precautionary and broadly aligned with policy and guidance, some aspects of the reliance on Acoustic Deterrent Devices (ADDs), particularly duration and effectiveness assumptions, will require careful scrutiny / discussion if consented.

We note an inconsistency between the UXO assessment and Chapter 9 of the EIA Report (Marine Mammals), in relation to assumed Acoustic Deterrent Device (ADD) activation durations. Section 204 of Chapter 9 states that; based on scientific evidence and experience from other offshore wind farm developments, an upper boundary of approximately 30 minutes has been identified beyond which ADD activation becomes ineffective and represents an unnecessary additional noise source. In contrast, the UXO assessment assumes ADD activation periods of up to 80 minutes to mitigate worst-case high-order clearance scenarios. This longer duration appears to exceed what is supported by the evidence cited elsewhere in the application and advice typically issued by NatureScot regarding ADD use. **If consented, further consideration should be given to the approach to mitigation during UXO clearance.**

D.4.2.6 Appendix 9.5: Marine Mammals Information and Modelling Methods for Disturbance

The approach undertaken to model marine mammal disturbance from piling and other underwater noise sources is set out in Appendix 9.5. The assessment provided applies the Interim Population

Consequences of Disturbance (iPCoD) framework to estimate population-level consequences of disturbance for five key species and uses recognised dose–response relationships to quantify behavioural effects.

The Applicant explores recent evidence suggesting that dose–response curves for harbour porpoise may be overly precautionary and presents alternative deterrence-function outputs for comparison. For harbour porpoise, we note that the dose-response curve predicts ~8,554 individuals disturbed per piling event whereas the deterrence function predicts ~733 individuals.

While the discussion of emerging evidence and limitations of current disturbance modelling methods is helpful and transparent, NatureScot advice has been that deterrence-function outputs should be provided for comparison only. The approach taken broadly reflects this position and the use of iPCoD is appropriate, though predicted disturbance levels for some species remain high and should be interpreted in the context of acknowledged model limitations.

For both the project alone and cumulative scenarios, 396 piling days were included in the iPCoD modelling scenarios. The iPCoD modelling is based on 6 years construction duration and we highlight the modelling outputs assume no more than 8 months of piling will occur per year. **Should consent be granted, we would require the Applicant to update iPCoD modelling via the Piling Strategy - informed by the final piling schedule**.

D.5 NatureScot appraisal – EIA

D.5.1 Project Design Envelope (PDE)

Our understanding of the proposed WFDA PDE is briefly summarised below with further considerations set out in the Cover Letter to our advice. We acknowledge that, should consent be granted, the current PDE (as set out in Chapter 4: Project Description) is likely to be refined in-line with engineering and project requirements. Our appraisal and advice below is based on the PDE set out within the WFDA EIA Report and the worst-case scenarios (WCS) assessed in Chapter 9.

In relation to our appraisal of potential impacts to marine mammals (and particularly piling) we note:

- Water depths within the WFDA boundary range from 69 m to 121 m.
- Up to 132 Floating Offshore Units (FOUs) are proposed. Other WFDA infrastructure also includes inter-array cables (IAC), subsea cable hubs and ancillary infrastructure.
- Anchors under consideration for the FOUs are driven, suction, drag embedment and gravity-based anchors - the WCS assumes that all anchors will be piled.
- For piling, the maximum hammer energy is stated as 3,000kJ.
- Up to 2 piling events occurring concurrently within the WFDA are considered in relation to FOUs.
- Total number of piling days expected to be a maximum of 396 over a 7-year period.
- Piling duration across 6 years has been included in iPCoD modelling, with no more than 8 months of piling per year.
- Maximum number of mooring lines (and therefore anchors) is 9 per FOU, shared anchor design is under consideration.
- Overall construction period of up to 7 years, between 2031 and 2037 (inclusive). Construction is expected to be mostly undertaken during the ‘construction season’ - between March and October (inclusive).

- Expected operational life of up to 35 years (from date of commercial operation).

D.5.2 Proposal alone impact assessment

In relation to the following potential impacts, we generally agree with the Applicant's conclusions (as summarised in Table 9.89):

Construction phase -

- *Underwater Noise During UXO Clearance* (*C1*; auditory injury and disturbance) - providing appropriate mitigation and low order deflagration is implemented, see advice below.
- *Underwater Noise during Geophysical Surveys (C2*; auditory injury and behavioural disturbance) - noting requirements in relation to EPS requirements, see below.
- *Underwater Noise and Presence of Vessels (C5)*
- *Collision Risk with Vessels (C6)*
- *Disturbance at Seal Haul-out Sites (C7)*
- *Changes to Prey Availability (C8)*

Operation and Maintenance phase –

- *Underwater Noise during Geophysical Surveys (O1; auditory injury and disturbance)* - noting requirements in relation to EPS requirements, see below.
- *Underwater Noise and Presence of Vessels (O3)*
- *Underwater Noise from Operational WTGs and Moorings on the Seabed (O4; auditory injury and disturbance)*
- *Collision Risk with Vessels (O6)*
- *Disturbance at Seal Haul-Out Sites (O7)*
- *Changes to Prey Availability (O8)*

For decommissioning, we are content with the Applicant's conclusions for sensitivity, magnitude and overall significance; which are broadly aligned with those for the other project phases.

We provide further advice below in relation to instances where we do not support elements of the assessment and/or from our appraisal we have reached conclusions that differ from those of the Applicant.

D.5.2.1 UXO clearance (C1)

In relation to UXO clearance, our position is that low-order deflagration should be the default method for clearance. However, for the worst-case scenario, impact ranges have been based on high-order clearance without noise mitigation. A suite of mitigation measures is proposed, to be secured through a Marine Mammal Mitigation Protocol (MMMP) and to be agreed with Marine Directorate and NatureScot prior to any UXO clearance works. We also note that appropriate EPS and Marine Licensing requirements will be consulted on further should UXO clearance be required.

We agree with the Applicants conclusions of **no significant impact from UXO clearance (auditory injury or disturbance), providing appropriate mitigation is adhered to and no high-order detonations are required**.

D.5.2.2 Underwater Noise during Geophysical Surveys (C2 & O1)

In Table 9.19, the Applicant sets out the anticipated equipment required for geophysical surveys of the WFDA and the potential risk to marine mammals. **We agree that in EIA terms there should be no significant impacts to any species (disturbance or injury) due to underwater noise from geophysical survey equipment**. The Applicant states that injury from sub-bottom profiler (SBP) is not anticipated. Noting that we advise mitigation for injury for the use of SBP (and any other geophysical equipment <200kHz and above 210dB$_{peak}$) is adhered to for all species.

D.5.2.3 Underwater Noise during Piling – Auditory injury (C3a)

Underwater noise modelling was undertaken for three locations at water depths of 71.4 m, 73.0 m and 82.5 m. The Applicant has selected the worst-case scenario from the highest impact ranges of these three locations, based on three sequential FOU driven piles with a maximum diameter of 6m. We note that, with no mitigation applied, the Applicant has concluded that cumulative PTS could be a moderate significant impact for harbour porpoise and a major significant impact for minke whale.

We agree that any mitigation applied for instantaneous PTS would partially mitigate for cumulative PTS. However, due to the potential significance of impact and the uncertainties regarding cumulative PTS, should consent be granted we expect this to be re-evaluated using the final PDE parameters and appropriate mitigation applied via the Piling Strategy. We also advise monitoring may be required to validate predictions.

D.5.2.4 Underwater Noise during Piling – Disturbance (C3b)

Table 9.29 sets out the number of individuals and percentage of reference population that could be disturbed during piling of driven piles for the FOUs, based on the dose-response approach:

Harbour porpoise

As set out in Table 9.29, the Applicant has calculated that the maximum number of harbour porpoise potentially impacted by piling driven piles for the FOUs is 8,554 individuals (i.e. 2.5% of North Sea MU, 5.4% of UK portion). The magnitude assigned in Table 9.29 is 'low' with the temporary effect considered to be 'medium'. As stated in summary Table 9.89, for harbour porpoise the Applicant has assigned a sensitivity of 'medium' and a magnitude of 'low' resulting in a conclusion of 'minor adverse' significance of effect which in EIA terms is not significant. The Applicant notes that magnitude has been defined be considering the evidence base of available literature, dose-response curve and outcome of iPCoD modelling.

As highlighted above, we note an issue in which the iPCoD modelling has been run using the full MU and not the UK portion. This means that the reference populations used in the modelling would be significantly larger (e.g. 346,601 instead of 159,632 for harbour porpoise). As such we have taken a precautionary approach in our appraisal.

Given this issue, and on the basis of the magnitude criteria presented in Table 9.5 in which a medium magnitude is defined as >5% of reference population exposed to impact; **we conclude that for harbour porpoise the magnitude should instead be 'medium'. This would result in an overall conclusion of 'moderate adverse' significance of effect which is significant in EIA terms**.

Minke whale

According to Table 9.29, the Applicant calculates that the maximum number of minke whale potentially impacted by piling of FOU driven piles is 504 individuals (i.e. 2.5% of Celtic and Greater North Seas MU, 4.9% of the UK portion).

The Applicant refers to iPCoD modelling undertaken for minke whale and states that the results show no significant effects. As discussed above in D.4.2, we note that in undertaking the iPCoD modelling the Applicant used the full MU and not the UK portion, this means that the reference populations used in the modelling would be significantly larger (e.g. 20,118 instead of 10,288 for minke whale). We have taken this aspect into account when providing our advice.

Our review of the Applicants magnitude criteria in Table 9.5, in which a medium magnitude is defined as >5% of reference population exposed to impact; we consider it arguable that for minke whale the magnitude of impact could be concluded as 'medium'.

In Table 9.89, in relation to disturbance from piling for baleen whales the Applicant has assigned a 'medium' sensitivity and 'low' magnitude of impact, resulting in a conclusion of 'minor adverse' significance of effect which in EIA terms is not significant.

Noting the issue raised above in relation to iPCoD modelling, noting the conclusion of a 'medium' magnitude of impact, **we instead conclude that potential impacts to minke whale are of 'moderate' significance which is significant in EIA terms**.

Bottlenose dolphin

The Applicant states that disturbance to the bottlenose dolphin population in the Coastal East Scotland (CES) MU from piling in the WFDA has not been considered further, due to distance between the CES MU and WFDA boundary (93 km) and low likelihood of responses according to the Graham et al 2019 dose response curve (as per Paragraph 198, Section 9.8.1.3.2.2.1). The Applicant has assessed disturbance from piling using the Greater North Sea MU.

However, it is also explained that underwater noise over 143dB is modelled to reach the CES (Paragraph 198). This is not reflected in Figure 9.2 which instead shows 120 - 135dB noise contours reaching the CES MU. On the basis of the modelling contours presented in Figure 9.2, the predicted effects from the project-alone assessment should not result in significant impacts to bottlenose dolphin from the CES MU. **We require clarification regarding the discrepancy between Paragraph 198 and Figure 9.2 and confirmation on whether the 143dB noise contour will reach the coastal area.**

Without this clarification we do not support the omission of further assessment of the bottlenose dolphin population in the CES MU in relation to disturbance from piling, and we would have expected the Applicant to consider any contribution of disturbance to the CES cumulatively. As such, **should the proposal be consented, we would expect the CES MU to be included in any relevant post-consent plans (i.e. Piling Strategy and MMMP).**

D.5.2.5 Underwater Noise from Non-Piling Construction Activities – Auditory Injury & Disturbance (C4)

Harbour porpoise – cumulative PTS

On the basis of the underwater noise modelling, cumulative PTS from other construction activities has been scoped out of further assessment for all species except harbour porpoise.

For harbour porpoise, the Applicant has assigned a 'high' sensitivity and 'low' magnitude resulting in a conclusion of significant in EIA terms. In this instance, **we advise that the magnitude should be 'negligible' which results in an overall conclusion of 'not significant' in EIA terms**.

We advise that cumulative PTS from other construction activities would not be significant for any species assessed.

Bottlenose dolphin - disturbance

For disturbance from other construction activities, the Applicant has assessed the CES MU population of bottlenose dolphin. Despite the WFDA boundary being 93 km from the MU and no impulsive noise anticipated to be produced from these activities.

We would not expect noise from other construction activities within the WFDA to overlap with the CES MU. **We are content that for disturbance, there would be no significant impacts from other construction activities**.

D.5.2.6 Underwater Noise from Operation and Maintenance Activities – Auditory Injury & Disturbance (O3)

Harbour porpoise – cumulative PTS

The Applicant has assigned sensitivity and magnitude in-line with those concluded in the construction phase. However, for harbour porpoise a 'minor adverse' significance is concluded (Paragraph 352). In-line with impacts predicted for the construction phase this should instead be 'moderate adverse'. However, we would advise a magnitude of 'negligible' for harbour porpoise as with all other species, therefore resulting in an **overall conclusion of 'not significant'**.

Should the proposal be granted consent, we anticipate that the Applicant will be required to consult with MD-LOT and NatureScot regarding noise expected from non-piled activities through the post-consent plan process (e.g. MMMP).

Bottlenose dolphin - disturbance

We agree that disturbance there would be no significant impacts from other operation and maintenance activities, as any underwater noise from operation and maintenance (non-piling) activities in the WFDA should not reach the CES MU.

D.5.2.7 Secondary entanglement (O5)

Secondary entanglement is assessed in Section 9.8.2.5. We assume there is a typo in the concluding sentence of 9.8.2.5.1, and that this should refer to 'secondary entanglement' rather than '*primary entanglement risk*'. As such, we agree with the Applicant's assignment of sensitivity, magnitude and overall significance for all species scoped in.

This results in a significant ('moderate adverse') impact on baleen whales; however we support and agree with the mitigation measures outlined, which describe the use of load cells as well as regular ROV inspections. **If consented and the Applicant commits to these mitigation measures in detail within post-consent plans, we agree that the overall significance of secondary entanglement would not be significant to any species.**

D.5.3 Cumulative effects assessment

The project-alone assessment is well structured and of good quality. However, in comparison we found the Cumulative Effects Assessment (CEA; Section 9.9) less clear in its presentation and this introduced further complexity to our review and appraisal.

In particular, within the CEA, the Applicant has combined numbers of animals disturbed from piling for the project alone with other impacts. While this seems logical if these impacts are expected to occur at the same time, it makes it complex to understand the numbers of animals disturbed from other projects occurring at the same time, within the relevant MUs for each species. Table 9.70 presents this, however in this table disturbance from pilings is omitted from all projects. Disturbance from piling from all projects is covered in Table 9.72 much later in the CEA.

Whilst we appreciate the Applicant's attempts to include impacts from operational noise, along with piling and impacts from other industries, we have found it complicated to follow and appraise. In general, we expect to see impacts assessed separately and then, depending on which impacts would occur concurrently, a tabulated tally of the number of animals disturbed be presented. In our view, this would be easier to interpret than presenting the number of animals disturbed from piling alone from Bellrock provided alongside every other impact.

We agree that there is a unique Zone of Influence (ZOI) from each impact assessed, however, we do not consider it appropriate to only consider cumulative impacts where these zones overlap. This is because if the potential impact occurs temporally within the same MU for assessed species, then there is potential for a cumulative impact. As such, we do not agree that the impact ZoI from adjacent projects would need to directly overlap spatially to be considered a cumulative impact, as alluded to within Paragraph 473 (Section 9.9). Despite this and on the basis of the narrative provided in Section 9.9.2 and Appendix 9.4: Marine Mammals Cumulative Effects Assessment Screening, our advice assumes that the Applicants reference to "*spatial overlap (i.e. occurring over the same area)*" comprises the species-specific MU.

D.5.3.1 CEA Impact Screening

Table 9.47 summarises the impacts considered for the CEA and the justification for screening in or out for further assessment, which we broadly agree with.

However, as above, we wish to highlight that screening-in of a cumulative effect should be on the basis of any simultaneous impact occurring within the same IAMMWG MU for cetaceans or SCOS SMUs for seals. This is because marine mammals are highly mobile and as such the whole MU and associated reference population should be considered.

We note some inconsistency in relation to inclusion of potential impacts within the CEA. For example, in relation to auditory injury from underwater noise. In Section 9.9.3.1, the Applicant states that potential impacts from auditory injury from underwater noise will not be assessed further in the CEA because it was concluded that potential impacts were concluded to be '*negligible adverse*' in the project-alone assessment. However, Section 9.9.1 (Paragraph 475) states that all impacts of "*negligible adverse or above are considered in the CEA impact screening"*. We assume this is an error and should instead say that all impacts of '*minor adverse' or above* (as concluded for the project-alone) would be considered for further assessment in the CEA.

We agree that auditory injury (instantaneous and cumulative PTS) has been scoped out of cumulative assessment, as explained in Section 9.9.3.1 (Paragraph 492). With mitigation applied we agree that there should be no residual impact for instantaneous PTS. In our view we consider there to be too many uncertainties associated with cumulative PTS to be considered cumulatively at present.

D.5.4 CEA conclusions

In relation to the following potential impacts, we generally support the Applicant's conclusions (as summarised in Table 9.89 – starting on page 283 for cumulative):

- *Underwater Noise Impacts from Geophysical Surveys at other OWFs* (CE1b) – noting our advice in relation to project-alone conclusions above in relation to EPS requirements.
- *Underwater Noise Impacts from non-piling Construction Activities at other OWFs (CE1c)*
- *Underwater Noise from Other Industries and Activities (CE1d)*
- *Underwater Noise and Presence of Vessels (CE1f)*
- *Vessel collision Risk (CE3)*
- *Disturbance at Seal Haul Outs Sites (CE4)*
- *Changes to Prey Availability (CE6)*

We provide further advice below in relation to instances where we do not support elements of the CEA and/or from our appraisal where we have reached conclusions that differ from those of the Applicant.

D.5.4.1 Underwater Noise Impacts from Clearance of UXOs at Other OWFs (CE1a)

The Applicant has used a screening buffer of 100 km to determine other developments for further consideration in the CEA. We support the projects listed and the justification provided regarding not further considering PTS from UXO clearance further within the assessment, whilst noting this is not our advised approach for scoping-in other developments.

For this potential impact, we agree with the Applicant's assignment of 'medium' sensitivity for harbour porpoise and baleen whales, and 'low' for all other species. This is consistent with the assessment for the project alone.

In Tables 9.50 - 9.56, we note that the Applicant has included the number of disturbed animals from piling as per the dose response curve as well as JNCC Effective Deterrent Range (EDRs) recommended for UXO clearance. Typically, other assessments for ScotWind projects have not usually combined more than one cumulative impact at a time. However, as the Applicant anticipates these activities would be occurring simultaneously and this appears to be a precautionary approach, **we note the approach presented and agree with the overall conclusions**.

We also highlight that, as detailed in Tables 9.50 - 9.56, **full MUs have been used to determine the percentage of the population potentially affected by disturbance from UXO** (and all other impacts for the cumulative assessment). **Our advice is that UK portions of the MU should be used in any cumulative assessment. As with our appraisal of the project-alone assessment; should the proposal be consented, we would expect our advised approach to be used to inform any post-consent plans.**

For baleen whales (including minke whale), we consider a magnitude of 'low' would be more appropriate. This adjustment would result in a 'minor adverse' significance, which in EIA terms is a 'not-significant' impact overall.

This is due to the instantaneous and very temporary effect of disturbance from UXO clearance and the highly unlikely possibility of both the need for any high-order detonations (noting our position with regard to low-order deflagration) and other projects disposing of the same number of UXOs at the same time. Should UXOs be discovered then we would expect further consultation with MD-

LOT, NatureScot. **Overall, we are content there should be no significant impacts from UXO clearance to any species**.

D.5.4.2 *Underwater Noise from Other Industries and Activities (CE1d)*

We appreciate the Applicant including consideration of impacts from other industries; however, we do not consider aggregate extractions and dredging from Inner Dowsing (off the coast of Skegness, over 400 km from the Bellrock WFDA) and West Bassurelle (eastern English Channel, over 700 km from the proposed Bellrock WFDA) to be relevant to the CEA. Particularly given the screening buffers applied by the Applicant for other impacts in the project-alone assessment.

We highlight that for the OfTDA (subject to a separate application), the CEA should include all industries screened in as set out in Appendix 9.4 (e.g. harbours, aquaculture, subsea cables).

D.5.4.3 Assessment of Noise Disturbance from Operational Offshore Developments (CE1e)

As referred to above in D.5.3, operational noise from fixed and floating turbines in conjunction with piling from the Bellrock WFDA has been assessed qualitatively under the impact *CE1e: Assessment of Noise Disturbance from Operational Offshore Developments.* We would not necessarily have expected this impact to be scoped in for assessment; however, we appreciate the Applicant's rationale and, in this instance, **we support the overall conclusion of no significant impacts from this potential impact.**

D.5.4.4 Combined Disturbance from Underwater Noise from All Other Industries and Activities (Section 9.9.3.1.7)

The Applicant provides a quantitative assessment of *Construction at Other OWFs, as well as Other Industry Noisy Activities with the Potential for Cumulative Disturbance Effects for Marine Mammals* within Table 9.70 and Section 9.9.3.1.8. We understand this to refer to potential combined disturbance from all underwater noise, except piling, from other developments.

On the basis of numerous factors (e.g. mitigation, likelihood of all activities occurring at the same time etc) the Applicant's overall conclusion is that of not significant in EIA terms. As highlighted above, the approach to combining cumulative impacts is not typical and we have no further comments.

D.5.4.5 Auditory Injury and Behavioural Impacts of Underwater Noise Impacts from Piling at Other OWFs (CE2 - Section 9.9.3.2)

We broadly agree with the Applicant's assignment of 'medium' sensitivity across all species assessed and provide further species-specific advice in relation to magnitude and overall conclusions below.

Harbour porpoise

Table 9.72 sets out the Applicant's rational in relation to their allocation of 'high' magnitude for harbour porpoise. We agree with this magnitude and highlight that if using the UK portion of the MU, the percentage of the population predicted to be potentially affected would more than double (i.e. 48% of UK portion, in comparison to 22.10% of the entire North Sea MU) resulting in a 'major adverse' significance of effect, and therefore significant impact in EIA terms.

Section 9.9.3.2.3.1.1 (Paragraph 659) explains that on the basis of iPCoD modelling indicating no change in overall population trajectory (table 9.78 and plate 9.8), the Applicant has concluded no

significant impacts from cumulative disturbance from piling, for harbour porpoise. **We do not agree with this final conclusion**, as the UK population was not used in iPCoD. **Cumulatively, we conclude there to be a significant impact to harbour porpoise**.

As such, should the WFDA proposal be consented, we require the Applicant to further refine the PDE to reduce this impact to not significant with or without mitigation.

Bottlenose dolphin

For bottlenose dolphin, the Applicant's calculations use only the Greater North Sea MU. We support the Applicant's conclusion of 'high' magnitude and consider the iPCoD results to be comparable in this instance (despite not using the UK portion of the MU). The iPCoD results indicate a 4.4% change in the mean population (Table 9.79 and Plate 9.9).

The Applicant has concluded the impact to be not significant (minor adverse) as the results show a less than 1% average annual decline over the first six years and over the 25-year period. We do not agree with the use of this threshold in defining the magnitude of an impact. **Cumulatively, we conclude there to be a significant impact on bottlenose dolphin as a result of potential disturbance from piling.**

White-beaked dolphin

iPCoD modelling is not available for this species. We calculated a higher percentage of the population of the UK MU to be potentially disturbed. However, we support the 'high' magnitude assigned by the Applicant and as such given the 'medium' sensitivity; **we conclude there to be a cumulative significant impact to white-beaked dolphin**.

Common dolphin

For common dolphin, while we consider that a magnitude of 'low' may be more appropriate than the 'negligible' magnitude assigned by the Applicant **we agree with the overall conclusion of not significant.**

Minke whale

For minke whale, using the UK portion of the MU we calculate that a higher percentage of the population could potentially be disturbed than presented by the Applicant in Table 9.75 (i.e. 24% of the UK portion, in comparison to 12.12% of the entire Celtic and Greater North Seas MU). However, despite this we are in agreement with the magnitude assigned.

Table 9.80 and Plate 9.10 present the Applicant's iPCoD results which show no long-term change in population, on this basis the Applicant has concluded no significant impact on minke whale. As with harbour porpoise, using the UK portion of the MU rather than the entire MU results in an increase to the percentage of the population impacted, as such in this instance we do not support this conclusion on the basis of the iPCoD results. From our appraisal, **we conclude there to be a cumulative significant impact to minke whale.**

Grey Seal

The results from iPCoD are presented in Table 9.81 and Plate 9.11 and show no long-term changes in population trajectory. While updated SCOS SMUs are available (NE England, East Scotland and Moray Firth) we are content that the SMU populations used in the iPCoD modelling. As such, we are

in agreement with the Applicant's conclusion of 'minor adverse' and conclude there to be **no significant impact on grey seal**.

Harbour seal

We note that a precautionary approach has been taken for harbour seal (i.e. one SMU rather than combining multiple SMUs). Table 9.82, Plate 9.12 and Plate 9.13 show no long-term change in population trajectory, as such we are content with the Applicant's conclusions and advise **no significant impacts to harbour seal**.

Other species (Killer Whale, Fin Whale & Humpback Whale)

Killer whale, fin whale and humpback whale have been assessed qualitatively due to lack of data. The Applicant provides conclusion for killer whale, fin whale and humpback whale on the basis of their conclusions for dolphin species and minke whale respectively.

Prior to mitigation the Applicant concludes 'moderate adverse' (significant in EIA terms) for killer whale and 'major adverse' (significant in EIA terms) for fin whale and humpback whale. Taking account of embedded mitigation measures the Applicant concludes that the overall cumulative significance of effect for disturbance from piling would be 'minor adverse' (which is not significant in EIA terms).

We question the justification given in relation to mitigation, as there is no detail provided on how this would be achieved for disturbance. No quantitative assessment is available for these three species, however on the basis of the precautionary assessment approach of using minke whale and other dolphin species as a proxy, we consider there **could also be significant impacts on these species** (in-line with our advice above). **On this basis, should the proposal be consented, we advise that post consent plans (e.g. Piling Strategy and MMMP) should also consider killer whale, fin whale and humpback whale accordingly**.

D.5.4.6 Secondary Entanglement (CE5 – Section 9.9.3.5)

We agree with the assignment of sensitivity for all species assessed ('high' for baleen whales and 'medium' for all other species).

However, we consider the rationale provided by the Applicant in Section 9.9.3.5 to be lacking in detail. For example, the Applicant explains that risk of secondary entanglement is restricted only to wind farm array areas during operation, making it a local and temporary impact (35 years) - as infrastructure will be removed at the end of operation and maintenance phases. We do not consider 35 years to be temporary, nor do we have a collective understanding of secondary entanglement risk from floating wind.

We are in agreement with the Applicant's assignment of 'low' magnitude and that overall, with the implementation of mitigation, the impact should be **not significant** in EIA terms. However, we advise that commitment from the Applicant in relation to mitigation and monitoring of secondary entanglement should be secured. In our view, most benefit could be achieved from identifying appropriate mitigation and monitoring of secondary entanglement across all floating wind projects.

D.6 Mitigation and monitoring

As discussed above, we have concluded that disturbance from piling from the proposal alone impacts is significant in EIA terms for minke whale and harbour porpoise. We also conclude there

to be significant cumulative impacts for harbour porpoise, bottlenose dolphin, white-beaked dolphin and minke whale. As such, **should Scottish Ministers grant consent, we advise that:**

- **Appropriate post-consent plans (e.g. Piling Strategy and Marine Mammal Mitigation Protocol), to be prepared in consultation with MDLOT and NatureScot and if necessary post-consent monitoring and mitigation identified and secured via these plans.**

D.6.1 Embedded mitigation

Section 9.7.3 and Table 9.16 outline the embedded mitigation measures proposed by the Applicant and considered within the marine mammal assessment. The level of detail provided is generally typical of the Application stage. However, in relation to potential disturbance impacts, we do not consider the detail provided to be sufficient basis for the Applicant's EIA conclusions of not significant, at this stage. Should consent be granted, we would expect to be further consulted on proposed mitigation measures - once further refinement of the PDE has been undertaken.

Given current uncertainties around secondary entanglement, and the potential number of mooring lines and dynamic cabling proposed within this Application, we advise that monitoring and removal of potential marine debris should be further considered within relevant post-consent plans.

D.6.1.1 Outline Marine Mammal Mitigation Protocol (MMMP)

We welcome the Applicant's commitment to developing a Marine Mammal Mitigation Protocol (MMMP), at this stage an outline MMMP is provided. We note that, should the proposal be consented, the MMMP will form part of a post-consent Piling Noise Mitigation Plan (PNMP); we assume the PNMP will serve as a Piling Strategy. Table 1.1 of the outline MMMP summarises the mitigation options proposed by the Applicant which we support at this stage.

We acknowledge the challenge in providing detail in relation to the mitigation required for each impact at the Application stage, due to the broad PDE and how realistic the worst-case scenario presented in the EIA Report is. We recommend that the project envelope is refined to a more realistic build-out scenario.

If consented, then all mitigation measures should be consulted further with NatureScot.

D.7 MPA Assessment – Southern Trench NCMPA

The Applicant has provided a Report to Inform Nature Conservation Marine Protected Area Assessment (EIA Report, Volume 7). As agreed at Scoping, the Southern Trench NCMPA is the only NCMPA screened in for further assessment. **For marine mammals, we are content that no further NCMPAs have been screened-in to the MPA assessment report**; however, we highlight our advice regarding physical processes (as set out in Appendix A) in which we advise further advice should be sought from MD-SEDD in relation to any potential effects from changes to wave climate upon NCMPAs.

Minke whale is a protected species of the Southern Trench Nature Conservation Marine Protected Area (NCMPA). We are content that Table 6.1 summarises the relevant potential impacts, as scoped in for assessment.

Section 6.3 sets out that auditory injury has not been further considered within the assessment due to the distance from the proposed Bellrock WFDA and lack of overlap between modelled PTS impact

ranges and the NCMPA boundary (from either piling or high-order UXO clearance). We are content with this approach and the rationale provided, noting that disturbance is taken through for further assessment.

D.7.1 Project alone assessment

D.7.1.1 UXO clearance – project alone

Underwater noise disturbance from UXO clearance is assessed in Section 9.3.1.1 and summarised in Table 9.2. Should UXO clearance be necessary, further consultation with MD-LOT and NatureScot would be required.

On the basis that low order deflagration techniques are utilised, we are content that **potential disturbance from UXO clearance will not result in a significant risk of hindering the achievement of Conservation Objectives.**

Once the extent of any UXO clearance activities are understood post consent, this assessment may need to be updated via the Piling Strategy.

D.7.1.2 Disturbance from piling – project alone

On the basis of the dose response curve (Graham et al 2019) we agree that, at the sound levels presented, the probability of a disturbance response is low. **Therefore, we advise that the proposal is capable of affecting the minke whale protected features of the Southern Trench NCMPA. However, these effects are insignificant. No further assessment is required.**

D.7.1.3 Presence of Vessels and Associated Underwater Noise – project alone

We welcome the Applicant's justification as set out in Section 9.3.1.1.3 and we advise that **the proposal is capable of affecting the minke whale protected features of the Southern Trench NCMPA. However, these effects are insignificant. No further assessment is required.**

D.7.2 Cumulative assessment

Section 9.4 (volume 7) provides an assessment of cumulative effects, within this Table 9.4 sets out the potential cumulative impacts considered by the Applicant.

D.7.2.1 Disturbance from piling - cumulative

We note that the Applicant has screened-out disturbance from piling from cumulative assessment in relation to the MPA assessment, as they have determined underwater noise from piling to not reach the Southern Trench NCMPA (Section 9.3.1.1.2). However, we consider the justification for choosing a threshold approach (168dB) is lacking and while noise of 135dB may not have a high disturbance response, it could still be contributing to cumulative disturbance.

Considering the EIA Report CEA, and in particularly the issue discussed above (D.4.2 and D.5.4) in relation to utilising whole MUs in iPCoD modelling, **we advise that disturbance from piling is capable of affecting protected features, other than insignificantly, but effects can be avoided through the implementation of agreed post consent plans such as a Marine Mammal Management Strategy and a Piling Strategy.**

D.7.2.2 UXO clearance - cumulative

As with our advice above in relation to UXO clearance from the proposal-alone, on the basis that low order deflagration techniques are utilised, we are content that **potential disturbance from UXO clearance will not result in a significant risk of hindering the achievement of Conservation Objectives.**

Once the extent of any UXO clearance activities are understood post consent, this assessment may need to be updated via the Piling Strategy.

D.7.2.3 Presence of Vessels and Associated Underwater Noise and Collision Risk with Vessels – cumulative

We advise that **the proposal is capable of affecting the minke whale protected features of the Southern Trench NCMPA. However, these effects are insignificant. Further assessment is therefore not required.**

We agree with the Applicant's justification as set out in Section 9.4.3.2 and conclusions in Paragraph 102. Cumulative effects from the presence of vessels and associated underwater noise and collision risk, are unlikely to be a significant risk of hindering the relevant minke whale Conservation Objectives of the Southern Trench NCMPA. We also note the Applicant's commitment to managing vessel movements by development of a Vessel Management and Navigational Safety Plan (VMNSP) and alignment to the Scottish Marine Wildlife Watching Code (SMWWC).

D.8 NatureScot appraisal - RIAA

The following SACs with marine mammal qualifying species have been screened-in to the Report to Inform Appropriate Assessment (as per RIAA: Part 2 - Special Area of Conservation Assessments - Marine Mammals):

- Southern North Sea SAC – Harbour porpoise
- Berwickshire and North Northumberland Coast SAC – Grey seal

The Southern North Sea SAC is located in English waters and as such advice should be sought from Natural England regarding the assessment and conclusions provided.

As the Berwickshire and North Northumberland Coast SAC is a cross-border site, advice should also be sought from Natural England. From a NatureScot perspective we advise there is no connectivity with the grey seal protected feature of this site and therefore no likely significant effect (LSE) for the Scottish portion of the site (either alone or cumulatively) and as such no further assessment is required.

As detailed in Table 3.2, Scottish sites considered at the screening stage and subsequently screened-out of further assessment in the RIAA are:

- Moray Firth SAC – Bottlenose dolphin
- Isle of May SAC – Grey seal
- Firth of Tay & Eden Estuary SAC – Harbour seal

We are content that there is no LSE for either the grey seal feature of the Isle of May SAC or harbour seal feature of the Firth of Tay & Eden Estuary SAC, either alone or cumulatively; further assessment is therefore not required. We provide further advice in relation the bottlenose dolphin feature of the Moray Firth SAC below.

D.8.1.1 Moray Firth SAC – Bottlenose dolphin

For the Moray Firth SAC, within Chapter 9 of the EIA Report, the Applicant highlights that underwater noise from piling (143 dB) could reach the Coastal East Scotland (CES) Management Unit (MU) for bottlenose dolphin.

In our EIA advice above (D.5), we seek clarification regarding the disturbance contours presented in relation to piling. **In relation to the EIA Report Section 9.8.1.3.2 we have requested**:

- **Clarification regarding the discrepancy between Paragraph 198 and Figure 9.2 and confirmation on whether the 143dB noise contour will reach the coastal area.**

In relation to the RIAA, we advise that should the results of underwater noise modelling as presented in Figure 9.2 be correct (i.e. the 120 – 135 dB reaching the CES MU rather than 143 dB as stated in Section 9.8.1.3.2.2.1), **then we would be content that whilst there is connectivity to the Moray Firth SAC, there would be no LSE and therefore no AEoSI from either project alone or in-combination effects**.

NATURESCOT ADVICE ON BELLROCK OFFSHORE WIND FARM

Appendix E – Offshore ornithology

Offshore ornithological interests are considered in Chapter 10 (Volume 2) and the following relevant supporting appendices:

- Volume 4, Appendix 10.1: Benthic Ecology Baseline Report
- Volume 4, Appendix 10.1: Offshore Ornithology Digital Aerial Survey Baseline Report View including Annexes A-C
- Volume 4, Appendix 10.1: Annex D - MRSea Modelling Data Pack
- Volume 4, Appendix 10.2: Ornithology Collision Risk Modelling Technical Report
- Volume 4, Appendix 10.2: Annex A - Bootstrap Samples
- Volume 4, Appendix 10.2: Annex B CRM Input Output Files
- Volume 4, Appendix 10.3: Displacement Assessment Technical Report
- Volume 4, Appendix 10.4: Offshore Ornithology Population Viability Technical Report
- Volume 4, Appendix 10.4: Annex A - Project Alone Mortality Apportionment Calculations
- Volume 4, Appendix 10.4: Annex B2 The NEEOG Interim CEF With Derived In-Combination and Cumulative Mortalities
- Volume 4, Appendix 10.4: Annex C -In-Combination Mortality Apportionment Calculations
- Volume 4, Appendix 10.4: Annex G PVA Outputs Files
- Volume 4, Appendix 10.5: Offshore Ornithology Apportioning Technical Report
- Volume 4, Appendix 10.6: Bird Species List
- Volume 5, Outline Vessel Management and Navigational Safety Plan
- Volume 5, Outline Lighting and Marking Plan
- Volume 5, Outline Environmental Management Plan
- Volume 6, RIAA Part 3 Special Protection Area and Ramsar Assessments - Ornithology

E.1 EIA summary

E.1.1 Proposal alone assessment

We agree with the Applicant's conclusion of **no significant impact** for proposal alone impacts under EIA.

E.1.2 Cumulative assessment

We conclude that the cumulative effects are **significant** in EIA terms for:

- Guillemot – displacement
- Razorbill – displacement
- Puffin – displacement
- Kittiwake – combined collision and displacement
- Gannet – combined collision and displacement

In line with established EIA practice, we expect the full mitigation hierarchy to be considered where a significant adverse effect is identified.

Without prejudging the outcome of the Appropriate Assessment (discussed further in Appendix G to our advice), we anticipate, should consent be granted, that compensatory measures would need to be secured for kittiwake, razorbill, gannet and puffin. We consider that agreed

compensation measures would be sufficient to address impacts predicted under EIA for these species.

As guillemot were not assessed in the RIAA, there is no compensation proposed in the derogation case. Impacts to guillemot occurring from the Bellrock proposal must be addressed through the EIA mitigation hierarchy, through **offsetting.** We encourage the Applicant to engage with NatureScot and MD-LOT to secure measures to offset (compensate) the impacts to guillemot.

E.2 RIAA summary

E.2.1 Proposal alone assessment of AEoSI

We agree with the Applicant's proposal alone conclusion of no AEoSI for all species and sites assessed.

E.2.2 In-combination assessment of AEoSI

In situations where Berwick Bank has reached AEoSI for a feature, and therefore compensation is to be provided as a condition of the consent, we have considered the 'excluding Berwick Bank' mortality values when reaching a conclusion of adverse effect. This is under the assumption that Berwick Bank will compensate for those impacts and is in line with the approach taken by the Applicant when reaching their own conclusions. The Applicant has also excluded impacts from the Green Volt wind farm, for those SPA populations which an AEoSI could not be excluded as a result of Green Volt, and for which compensation is required as a condition of the Green Volt consent. No other compensated for impact has been removed for any other consented wind farm, although we note that Appendix B to the RIAA Part 3 includes an update with predicted mortalities from additional offshore wind farm applications between March 2025 and February 2026 and we provide further advice on this in E.6.4.1 below.

For the qualifying species and sites listed below, we have concluded **AEoSI** in-combination with other offshore wind farm projects:

- Kittiwake at Buchan Ness to Collieston Coast SPA
- Kittiwake at East Caithness Cliffs SPA
- Kittiwake at Fair Isle SPA
- Kittiwake at Fowlsheugh SPA
- Kittiwake at Hoy SPA
- Kittiwake at Troup, Pennan and Lion's Heads SPA
- Kittiwake at West Westray SPA
- Razorbill at East Caithness Cliffs SPA
- Razorbill at Forth Islands SPA
- Razorbill at Fowlsheugh SPA
- Puffin at North Caithness Cliffs SPA
- Gannet at Forth Islands SPA

For the qualifying species and sites listed below, we are **unable to conclude beyond reasonable scientific doubt that there will be no AEoSI** from Bellrock in-combination with other offshore wind farm projects:

- Kittiwake at Forth Islands SPA
- Kittiwake at North Caithness Cliffs SPA

For the qualifying species and sites listed below, we have been **unable to conclude beyond reasonable scientific doubt that there will be no AEoSI** from Bellrock in-combination with other offshore wind farm projects, however we note that the mortality predicted is less than a bird over the entirety of the operational period:

- Razorbill at Troup, Pennan and Lion's Heads SPA
- Razorbill at North Caithness Cliffs SPA

Based on our assessment and conclusions reached above, we advise that Marine Directorate will be required to undertake an Appropriate Assessment. **We advise that Natural England should be consulted on impacts and conclusions for English SPAs,** particularly where AEoSI has been concluded and compensation measures are required.

E.3 Baseline characterisation (*Appendix 10.1 Offshore Ornithology Digital Aerial Survey Baseline Report*)

E.3.1 Survey details

The Digital Aerial Survey (DAS) consisted of 24 monthly digital video (HiDef method) surveys from March 2022 to February 2024 (spanning HPAI outbreak in 2022 breeding season). The Bellrock survey area comprised the wind farm footprint plus a 4 km buffer, covering an area of 658 km^2.

Sampling consisted of 15 strip transects oriented southwest to northeast (perpendicular to the coast, following depth contours) at 2.5 km spacing. Strip width was 250 m per transect, resulting in just over 10% coverage (10.14 to 10.38%) of the Bellrock Offshore Aerial Survey Area (OASA) sampled per survey. On two surveys (March 2022 and June 2023) only 14 of 15 transects were sampled due to the aircraft flight path falling outside of the OASA and the 1.5 km long northwest edge transect being omitted. However, the omission did not cause coverage to fall below 10%.

E.3.2 Density and abundance estimation

The Applicant reported difficulties in using the MRSea modelling approach due to low bird densities, relatively small survey area, and limited environmental gradients within the survey area meaning there was limited possibility of correlation between environmental covariates and variations in bird densities across the site. Following advice from NatureScot, design-based density and abundance estimates were used for all species except guillemot, which were the most abundant and frequently occurring in the DAS and so were suitable for MRSea modelling.

Design-based density and abundance estimate of each species/species group were calculated for:

- Wind Farm Development Area (WFDA) + 4 km buffer = 658 km^2
- WFDA + 2 km buffer = 456 km^2 (for use in displacement assessment)
- WFDA only = 280 km^2 (for use in collision risk modelling assessment)

We agree with the method to estimate design-based density and abundance – a standard approach.

Modelling was run separately for the guillemot breeding and non-breeding seasons. NatureScot advice for the guillemot assessment recommended the addition of a post-breeding season, which was not modelled separately and was agreed with NatureScot in advance. The MRSea modelling methods appear to be consistent with NatureScot guidance and are as expected.

E.3.3 Availability bias

Correcting counts of guillemot, razorbill and puffin from DAS using correction factors to account for availability bias is in line with NatureScot guidance, however the correction factors stated by the Applicant slightly differ from our guidance.

In Paragraph 27 of Appendix 10.1, the Applicant states that correction factors for guillemot and razorbill were derived from Thaxter et al. (2010)[18], with factors of 0.7595 and 0.8182 used, respectively. These values represent the probability that a bird is visible at the surface at any time but are not correction factors. We recommend correction factors of 1.311 and 1.211 based on proportion of time that an animal is at the surface of 0.7625 and 0.8261 from Thaxter et al. (2010), for guillemot and razorbill respectively. It is not clear how the Applicant sourced the values used.

For puffin, the correction factor stated by the Applicant is also the probability that a bird is visible at the surface at any time (0.8584) rather than the corresponding correction factor (1.165), from Spencer (2012)[19].

Annex B: Density and Abundance Estimates By Survey provides density and abundance estimates before and after availability bias correction and dividing the corrected by the uncorrected counts shows that the correction factors used do align with our recommended values. Despite the confusion in the main text, the appropriate correction factors were used in the assessment.

E.3.4 Seasonal definitions

At Scoping for great black-backed gull, we agreed with the seasons presented, including two non-breeding seasons, despite the deviation from Furness (2015), which states just one BDMPS period is appropriate in the non-breeding season: migration free winter period of September-March. There has been a change since Scoping, and in this application, Bellrock define three non-breeding seasons: Autumn passage (Sep-Nov), migration-free winter (Dec) and Spring passage (Jan-Mar). We can accept this approach as the implications of this deviation are minor, as discussed in E.5.2.5.

For Arctic tern, Bellrock define three non-breeding seasons: Autumn passage (early Sep), migration-free winter (early Sep-Mar) and Spring passage (April). Furness (2015) states the following BDMPS period (and population estimate) is appropriate in the non-breeding season: migration periods July-early September and late April-May. We would now advise shortening these periods, giving priority to the NatureScot (2020) advised breeding season from May to August, therefore defining the migration periods as late-April and early September. Table 10.16 in Chapter 10 does not align with this, as a reference population estimate is stated for the migration periods only, and not the winter period. We also agreed to the seasonal definitions provided in the Scoping Report, which included a breeding season (May-Aug) only. This breeding period aligns with our guidance, but non-breeding seasons were omitted. We note this change since our scoping advice for future applications.

[18] Thaxter, C.B., Wanless, S., Daunt, F., Harris, M.P., Benvenuti, S., Watanuki, Y., Grémillet, D. and Hamer, K.C., 2010. Influence of wing loading on the trade-off between pursuit-diving and flight in common guillemots and razorbills. *Journal of Experimental Biology*, *213*(7), pp.1018-1025.

[19] Spencer, S.M., 2012. *Diving behavior and identification of sex of breeding Atlantic puffins (Fratercula arctica), and nest-site characteristics of alcids on Petit Manan Island, Maine* (Doctoral dissertation, University of Massachusetts Amherst).

Arctic tern were only recorded in the WFDA between July and September. As there are no breeding colonies within foraging range, we can accept that these are breeding birds on early post-breeding migration, or non-breeding birds. In the discussion of collision impacts in the EIA, all collisions are assigned to the non-breeding season. Despite this not aligning with our seasonal definitions, we accept that these impacts are assigned to the non-breeding season in this instance.

Seasonal definitions for all other species match the definitions in NatureScot (2020) and Furness (2015) as appropriate. We note the inclusion of a post-breeding dispersal period for guillemot defined as July-September, based on our advice in October 2024. We note that some of these seasonal definitions have changed since our scoping advice and are updated in our guidance.

E.3.5 Age class determination

Age class proportions from DAS observations are presented for gannet, gull species and tern species. For kittiwake, it is noted that only first year immatures can be easily distinguished from adults based on plumage alone and that the proportion of adults derived from DAS may be overestimated. There is no discussion on the treatment of the proportion of adult and year 1 immature kittiwakes identified in DAS to calculate the proportion of immature age classes from age 2-4, which is the case in other applications where DAS observations were used to determine age class proportions. We provide further advice regarding this under the apportioning section (E.4.7.1) below.

Guillemot and razorbill were not aged from DAS observations as we would expect. An alternative approach (e.g. stable age structure modelling) is not provided in this section (2.2.7) of the report. No other species, notably puffin and fulmar, are mentioned in Section 2.2.7 either. Age class proportions were calculated for these species using Horswill & Robinson (2015)[20] demographic rates in a stable age model, as discussed under the apportioning section (E.4.7.1) below.

E.3.6 Species accounts

In total, 16 species were recorded in the survey area across the two years of DAS. Guillemot and fulmar were recorded in all surveys. Gannet were recorded in 21 surveys, and kittiwake and puffin were recorded in 18 surveys. Six species (oystercatcher, curlew, Arctic skua, little auk, red-throated diver and European storm petrel) were recorded in only one survey each. The remaining species were recorded in fewer than 10 surveys each: common gull (2), great black-backed gull (8), herring gull (7), Arctic tern (4), and razorbill (7).

E.3.7 Annex C: Ornithology MRSea Modelling and Reporting

The MRSea tool in R was used to produce density surface layers for common guillemot only, as it was the most abundant species recorded in DAS and the only species with sufficient records for modelling. Density estimates were produced for three different behaviour categories: all birds, flying birds, sitting birds. Density surfaces were modelled for the breeding and non-breeding season separately, to allow for seasonal relationships between predictor variables and distribution.

[20] Horswill, C. and Robinson, R.A., 2015. Review of seabird demographic rates and density dependence. JNCC Report No. 552.

Only surveys with ≥10 records of guillemot within the full survey area were included in the model, resulting in 23 surveys (not Dec 2023) included for all behaviours and sitting birds only, and five surveys included for flying birds only. Where MRSea model outputs were not possible due to <10 records of guillemot in a survey, design-based estimates were substituted.

Availability bias correction factor was used, with the proportion of time of birds at the sea surface assumed to be 0.7595. As above this is slightly wrong and does not state the actual correction factor, but it appears that the appropriate correction factors were used.

Distance to coast had a consistent significant effect on distribution of all behaviours during the breeding season, with higher densities of birds on the western side of the survey area (closer to the coast).

E.3.8 Annex D: MRSea Modelling Pack

It is useful to have the full MRSea modelling pack provided to help us better understand the detailed modelling. In particular, the design-based vs model-based estimate comparisons (file six) is a useful comparison between the two approaches.

E.4 Assessment approach

E.4.1 Magnitude criteria

Table 10.5 provides the criteria used to define the magnitude of an impact to offshore ornithology receptors in the EIA. The criteria uses a 'guide' however the predicted increase in baseline mortality thresholds used are set too high, meaning 1-5% change in baseline mortality is only low magnitude, >5% is medium, and >10% is high. It would be more suitable to move each of these thresholds up one classification, i.e. 1-5% change in mortality becomes medium magnitude. We provide our own conclusions of impact magnitude in the relevant sections below.

E.4.2 Fulmar

Fulmar were not identified as a species to be considered in the EIA from the DAS. The Applicant states that '*fulmar was recorded regularly during surveys but is not considered sensitive to the effects of offshore wind development*'. However, we note that fulmar were the second most abundant species (750 raw counts across all 24 months of DAS) recorded in the DAS. It was agreed at Scoping that fulmar should be screened out for all impacts, however this was based on the first year of surveys alone and a peak of 436 fulmar were recorded in October 2023 in the second year of survey, representing a post-breeding dispersal movement offshore. Given the high abundance of fulmar, the species should have been screened in for impacts, including qualitative assessments of artificial light, temporary disturbance and displacement and indirect effects through impacts to habitats and prey species, and for a quantitative assessment of collision risk. This is discussed further below, including our own assessment of collision risk for fulmar.

E.4.3 Cumulative effects assessment

The EIA cumulative assessment has included all impacts from Berwick Bank and Green Volt offshore wind farms, with compensation not taken into account. NatureScot advice at the time (7 Feb 2025) was to include cumulative impact scenarios with and without Berwick Bank impacts and remove compensated-for impacts from Green Volt. The approach taken by the Applicant is more precautionary. All compensated impacts are included in the cumulative mortality total for regional populations.

E.4.4 Appendix 10.2: Ornithology Collision Risk Modelling Technical Report

Collision Risk Modelling (CRM) was undertaken for five species, kittiwake, gannet, great black-backed gull, Arctic tern, and Arctic skua. Analysis covered two scenarios, WTG Type 1 and WTG Type 2, representing the 'worst case' and 'most likely' scenarios respectively. The maximum number of WTGs is predicted to be between 90 (WTG Type 2) and 132 (WTG Type 1), dependent on the export capacity of the selected WTG, with both design scenarios based on a total export capacity for the Bellrock Wind Farm of 1.8 GW.

Although the update to Guidance Note 7 was unavailable at the time of running the CRM, parameters were agreed with NatureScot via email. Option 2 of the Band (2012) model was used in all cases with model outputs set to 'per annum' and 'per month' in the stochastic models. Design-based methods were used for determining in-flight densities. A 70% macro-avoidance was applied to gannet in the non-breeding season. For seasons which include half months, impacts were split between the seasons and macro-avoidance only included in the relevant season.

We agree with the methods for determining collision risk.

E.4.5 Appendix 10.3: Offshore Ornithology Displacement Assessment Technical Report

The following species were included for displacement analysis: kittiwake, guillemot, razorbill, puffin, and gannet. Design based abundance estimates were used for all species. Although model-based estimates could be calculated for guillemot, they were not dissimilar and design-based was carried through the assessment. We agree with this approach.

The displacement and mortality rates presented in Table 3.3 are in line with our guidance.

We note the attempts to run SeabORD, and the level of detail provided in outlining the full results of running the model. The Applicant has set out a number of constraints in the application of SeabORD for this assessment; we note these and the subsequent use of the matrix approach.

We also note the Applicant's comments (4.1.2) on the differences between the mean peak population estimate and the mean population estimates (Table 4.2). As DAS shows only a snapshot of a few hours of one day a month, we believe that this precaution is necessary. This allows for year-to-year variation in time and magnitude of peak abundance estimates to be taken into account. The correct approach has been applied.

E.4.6 Appendix 10.4: Offshore Ornithology Population Viability Technical Report

Population Viability Analyses (PVAs) were run using Natural England's PVA Shiny Tool (version 2) under the simulation model type, with environmental and demographic stochasticity, and no density dependence. Models were run over two projection periods: 35 years (operational lifetime of the wind farm) and 50 years (operational lifetime + 15 years recovery period without wind farm impacts). The model was run for 5,000 simulations and a 5-year burn-in period. The demographic rates used in the model and presented in Tables 2.9 to 2.12 and are consistent with Horswill & Robinson (2015), including region and colony-specific productivity rates for relevant SPA populations.

The Applicant calculated the impact on immature age class survival rate and specified this separately in the PVA model. Whilst this is not an essential step, other applications instead apply the same impact on survival rate to all age classes, we acknowledge the effort taken to calculate this for immatures, which should make the modelling more accurate.

Age-class proportions were determined by stable age distribution population model in the PVA Tool (i.e. with no impacts applied) for all species – including gannet and kittiwake where this was determined from DAS observations in the earlier stages of the assessment. As a result, there is some mismatch between calculating the mortalities to a higher proportion of adults (0.943 for kittiwake, 0.973 for gannet) and applying these impacts as a relative impact on survival rate to a population model with a lower proportion of adults (0.456-0.493 for kittiwake, 0.546-0.550 for gannet, SPA-specific, Table 2.13). The difference in the proportion of adults using the Bellrock WFDA (as seen in DAS) and the age structure at the colony is likely to differ, therefore this mismatch may be an accurate representation of this difference in demography. Ultimately, if there is any implication of using these different adult proportions in the PVA modelling, we consider it more precautionary and therefore we accept the approach taken by the Applicant.

PVAs were undertaken for kittiwake, guillemot, razorbill, puffin and gannet. The Applicant did not progress great black-backed gull, Arctic tern or Arctic skua for PVA on the basis that the predicted mortality was a single bird or less per annum. This is not an approach we endorse. PVAs should be carried out whenever there is a 0.02 percentage point change in annual adult survival rate, as is referenced by the Applicant throughout the documents. There is currently no threshold for a '*de minimus*' mortality. We have enough information to reach a conclusion of no AEoSI for these species, we would generally require to see the full working from the Applicant for a complete audit trail for in-combination assessments. In this case, we have provided this working in E.5.5.2 to our advice below.

Only razorbill at Fowlsheugh SPA triggered the change in mortality required to undertake a PVA for proposal alone impacts. In-combination results were presented both with and without Berwick Bank, as requested by NatureScot at the HRA Screening stage. The predicted mortalities from the Green Volt wind farm on SPA populations for which an Adverse Effect on Site Integrity could not be excluded, as a result of predicted mortality, and for which compensation is required as a condition of the Green Volt Section 36 consent, were omitted from all in-combination totals. These were:

- Kittiwake at the Fowlsheugh SPA, Buchan Ness to Collieston Coast SPA, Troup, Pennan and Lion's Heads SPA and the East Caithness Cliffs SPA;
- Razorbill at the East Caithness Cliffs SPA;
- Puffin at the Forth Islands SPA; and
- Gannet at the Forth Islands SPA.

We acknowledge the omission of features where compensation is required however note that more developments have been consented or submitted applications since the Applicant's cut-off date of March 2025, which would have impacts on the presented in-combination results. Further advice is provided below under E.6.4.1 to our advice.

The PVA methodology is in line with what we would expect, and we welcome the inclusion of the input and output files provided in the Annexes. These enable corroboration of the Applicant's calculations. We have calculated different colony counts from the SMP database (Section E.4.7.2 to our advice below); however, we do not think that these would substantially alter the apportioning and our conclusions remain unchanged.

The inclusion of the detail on the NEEOG interim CEF provided in Annex 10.4-B is also welcome.

E.4.7 Appendix 10.5: Offshore Ornithology Apportioning Technical Report

The approach to apportion impacts to breeding adult birds in the breeding season is appropriate and follows the approach advised in our interim guidance (NatureScot, 2020). In the non-breeding season, we accepted the approach to apportion to SPAs as set out in the HRA Screening Report (March 2024). The approach set out in the Screening Report states that where an SPA is identified as having connectivity to the Bellrock WFDA in the non-breeding season only, it is screened out if the SPA population represents less than 1% of the adult component of the wider BDMPS. We note however that there is inconsistency with this approach in the inclusion of Mingulay & Berneray SPA and Rathlin Island SPA for razorbill, which comprise 0.001 and 0.002% of the passage period BDMPS population, and 0.09 and 0.04% of the winter BDMPS population, respectively. However, we do not believe any adverse effect on site integrity has been missed with this inconsistency, or with this approach in general.

We accept this approach for the Bellrock application as it was agreed at the HRA Screening stage and it is unlikely to have resulted in any adverse effect on site integrity being missed by the assessment.

[Our advice for future applicants is that all SPAs constituting the BDMPS population should be screened in for non-breeding season connectivity, regardless of breeding season connectivity status. As such, we expect the list of SPAs screened into the apportioning assessment to consist of those with both breeding season and non-breeding season connectivity, and SPAs with non-breeding season connectivity only. Birds from all SPAs listed in the appendix table for the relevant BDMPS region in Furness (2015) have the potential to be present in the proposal WFDA and therefore experience impacts in the non-breeding season and should be assessed as such. We acknowledge that some SPAs will have minimal impacts apportioned to them in the non-breeding season, but no threshold should be used to screen out any minimal impacts.]

We accept the approach to apportion impacts to non-breeding season regional populations in the EIA, this follows our recommended approach using Furness (2015). The working is provided in *Annex A: Project Alone Mortality Apportionment Calculations* and *Annex C: In-Combination Mortality Apportionment Calculations*, including steps to account for non-UK breeding birds within the BDMPS, so that the final apportioned mortalities are to UK breeding adult birds only.

E.4.7.1 Age class apportioning

Age class proportions were determined from DAS observations for kittiwake and gannet only. There were insufficient records assigned to age classes for great black-backed gull and herring gull, and auk species cannot be aged from DAS. 94.3% of kittiwake and 97.3% of gannet were identified as adults in the breeding season, with 77.4% of kittiwake and 88.9% of gannet successfully aged from DAS observations.

It is stated that the proportion of adults determined for kittiwake is likely to be an overestimation due to the difficulty in aging subadult birds in their second and third year plumage. We acknowledge this is likely to make the assessment of impacts to breeding adults more precautionary. However, we have seen examples of applications which have used the proportions of juvenile, immature (1 year old) and adult birds identified from DAS, and demographic rates in Horswill & Robinson (2015) to determine the age class proportions of age classes 2-3 and 2-4, and adult birds (e.g. see *Environmental Impact Assessment Report - Volume 3 – Technical Reports – Ossian Offshore Wind Farm - South-east of Aberdeenshire Coast – Appendix 11.5 – Offshore*

Ornithology EIA Population Viability Analysis Technical Report). As this approach was not used in the Bellrock application, we can only make conclusions on the information presented.

The proportion of adults in the breeding season calculated for guillemot, razorbill and puffin are derived from stable age-structure modelling parametrised by demographic rates in Horswill & Robinson (2015). The proportions are within the range we expect to see when using region or SPA-specific productivity rates. The proportion of adults is not calculated for the apportioning of impacts to great black-backed gull as there are no impacts predicted in the breeding season. The sabbatical rates in Section 3.3 are consistent with the rates we have accepted from previous applications. A summary of these rates is provided below.

Table E-1. Proportion of adults and sabbatical rates for species identified for apportioning of impacts.

Species	Proportion of adults used for apportioning	Sabbatical rate
Kittiwake	0.943	0.1
Guillemot	0.506	0.07
Razorbill	0.481	0.07
Puffin	0.549 (Farne Islands SPA and Coquet Island SPA) 0.454 (Forth Islands SPA) 0.463 (North Caithness Cliffs SPA and regional population)	0.07
Gannet	0.973	0.1
Great black-backed gull	N/A	0.35

E.4.7.2 SPA colony count discrepancies

The application states that counts of breeding adults at SPA colonies with connectivity to the Bellrock WFDA have been derived from the most up to date or contemporaneous source, mainly Seabirds Count (Burnell et al., 2023) or the Seabird Monitoring Programme Database (SMP, 2026)[21]. Two additional sources were used for colony counts, Clarkson et al. (2022)[22] for counts of kittiwake and razorbill at Flamborough and Filey Coast SPA (including Filey Cliffs), and Harris et al. (2023)[23] for counts of gannet at Forth Islands SPA (Bass Rock).

Despite the application stating that the most up to date count is used, this is not the case and there are several instances where Seabirds Count data from 2015-2021 were used when counts up to and including 2024 were available (we acknowledge that 2025 data was likely not available at the time of writing). Considering the time period of the DAS between 2022 and 2024, the most contemporaneous colony counts would have been within this period. Additionally, the significant outbreak of HPAI in Scottish seabird populations in 2022 occurred during the DAS period, it is therefore more relevant to use colony counts from 2022 or later where possible in order to 'match up' the populations of birds using the survey area as captured by DAS and the colonies that impacts are apportioned to.

We note a number of discrepancies between the breeding colony population estimates in Table 2.1 and Table F-1 (Appendix 10.4-F) and the most recent or contemporaneous (with the DAS) counts in Seabirds Count or the SMP database. It also appears our advice on Scoping and HRA

[21] https://app.bto.org/seabirds/public/data.jsp
[22] Clarkson, K., Aitken, D., Cope, R. and O'hara, D., 2022. Flamborough & Filey Coast SPA: 2022 seabird colony count and population trends. *RSPB report*.
[23] https://www.seabird.org/conservation/bass-rock-colony-counts

Screening on 13 May 2024 recommended using correction factors to convert counts of guillemot and razorbill as 1.49 and 1.34, respectively – this is an error in our advice as these factors should be the other way around for these species (i.e. 1.34 for guillemot and 1.49 for razorbill, as per Burnell et al. (2023)). The Applicant has followed our advice on this, and we have used the same correction factors to compare our own colony counts with the Applicant's. We identify 22 incorrect colony counts across five species: kittiwake, razorbill, guillemot, puffin and gannet.

- Calf of Eday SPA – guillemot
- Copinsay SPA – kittiwake
- East Caithness Cliffs SPA – kittiwake, razorbill*, guillemot
- Forth Islands SPA – kittiwake, razorbill*, gannet
- Fowlsheugh SPA – kittiwake, razorbill and guillemot
- Mingulay and Berneray SPA – razorbill*
- North Caithness Cliffs SPA – kittiwake, razorbill*, puffin*, guillemot
- Rathlin Island SPA – razorbill*
- St Abb's Head to Fast Castle SPA – guillemot
- Troup, Pennan and Lion's Heads SPA – kittiwake, guillemot
- West Westray SPA – kittiwake*, guillemot

Many of these discrepancies are for colonies with connectivity in the non-breeding season only (shown by *), therefore the breeding season colony counts are not used in the apportioning assessment or in the regional breeding season reference population, but they are used to calculate the percentage point change in adult annual survival rate as a result of annual impacts for that SPA.

As sufficient detail was provided in the apportioning report, we have been able to undertake our own apportioning of impacts to SPAs and subsequent PVAs to assess the implications of colony count discrepancies. This was undertaken for SPAs with breeding season connectivity where colony count discrepancies were identified (kittiwake, razorbill and gannet only).

Overall, we found no implications for our conclusions across the four SPAs where AEoSI had not been concluded and the updated percentage point change in adult annual survival as a result of our apportioning was greater using updated colony counts (the only scenario where our conclusions may change from no AEoSI to AEoSI/unable to conclude no AEoSI). In each of these scenarios, the updated CPS and CGR from PVA would not contribute to a conclusion of AEoSI for these SPAs.

If requested, we can share our working for reaching these conclusions with MD-LOT. We also advise that MD-LOT may wish for the Applicant to recalculate impacts and rerun PVAs with updated colony counts (including correcting counts for guillemot and razorbill using correct k value conversion factors) to provide accurate impact mortalities for the derogation case.

E.4.7.3 Regional populations

The effect of individual colony count discrepancies on the regional breeding populations used in the EIA is minimal overall (an overestimate of approximately 2.2 to 7.3% for each species) given that individual counts within any species' regional population are both over- and underestimated, so is unlikely to have any further implications. We note that the regional populations used are an

overestimate in each case, therefore impacts are diluted and results are slightly less precautionary, which we consider in making our final conclusions.

E.5 NatureScot appraisal – EIA

E.5.1 Proposal alone impact assessment – construction

Site preparation works will be undertaken before the start of construction, but these have been included as construction activities. As such, the impact assessment includes one year of site preparation works plus seven years of construction activities, totalling eight years overall.

E.5.1.1 Temporary disturbance and displacement

The protracted construction period of eight years means vessels will be present in the WFDA for an extended time, though intermittently. The total of 1,615 vessel trips over the eight-year period is stated as the equivalent of one vessel movement every two days, adding to the existing traffic of three to nine vessels per day in the vicinity of the WFDA. Up to 816 helicopter round trips will occur during the eight-year construction phase, presenting a frequent disturbance risk to seabirds offshore. The Outline Vessel Management and Navigational Safety Plan contains very little detail at this stage related to marine wildlife, including seabirds. The outline plan includes commitments to standard good practice measures in the interest of marine wildlife safety, but details on vessel types, movements, and indicative transit corridors are currently not known so have not been assessed.

We disagree with the conclusion of negligible impact magnitude for guillemot, razorbill, gannet and puffin, instead concluding low magnitude due to the frequency of vessel and helicopter traffic. Overall, we conclude minor significance of this impact pathway in the construction phase, which is **not significant** in EIA. Note that all species were assessed as having medium sensitivity to the impact pathway, however gannet could be classed as having low sensitivity to vessel and helicopter disturbance (Wade et al., 2016)[24] and therefore this would also be classed as having minor significance.

E.5.1.2 Indirect effects through impacts to habitats and prey species

We accept the conclusion of minor adverse impact, which is **not significant** in EIA for all species scoped into the EIA, on the basis of a conclusion of minor adverse impacts to fish and shellfish.

E.5.1.3 Artificial lighting

The assessment has not been presented in a species-specific manner, i.e. assessing the impact pathways for each species scoped and considering sensitivity to, and magnitude of, the impact. It is only stated that species sensitive to artificial lighting are unlikely to occur at Bellrock. However, one European storm petrel was recorded. Considering the nocturnal activity of petrels and shearwaters, and that DAS took place in daylight hours only, the surveys are likely to have underrepresented the distribution of these species. Other data sources should have been consulted to assess the likely distribution of these species, including tracking data of foraging trips from breeding colonies.

[24] Wade, H.M., Masden, E.A., Jackson, A.C. and Furness, R.W., 2016. Incorporating data uncertainty when estimating potential vulnerability of Scottish seabirds to marine renewable energy developments. *Marine Policy*, *70*, pp.108-113.

Additionally, fulmar were the second most abundant species recorded on site. Fulmar have a high nocturnal activity factor (Wade et al. 2016), and spend significant time foraging at night (Danielsen, 2011)[25] meaning they are likely to be vulnerable to the impacts of artificial light. Puffin may also be vulnerable to the impacts of artificial light, particularly as fledglings when leaving the colony for the first time. As the Bellrock WFDA is a significant distance offshore, it is unlikely that this impact pathway would have a discernible impact on puffin, however both species should have been scoped in as there is a potential impact pathway present.

The Outline Lighting and Marking Plan sets out the basic details of the lighting anticipated in the construction and operation and maintenance phases of the Bellrock WFDA. We note that the maximum range of lighting in the construction and operation and maintenances phases is 2 nautical miles (3.7 km) and the brightest aviation warning lighting proposed is 2,000 candela red lighting to be displayed at night. Given the limited visibility and brightness of the lighting expected to be used in the WFDA and the distance from shore, we can accept the conclusion of negligible magnitude of this impact for all species, therefore concluding negligible significance.

The Outline Environmental Management Plan makes reference to recording wildlife incidents and escalating them appropriately. We advise that this should also include incidents of birds grounding on vessels or infrastructure if attracted to or disoriented by artificial light in the WFDA, and that these incidents should be reported appropriately.

E.5.1.4 Indirect impacts from UXO clearance

The potential impacts of UXO clearance will be assessed as part of a separate Marine Licence and is described in the EIA chapter for information only. Our advice on this impact pathway should be considered in the Marine Licence application.

E.5.2 Proposal alone impact assessment – operation and maintenance

E.5.2.1 Temporary disturbance and displacement

We agree with the conclusion of negligible significance for guillemot, razorbill, gannet and puffin, noting that the frequency of vessel and helicopter traffic in this phase will be less than that in the construction phase.

Table 4.23 in Chapter 4 (Project Description) states that 986 helicopter return trips per year are required during the operations and maintenance phase. This would equate to nearly three return trips per day during the operations and maintenance phase, which is substantially higher than other Proposals. However, Table 4.21 states that 816 helicopter trips are required during the entire construction phase. We have assumed that Table 4.23 is in error and that the 986 return trips are for the entire phase, similar to Table 4.21. **We request clarification as to whether our understanding is correct regarding the number of return helicopter trips.**

E.5.2.2 Indirect effects through impacts to habitats and prey species

We accept the conclusion of minor adverse impact, which is **not significant** in EIA for all species scoped into the EIA, on the basis of a conclusion of minor adverse impacts to fish and shellfish.

[25] Danielsen, J., 2011. Diurnal activity patterns suggest nocturnal foraging in Northern Fulmar (Fulmarus glacialis)/Dagligt virksemi hjá havhesti (Fulmarus glacialis) bendir á, at hann leitar sær føði um náttina. *Fróðskaparrit-Faroese Scientific Journal*, pp.113-121.

E.5.2.3 Disturbance and displacement

Kittiwake, guillemot, razorbill, puffin and gannet have been assessed under this impact pathway using the displacement matrix approach. All five species have been classed as having medium sensitivity to this impact, which we accept. We note that Wade et al. (2016) class kittiwake and gannet as having low sensitivity, however conflicting evidence of the distributional responses of these species to offshore wind farms (Krijgsveld et al. 2011[26]; Vanermen et al. 2013[27]; Dierschke et al. 2016[28]; Pollock et al. 2024[29]) means that we advise both species are screened in for this impact pathway.

The survival rates of the species screened in are correctly derived from Horswill & Robinson (2015) and presented in Table 10.21. Productivity rates are also derived from Horswill & Robinson (2015), with east region-specific rates used for gannet, guillemot and kittiwake, mid region-specific rate used for razorbill, and national-average rate used for puffin, all of which we accept.

An average mortality rate is presented for each species. It is unclear how this value has been calculated or how age-specific survival rates have been weighted to reach the average mortality value stated. We note that the average mortality rates are greater than the mortality rate of the adult age class, therefore we accept these average rates.

A key element in assessing the magnitude of impact for all species assessed for distributional responses is the percentage point change in annual adult survival. For each species, the annual/total increase in baseline mortality presented in the relevant tables in the EIA chapter has been calculated using the largest baseline population as the reference population. We do not accept this approach as this results in the impacts across all seasons being diluted by the largest population, usually a non-breeding season, despite the greatest impact being in the breeding season for all species except guillemot.

To calculate the percentage point change in annual adult survival relative to the breeding season regional population, it is necessary to adjust the impacts in the non-breeding season(s) to account for the proportion of birds from the breeding season population which are in the non-breeding season population(s). This has been calculated correctly in *Appendix 10.4: Annex A - Project Alone Mortality Apportionment Calculations* and the annual adult mortalities and annual percentage point change in adult annual baseline mortality rate (i.e. percentage point change in annual adult survival rate) is presented below for the relevant tables in the EIA.

Therefore, the correct values have been presented in the text in the EIA, however we highlight to Marine Directorate and future applicants that the values in the tables presented below the species

[26] Krijgsveld, K.L., Fijn, R.C., Japink, M., Van Horssen, P.W., Heunks, C., Collier, M.P., Poot, M.J.M., Beuker, D. and Dirksen, S., 2011. Effect studies offshore wind farm Egmond aan Zee. *Final report on fluxes, flight altitudes and behaviour of flying birds. Report*, (10-219).

[27] Vanermen, N., Stienen, E., Courtens, W., Onkelinx, T., Van De Walle, M. and Verstraete, H., 2013. Bird monitoring at offshore wind farms in the Belgian part of the North Sea: assessing seabird displacement effects.

[28] Dierschke, V., Furness, R.W. and Garthe, S., 2016. Seabirds and offshore wind farms in European waters: Avoidance and attraction. *Biological Conservation*, *202*, pp.59-68.

[29] Pollock, C.J., Johnston, D.T., Boersch-Supan, P.H., Thaxter, C.B., Humphreys, E.M., O'Hanlon, N.J., Clewley, G.D., Weston, E.D., Shamoun-Baranes, J. and Cook, A.S., 2024. Avoidance and attraction responses of kittiwakes to three offshore wind farms in the North Sea. *Marine Biology*, *171*(11), p.217.

impact descriptions (e.g. Table 10.22) do not represent the approach we advise in calculating the change in adult annual survival rate.

Guillemot

The apportioned adult annual mortality of the guillemot regional population as a result of displacement impacts is stated as 24.94 to 65.93 birds, with a percentage point decrease in adult annual baseline survival rate of 0.0025 to 0.0066, meaning a regional PVA is not required for proposal alone impacts.

We have identified an error in the mean seasonal peak abundance calculation in Table 10.10, where the mean seasonal peak abundance estimates are substantially lower than the correct value.

We believe this may be an error in using the abundance estimates for sitting birds only in the WFDA, with no buffer, as the mean seasonal peak abundance estimates in Table 10.10 are similar to the values which would be derived from Table 5.5: *Apportioned Density and Abundance Estimates of Sitting Guillemots (Corrected for Availability Bias)* across the Bellrock WFDA using design-based analysis in *Appendix 10.1 – Annex B: Density and Abundance Estimates By Survey*. We have calculated the correct mean seasonal peak values from the apportioned and corrected abundance estimates for all guillemot in the WFDA + 2 km buffer in Table 10.10 of the EIA chapter and present the differences below.

Table E-2. Annual seasonal peak and reported (pink) and updated (green) mean seasonal peak abundance estimates of guillemot in the Bellrock WFDA + 2 km buffer.

Abundance estimate	Breeding season	Post-breeding dispersal	Non-breeding season
Year 1 peak	1,576.29 (Apr 22)	16,393.41 (Jul 22)	2,594.13 (Nov 22)
Year 2 peak	1,002.62 (May 23)	165.08 (Aug 23)	465.05 (Mar 23)
Mean peak	1,289.46	8,279.25	1,529.59
Table 10.11 value	790	5,075	938

The displacement mortality values from the displacement matrix and using the corrected mean seasonal peak density estimates are as follows:

- Breeding season **23.2 to 38.67**
- Post-breeding dispersal period **49.67 to 149.02**
- Non-breeding season **9.18 to 27.54**

When apportioned to breeding adults only, this results in 40.68 to 107.49 annual adult mortalities and a percentage point decrease in adult annual survival rate of 0.0041 to 0.0107, meaning a regional PVA is not required for proposal alone impacts.

Despite the discrepancies in seasonal mean peak abundance estimates used in the assessment of displacement impacts, we agree with the classification of negligible magnitude, meaning the impact is of negligible significance.

Razorbill

The apportioned adult annual mortality of the razorbill regional population as a result of displacement impacts is 10.50 to 17.55 birds, with a percentage point decrease in adult annual baseline survival rate of 0.0395 to 0.0660, meaning a regional PVA is required for proposal alone impacts.

We conclude low magnitude of the proposal alone displacement impacts on the razorbill regional population based on the following:

- Median CPS values of 0.9727 to 0.9835 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 1.65 to 2.73% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.9992 to 0.9995
- The relatively stable population trend of razorbill in Scotland with a 4% increase between 2000 and 2024 (Harris et al., 2026)[30] and a 2.4% decline between Seabird 2000 and Seabirds Count (Burnell et al., 2023)[31].

Overall, we therefore conclude an impact of minor significance, which is **not significant** in EIA terms.

Puffin

We accept the conclusion of negligible magnitude and therefore negligible significance of the proposal alone displacement impacts on the regional puffin population based on the following:

- The apportioned adult annual mortality of the puffin regional population as a result of displacement impacts is 4.61 to 9.99 birds
- The percentage point decrease in adult annual baseline survival rate of 0.0017 to 0.0036, meaning a regional PVA is not required for proposal alone impacts.

E.5.2.4 Barrier to movement (migratory non-seabirds)

The assessment of this impact pathway is specifically focussed on the potential impact of the Bellrock WFDA acting as a barrier to movement for migratory species (collision risk of migratory species is assessed separately). Given the minimal additional flight distance which may be incurred by migratory species when navigating around the development relative to their existing migration distances, we agree with the classification of low sensitivity, negligible impact magnitude, and negligible significance.

E.5.2.5 Collision risk

Two Wind Turbine Generator (WTG) design scenarios have been considered in the Collision Risk Modelling (CRM) assessment; WTG Type 1 (worst-case scenario due to larger rotor swept area) and WTG Type 2. Both deterministic and stochastic models have been run, with EIA conclusions based on option two from the stochastic model outputs and the WTG Type 1 worst-case scenario.

[30] Harris, S.J., Baker, H., Balmer, D.E., Bolton, M., Burton, N.H.K., Caulfield, E., Clarke, J.A.E., Dunn, T.E., Evans, T.J., Hereward, H.R.F. and Humphreys, E.M., 2024. Seabird population trends and causes of change: 1986–2023. *the annual report of the Seabird Monitoring Programme*.
[31] https://jncc.gov.uk/our-work/seabirds-count/

Great black-backed gull

The predicted annual mortality of the great black-backed gull regional population as a result of collision impacts is 1.14 birds, with impacts occurring in the spring migration period only. The great black-backed gull non-breeding BDMPS period in Furness (2015) is defined as a single period from September to March (i.e. not split into autumn and spring migration, and winter period which was the Applicant's approach) and a population of 91,399 birds (adults and immatures). The spring migration period in the assessment is also stated as a population of 91,399 birds, therefore we agree with the percentage point decrease in adult annual baseline survival rate of 0.001 and agree a regional PVA is not required for proposal alone impacts.

Great black-backed gull are classed as having high sensitivity to collision impacts and we agree with the classification of negligible impact magnitude, meaning the impact is of minor significance overall.

Arctic tern

The predicted annual mortality of the Arctic tern regional population as a result of collision impacts is 0.35 birds with impacts occurring in the breeding season only. It is noted that there are no Arctic tern breeding colonies with theoretical connectivity to the WFDA in the breeding season, and birds recorded in the DAS are likely to be non-breeding or early Autumn passage birds as most were present in July and August surveys. On a precautionary basis, the percentage point change in adult annual survival was based on all birds in the WFDA being assumed to be breeding adults, resulting in a percentage point decrease in adult annual survival of 0.0002, meaning a regional PVA is not required for proposal alone impacts.

Arctic tern are classed as having medium sensitivity to collision impacts and we agree with the classification of negligible impact magnitude, meaning the impact is of negligible significance overall.

Arctic skua

The predicted annual mortality of the Arctic skua regional population as a result of collision impacts is 0.08 birds with impacts occurring in the breeding season only. It is noted that there are no Arctic skua breeding colonies with theoretical connectivity to the WFDA in the breeding season and only one bird was recorded in the DAS in June 2022, likely a non-breeding or migrating bird. On a precautionary basis, the percentage point change in adult annual survival was based on all birds in the WFDA being assumed to be breeding adults, resulting in a percentage point decrease in adult annual survival of 0.001, meaning a regional PVA is not required for proposal alone impacts.

Arctic skua are classed as having medium sensitivity to collision impacts and we agree with the classification of negligible impact magnitude, meaning the impact is of negligible significance overall.

Migratory non-seabirds

The assessment of collision risk to migratory non-seabirds has been undertaken using WWT (2014)[32] and Woodward et al. (2023)[33], as the migratory CRM (mCRM) tool (Humphries and Caneco, 2022)[34] was not available at the time of the assessment. We accept this approach for the Bellrock WFDA assessment but expect future applications to use the mCRM tool which is now available to users.

We acknowledge the precautionary approach taken for the assessment, which assumes all birds in the migration front pass through the WFDA. The proportion at collision risk height and recommended avoidance rates are derived from Woodward et al. (2023) to calculate the percentage of the migratory population at risk of collision. It is noted that the proportion of the migratory population at risk of collision is not further reduced by the proportion of the WFDA width relative to the migration front. This is an appropriate approach given that any species with a migratory corridor overlapping the WFDA may theoretically migrate through the WFDA.

We agree with the impact magnitude classification for all species, noting that those with non-overlapping migration corridors are classed as no change, those with <1% of population at risk of collision are negligible magnitude, and >1% of population at risk of collision are low magnitude.

The species with >1% of population at risk of collision and assessed as low magnitude are shoveler, gadwall, wigeon, mallard, pintail, teal, pochard, tufted duck, scaup, velvet scoter, common scoter, long-tailed duck, goldeneye, goosander, red-breasted merganser, corncrake, spotted crake and merlin. For these species we agree with the conclusion of minor significance. Species with no connectivity to the WFDA and assessed as having no effect of collision are Nearctic light-bellied brent goose, dark-bellied brent goose, Greenland barnacle goose, Icelandic greylag goose, Greenland white-fronted goose, European white-fronted goose, Bewick's swan, stone curlew, avocet, black-tailed godwit (limosa), red-necked phalarope, honey buzzard, Montagu's harrier and white-tailed eagle. All other species in Woodward et al. (2023) had connectivity but <1% of population at risk of collision and we agree with the conclusion of negligible significance.

Fulmar

Due to the high number of fulmar recorded in the Bellrock WFDA during the DAS making them the second most abundant species on site, we are of the view that the species should have been scoped in for collision risk modelling. Whilst we acknowledge that fulmar are not typically assessed for collision risk due to the low proportion of flights at collision risk height (Johnston et al. (2014) predict a proportion of 0.0002 (0.000 to 0.061) birds within a rotor swept area of 20 to 120m), the risk is not zero and therefore a large influx of birds introduces the potential for population-level impacts to occur. Similarly, however, we acknowledge that the extensive foraging range of fulmar (MM+1SD 1,200.2 km) and the large non-breeding season BDMPS populations

[32] https://www.gov.scot/publications/scottish-marine-freshwater-science-volume-5-number-12-strategic-assessment/
[33] Woodward, I.D., Franks, S.E., Bowgen, K., Davies, J.G., Green, R.M.W., Griffin, L.R., Mitchell, C., O'Hanlon, N., Pollock, C., Rees, E.C., Tremlett, C., Wright, L. & Cook, A.S.C.P. 2023. Strategic study of collision risk for birds on migration and further development of the stochastic collision risk modelling tool (Work Package 1: Strategic review of birds on migration in Scottish waters). *JNCC Reports* JNCC, Peterborough, UK
[34] https://github.com/MarineScotlandScience/mCRM

mean any quantitative impacts would be significantly diluted across a large regional population in EIA and almost all UK breeding colonies in HRA.

Given that we do not expect collision mortality impacts to result in significant or adverse effect to any fulmar regional or SPA populations, we have undertaken our own modelling to validate this assumption. Collision risk modelling was undertaken using best available data to inform species parameters which are summarised below. The CRM Shiny App (Caneco, 2022) version 0.2.0 was used, with only a deterministic model run as the density inputs available were the mean of the two density estimates (one from each year of survey) of flying fulmar from each month (taken from Appendix 10.1, Annex B, Table 8.5). Flight height distribution used Johnston et al. (2014) generic data. Wind farm parameters were taken from those presented in the Bellrock application, with only the WTG Type 1 scenario modelled as the worst-case scenario. Only the proposal alone impacts have been modelled, due to insufficient data from other projects regarding fulmar collision risk.

Table E-3. Species parameters used in collision risk modelling for fulmar.

Parameter	Source	Value
Bird length (m)	Caneco (2022)	0.45
Wingspan (m)	Caneco (2022)	1.07
Flight speed (m/s)	Pennycuick (1987), in Caneco (2022)	13.0
Nocturnal activity factor (0-1)	Wade et al (2016)	0.75
Flight type	(SNCBs, 2024)	Flapping
Proportion of upwind flights (0-1)	(SNCBs, 2024)	0.5
Avoidance rate (deterministic)	(SNCBs, 2024)	0.9923

Option two of the deterministic CRM model is presented in the results below. The results of the CRM are then apportioned to UK breeding adult mortalities using the BDMPS populations defined by Furness (2015). The percentage point change in adult annual survival rate after annual collision impacts is sufficiently low that it can be classed as a non-tangible impact which would be classed as negligible magnitude and significance.

Table E-4. Predicted mortalities of fulmar from collision risk modelling, apportioned mortality estimates to UK breeding adults only and resulting percentage point change in adult annual survival rate.

Season	Regional population count		Collision mortalities		% point decrease in adult annual survival rate
	All birds	UK Breeding adults	All birds	UK Breeding adults	
Breeding	554,700	343,914	0.71	0.44	0.00013
Post-breeding	957,502	573,641	3.34	0.72	0.00013
Winter	568,736	408,808	0.26	0.11	0.00003
Pre-breeding	957,502	573,641	1.16	0.25	0.00004
Annual	554,700	343,914	5.46	1.52	0.00044

E.5.2.6 Combined collision risk and displacement

Kittiwake

We agree with the conclusion of negligible magnitude and therefore negligible significance of the proposal alone combined collision and displacement impacts on the regional kittiwake population based on the following:

- The apportioned adult annual mortality of the kittiwake regional population as a result of displacement and collision impacts is 14.03 to 16.08 birds
- The percentage point decrease in adult annual baseline survival rate of 0.0045 to 0.0051, meaning a regional PVA is not required for proposal alone impacts

Kittiwake are classed as having medium sensitivity to displacement and collision impacts and we agree with the classification of negligible impact magnitude, meaning the impact is of negligible significance overall.

Gannet

We agree with the conclusion of negligible magnitude and therefore negligible significance of the proposal alone combined collision and displacement impacts on the regional gannet population based on the following:

- The apportioned adult annual mortality of the gannet regional population as a result of displacement and collision impacts is 17.79 to 24.04 birds
- The percentage point decrease in adult annual baseline survival rate of 0.0047 to 0.0063, meaning a regional PVA is not required for proposal alone impacts

Gannet are classed as having medium sensitivity to displacement and collision impacts and we agree with the classification of negligible impact magnitude, meaning the impact is of negligible significance overall.

E.5.2.7 Secondary entanglement with subsea infrastructure

Diving species have been screened into the assessment of impacts arising from secondary entanglement with subsea infrastructure. We note that only guillemot, razorbill and puffin have been named as species screened into the assessment of this impact and we recommend that gannet are also considered here. All three species have been assessed as having high sensitivity to the potential impacts, which we agree with and also consider applicable to gannet.

It is stated that regular inspection and monitoring of mooring lines and other subsea structures would occur during the operation and maintenance phase, during which any debris would be removed to reduce the risk of secondary entanglement. We note the commitment under embedded mitigation measure WFDA-62 under which "*regular and periodic inspections and maintenance of the Wind Farm Infrastructure will be undertaken over its operational life to identify and remediate any damage and deterioration and maintain good working conditions (including any debris entangled with the Wind Farm Infrastructure)*" – such a commitment is likely to reduce the risk of secondary entanglement to all vulnerable species sufficiently to prevent a significant effect from occurring.

As such, we agree with the classification of negligible magnitude and minor adverse significance overall for all diving species (including gannet), providing mitigation measure WFDA-62 is implemented.

E.5.2.8 Artificial lighting

Our advice for the construction phase is also relevant to the operation and maintenance phase for this impact pathway.

E.5.3 Proposal alone impact assessment – decommissioning

The impacts predicted to occur in the decommissioning phase are stated to be at a lesser magnitude than that expected in both the construction and operation and maintenance phases. Details of anticipated activities or works associated with this phase are not provided to confirm this, however we accept that no new impact pathways would arise for marine ornithology receptors in the decommissioning phase. Any planned decommissioning activities should involve consultation with NatureScot and other stakeholders and include detailed consideration of the expected impact pathways.

E.5.4 Cumulative effects assessment – construction

For impacts C1 and C2 (temporary disturbance and displacement; indirect effects through impacts to habitats and prey species), the cumulative effects assessment has considered only the combined impact of the Bellrock WFDA and OfTDA and does not consider other offshore wind farms. The impact from the OfTDA is assumed to be of a lesser extent/magnitude than that of the WFDA construction phase, so it is concluded that the magnitude of impact would not be increased when the OfTDA is considered. Detail of the impact occurring as a result of the OfTDA or other offshore wind farms are not provided (e.g. vessel trips, area of habitat loss, etc) or overlap in construction times. The approach also appears to not consider the possibility that the combined impact of the WFDA and OfTDA construction activities could together cause a significant effect, only that the OfTDA construction activities would not increase the magnitude of the WFDA-alone impacts.

Additionally, the cumulative impact of temporary disturbance and displacement from the Bellrock WFDA, OfTDA and other plans and projects cannot be fully assessed at this stage while port selection is unknown.

Therefore, we request within the OfTDA Application that full consideration is given to the cumulative effects assessment of construction. We encourage the Applicant to engage with NatureScot and MD-LOT on the approach to this assessment.

E.5.5 Cumulative effects assessment – operation and maintenance

E.5.5.1 Disturbance and displacement

Guillemot

The apportioned adult annual mortality of the guillemot regional population as a result of cumulative displacement impacts is 3,813 to 7,797 birds, with a percentage point decrease in adult annual baseline survival rate of 0.3800 to 0.7770, meaning a regional PVA is required for cumulative impacts.

We disagree with the conclusion of low magnitude and instead conclude high magnitude of the cumulative displacement impacts on the guillemot regional population based on the following:

- Median CPS values of 0.7265 to 0.8552 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 14.48 to 27.35% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.9912 to 0.9957

- The declining population trend of guillemot in Scotland with a 38% decline between 2000 and 2024 (Harris et al., 2026) and a 31% decline between Seabird 2000 and Seabirds Count censuses (Burnell et al., 2023).

Guillemot are classed as having medium sensitivity to displacement impacts; therefore we conclude an impact of major significance overall, which is **significant** in EIA terms. As guillemot were not assessed in the RIAA, there is no compensation proposed in the derogation case. Impacts to guillemot occurring from the Bellrock proposal must be addressed through the EIA mitigation hierarchy, through offsetting. We encourage the Applicant to engage with NatureScot and MD-LOT to secure measures to offset (compensate) the predicted impacts to guillemot.

Razorbill

The apportioned adult annual mortality of the guillemot regional population as a result of cumulative displacement impacts is 244 to 497 birds, with a percentage point decrease in adult annual baseline survival rate of 0.9175 to 1.8681, meaning a regional PVA is required for cumulative impacts.

We disagree with the conclusion of medium magnitude and instead conclude high magnitude of the cumulative displacement impacts on the razorbill regional population based on the following:

- Very low median CPS values of 0.4538 to 0.6790 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 32.10 to 54.62% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.9783 to 0.9893
- The relatively stable population trend of razorbill in Scotland with a 4% increase between 2000 and 2024 (Harris et al., 2026) and a 2.4% decline between Seabird 2000 and Seabirds Count (Burnell et al., 2023)

Razorbill are classed as having medium sensitivity to displacement impacts; therefore, we conclude an impact of major significance overall, which is **significant** in EIA terms. We have concluded adverse effect on site integrity to several SPAs for razorbill as a result of the Bellrock proposal in the RIAA. Where adverse effect on site integrity has been concluded, compensation measures are required and have been proposed in the derogation case. As such, we are content that the significant impacts to the regional population will be addressed through compensation.

We acknowledge the narrative provided in Section 10.9.4.1.2.3.1 around the potential inflation of impacts to the regional razorbill population given the relatively small number of breeding colonies within foraging range of the Bellrock WFDA due to its distance from the coast. Comparisons are drawn between the approach taken for guillemot where the maximum foraging range was used, and razorbill where the mean maximum foraging range was used. It is our recommended approach that the mean maximum foraging range is used to determine connectivity to breeding colonies as this is a more robust metric averaging multiple recorded maximum foraging range distances, as opposed to a single maximum foraging range value. The approach taken to determine guillemot breeding season connectivity was a bespoke approach and an exception to our guidance, given that no guillemot colonies were within breeding season mean maximum foraging range. We base our conclusion for razorbill on the results using the mean maximum foraging range and the PVA results presented in the EIA.

Puffin

The apportioned adult annual mortality of the puffin regional population as a result of cumulative displacement impacts is 460 to 1,049 birds, with a percentage point decrease in adult annual baseline survival rate of 0.1651 to 0.3765, meaning a regional PVA is required for cumulative impacts.

We disagree with the conclusion of low magnitude and instead conclude medium magnitude of the cumulative displacement impacts on the puffin regional population based on the following:

- Median CPS values of 0.8836 to 0.9437 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 5.63 to 11.64% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.9966 to 0.9984
- The substantial declines of the puffin breeding population in Scotland with a decline of 20.8% between Seabird 2000 and Seabirds Count censuses (Burnell et al., 2023).

Puffin are classed as having medium sensitivity to displacement impacts; therefore, we conclude an impact of moderate significance overall, which is **significant** in EIA terms. We have concluded adverse effect on site integrity to several SPAs for puffin as a result of the Bellrock proposal in the RIAA. Where adverse effect on site integrity has been concluded, compensation measures are required and have been proposed in the derogation case. As such, we are content that the significant impacts to the regional population will be addressed through compensation.

E.5.5.2 Collision risk

Great black-backed gull, Arctic tern and Arctic skua

Predicted collision impacts from the proposal alone were low for great black-backed gull (1.14 birds/annum), Arctic tern (0.35 birds/annum) and Arctic skua (0.08 birds/annum). All three species were excluded from the assessment of cumulative collision impacts on the basis of low proposal alone collision impacts. However, we would expect the cumulative impacts to be quantified and expressed as a percentage point change in adult annual survival rate in order to assess whether or not a cumulative assessment is required. The exception is for Arctic skua, where proposal alone collision mortalities are low enough to be deemed as a non-tangible impact and we accept a cumulative assessment is not required.

We have undertaken the calculations to determine the predicted proposal alone collision mortality of UK breeding adult birds for great black-backed gull and Arctic tern experiencing collision impacts in the non-breeding season as follows:

UK breeding adult bird mortalities = Predicted collision mortalities for all birds * (No. UK adult birds in UK North Sea BDMPS / total birds in UK North Sea BDMPS)

- Great black-backed gull: 1.14 * (11,670/91,399) = 0.146 UK breeding adult bird mortalities per annum
- Arctic tern: 0.35 * (22,917/163,930) = 0.049 UK breeding adult bird mortalities per annum

For both species, the predicted collision mortalities apportioned to UK breeding adult birds is very low and therefore we advise this is a non-tangible impact in EIA and a cumulative assessment is not required.

[We highlight to future applicants that in order to demonstrate that a cumulative assessment is not required, we require either a quantification of cumulative impacts and the associated percentage point change in adult survival, or the predicted impact apportioned to breeding adult birds provided to show a non-tangible impact in EIA as we have done above. Please note that we consider what constitutes a non-tangible impact on a case-by-case basis and future applicants should consult NatureScot to confirm whether we accept an impact as non-tangible.]

E.5.5.3 Combined collision and displacement

Kittiwake

The apportioned adult annual mortality of the kittiwake regional population as a result of combined cumulative collision and displacement impacts is 2,350 to 3,181 birds, with a percentage point decrease in adult annual baseline survival rate of 0.7507 to 1.0159, meaning a regional PVA is required for cumulative impacts.

We disagree with the conclusion of low magnitude and instead conclude high magnitude of the cumulative combined displacement and collision impacts on the kittiwake regional population based on the following:

- Median CPS values of 0.723 to 0.789 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 21.1 to 27.7% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.991 to 0.993
- The significant declines of the kittiwake breeding population in Scotland with a 41% decrease between 2000 and 2024 (Harris et al., 2026) and a 57.2% decline between Seabird 2000 and Seabirds Count censuses (Burnell et al., 2023).

Kittiwake are classed as having medium sensitivity to displacement and collision impacts; therefore we conclude an impact of major significance overall, which is **significant** in EIA terms. We have concluded adverse effect on site integrity to several SPAs for kittiwake as a result of the Bellrock proposal in the RIAA. Where adverse effect on site integrity has been concluded, compensation measures are required and have been proposed in the derogation case. As such, we are content that the significant impacts to the regional population will be addressed through compensation.

Gannet

The apportioned adult annual mortality of the gannet regional population as a result of combined cumulative collision and displacement impacts is 1,250 to 1,935 birds, with a percentage point decrease in adult annual baseline survival rate of 0.3292 to 0.5095, meaning a regional PVA is required for cumulative impacts.

We disagree with the conclusion of low magnitude and instead conclude medium magnitude of the cumulative combined displacement and collision impacts on the gannet regional population based on the following:

- Median CPS values of 0.8489 to 0.9032 (upper to lower displacement scenario) after the 35-year lifetime of the proposal, representing a 9.68 to 15.11% smaller population than the unimpacted baseline scenario
- Median CGR values of 0.9955 to 0.9972

- The increase in the breeding population of gannet in Scotland by 39.6% between Seabird 2000 and Seabirds Count censuses (Burnell et al., 2023), followed by mortality from the 2022 HPAI outbreak causing all Scottish colony populations to decline by between 3% (Fair Isle) and 37% (Hermaness, Saxa Vord and Valla Field) relative to pre-HPAI baseline counts (Tremlett et al., 2024)[35].

Gannet are classed as having medium sensitivity to displacement and collision impacts; therefore we conclude an impact of moderate significance overall, which is **significant** in EIA terms. We have concluded adverse effect on site integrity to several SPAs for gannet as a result of the Bellrock proposal in the RIAA. Where adverse effect on site integrity has been concluded, compensation measures are required and have been proposed in the derogation case. As such, we are content that the significant impacts to the regional population will be addressed through compensation.

E.5.6 Mitigation and monitoring

We are disappointed that little consideration has been given to monitoring requirements at this stage. We would expect to see an outline monitoring proposal, indicating how and when monitoring would be incorporated. We encourage the Applicant to engage with NatureScot going forward to propose monitoring measures to validate the outcome of the EIA and RIAA.

E.5.6.1 Construction programme

Work will be undertaken on a 24-hour and 7-days per week basis from March to October inclusive. The construction phase is planned to start in 2031 and span a seven-year period (plus site preparation works in 2030). Construction activities will be phased to allow a group of Floating Offshore Units (FOUs) to be constructed each construction season. Each group of FOUs will generate energy during the remaining construction period.

These periods of overlapping operation and construction are not fully understood and we recommend that post-consent monitoring incorporate this period as well as when the wind farm is fully operational.

E.6 NatureScot appraisal – RIAA

E.6.1 Revisions to the HRA Screening conclusions

At the HRA Screening stage, it was assumed that in the breeding season, lesser black-backed gull, Leach's storm petrel, European storm petrel, great skua and Manx shearwater could theoretically have connectivity. None of these five species were observed in the DAS although the Applicant acknowledges the petrel species may be under-recorded due to their small size and dark colouration. Leach's storm petrel and Manx shearwater continue to be justified as not requiring screening in by having no potential for connectivity in the assessment due to their known ecology and at-sea distributions. European storm petrel could have connectivity due to the colony at Auskerry SPA; however, densities are low in the North Sea. Lesser black-backed gull, European storm petrel and great skua were revised to conclusions of no potential connectivity. We support this.

In the non-breeding season, the HRA Screening concluded there was potential connectivity for lesser black-backed gull, Sandwich tern, common tern, Arctic tern, Arctic skua and great skua.

[35] https://www.rspb.org.uk/birds-and-wildlife/seabird-surveys-project-report

Following the two years of DAS, there were either no or only a single record of these species in the non-breeding season. The conclusions of potential connectivity were therefore revised to no potential connectivity, which we support.

As LSE has been ruled out for nocturnal species (i.e. Manx shearwater, European storm petrel and Leach's storm petrel), potential impacts from artificial lights have not been considered further in the assessment.

E.6.2 Highly Pathogenic Avian Influenza (HPAI)

There is a thorough assessment of the impacts to seabirds from the effects of HPAI. We appreciate the detail provided and considerations on the implications for the assessment.

E.6.3 Proposal alone assessment of AEoSI

We agree with the Applicant's conclusion of no AEoSI from proposal alone impacts.

Fowlsheugh SPA

Table E-5. Proposal alone impacts and conclusions.

SPA	Species	Mortality from proposal alone (low to high)[36]	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Fowlsheugh	Razorbill	16.39 to 27.33	1.000 – 0.999	0.983 – 0.972	No AEoSI

For razorbill at Fowlsheugh SPA we conclude no AEoSI, considering:

- The high CPS values, representing a reduction in population size of up to 2.8%,
- a stable population growth rate,
- the increasing population and the favourable condition of the feature.

E.6.4 In-combination assessment of AEoSI

The NEEOG interim CEF dataset has been used when calculating in-combination impacts. Although we are aware of some issues within this dataset, for the sake of consistency and compatibility across applications, we are content with this being used.

The Applicant has provided narrative around very small impacts in the in-combination assessment. Previous NatureScot advice had been that PVAs only had to be undertaken when impacts were above 0.2 bird/annum. However, as the increase in number of developments has pushed more sites into adverse effect, it is important to understand the in-combination assessment as small impacts may still add up and we no longer recommend the 0.2 bird/annum threshold. As such, we cannot accept the argument that the impacts from the Applicant '*represent no meaningful addition to the in-combination effects*'.

We understand that this could leave the Applicant responsible for compensation for, at times, a very small impact. The compensation package outlined by the Applicant accounts for these very

[36] Values presented for low displacement mortality rate value followed by high displacement mortality rate value.

small impacts (required and without prejudice, Tables 2.1 and 2.2 Appendix A: Shadow Derogation) and we do not require more to be done, but it is important that we understand which designated SPAs are under pressure and for which feature(s).

The Applicant has removed impacts from Green Volt where Marine Directorate has concluded AEoSI in the Appropriate Assessment on the basis that these impacts will be compensated for should the development be constructed. These are:

- Gannet at Forth Islands SPA,
- Kittiwake at Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, Fowlsheugh SPA, and Troup, Pennan and Lion's Head SPA,
- Puffin at Forth Islands SPA, and
- Razorbill at East Caithness Cliffs SPA.

Impacts are presented both with and without Berwick Bank at NatureScot request. Since this advice was given, Berwick Bank has been consented. NatureScot conclusions have therefore been based on the 'excluding Berwick Bank' scenario for the sites and features where Marine Directorate has concluded AEoSI in the Berwick Bank Appropriate Assessment on the basis that these impacts will be compensated for. These are:

- Gannet at Forth Islands SPA and Hermaness, Saxa Vord and Valla Field SPA,
- Kittiwake at Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, Forth Islands SPA, Fowlsheugh SPA, North Caithness Cliffs SPA, St Abb's Head to Fast Castle SPA, Troup, Pennan and Lion's Heads SPA, and West Westray SPA,
- Puffin at Forth Islands SPA, and
- Razorbill at Forth Islands SPA, Fowlsheugh SPA, and Troup, Pennan and Lion's Heads SPA.

Where no compensation is required by Berwick Bank as a condition of their consent, the conclusions have been based on the 'including Berwick Bank' scenario.

E.6.4.1 Additional offshore wind farm mortalities

We note the Applicant's narrative surrounding the future exclusion of some sites currently included in the in-combination assessment as other development applications are either consented or withdrawn. The Applicant has applied a cut-off date for projects included in the in-combination assessment of the end of March 2025 which coincided with the timing of the production of the most recent update (i.e. April 2025) of the North East and East Ornithology Group (NEEOG) Interim Cumulative Effects Framework (CEF) project totals (Section 3.4, RIAA Part 3). However, an update with mortalities from additional OWF applications between March 2025 and February 2026 has been included (Appendix B, RIAA Part 3).

This Appendix includes:

- Four OWF proposals (specifically Aspen, Ayre, Buchan and MarramWind) that have submitted consent applications and have the potential to contribute to in-combination mortality for some of the SPA populations assessed,
- Three OWF projects that have received consent from the Scottish Government (specifically Berwick Bank, Salamander and West of Orkney), and
- Three OWF proposals that submitted before the end of March 2025 (and therefore included within the Bellrock WFDA in-combination assessment) but which remain to be

determined, which have submitted additional information (specifically Muir Mhòr, Caledonia – north and south and Ossian).

As was the case with Green Volt, for consented projects where an AEoSI has been concluded (or could not be excluded)[37] by the Scottish Ministers for a particular SPA population, these impacts have been removed on the basis that the project cannot move forward without compensating for these impacts.

The Applicant has not changed their own conclusion of AEoSI where these updated mortalities have been included, regardless of whether the resulting mortalities were higher or lower (Table 4.1, Appendix B, RIAA Part 3). This is not a methodology we would generally accept; however, we do not believe our conclusions would differ had the cut off been later. In this case, accept this. **Marine Directorate where necessary, can advise how the Applicant should proceed regarding quantifying the compensation required.**

We recommend the Applicant contact Natural England regarding impacts to English sites, and DAERA regarding impacts to Northern Irish sites.

E.6.4.2 In-combination assessment summary

Summary table

Table E-6. NatureScot and Developer conclusions in-combination with other plans and projects.

SPA	Species	NatureScot conclusion	Developer Conclusion
Buchan Ness to Collieston Coast	Kittiwake	**AEoSI**	AEoSI
Copinsay	Kittiwake	No AEoSI	No AEoSI
East Caithness Cliffs	Kittiwake	**AEoSI**	AEoSI
	Razorbill	**AEoSI**	No AEoSI
Fair Isle	Gannet	No AEoSI	No AEoSI
	Kittiwake	**AEoSI**	No AEoSI
Forth Islands	Gannet	**AEoSI**	AEoSI
	Razorbill	**AEoSI**	No AEoSI
	Puffin	No AEoSI	No AEoSI
	Kittiwake	**Unable to conclude no AEoSI**	No AEoSI
Fowlsheugh	Kittiwake	**AEoSI**	AEoSI
	Razorbill	**AEoSI**	AEoSI
Hermaness, Saxa Vord and Valla Field	Gannet	No AEoSI	No AEoSI
Hoy	Kittiwake	**AEoSI**	No AEoSI
Mingulay and Berneray	Razorbill	No AEoSI	No AEoSI
North Caithness Cliffs	Puffin	**AEoSI**	No AEoSI
	Razorbill	**Unable to conclude no AEoSI**	No AEoSI
	Kittiwake	**Unable to conclude no AEoSI**	No AEoSI
North Rona and Sula Sgeir	Gannet	No AEoSI	No AEoSI
Noss	Gannet	No AEoSI	No AEoSI

[37] Where Scottish Ministers were unable to conclude beyond reasonable scientific doubt that there will be no AEoSI from the proposal.

St Abb's to Fast Castle	Kittiwake	No AEoSI	No AEoSI
Sule Skerry and Sule Stack	Gannet	No AEoSI	No AEoSI
Troup, Pennan and Lion's Heads	Kittiwake	**AEoSI**	AEoSI
	Razorbill	**Unable to conclude no AEoSI**	No AEoSI
West Westray	Kittiwake	**AEoSI**	No AEoSI

Seabird assemblage features

For those SPAs which have a seabird assemblage feature, where we have concluded AEoSI for at least one named species of the seabird assemblage, then the same conclusion is reached for the assemblage feature. Any named qualifying species of an assemblage feature in an SPA is protected in their own right. The SPA conservation objectives are set for individual species rather than the assemblage and therefore the features should be assessed and any impacts concluded at the individual species level. This has been the established position in Scotland for quite some time, although we understand that this differs from the approach taken in England.

Guillemot

The proposal is outwith the guillemot foraging range of 95.2 km from any SPA and therefore no SPAs have been screened into the HRA. This is in line with advice given by NatureScot on 8th October 2024. Since this advice was given, we have recommended the use of the extended foraging range (153.7km) for sites that are far offshore but have connectivity with one protected area (i.e. that the proposal is at least partially within the 95.2 km foraging range of a single SPA). We consider the approach taken by Bellrock is acceptable as the entirety of the development area is outwith that foraging range and that we consider the densities of birds seen during the baseline DAS are likely to be either non-breeders who have not returned to the colony or breeders which have left the colony after chicks fledging. There does appear to be evidence in the densities that the peak counts represent a post-breeding dispersal. We are content with the Applicants approach to the guillemot foraging range in the HRA.

Great black-backed gull

The Applicant has provided narrative around the great black-backed gull feature of SPAs. There was a peak abundance of 77 individuals within the survey area, which occurred in the non-breeding season. This results in less than 0.5 adult birds being apportioned to each SPA. The worst-case scenario for WTG Type 1 would be 1.14 mortalities from collision annually (Table 3.2, Appendix 10.2). Although the great black-backed gull feature is severely declining at the SPAs in question and AEoSI has been reached for a number of developments, considering the low abundance, distance from the colonies, and influx of non-Scottish great black-backed gulls in the non-breeding season, we support the conclusion of **no AEoSI** for these sites / feature.

E.6.4.3 In-combination assessment – individual SPA assessments

Buchan Ness to Collieston Coast SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion

Buchan Ness to Collieston Coast	Kittiwake	1.77 to 2.03 (1.96 to 2.25)	0.997 – 0.996	0.895 – 0.861	**AEoSI**

For kittiwake at Buchan Ness to Collieston Coast SPA, we conclude **AEoSI**, considering:

- the low CPS value for the high displacement scenario, representing a population decrease of 12.3%
- a decrease in population growth rate of up to 0.4%
- 19% population decline between Seabird 2000 and Seabirds Count,
- the unfavourable condition of the feature.

Copinsay SPA

SPA	**Species**	**Mortality from proposal alone (low to high)**	**Median CGR after 35 years of impact (low to high mortality)**	**Median CPS after 35 years of impact (low to high mortality**	**NatureScot conclusion**
Copinsay	Kittiwake	0.03 to 0.03 (0.04 to 0.04)	0.999 – 0.998	0.955 – 0.935	No AEoSI

For kittiwake at Copinsay SPA we conclude no AEoSI, considering:

- the high CPS values, representing only a small population decline of up to 6.5%,
- the high CGR value, representing a decrease in population growth rate of up to 0.2%,
- 78% population decline between Seabird 2000 and Seabirds Count,
- the unfavourable condition of the feature.

East Caithness Cliffs SPA

SPA	**Species**	**Mortality from proposal alone (low to high)**	**Median CGR after 35 years of impact (low to high mortality)**	**Median CPS after 35 years of impact (low to high mortality**	**NatureScot conclusion**
East Caithness Cliffs	Kittiwake	1.36 to 1.55 (1.68 to 1.85)	0.994 – 0.992	0.813 -0.735	**AEoSI**
	Razorbill (NBS)[38]	0.03 to 0.08 (0.05 to 0.13)	0.997 – 0.993	0.889 – 0.789	**AEoSI**

For kittiwake at East Caithness Cliffs SPA we conclude **AEoSI**, considering:

- the significantly low CPS value, representing a population decrease of 26.5%,
- a decrease in population growth rate of up to 0.8%,
- 39% population decline between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

[38] SPA was outside of the breeding season foraging range for razorbill, therefore it was assessed in the non-breeding season (NBS) only.

For razorbill at East Caithness Cliffs SPA we conclude **AEoSI**, considering:

- the significantly low CPS value for the high displacement scenario, representing a population decrease of 21.1%,
- a decrease in population growth rate of up to 0.7%,
- 69% population increase between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

Fair Isle SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Fair Isle	Kittiwake	0.02 to 0.02 (0.03 to 0.03)	0.997 – 0.996	0.895 – 0.854	**AEoSI**
	Gannet	0.31 to 0.45 (0.38 to 0.58)	0.999 – 0.999	0.976 – 0.951	No AEoSI

For kittiwake at Fair Isle SPA we conclude **AEoSI**, considering:

- the low CPS value for the high displacement scenario, representing a population decrease of 14.6%
- a decrease in population growth rate of up to 0.4%,
- 95% population decline between Seabird 2000 and Seabirds Count,
- the unfavourable condition of the feature.

For gannet at Fair Isle SPA we conclude no AEoSI, considering:

- the high CPS values, representing only a small population decline of up to 4.9%,
- the high CGR value, representing a decrease in population growth rate of up to 0.1%,
- the increasing population between Seabird 2000 and Seabirds Count and only a 3% decline following HPAI,
- The favourable condition of the feature.

Forth Islands SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Forth Islands	Kittiwake	0.40 to 0.46 (0.44 to 0.51)	0.998 – 0.997	0.930 – 0.899	**Unable to conclude no AEoSI**
	Razorbill (NBS)[39]	0.005 to 0.017 (0.01 to 0.03)	0.995 – 0.990	0.831 – 0.703	**AEoSI**
	Puffin	0.98 to 1.63 (2.25 to 3.73)	0.999 – 0.998	0.948 – 0.916	No AEoSI

[39] SPA was outside of the breeding season foraging range for razorbill, therefore it was assessed in the non-breeding season (NBS) only.

	Gannet	12.01 to 15.73 (13.30 to 17.96)	0.996 – 0.994	0.855 – 0.790	**AEoSI**

For kittiwake at Forth Islands SPA we are **unable to conclude no AEoSI**, considering:

- the low CPS value, representing a population decrease of 10.2%,
- a decrease in population growth rate of up to 0.3%,
- 22% population decline between Seabirds 2000 and Seabirds Count,
- The unfavourable condition of the feature.

For razorbil**l** at Forth Islands SPA we conclude **AEoSI**, considering:

- the significantly low CPS value for the high displacement scenario, representing a population decrease of 29.7%,
- a decrease in population growth rate of up to 1.0%,
- 39% population decline between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

For puffin at Forth Islands SPA we conclude no AEoSI, considering:

- the high CPS value for the high displacement scenario, representing a population decrease of 8.4%
- a decrease in population growth rate of up to 0.2%
- 39% population decline between Seabird 2000 and Seabirds Count, despite the favourable condition of the feature.

For gannet at Forth Islands SPA we conclude **AEoSI**, considering:

- the significantly low CPS value, representing a population decrease of up to 21.0%,
- a decrease in population growth rate of up to 0.6%,
- the increasing population between Seabird 2000 and Seabirds Count but a 27% decline following HPAI,
- The favourable condition of the feature.

Fowlsheugh SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Fowlsheugh	Kittiwake	2.21 to 2.42 (2.29 to 2.64)	0.997 – 0.996	0.898 – 0.863	**AEoSI**
	Razorbill	7.60 to 12.67 (16.39 to 27.33)	0.996 – 0.993	0.866 – 0.767	**AEoSI**

For kittiwake at Fowlsheugh SPA we conclude **AEoSI**, considering:

- the low CPS value, representing a population decrease of up to 13.7%,
- a decrease in population growth rate of up to 0.4%,
- 51% population decline between Seabird 2000 and Seabirds Count,

- The unfavourable condition of the feature.

For razorbill at Fowlsheugh SPA we conclude **AEoSI**, considering:

- The significantly low CPS values, representing a reduction in population size of up to 23.3%,
- a decrease in population growth rate of up to 0.7%,
- despite the increasing population and the favourable condition of the feature.

The Applicant acknowledges that it may also be possible that activities related to cable laying and landfall could impact the features of Fowlsheugh SPA. It is unlikely that these activities would have any meaningful impact alone however they could have consequences in-combination with other activities.

Hermaness, Saxa Vord and Valla Field SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Hermaness, Saxa Vord and Valla Field SPA	Gannet	1.12 to 1.80 (1.52 to 2.56)	0.999 – 0.998	0.963 – 0.920	No AEoSI

For gannet at Hermaness, Saxa Vord and Valla Field SPA we conclude no AEoSI, considering:

- the high CPS value, representing a population decrease of 8.0%,
- a decrease in population growth rate of up to 0.2%,
- 89% population increase between Seabirds 2000 and Seabirds Count,
- The favourable condition of the feature.

Hoy SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Hoy	Kittiwake	0.016 to 0.018 (0.019 to 0.022)	0.997 – 0.996	0.894 – 0.851	**AEoSI**

For kittiwake at Hoy SPA we conclude **AEoSI**, considering:

- the low CPS value, representing a population decrease of 14.9%,
- a decrease in population growth rate of up to 0.4%,
- 66% population decline between Seabird 2000 and Seabirds Count,
- the unfavourable condition of the feature.

Mingulay and Berneray SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years	Median CPS after 35 years	NatureScot conclusion

			of impact (high mortality)	of impact (high mortality	
Mingulay and Berneray	Razorbill (NBS)[40]	0.0004 to 0.002 (0.001 to 0.005)	1.000	0.989	No AEoSI

For razorbill at Mingulay and Berneray SPA we conclude no AEoSI, considering:

- The very high CPS value for the high displacement scenario, representing a population decrease of 1.1%,
- The stable population growth rate for the high displacement scenario,
- 9% decline in population between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

North Caithness Cliffs SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
North Caithness Cliffs	Kittiwake	0.27 to 0.31 (0.35 to 0.40)	0.998 – 0.997	0.920 -0.891	**Unable to conclude no AEoSI**
	Razorbill (NBS)[41]	0.003 to 0.010 (0.006 to 0.017)	0.998 – 0.995	0.931 – 0.846	**Unable to conclude no AEoSI**
	Puffin	0.010 to 0.017 (0.02 to 0.04)	0.994 – 0.990	0.810 – 0.707	**AEoSI**

For kittiwake at North Caithness Cliffs SPA we are **unable to conclude no AEoSI**, considering:

- the low CPS value, representing a population decrease of 10.9%
- a decrease in population growth rate of up to 0.3%
- 4% population decline between Seabird 2000 and Seabirds Count,
- The unfavourable condition of the feature.

For razorbill at North Caithness Cliffs SPA we are **unable to conclude no AEoSI**, considering:

- the CPS value representing a population decrease of between 6.6 - 15.4%,
- a decrease in population growth rate of between 0.2 - 0.5%,
- 41% population increase between Seabird 2000 and Seabirds Count,
- The favourable, maintained condition of the feature.
- However, we do note that the mortality would only result in up to 0.35 birds over the lifespan of the development.

For puffin at North Caithness Cliffs SPA we conclude **AEoSI**, considering:

[40] SPA was outside of the breeding season foraging range for razorbill, therefore it was assessed in the non-breeding season (NBS) only.
[41] SPA was outside of the breeding season foraging range for razorbill, therefore it was assessed in the non-breeding season (NBS) only.

- The significantly low CPS values, representing a reduction in population size of up to 29.3%,
- a decrease in population growth rate of up to 1.0%,
- 56% population decline between Seabird 2000 and Seabirds Count,
- The unfavourable, declining condition of the feature.

North Rona and Sula Sgeir SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (high mortality)	Median CPS after 35 years of impact (high mortality	NatureScot conclusion
North Rona and Sula Sgeir	Gannet	0.25 to 0.31 (0.28 to 0.37)	1.000	0.985	No AEoSI

For gannet at North Rona and Sula Sgeir SPA we conclude no AEoSI, considering:

- The very high CPS value, representing a population decrease of only 1.5%,
- The stable population growth rate for the high displacement scenario,
- the increasing population between Seabird 2000 and Seabirds Count and 23% decline following HPAI,
- The favourable condition of the feature.

Noss SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Noss	Gannet	0.65 to 0.97 (0.82 to 1.28)	0.999 - 0.998	0.969 – 0.935	No AEoSI

For gannet at Noss SPA we conclude no AEoSI, considering:

- The high CPS value, representing a population decrease of 6.5%,
- a decrease in population growth rate of up to 0.2%,
- The increase in population between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

St Abb's Head to Fast Castle SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
St Abb's Head to Fast Castle	Kittiwake	0.55 to 0.63 (0.61 to 0.69)	0.998 – 0.997	0.937 – 0.908	No AEoSI

For kittiwake at St Abb's Head to Fast Castle SPA we conclude no AEoSI, considering:

- The CPS value, representing a population decrease of 9.2%,
- a decrease in population growth rate of up to 0.3%,
- 68% population decline between Seabird 2000 and Seabirds Count,

- The unfavourable condition of the feature.

Sule Skerry to Sule Stack SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Sule Skerry to Sule Stack	Gannet	0.28 to 0.35 (0.30 to 0.38)	0.998 – 0.997	0.933 – 0.909	No AEoSI

For gannet at Sule Skerry to Sule Stack SPA we conclude no AEoSI, considering:

- The CPS value, representing a population decrease of 9.1%,
- a decrease in population growth rate of up to 0.3%,
- the increasing population between Seabird 2000 and Seabirds Count,
- The favourable condition of the feature.

Troup, Pennan and Lion's Heads SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
Troup, Pennan and Lion's Heads	Kittiwake	1.04 to 1.19 (1.19 to 1.37)	0.997 – 0.995	0.889 – 0.847	**AEoSI**
	Razorbill (NBS)[42]	0.004 to 0.011 (0.006 to 0.018)	0.998 – 0.996	0.943 – 0.873	**Unable to conclude no AEoSI**

For kittiwake at Troup, Pennan and Lion's Heads SPA we conclude **AEoSI**, considering:

- The low CPS values, representing a population decline of up to 15.3%,
- a decrease in population growth rate of up to 0.5%,
- 44% population decline between Seabirds 2000 and Seabirds Count,
- The unfavourable, declining condition of the feature.

For razorbill at Troup, Pennan and Lion's Heads SPA we are **unable to conclude no AEoSI**, considering:

- the CPS value, representing a population decrease of between 5.7 - 12.7%
- a decrease in population growth rate of between 0.2 - 0.4%,
- 9% population decline between Seabird 2000 and Seabirds Count,
- The favourable, recovered condition of the feature.
- However, we do note that the mortality would only result in up to 0.36 birds over the lifespan of the development.

[42] SPA was outside of the breeding season foraging range for razorbill, therefore it was assessed in the non-breeding season (NBS) only.

West Westray SPA

SPA	Species	Mortality from proposal alone (low to high)	Median CGR after 35 years of impact (low to high mortality)	Median CPS after 35 years of impact (low to high mortality	NatureScot conclusion
West Westray	Kittiwake	0.15 to 0.17 (0.23 to 0.26)	0.994 – 0.991	0.795 – 0.717	**AEoSI**

For kittiwake at West Westray SPA we conclude **AEoSI**, considering:

- The significantly low CPS values, representing a reduction in population size of up to 28.3%,
- a decrease in population growth rate of up to 0.9%,
- 92% population decline between Seabird 2000 and Seabirds Count,
- The unfavourable, declining condition of the feature.

E.6.5 Marine SPAs

At this stage, there is no certainty in the port(s) to be used during Construction and / or Operation and Maintenance then Decommissioning. **This has limited our ability to provide meaningful assessment of any proposed vessel movement on protected species of any marine SPAs.**

When port selection is made, vessel routes should be assessed in detail, particularly in relation to any overlap with marine SPAs and sensitive features. Given the list of indicative ports to be used, mainly on the east coast of Scotland and Orkney, it is likely that vessels will transit through marine SPAs. If consented, the Vessel Management and Navigational Safety Plan should be updated with a full assessment of vessel disturbance in marine SPAs and details of how disturbance will be minimised, including avoiding areas of rafting birds particularly in the flightless moult period.

Within the Offshore Transmission Development Area (OfTDA) application, assessment should include detailed consideration of vessel routes with marine SPAs, alone and in-combination. In particular, waterfowl species found closer to shore are the most sensitive species to vessel and helicopter disturbance (especially in flightless moult periods) and should be given full consideration in the assessment. Migratory non-seabird SPAs

Migratory CRM was carried out using the approach in the report on the strategic assessment of collision risk of Scottish OWFs to migrating birds (WWT, 2014) with updates from Woodward et al. (2023) as the mCRM was not available at time of modelling. This is acceptable for this development.

Avoidance rates for cormorant and Sandwich tern were set at 0.9902, and percentage at collision risk height (CRH) at 100%, the most precautionary, as species specific rates were not available.

The Applicant has presented the percentage of the populations at potential risk of collisions both if all birds were assumed to fly through the proposed array area and amended to take the maximum width of the array area as a proportion of the migratory front width.

We agree there is no AEoSI for migratory non-seabird SPAs.

NATURESCOT ADVICE ON BELLROCK OFFSHORE WIND FARM

Appendix F – Blue carbon

The Applicant has provided an assessment of impacts to Blue Carbon in Chapter 17 Greenhouse Gas Assessment.

The assessment for Blue Carbon concludes **no significant impacts,** both alone and cumulatively, which we support.

We recognise that Blue Carbon assessments are a relatively new element of EIA Reports for proposed marine energy projects. Whilst advice included within this appendix is specific to the proposed Bellrock Offshore Wind Farm EIA Report, there are some instances in which we provide comment on aspects of the assessment process which do not affect the outcome of the assessment or the overall conclusions reached in our advice; we hope these comments will be of benefit to future Blue Carbon assessments.

Furthermore, the biodiversity value and ecosystem function benefits provided by Blue Carbon habitats are well understood and afforded protection through a variety of policies. In addition, there is an increasing need to also recognise the climate change mitigation potential in line with the Blue Carbon Action Plan[43] which we have considered in reaching our conclusions.

F.1 Study area

The study area includes the Bellrock Array Area only, covering an area of 280 km^2. Typically, we would expect the study area for Blue Carbon to mirror the Benthic Ecology study area, i.e. the proposed development plus a buffer from the spring tidal ellipse. However, in this case, we can accept the proposed study area.

F.2 Baseline characterisation

Site-specific benthic surveys were conducted, which identified European Nature Information System (EUNIS) broadscale habitat classification groups and a particle size distribution analysis was also undertaken on the sediment samples. However, site-specific information was not used to inform the sedimentary carbon assessment and spatial data from scientific literature was used instead. Whilst we typically recommend that site-specific data is used where possible, we accept this desk-based assessment for Blue Carbon.

Given that the application is for the Array Area only, coastal Blue Carbon habitats such as seagrass and saltmarsh were not identified. These should be considered as part of the offshore transmission application. There is consideration of Blue Carbon habitats using the EUNIS broadscale habitat classification groups, with various benthic communities identified, including bivalves, brittlestars, tubeworm polychaetes, etc. Overall, the assessment focuses more on sedimentary carbon, which we are content with.

Table 17.11 lists the data sources used to inform the Blue Carbon assessment. Many key data sources we would recommend for the Blue Carbon assessment are missing from these tables, although some are referenced within the specific sections, including:

[43] https://www.gov.scot/publications/scottish-blue-carbon-action-plan/

- Daewel, U., Akhtar, N., Christiansen, N., & Schrum, C. (2022). Offshore wind farms are projected to impact primary production and bottom water deoxygenation in the North Sea. Communications Earth and Environment, 3(1), 1–8. https://doi.org/10.1038/s43247-022-00625-0
- Diesing, M., Thorsnes, T., & Rún Bjarnadóttir, L. (2021). Organic carbon densities and accumulation rates in surface sediments of the North Sea and Skagerrak. Biogeosciences, 18(6), 2139–2160. https://doi.org/10.5194/bg-18-2139-2021
- Hunt C, Demšar U, Dove D, Smeaton C, Cooper R and Austin WEN (2020) Quantifying Marine Sedimentary Carbon: A New Spatial Analysis Approach Using Seafloor Acoustics, Imagery, and Ground-Truthing Data in Scotland. *Front. Mar. Sci.* 7:588. https://doi.org/10.3389/fmars.2020.00588
- Smeaton, C., Austin, W., & Turrell, B. (2020). *Re-evaluating Scotland's sedimentary carbon stocks*. (2 ed.) (Scottish Marine and Freshwater Science; Vol. 11, No. 2). Marine Scotland. https://doi.org/10.7489/12267-1
- Smeaton, C. and Austin, W.E.N. (2022). Quality not quantity: Prioritizing the management of sedimentary organic matter across continental shelf seas. Geophysical Research Letters, 49, https://doi.org/10.1029/2021GL097481
- Turrell, W. R., Austin, W. E. N., Philbrick, S. P., Tilbrook, C., & Kennedy, H. (2023). Clarifying the role of inorganic carbon in blue carbon policy and practice. Marine Policy, 157(October), 105873. https://doi.org/10.1016/j.marpol.2023.105873
- Watson, S. C. L., Somerfield, P. J., Lemasson, A. J., Knights, A. M., Edwards-Jones, A., Nunes, J., … Beaumont, N. J. (2024). The global impact of offshore wind farms on ecosystem services. Ocean and Coastal Management, 249 (September 2023). https://doi.org/10.1016/j.ocecoaman.2024.107023

F.3 Assessment approach

F.3.1 Sedimentary Blue Carbon

For sedimentary Blue Carbon, organic carbon data from Smeaton *et al.* (2021)[44] was overlain with the proposed development area. As above, whilst it would have been useful to incorporate site-specific carbon values, we are content with this desk-based approach using the best available scientific information.

Table 17.17 presents the maximum design scenario, which includes the combined temporary disturbance from construction and permanent habitat loss from the infrastructure footprints of 6.57 km^2 and temporary disturbance of 47.46 km^2 during the operation and maintenance phase. These area values are then converted into a proportion of the entire proposed development in Tables 17.25 and 17.26, resulting in 2.34% and 16.95% for the construction and operation and maintenance phases, respectively.

F.3.2 Impact pathways

The impacts scoped in are minimal and high level, with Table 17.16 including 'Blue Carbon' as an overall potential impact. Impact pathways for Blue Carbon should be similar to those for Benthic

[44] Smeaton, C., Hunt, C.A., Turrell, W.R. and Austin, W.E.N. (2021). Sediment type and surficial sedimentary carbon stocks across the United Kingdom's Exclusive Economic Zone and the territorial waters of the Isle of Man and the Channel Islands.

Ecology, with an emphasis on direct disturbance to sediment in particular, noting that this is included in the Bellrock Blue Carbon Assessment.

Typically, we advise that changes in physical processes resulting from the presence of the subsea infrastructure associated with the proposed development are included in an assessment e.g. scour effects, changes in wave/tidal current regimes and resulting effects on sediment transport. We therefore recommend that future Blue Carbon assessments should also include this as an impact pathway where relevant, as sediment and associated carbon accumulation may result from the proposed development (Daewel, *et al.*, 2022; Watson *et al.*, 2024). This could be further impacted at decommissioning stage, although the impact is likely to be negligible given relatively low sediment accumulation rates in the North Sea, noting that this does vary spatially (Diesing, Thorsnes, & Bjarnadóttir, 2021).

F.4 Impact assessment

F.4.1 Blue Carbon habitats

As indicated above, the assessment focuses more on sedimentary carbon, although there is consideration of Blue Carbon habitats using the EUNIS broadscale habitat classification groups. Consideration is given to physical disturbance and increased suspended sediment concentrations. We agree with the conclusions of low magnitude and medium sensitivity to Blue Carbon habitats, resulting in a minor significance, which is not significant in EIA terms.

F.4.2 Sedimentary carbon

F.4.2.1 Sediment disturbance during construction

The proposed development has the potential to disturb up to 2,892 tonnes of sedimentary carbon during the construction period, representing 10,612 tonnes of CO_2 equivalent, assuming that 100% of the organic carbon disturbed will be released as CO_2 equivalent. We agree that this magnitude is considered negligible due to the footprint of the proposal relative to the total seabed area, and net benefit of displaced greenhouse gas emissions across the operational lifetime.

The Applicant has not considered sensitivity scoring within the sedimentary carbon assessment. We consider that the sedimentary carbon is deemed to be of high vulnerability, low recoverability and high value. This is because sediment accumulation on the seabed can be very low and recovery therefore is slow.

Overall, the Applicant has concluded negligible significance. As a result of our assessment of high sensitivity, our conclusion would be minor significance, which is still not significant in EIA terms.

F.4.2.2 Sediment disturbance during operation and maintenance

The proposed development has the potential to disturb up to 20,921 tonnes of sedimentary carbon during the construction period, representing 76,781 tonnes of CO_2 equivalent, assuming that 100% of the organic carbon disturbed will be released as CO_2 equivalent. We agree that this magnitude is considered negligible due to the footprint of the proposal relative to the total seabed area, and net benefit of displaced greenhouse gas emissions across the operational lifetime.

The Applicant has not considered sensitivity scoring within the sedimentary carbon assessment. We consider that the sedimentary carbon is deemed to be of high vulnerability, low recoverability

and high value. This is because sediment accumulation on the seabed can be very low and recovery therefore is slow.

Overall, the Applicant has concluded negligible significance. As a result of our assessment of high sensitivity, our conclusion would be minor significance, which is still not significant in EIA terms.

F.5 Cumulative assessment

For Blue Carbon habitats, the cumulative assessment mirrors that presented for Benthic Ecology, such that there are no significant cumulative effects predicted for any phase of the proposed development. We are content with this conclusion. However, a cumulative assessment is not provided for sedimentary carbon. We advise that future assessments should consider the cumulative impacts of disturbance from other developments, including longer-term carbon stored deeper.

F.6 Mitigation and monitoring

Embedded mitigation measures are presented in Table 17.18, and we note that no specific mitigation or monitoring for Blue Carbon is proposed, which is in line with the overall conclusion of not significant in EIA terms. The measure WFDA-59 "*Seabed contacting infrastructure will be micro-sited, where practicable, to avoid sensitive seabed habitats, low or limited mobility benthic species, such as Annex I habitats and Priority Marine Features*" is welcomed, as this will also have benefits to potential sensitive Blue Carbon habitats identified.

NATURESCOT ADVICE ON BELLROCK OFFSHORE WIND FARM

Appendix G – Derogation

The Applicant has submitted a derogation case alongside the s36 and Marine Licence Applications for the proposed Bellrock Offshore Wind Farm. This derogation case is provided on a without prejudice basis, and includes the following documents:

- Shadow Habitats Regulations Appraisal Derogation Case – Volume VI

We have considered this report and associated appendices and provide advice below.

G.1 Shadow Habitats Regulations Appraisal Derogation Case – Volume VI

This report provides information on the legal framework, policy and guidance; consideration of alternative solutions; Imperative Reasons of Overriding Public Interest (IROPI) to justify the Proposed Development; and a brief summary of the compensation measures. Additionally, it includes three appendices, which we have focussed our advice on in line with our remit, as below.

G.1.1 Scottish Marine Recovery Fund

In Paragraph 151 of the main report and Section 4.1 of Appendix A, we note the Applicant's interest in utilising any Scottish Marine Recovery Fund should this be available. There are likely to be activities that can be delivered through a Scottish Marine Recovery Fund and or undertaken solely by individual developers that may be of interest that come forward through the Seabird Portfolio work. We encourage developers to identify how they will contribute to a long-term legacy for seabirds as part of any compensation measures required as part of any derogation case.

G.1.2 Adaptive Management

Adaptive management is briefly mentioned in Section 5.5 of Appendix C as part of the bycatch reduction outline delivery roadmap. However, no further consideration is given to adaptive management across any of the appendices. Further detail on adaptive management will be required, including what constitutes the measure not being effective, i.e. the trigger point for adaptive management.

G.1.3 Seabird Compensation Plan

A detailed Seabird Compensation Plan is proposed to be developed and submitted post-consent. We would welcome engagement as this Plan develops particularly on early-stage elements such as baseline monitoring and evidencing the pressures at specific sites.

G.2 Ornithology Compensation Plan (Appendix A)

Overall, the information presented in this appendix is high level, although we note that further detail on specific measures and delivery mechanisms is provided in the subsequent appendices, B and C. The level of detail is reflected within our advice on the specific measures below.

On the basis of our appraisal of the Proposal, compensation measures are likely to be required for the following species:

- Kittiwake,
- Razorbill,
- Puffin, and

- Gannet.

Table 2.2 presents the summary of predicted combined annual mortality, and where compensation measures are expected either in principle or without prejudice. **We advise that Natural England are consulted on conclusions / impacts for English SPAs,** particularly when AEoSI has been concluded.

Table 3.5 presents the calculation of additional breeding pairs required for each species to compensate for the predicted seabird mortality as a result of the Proposed Development, including where AEoSI has been concluded either in principle or without prejudice at English sites. As above, we advise that Natural England are consulted on mortality attributed to English SPAs and associated compensation requirements. Considering the total number of nest sites required to compensate for impacts to Scottish sites, we are content that the proposed additional breeding pairs presented in Table 3.5 would be sufficient.

Table 4.1 presents a long list of measures considered for compensation, adapted from the North East and East Ornithology Group (NEEOG) commissioned report (Pizzolla, *et al.*, 2014)[45]. The Applicant identifies a number of measures to be included in the short list that could be undertaken to compensate for impacts to kittiwake, razorbill, puffin, and gannet. These include:

- Predator control / management – management of mammalian predators, such as rats, feral cats and American mink, to compensate impacts to kittiwake, razorbill, puffin and gannet. A ranking exercise of potentially suitable sites in Scotland was undertaken, with landowners at 11 shortlisted sites contacted for further discussion. Further detail is provided in Appendix B: Predator Control, Biosecurity Evidence Plan and Roadmap.
- Reduce anthropogenic disturbance – reduction of disturbance to seabird colonies for example from inappropriate visitor activity, to compensate impacts to kittiwake and gannet. Further detail on this measure has not been presented as the Applicant considers that this may overlap with the ongoing Portfolio of Compensation Measures work.
- Management of breeding habitats – control of dense vegetation growth, which may affect access to nesting burrows, to compensate impacts to puffin. Further detail on this measure has not been presented as the Applicant considers that this may overlap with the ongoing Portfolio of Compensation Measures work.
- Bycatch reduction – introduction of measures to reduce accidental bycatch of seabirds, to compensate impacts to gannet and razorbill. A review of options has been undertaken, and the Applicant considers that it would be delivered best through collaboration with other developers or at the strategic level. Further detail is provided in Appendix C: Bycatch Evidence and Roadmap.

We focus our advice on the ecological feasibility of proposed compensation, submitted as part of the without prejudice derogation package. In doing so, we acknowledge that at this point in time, the Appropriate Assessment has yet to be undertaken and therefore no final conclusions have been recorded and limited detail has been provided on proposed measures.

G.3 Predator Control, Biosecurity Evidence Plan and Roadmap (Appendix B)

[45] Pizzolla, P. Tyler, G. Grant, M. Salmon, W. Harker, J. & Bower, R. (2024). Development of Ornithology Regional Compensation Measures: Ornithology Compensation Measures. Report to NE/E ScotWind Developers Group.

Information regarding locations, including an initial desk-based summary of shortlisted sites, and landowner discussions have been redacted, due to commercial sensitivity. We highlight the requirement to secure both landowner and land manager (if different) agreement associated with any compensation measure. We advise that we require confidence that agreements have been / will be secured and not that initial contact with landowners has occurred.

Table 3 presents the ranking criteria used for the shortlisting exercise and we highlight that for risk of reinvasion, the values 'high' and 'low' are listed in the wrong order, i.e. an island defined as *more than one km from mainland / source* would be a lower risk of reinvasion compared with criteria defined as the *mainland / 0 km from mainland / source island* criteria.

Section 5 of this appendix outlines the roadmap to delivery for this proposed compensation measure. This includes three main phases, including: screening study with initial field study of habitat suitability, seabird count and nesting space; assessing the feasibility for predator eradication with more detailed field studies of predation and baseline ecology, as well as negotiating land access agreements; and the predator eradication phase with detailed planning, eradication / control, and long-term monitoring and biosecurity.

As highlighted in Section 5.3, various permissions may be required. Depending on the exact locations and activities, SSSI consent may be required and potential impacts to European sites or protected species would need to be considered, including disturbance to any ground-nesting birds, e.g. great skua. The bulleted list of potential permissions required is fairly comprehensive, however, we highlight other potential constraints including AECS agreements, depending on the location.

Currently, the information presented is insufficient for us to provide any meaningful advice or determine the ecological effectiveness. We advise consideration is given to our derogation advice provided for other Proposed Offshore Wind Developments, as various predator control measures have been proposed and whilst most advice will be site-specific, there will be overarching principles that can be consistently applied. Furthermore, we request continued engagement with the Applicant as more information becomes available through field studies so that we can provide advice to assist with their site selection process.

G.3.1.1 Biosecurity

We agree that biosecurity measures are essential to protect sites from the risk of re-incursion. Figure 4 provides a preliminary programme of work and indicates that long-term monitoring and biosecurity would be established in 2031, but it is unclear how long this programme would last. We highlight the requirement for biosecurity to be implemented for the duration of the operational lifetime of the compensation measure / proposed development.

G.4 Bycatch Evidence and Roadmap (Appendix C)

For each of the four species requiring compensation, evidence of bycatch is provided where available. Given the limited evidence for kittiwake, bycatch reduction is not considered further for this species by the Applicant. Moreover, Section 5.4 states that the benefits for puffin are uncertain, therefore bycatch reduction is also not proposed for puffin by the Applicant.

For the remaining two species, gannet and razorbill, the extent of evidence available within UK waters varies, and an accurate estimate of mortality is largely unknown. To establish the effectiveness of this measure, we would require more detail on any proposed scheme, including

quantifying the existing pressures and management measures, which colonies would benefit and how this is established, as well as how the measure integrates with any existing management measures, including bycatch considerations by Government.

For gannet, available mitigation measures are focused on longline fisheries, with further detail provided around line weighting and bird-scaring lines. For auk species, mitigation measures for static nets and midwater trawl are the focus, including various deterrents. However, there are many dependencies that make delivery of such measures especially complex, nor is it clear without further information which elements the Applicant has the ability to deliver.

Section 4 details the other offshore wind projects within the UK that have submitted derogation case documents that include fisheries bycatch as a potential compensation measure. In Section 5.6, the Applicant concludes that delivery of bycatch reduction at a project-level is unlikely to be feasible, although effective bycatch reduction measures could be achieved through collaboration with other offshore wind farm projects.

Further information regarding locations, delivery partners, and mechanisms for delivery are not provided at this stage for the bycatch reduction measure. Therefore, the information presented is insufficient to provide any meaningful advice or determine the ecological effectiveness currently. We advise consideration of our derogation advice provided for other Proposed Offshore Wind Developments, as various bycatch reduction measures have been proposed within Scottish waters and further afield, which may have overarching principles that can be consistently applied / considered.

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Your Ref: Bellrock OWF – S36 Consent & ML Application
Our Ref: AL/OPS/ML/WIND_019_26

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24 April 2026

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

MARINE AND COASTAL ACCESS ACT 2009
The Marine Works (Environmental Impact Assessment) Regulations 2007

Application for Consent Under Section 36 of the Electricity Act 1989 and Part 4 of the Marine & Coastal Access Act 2009 to Construct and Operate the Bellrock Offshore Wind Farm, Approximately 120km East of Stonehaven

Thank you for your e-mail correspondence dated 16th April 2026 relating to the application submitted by **Bellrock Offshore Wind Farm Ltd** for consent to develop the Bellrock Offshore Wind Farm, located approximately 120km east of Stonehaven.

Northern Lighthouse Board note that the Bellrock OWF will consist of up to 132 floating Wind Turbine Generators (WTG) with an approximate export capacity of up to 1.8GW. A maximum of 18 Subsea Cable Hubs will gather multiple Inter-Array Cables and connect onwards to the Offshore Substation Platforms (OSP).

It is noted that the project OSP's, Offshore Export Cables, Offshore Reactive Compensation Station(s) and other Offshore Transmission Infrastructure will be assessed as part of the Bellrock Offshore Transmission Development Area EIA Report.

Additional infrastructure within the array area may consist of up to two offshore mooring buoys, which may include electrical charging facilities for Offshore Support Vessels. Additional MetOcean data buys may also be deployed on site during both the Construction phase and the Operations & Maintenance phase.

NLB have reviewed the documentation associated with the application, with particular reference to the navigational safety elements, including cumulative impacts, of the application contained within Chapter 12 (Shipping & Navigation) and Chapter 14 (Marine Infrastructure & Other Marine Users). NLB recognise the inclusion of both Appendix 12.1: Bellrock Offshore Wind Farm - Wind Farm Development Area Navigation Risk Assessment {NRA) and Appendix 12.2: East Region Developers Group Cumulative Baseline for Shipping and Navigation.

NLB note the hazards identified through the Navigational Risk Assessment (NRA) process, and the associated embedded mitigations detailed within Table 21.1 of the NRA. Northern Lighthouse Board acknowledge that whilst Wet Storage is referenced within both the EIA and NRA, it will be considered as part of a separate consenting process.

The inclusion of Outline Post-Consent Documentation such as the Outline Lighting & Marking Plan (LMP) and Outline Vessel Management and Navigational Safety Plan (VM&NSP) is welcomed.

Within the Outline Lighting & Marking Plan, NLB acknowledge the inclusion of Section 6 (Maintenance of AtoN), and the commitment to undertake visual monitoring (or where feasible, remote monitoring) of AtoN on buoyage during the construction phase, and to undertake remote monitoring of AtoN during the O&M phase. NLB also welcome the commitment that general maintenance will be undertaken to ensure functionality of the AtoN is maintained and optimised.

Within Section 6.4 (Availability) of the Outline Lighting & Marking Plan, NLB request inclusion of the following text:

> "NLB will conduct regular audits of Bellrock Offshore Wind Farm Ltd for their provision of Aids to Navigation, as established by the Merchant Shipping Act 1995, and the Northern Lighthouse Board's position as the General Lighthouse Authority for Scotland and the Isle of Man. NLB request that a record of annual AtoN maintenance and testing is kept for auditing purposes."

NLB request that Sections 7.1.36 – 37 (Loss of Aid to Navigation) of the Outline Lighting & Marking Plan is reworded to include the following:

> "In the event of a significant AtoN outage, notification will be provided to the Northern Lighthouse Board (navigation@nlb.org.uk / 08000 326655) and the NLB AtoN Reporting Portal at http://nlb.org.uk/latonsonline, the UK Hydrographic Office (using form H102 via admiralty.co.uk/H-note) and the local HM Coastguard (zoneXXX@hmcg.gov.uk).
>
> Notifications to local marine stakeholders shall also be made by Notice to Mariners and the Kingfisher Safety Bulletin scheme. In the event of a failure which may lead to a significant risk to navigational safety, additional temporary risk mitigation measures will be considered following consultation with the NLB and MCA, including the use of a guard vessel, until such time as the AtoN has been repaired or replaced."

NLB also acknowledge the commitment to engage with NLB with regard to a significant failure of AtoN, and potential mitigations including the deployment of a guard vessel. **NLB request that this wording is amended to include alternative solutions such as temporary buoyage or AtoN deployed on adjacent WTG structures.**

Northern Lighthouse Board request that a section is included within the LMP to cover situations whereby an IPS/SPS structure is intentionally removed from site for maintenance, and the provision of temporary AtoN to cover this maintenance period.

NLB also request that Section 7.1 (Loss of Aid to Navigation) of the Outline Lighting & Marking Plan contains reference to Section 3 of the Bellrock OWF Vessel Management & Navigational Safety Plan, and the relevant procedures for the promulgation of Local Notices to Mariners and Radio Navigational Warnings in the event of an Aid to Navigation failure.

The establishment, alteration and discontinuation of any Aid to Navigation is subject to the Statutory Sanction of the Commissioners of Northern Lighthouses. Further guidance and application forms can be obtained on request from the NLB Navigation Department (navigation@nlb.org.uk).

NLB operate vessels in the Central North Sea as part of their statutory duties under the Merchant Shipping Act 1995. However, this is largely for the inspection of AtoN installed on offshore installations. Aids to Navigation associated with the Bellrock OWF would be incorporated in to these inspection voyages, and NLB do not anticipate that the project will negatively impact these operations.

Northern Lighthouse Board have no objection to the proposed Bellrock OWF, and will continue to engage with the applicant with regard to the development of post-consent navigational safety documentation.

Yours sincerely

[redacted]

Peter Douglas
Navigation Manager

ROYAL SOCIETY FOR THE PROTECTION OF BIRDS

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By email: MD.MarineRenewables@gov.scot

29 July 2026

Dear Sir/Madam

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND MARINE LICENCES UNDER PART 4 OF THE MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE BELLROCK OFFSHORE WIND FARM, APPROXIMATELY 120 KM TO THE EAST OF STONEHAVEN

Thank you for consulting RSPB Scotland on the above application to construct and operate a Bellrock offshore windfarm (of up to 1.8GW of generating capacity), approximately 120 kilometres from the Aberdeenshire coast.

RSPB Scotland recognises that climate change is the greatest long-term threat to nature and people, and we fully support the need to develop more renewable energy, including offshore wind. However, any development, including offshore wind, must be carefully sited, designed and deployed to ensure that it does not result in unacceptable impacts on nature.

Population Modelling

It must be recognised by MD-LOT in their recommendation to Ministers that models are simplified versions of reality. They do not fully capture the nuances of our dynamic natural environment, the complex behaviours of seabirds or the interlinkages between the two. Models are not complete evaluations of the possible risks that windfarms pose to seabirds. Seabirds are relatively long-lived, tend to breed later and have fewer young than other birds and, as a result, their populations are sensitive to even the smallest increases in adult mortality. This fact, combined with the requirements of the Habitats Regulations, emphasises the requirement to take a precautionary approach when assessing all possible impacts of the proposed development.

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The survival and productivity rates of seabirds can be impacted by offshore windfarms directly (i.e. through collision) and indirectly (e.g. displacement from foraging areas and additional energy expenditure required to avoid and due to additional flying distances to alternative foraging areas). They are also already under severe pressure. In Scotland, the number of breeding seabirds has declined by 49% since the 1980s, according to the Scottish biodiversity indicator[1]. Kittiwake and Puffin are red listed as Birds of Conservation Concern while Northern Gannet, Razorbill and Guillemot are amber listed. In addition, in 2026 they were assessed as moving away from the target to achieve Good Environmental Status[2]. I

Detailed comments

RSPB Scotland has independently reviewed the conclusions of the Report to Inform Appropriate Assessment (RIAA) and the Shadow HRA. We note that the assessments have not identified Adverse Effects of Site Integrity (AEoSI) from the project alone, but that adverse effects cannot be excluded for the following SPAs in-combination with other wind farms:

Kittiwake
- Buchan Ness to Collieston Coast SPA
- Fowlsheugh SPA
- Farne Islands SPA
- Troup, Pennan and Lion's Head SPA
- East Caithness Cliffs SPA
- Flamborough and Filey Coast
- Farne Islands SPA

Gannet
- Forth Islands SPA

Razorbill
- Fowlsheugh SPA

The Applicant concludes AEoSI cannot be ruled out (when considering in-combination impacts including Berwick Bank) at the above seven breeding colony SPAs. However, the species most affected are Kittiwakes at St Abb's Head to Fast Castle SPA which are subject to a predicted a 50% decline through in-combination impacts, but they do not appear in the applicant's list.

Using the NatureScot upper scenario and including Berwick Bank throughout, there are five SPAs that show reductions comparable to or greater than the seven sites that the Applicant has listed. Consequently, we would contend that the list should consist of 12 SPAs that are subject to AEoSI rather than the seven (above) identified by the Applicant. The additional SPAs are:
- St Abb's Head to Fast Castle, West Westray, Hoy and Fair Isle (all for Kittiwake),
- North Caithness Cliffs (Puffin, Kittiwake and Razorbill).

These five SPAs are kept off the Applicant's AEoSI list due to their conclusions based on two arguments, rather than because the predicted effect is small. For St Abb's Head to Fast Castle SPA, the Applicant excludes Berwick Bank's predicted mortality due to it being

[1] Scotland's Trends, Indicators and Official Statistics | NatureScot

[2] https://jncc.gov.uk/our-work/official-statistic-on-seabird-breeding-population-changes/#results-scotland-abundance-and-productivity-changes-for-18-species

assumed to be 'fully compensated'. We do not believe that the scale of the losses from Berwick Bank can be compensated for, so do not agree with an approach that assumes that they can be compensated for at this time when no evidence has been presented that this is the case. West Westray, North Caithness, Hoy and Fair Isle rest on the Applicant's judgement that Bellrock's own contribution is too small to be considered a meaningful addition. However, we do not agree with this approach given that this could be used in multiple cases that would then result in a significant cumulative effect.

We note that Guillemot are the most abundant species from the survey data, the Year 1 July estimate is 16,000 birds. However, they are scoped out of every SPA on the basis that the array sits beyond the foraging range used to test connectivity, and the Applicant classes July as post-breeding dispersal. In the EIA notes (EIA report page 10) NatureScot point out that these are birds from colonies along the East coast of Scotland congregating in the area, but little is known about these aggregations, so it is not considered further. We would argue that these birds need to be factored into the assessment. Consequently, **RSPB Scotland object to the proposal based upon likely in-combination impacts identified by the Applicant for seven sites and the additional five sites we identify above as subject to potential AEoSI. We also object the fact that the effects of Berwick Bank are considered as compensated for regarding Kittiwake at St Abbs SPA to Fast Castle SPA.**

Habitat Regulations Tests

Due to the Proposed Development's predicted Adverse Effect on Site Integrity (AEoSI) on several SPAs, further tests apply after the appropriate assessment has been undertaken before a decision can be made. Under the Habitats Regulations, a project which cannot conclude that there would be no adverse impacts on the site integrity of European protected sites cannot be permitted unless it can be demonstrated there are no lesser damaging alternative solutions and there are imperative reasons of overriding public interest (IROPI) for the project to go ahead. In the event of there being no alternative solutions and the IROPI test being satisfied, the competent authority must secure the necessary compensation to ensure that the overall coherence of the UK's National Site Network is protected. European sites are amongst the most important sites for wildlife and as such it is right that maintaining them in favourable conservation status and protecting them from development carries a considerable weight in decision making.

Proposed Compensation under the Habitat Regulations

It is important to highlight that any compensation proposed must be *additional* to the existing requirements set out in the Habitats Directive and the Birds Directive (Regulations 9 and 10, Habitats Regulations). These existing commitments require the Competent Authority to take such steps as it considers appropriate to secure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds, having regard to the requirements of Article 2 of the Birds Directive. For offshore SPAs and SACs, Regulation 26, Offshore Habitats Regulations requires Competent Authorities to exercise their functions as far as possible to secure steps to avoid the disturbance of species and the deterioration of habitats or habitats of species within those sites.

If compensation measures are required for a project, then that project has been identified as giving rise to potential adverse impacts on the integrity of a European protected site, either alone or in combination with other plans or projects. Therefore, potential adverse effects of site integrity from other developments are also relevant.

We have serious concerns that in considering the in-combination effects for this proposal, the scenario presented in this application has assumed that there would be full and effective compensation for Berwick Bank Offshore Windfarm. We do not believe that there is any evidence that this level of compensation is available.

RSPB Scotland notes the proposed compensation put forward by the Applicant:

- Strategic compensation through the MRF

The following project-level plans have been short-listed:

- Mammalian predator control and management
- Bycatch reduction
- Disturbance reduction
- Management of breeding habitats

Commentary on, and analysis of, these proposed compensation measures is attached to this letter as an appendix (Appendix 2). In summary, we consider that the developer should utilise the strategic approach to compensation through the Marine Recovery Fund when this becomes available. However, if project-based measures continue to be pursued, then a much greater level of detail and certainty around exactly what the measures are and where they would be carried out is critically required to demonstrate their efficacy and quantitative suitability as compensation under the Habitat Regulation test. It is noted that there are now unfulfilled conditions attached to a number of consents and compensation requirements are being compounded when there is no evidence to suggest that the amount of compensation required cumulatively is available. This level of uncertainty emphasises the need for a detailed assessment of the compensation to be carried out before Scottish Ministers consent to the development.

We have very limited capacity to engage in project level compensation measures given the number of projects asking similar questions and seeking similar solutions at the same places. The Applicant must clarify and improve the proposed compensation measures to ensure that they are as effective ecologically, financially and legally, and are as close as possible to the affected colonies, thus ensuring the coherence the UK's National Site Network**.**

Summary

RSPB Scotland **objects** to the application. We have significant concerns that the Applicant's assessment underestimates the number of SPA sites that would be affected. One of the key reasons for this is the assumption that the losses from Berwick Bank Offshore Windfarm are, or will be, compensated for. We do not believe that the scale of the losses from Berwick Bank can be compensated for, so do not agree with an approach that assumes that they can be compensated for when no evidence has been presented that this is the case.

Should you require any further information or clarification, please do not hesitate to get in contact.

Yours sincerely

Andrew Tait
Senior Conservation Planner, RSPB Scotland

Appendix 1 Ornithological assessment
Appendix 2 Commentary on compensation measures

Appendix 1
Bellrock Offshore Windfarm Application
Detailed Response by the Royal Society for the Protection of Birds

1. Legislative and policy background

Introduction

1.1 This appendix sets out the steps for the habitat regulations with the legal steps that must be taken, together with the wider legal context and the policy landscape for offshore wind development. This is followed by a summary of the most relevant seabird colonies and their current status.

The Habitats Regulations

1.2 The Habitats Regulations seek to conserve particular habitats and species across the UK. The overall aim of these Regulations is to ensure the long-term survival of viable populations of the UK's most valuable and threatened species and habitats, throughout their natural range and to maintain and promote biodiversity.

1.3 These Directives have been transposed into UK legislation and, relevant to this application are:

1.3.1 The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) ("the 1994 Regulations") - applies on land in Scotland, and in Scottish inshore waters (the area of sea adjacent to Scotland from 0 to 12 nautical miles);

1.3.2 The Conservation of Habitats and Species Regulations 2017 -applies to specific reserved and devolved activities on land in Scotland, and in Scottish inshore waters, including for consents under sections 36 and 37 of the Electricity Act 1989; and

1.3.3 The Conservation of Offshore Marine Habitats and Species Regulations 2017 -applies to all UK offshore waters (the area of sea beyond 12 nautical miles).

1.4 These are referred to as "the Habitats Regulations" in this submission.

1.5 In Scotland, 162 Special Protection Areas (SPAs) have been classified. These have been specifically identified and protected due to supporting one or more rare, threatened, or vulnerable bird species as listed in Annex I of the Birds Directive or regularly occurring migratory species.

1.6 Although the UK has withdrawn from the EU, the aims and objectives (as set out in the Habitats and Birds Directives recitals/preambles) remains relevant and important as discussed below. SPAs are protected in Scotland and the rest of the UK, and the standard of protection and requirements has not changed.

1.7 There have however been some changes to terminology and process due to Brexit. Of relevance to this submission is that the EU-wide network of SPAs and SACs known as "Natura 2000" is now referred to as the "UK's National Site Network" and references in the Habitats

Regulations to the “coherence of Natura 2000" must now be read as references to the coherence of the UK’s National site network.

1.8 Using *the Conservation of Habitats and Species Regulations 2017* (since all Habitats Regulations have identical requirements), the Regulations set out the sequence of steps to be taken by the competent authority (here the Scottish Ministers) when considering authorisation for a project that may have an impact on a European site and its species before deciding to authorise that project. These are as follows:

- Step 1: consider whether the project is directly connected with or necessary to the management of the SPA and its species (regulation 63(1)). If not –
- Step 2: consider, on a precautionary basis, whether the project is likely to have a significant effect on the SPA and its species, either alone or in combination with other plans or projects (the Likely Significance Test) (regulation 63(1)).
- Step 3: if there is a likelihood of significant effect, make an appropriate assessment of the implications for the SPA and its species in view of its conservation objectives. There is no requirement or ability at this stage to consider extraneous (non-conservation e.g. economics, renewable targets, public safety etc) matters in the appropriate assessment (regulation 63(1)).
- Step 4: consider whether it can be ascertained that the project will not, alone or in combination with other plans or projects, adversely affect the integrity of the SPA and its species, having regard to the manner in which it is proposed to be carried out, and any conditions or restrictions subject to which that authorisation might be given (the Integrity Test) (regulation 63(6)).
- Step 5: In light of the conclusions of the assessment, the competent authority shall agree to the project only after having ascertained that it will not adversely affect the integrity of the SPA, alone or in combination with other plans or projects (regulation 63(5)).
- Step 6: only if the competent authority is satisfied that, there being no alternative solutions and the plan or project must be carried out for imperative reasons of overriding public interest (IROPI) which, subject to regulation 64(2), may be of a social or economic nature, they may agree to the plan or project notwithstanding a negative assessment of the implications for the European site (regulation 64(1)).
- Step 7: in the event of there being no alternative solutions and the IROPI test being satisfied, the Scottish Ministers must secure that any necessary compensatory measures are taken to ensure that the overall coherence of the UK’s National Site Network is protected (regulation 68).

It is vital that the precautionary approach required by the Habitats Regulations is taken. This means if scientific data is incomplete or hard to get and it is not possible to complete a full evaluation of all possible or potential risks an activity/development may cause, account should be taken of all possible harm. Potential harm should not be dismissed due to the lack of scientific data. Importantly, the precautionary principle requires the Applicant to demonstrate with scientific certainty that something would not be harmful. The concept of something being overly precautionary dismisses the inherent uncertainty in modelling and overlooks the simplistic version of reality that the modelling captures.

1.9 It is important to add that the compensatory requirements identified above, in relation to both inshore area and the offshore marine area, are *additional* and any competent authority must exercise its functions so as to secure compliance with the under-pinning requirements of the

Habitats Directive and the Birds Directive to take such steps as it considers appropriate to secure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds, having regard to the requirements of Article 2 of the Birds Directive.[7] And for offshore SPAs regulation 26, Offshore Regulations requires competent authorities to exercise their functions, as far as possible, to secure steps to avoid the disturbance of species and the deterioration of habitats or habitats of species within those sites.

Appropriate assessment

1.10 Under case law, any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects: see *Waddenzee*[1].

1.11 Following that appropriate assessment, a project may only be granted consent if the competent authority is convinced that it will not have an adverse effect on the integrity of the European site(s) and their species of concern, having applied the precautionary principle and taken account of the conservation objectives for those sites and their habitats and species. *Waddenzee* confirmed that where doubt remains as to the absence of adverse effects on the integrity of the site, approval should be refused (subject to the considerations of alternative solutions, imperative reasons of overriding public interest and the provision of compensatory measures as set out in regulations 64 & 68).

1.12 An appropriate assessment requires all aspects of the project which could affect the site, its species and its conservation objectives to be identified in the light of the best scientific knowledge in the field. The competent authority,

> *"taking account of the conclusions of the appropriate assessment of the implications…for the site concerned, in the light of the conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of the site. That is the case where no reasonable scientific doubt remains as to the absence of such effects".*

1.13 Integrity of the SPA should be considered as the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is classified. A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required. When looking at the 'integrity of the site', it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and long-term.

1.14 As is clear from the requirements of the Habitats and Offshore Regulations, the assessment of integrity is to be considered by reference to the impact of the project alone and in-combination with other plans and projects, taking account of the site(s) conservation objectives. As clearly set out in *Waddenzee*, para 61:

> *"**61** In view of the foregoing, the answer to the fourth question must be that, under Article 6(3) of the Habitats Directive,* ***an appropriate assessment of the implications for the site concerned of the plan or project implies that, prior to its approval, all the aspects of the plan***

[1] CJEU Case-127/02; [2004] ECR-7405 at [45]

> ***or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field.*** *The competent national authorities, taking account of the appropriate assessment of the implications of mechanical cockle fishing for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site.* ***That is the case where no reasonable scientific doubt remains as to the absence of such effects****."* (emphasis added)

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

1.15 These EIA requirements state that consent cannot be granted for Environmental Impact Assessment (EIA) development unless the decision-maker has taken into account environmental information including an environmental statement which describes the significant effects, including cumulative effects, of the development on the environment. This will include effects on all wild bird species whether SPA species or not.

1.16 Offshore wind farms have the potential to impact on birds through collision with rotating blades, direct habitat loss, disturbance from construction activities, displacement during the operational phase (resulting in loss of foraging/roosting area) and impact on bird flight lines (i.e. barrier effect) and associated increased energy use by birds for commuting flights between roosting and foraging areas. These additional potential impacts must be taken into account.

The UK Marine Strategy Regulations and Good Environmental Status

1.17 Also of relevance to achieving sustainable development in our seas is the Marine Strategy Framework Directive[2]. This was developed in response to concerns that although existing legislation protected the sea from some specific impacts, it was sectoral and fragmented. To overcome this, the directive seeks to reduce impacts on marine waters regardless of where impacts occur by applying an ecosystem approach.

1.18 Applying an ecosystem approach is important. Our natural environment is complicated, and the outcome of an impact may manifest elsewhere. It also feeds into the concept of sustainable development and the vision for clean, healthy, safe, productive, and diverse seas; managed to meet the long-term needs of nature and people as set out Scotland's National Marine Plan.

1.19 The Marine Strategy Framework Directive was transposed into UK law by the Marine Strategy Regulations 2010. It requires the UK to put in place the necessary management measures to achieve 'Good Environmental Status' (GES) in UK seas by 2020. This involves protecting the marine environment, preventing its deterioration, and restoring it where practical alongside using marine resources sustainably. As with the Habitats Regulations, although the UK has withdrawn from the EU, the legislative requirement for GES remains in place.

1.20 Governments of the UK have collectively failed to meet 11 out of the 15 indicators of Good Environmental Status (GES) for our seas with the marine bird indicator moving away from target. For breeding seabirds, more species, especially surface feeders who depend on small fish at the surface (35% in the Greater North Sea), are now experiencing frequent, widespread breeding failures. The reduced availability of small fish is largely responsible for these declines and impacts on breeding success.

Policy position

[2] EU Council Directive 2008/56/EC

1.21 In accordance with the requirements of the Marine (Scotland) Act 2010 when considering an application and making a recommendation to Ministers, MD-LOT must consider the extent to which the proposed activity accords with any marine plan for an area and the impact that it would have on the environment, human health, and other legitimate users of the sea as well as other matters considered relevant.

1.22 Scotland's National Marine Plan1 (NMP) (adopted 2015) sets out the strategic policies for sustainable development in both the Scotland inshore region (0 to 12 nautical miles) and within the Scottish Offshore region (12 to 200 nautical miles).

1.23 A core aim of marine planning, as set out by the NMP, is to manage human impact on the marine environment. The plan therefore seeks to put the marine environment at the heart of the planning process and adopt the principles of sustainable development. The environmental, social, and economic policies of the plan are intended to be complementary with one another as elements of sustainability.

1.24 Through policy GEN 9 (Natural Heritage), the NMP requires that development and use of the marine environment complies with legal requirements for protected areas and protected species, not result in significant impact on the national status of priority marine features and protect, and where appropriate, enhances the health of the marine area. It also encourages a strategic approach to mitigation of potential and cumulative impacts, stating these forms an integral part of marine planning and decision making.

1.25 Renewables specific policies within the NMP direct commercial scale development to the plan options areas (as identified in the Sectoral Marine Plan) and require applications to demonstrate compliance with the Environmental Impact Assessment (EIA) and Habitat Regulations Appraisal (HRA) legislative requirements.

1.26 Since the adoption of the NMP, Scottish Government has further recognised that net zero and energy goals will have impacts on the environment, specifically marine biodiversity, as well as other users of sea. In particular, the draft Energy Strategy and Just Transition Plan (2023), recognises the potential impacts on biodiversity arising from the major expansion in offshore wind. It contains a commitment to work in a way that recognises this reality and ensures appropriate protection of the natural environment as part of a joined-up approach to tacking the climate and nature crisis.

1.27 This follows the approach of the National Planning Framework 4 which, in policy 1, clearly sets the expectation that significant weight will be given to the global climate and nature crises when considering all development proposals. Although this document is not directly applicable to marine development, it is applicable to onshore elements and RSPB Scotland believe it is a relevant consideration, albeit one with limited weight, for development offshore.

Section summary

1.28 Taken together, there is a clear legal and policy requirement to protect the marine environment and deliver sustainable development. The UK Marine Strategy is clear in its aims of improving the state of the marine environment through taking a large scale, holistic approach. Therefore, proposals which further impact the ability of the UK to achieve GES should be considered carefully. The ability of an application to comply with the vital requirements of the Habitats Regulations which seek the long-term survival of viable populations of Europe's most

valuable and threatened species and habitats, must also be scrutinised and considered in the greatest detail.

2. Ornithological interest of the Application site

2.1 The UK is of outstanding international importance for its breeding seabirds and wintering marine birds. As with all Annex I and regularly migratory species, the UK has a particular responsibility under the Birds Directive to secure their conservation.

2.2 Seabirds are relatively long-lived, and as a result, their populations are sensitive to small increases in adult mortality. Their survival and productivity rates can be impacted by offshore windfarms directly (i.e. collision) and indirectly (e.g. displacement from foraging areas, additional energy expenditure, potential impacts on forage fish and wider ecosystem impacts such as changes in stratification).

2.3 The probability of seabirds being impacted by an application relates to whether they are likely to be in the area of the development, and their behaviour in the vicinity of the development. This will depend on a number of factors, including the application's proximity to seabird colonies, the species within those colonies, the species behaviours (including their foraging range, food preferences and flight behaviour), the attraction of the application array itself as a foraging area, and the attraction of areas beyond the application array for foraging (which would require birds to transition through the development array or detour around it).

Species of interest

2.4 The **key species of** interest **in relation to the application are** Black-legged Kittiwake (*Rissa tridactyla*), Northern Gannet (*Morus bassanus*), Common Guillemot (*Uria aalge*), Atlantic Puffin (*Fratercula artica*)

2.5 A summary of their population status within the Britain, Isle of Man and Channel Islands is provided in Table 1 below.

Species	% World Population	UK Colony Trends 1986 to 2021
Black-legged Kittiwake	5.3	Declining
Northern Gannet	59.1	Mostly increasing but a few declining colonies *(N.B. Gannets were badly impacted by HPAI in 2021-22)*
Guillemot	6.2	Some colonies increasing but many declining
Atlantic Puffin	3.3-3.9	Declining
Razorbill	12-24	Some colonies increasing but many declining

Table 1: Proportion of the world population of seabird species relevant to the Bellrock Offshore Windfarm. Population taken from Seabirds Count, 2023[14]

Northern Gannet

2.6 Northern Gannet are endemic to the North Atlantic although the majority breed in Britain and Ireland. They tend to breed on offshore islands and stacks. Gannets are typically long-lived seabirds, living to an average age of 17 years and not breeding until the age of 5 years. During the breeding season, adults will take it in turn to incubate the single egg for approximately 42-46 days with the chick fledging unaccompanied by its parents after approximately 90 days. Some colonies, such as that on the Bass Rock in the Firth of Forth – the largest Gannetry in the world - are

particularly large and conspicuous. Gannet can catch fish at depths of 20 metres but also feed from the surface on small shoaling fish such as sandeel.

2.7 During the breeding season Gannets are central-place foragers meaning they are constrained to return to the nest after foraging to maintain territories and raise their young. Foraging trip durations are dependent on colony size with birds from larger colonies making longer foraging trips (both in distance and duration).

2.8 Gannet were particularly badly impacted by Highly Pathogenic Avian Influenza (HPAI) during the 2022 breeding season with large numbers of deaths reported. On the Bass Rock a catastrophic breeding failure was reported which is likely to vastly impact their future population numbers and the robustness of those populations to additional mortality.

2.9 They are amber listed in the Birds of Conservation Concern.

2.10 Northern Gannet have been assessed as having a high vulnerability to collisions with rotating turbine blades (Furness *et al.,* 2013, Wade *et al.,* 2016), partly due to their flight altitude and manoeuvrability. Breeding Gannets tracked with GPS from Helgoland in the eastern North Sea travelled around and through operational wind farms.

2.11 There is a need to assess the possible impacts to Gannets throughout the year as behavioural constraints change; starting when they arrive back at the colony for the breeding season until they leave on migration, and then throughout the winter. During autumn and winter potential interaction with turbines will not be limited to birds from the closest breeding colony but birds from across the breeding range as they disperse and travel south.

2.12 There is consistent evidence of wind farm avoidance by non-breeding Gannets and Gannets on migration. But little is known about the behavioural responses of breeding Gannets to offshore turbines resulting from a lack of operational turbines within foraging range of breeding colonies.

Black-legged Kittiwake

2.13 Black-legged Kittiwake are members of the gull family. They tend to nest on vertical rocky-sea cliffs and during the breeding season feed on energy rich pelagic shoaling fish, such as sandeel, sprat and juvenile herring. Kittiwakes are surface feeders and are highly dependent on sandeels in the breeding season, as such they are particularly vulnerable to food shortage. During the breeding season Kittiwakes are central-place foragers meaning they are constrained to return to the nest after foraging to maintain territories and raise their young. When not in attendance at the nest or away on a foraging trip, Kittiwakes use the sea below the cliffs for maintenance behaviours such as loafing (spending time on the water to preen or rest, not related to feeding), preening and bathing. During the breeding season the highest densities of Kittiwakes at sea are within 1km of the colony.

2.14 Kittiwake are red listed in the Birds of Conservation Concern and on the OSPAR list of threatened and/or declining species and have been assessed by the IUCN as vulnerable to global extinction. They are particularly susceptible to collision risk but are also vulnerable to distributional changes as a result of the presence of turbines.

Common Guillemot

2.15 Common Guillemot are members of the auk family along with Puffin and Razorbill. They typically form highly dense colonies and lay a single egg (without a nest) on a cliff, narrow ledges, or other inaccessible areas. They tend to eat fish and crustaceans. Guillemots are typically long-

lived seabirds, living to an average age of 23 years and not breeding until the age of 5 years. Breeding success is highest where birds are most tightly packed. Adults will incubate the egg for 28-37 days, fledging then taking place when the chick is ~3 weeks old. The chick will then complete its growth at sea accompanied by its male parent.

2.16 The response of Guillemots to offshore wind farms is mixed although there is a paucity of data for breeding birds. Non-breeding birds have been shown to avoid offshore wind farms, as have breeding birds in the southern North Sea, whereas in the Irish Sea, Guillemots have shown no changes in abundance post construction and at another site, increased in abundance. More recent work has suggested that there may be some habituation over time to the presence of wind farms.

2.17 While details are still emerging, the 2024 breeding season for Guillemot appears to be extremely poor, with large number of nest sites vacant, birds present but not laying eggs and high degree of breeding asynchronicity. The causes of this are likely to be multifactorial, and may include HPAI, high water temperatures and resultant poor body conditions. The long term, population scale consequences are unclear, but may be severe. As a result, an extremely high level of precaution should be applied in considering the impacts arising from any offshore development on this species.

2.18 They are amber listed in the Birds of Conservation Concern.

Puffin

2.19 Puffin are one of the most iconic seabird species around Scotland with their brightly coloured beaks during the breeding season. They tend to nest in burrows and so are susceptible to mammalian predators. There is some evidence their diet changes seasonally but during the breeding season, they typically feed on shoaling fish such as sandeel, sprat and herring which they catch by underwater pursuit.

2.20 They are vulnerable to displacement which can lead to a loss of feeding grounds and excess energy expenditure as they take less direct routes to reach alternative prey sources.

2.21 Puffin are red listed in the Birds of Conservation Concern and have been assessed by the IUCN as vulnerable to global extinction.

Razorbill

2.22 Razorbill tend to nest hidden from view on small ledges or in cracks on boulder-fields. They are typically long-lived seabirds, living to an average age of 13 years and nobreeding until the age of 4 years. During the breeding season, adults will incubate the single egg for approximately 32 days with the chick fledging after approximately 21 days. The chick will then complete its growth at sea accompanied by its male parent.

2.23 Razorbill are amber listed in the Birds of Conservation Concern

Proximity of seabird colonies

2.22 The application array location is close to several SPAs with qualifying features within foraging range of the application array area. This includes the East Caithness Cliffs SPA, North Caithness Cliffs SPA, Outer Firth of Forth and St Andrews Bay Complex SPA, the Forth Islands SPA, Fowlsheugh SPA and St Abb's Head to Fast Castle SPA.

2.23 As SPAs, these sites are subject to general duties to protect, conserve and restore the designated features of the site to meet their conservation objectives, to prevent deterioration of the site's habitats and to prevent significant disturbance to the sites. If an application might impact a qualifying feature, as set out in Chapter 1, assessment in accordance with the Habitats Regulations is required.

Detailed response

3.1 RSPB Scotland has reviewed the in-combination ornithological assessment presented in the Bellrock EIA and RIAA. The applicant's own assessment concludes that an adverse effect on site integrity (AEoSI) cannot be ruled out for qualifying features at seven Special Protection Areas (SPAs): Buchan Ness to Collieston Coast; Fowlsheugh; Farne Islands; Forth Islands; Troup, Pennan and Lion's Heads; East Caithness Cliffs; and Flamborough and Filey Coast. Kittiwake is the driving feature at six of the seven, with gannet at Forth Islands, razorbill named at Fowlsheugh, and the breeding seabird assemblage at Farne Islands.

3.2 RSPB Scotland does not accept that this list captures the full extent of the in-combination effects of the development. Using the NatureScot in-combination upper-mortality scenario, including Berwick Bank, the RIAA's own PVA outputs predict reductions in projected 35-year population size at several other SPAs that are comparable to, or greater than, those at sites the applicant has listed. These include St Abb's Head to Fast Castle, West Westray, Hoy, and Fair Isle for kittiwake, and North Caithness Cliffs where there are impacts on puffin, kittiwake and razorbill. On this basis, RSPB Scotland reaches the conclusion there are twelve rather than seven SPAs where Adverse Effects on Site Integrity cannot be ruled out. Notably, the reductions predicted at several of these SPAs, St Abb's Head to Fast Castle, West Westray and North Caithness Cliffs, are of concern under both the NatureScot High and Low mortality scenarios. The effect at these sites therefore cannot be dismissed as an artefact of precautionary modelling assumptions.

3.4 The applicant has argued there are two reasons why these additional SPAs are not considered. At St Abb's Head to Fast Castle, the no-adverse-effect conclusion depends on excluding Berwick Bank's predicted mortality from the in-combination total, on the basis that Berwick Bank's consent carries compensation for the site. RSPB Scotland does not consider that Berwick Bank's IROPI consent and not-yet-delivered compensation constitute sufficient grounds for discounting Berwick Banks contribution from the in-combination assessment. When Berwick Bank is included, the in-combination effect is a 50% reduction in the kittiwake feature of St Abb's Head to Fast Castle. At West Westray, Hoy, Fair Isle and North Caithness Cliffs, the conclusion rests on the applicant's judgment that Bellrock's own contribution is too small to represent a meaningful addition to the in-combination effect. At West Westray and North Caithness Cliffs the RIAA expressly concedes that the possibility of an adverse effect on the SPA population cannot be excluded, with the site kept off the list only by that no-meaningful-contribution judgment. RSPB does not accept that either argument provides a sound basis for discounting these impacts.

Breeding colony SPAs not taken to PVA

3.5 Two breeding colony SPAs, Calf of Eday (great black-backed gull) and St Kilda (gannet), were screened in at LSE but did not proceed to PVA. In both cases the apportioned mortality was too small to warrant population modelling. For St Kilda the increase in baseline mortality fell

substantially below the 0.02 percentage-point increase that NatureScot treats as the trigger for PVA, and for Calf of Eday the effect was concluded to be small and highly localised. No adverse effect on site integrity was concluded for either, alone or in-combination.

Concern for Guillemot scoped out of the SPA assessment

3.6 Guillemot is the most abundant species recorded in the digital aerial survey, with a July peak estimate of more than 16,000 birds in Year 1. However, guillemot is excluded from every breeding colony SPA on the basis that the array lies beyond the 95.2 km foraging range used to test connectivity. That test is a breeding-season construct, and the July peak is treated as post-breeding dispersal rather than breeding-season presence, which removes it from the connectivity assessment. NatureScot noted during consultation that the Bellrock area is one where guillemots from colonies along the length of the East coast of Scotland could congregate, so these birds, including dependent young and their attending adults, plausibly derive from those same SPA colonies. The displacement of this aggregation is assessed only at the regional population scale in the EIA and is apportioned to no SPA, meaning a large and real effect on birds that likely originate from designated sites is not adequately considered in the RIAA.

Marine SPAs

3.7 Three marine SPAs were considered: the Outer Firth of Forth and St Andrew's Bay Complex SPA, the Moray Firth SPA, and Scapa Flow SPA. All three are classified for non-breeding aggregations (divers, scoters and other inshore waterfowl) as well as breeding and non-breeding seabird assemblages. All lie beyond the 15 km distance from the Bellrock Wind Farm advised by NatureScot, so there is no in-array collision or displacement pathway to these sites, and their seabird features are covered by the breeding colony SPA assessments. The only pathway considered was disturbance and displacement from project vessels transiting between Bellrock and ports. The RIAA estimated an increase of around 1.5% in annual vessel activity within the Outer Firth of Forth SPA as a result of the development, and no adverse effect on integrity was concluded for any of the three.

Migratory non-seabird SPAs

3.8 The nine migratory non-seabird SPAs (geese, swans and waders, all co-designated as Ramsar) were assessed for passage collision and barrier effect only, since these species interact with Bellrock solely as passage migrants. Collision risk was estimated using the WWT (2014) approach updated with Woodward et al. (2023) parameters, as the stochastic migratory CRM remains an unendorsed Beta. Even assuming every bird in a population passes through the array, the percentage at collision risk is below 1% for almost all species (1.5% maximum), and accounting for the narrow width of the array relative to each species' broad migratory front, and its position 116 km offshore, reduces this by at least an order of magnitude to a fraction of a percent. The barrier effect was assessed as a minor energetic detour cost. No adverse effect on integrity was concluded for any of the nine, and none required a PVA.

Table 1. Selected summary of Population Viability Analysis results for Special Protection Areas and species features identified during scoping. Median Counterfactual of Growth Rate (CGR) and Median Counterfactual of Population Size (CPS) estimated using NatureScot “High” Impact

Scenario in combination with consented developments including Berwick Bank over the 35-year operational lifetime of the project

SPA	Species	CGR	CPS	Table
Buchan Ness to Collieston Coast	Kittiwake	0.9959	**0.8614**	4.13
Copinsay	Kittiwake	0.9981	0.9352	4.140
Coquet Island	Puffin	0.9995	0.9818	4.98
East Caithness Cliffs	Kittiwake	0.9907	**0.7138**	4.108
	Razorbill	0.9930	**0.7780**	4.112
Fair Isle	Kittiwake	0.9957	**0.8543**	4.183
	Gannet	0.9986	0.9512	4.192
Farne Islands	Kittiwake	0.9931	**0.7793**	4.48
	Puffin	0.9992	0.9701	4.52
Flamborough and Filey Coast	Kittiwake	0.9950	**0.8352**	4.150
	Razorbill	0.9960	**0.8530**	4.154
	Gannet	0.9900	**0.6968**	4.163
Forth Islands	Kittiwake	0.9953	**0.8426**	4.62
	Razorbill	0.9880	**0.6450**	4.66
	Puffin	0.9973	0.9060	4.70
	Gannet	0.9919	**0.7465**	4.79
Fowlsheugh	Kittiwake	0.9934	**0.7883**	4.23
	Razorbill	0.9910	**0.7330**	4.28
Hermaness, Saxa Vord and Valla Field	Gannet	0.9976	0.9168	4.242
Hoy	Kittiwake	0.9960	**0.8510**	4.173
Mingulay and Berneray	Razorbill	1.0000	0.9890	4.254
North Caithness Cliffs	Kittiwake	0.9964	0.8776	4.122
	Razorbill	0.9950	**0.8460**	4.126
	Puffin	0.9904	**0.7071**	4.130
North Rona and Sula Sgeir	Gannet	0.9996	0.9851	4.232
Noss	Gannet	0.9981	0.9353	4.223
Rathlin Island	Razorbill	1.0000	0.9910	4.259
St Abb's Head to Fast Castle	Kittiwake	0.9812	**0.5053**	4.38
Sule Skerry and Sule Stack	Gannet	0.9974	0.9094	4.213
Troup, Pennan and Lion's Heads	Kittiwake	0.9948	**0.8295**	4.89
	Razorbill	0.9950	**0.8280**	4.93
West Westray	Kittiwake	0.9892	**0.6764**	4.203

Table 2. Selected summary of Population Viability Analysis results for Special Protection Areas and species features identified during scoping. Median Counterfactual of Growth Rate (CGR) and Median Counterfactual of Population Size (CPS) estimated using NatureScot “Low” Impact Scenario in combination with consented developments including Berwick Bank over the 35-year operational lifetime of the project.

SPA	Species	CGR	CPS	Table
Buchan Ness to Collieston Coast	Kittiwake	0.9969	0.8951	4.13
Copinsay	Kittiwake	0.9987	0.9547	4.140
Coquet Island	Puffin	0.9997	0.9884	4.98
East Caithness Cliffs	Kittiwake	0.9937	**0.7969**	4.108
	Razorbill	0.9970	0.8860	4.112
Fair Isle	Kittiwake	0.9969	0.8946	4.183
	Gannet	0.9993	0.9759	4.192
Farne Islands	Kittiwake	0.9948	**0.8295**	4.48
	Puffin	0.9995	0.9814	4.52
Flamborough and Filey Coast	Kittiwake	0.9957	**0.8552**	4.150
	Razorbill	0.9980	0.9230	4.154
	Gannet	0.9941	**0.8068**	4.163
Forth Islands	Kittiwake	0.9966	0.8840	4.62
	Razorbill	0.9940	**0.7920**	4.66
	Puffin	0.9983	0.9418	4.70
	Gannet	0.9946	**0.8237**	4.79
Fowlsheugh	Kittiwake	0.9950	**0.8352**	4.23
	Razorbill	0.9950	**0.8450**	4.28
Hermaness, Saxa Vord and Valla Field	Gannet	0.9989	0.9609	4.242
Hoy	Kittiwake	0.9970	0.8940	4.173
Mingulay and Berneray	Razorbill	n/a[1]	n/a[1]	4.254
North Caithness Cliffs	Kittiwake	0.9974	0.9106	4.122
	Razorbill	0.9980	0.9310	4.126
	Puffin	0.9942	**0.8095**	4.130
North Rona and Sula Sgeir	Gannet	n/a[1]	n/a[1]	4.232
Noss	Gannet	0.9991	0.9694	4.223
Rathlin Island	Razorbill	n/a[1]	n/a[1]	4.259
St Abb's Head to Fast Castle	Kittiwake	0.9853	**0.5860**	4.38
Sule Skerry and Sule Stack	Gannet	0.9981	0.9334	4.213
Troup, Pennan and Lion's Heads	Kittiwake	0.9963	0.8758	4.89
	Razorbill	0.9980	0.9360	4.93
West Westray	Kittiwake	0.9926	**0.7638**	4.203

[1] No “Low” scenario was modelled for these SPAs

Summary of significant impacts – in combination with other offshore wind farms

3.9 RSPB Scotland has independently reviewed the population viability analysis (PVA) results for the 32 species and SPA combinations that the applicant took to PVA-level assessment. These are summarised in the paragraphs below and in Tables 1 and 2, using the NatureScot upper and lower

mortality scenarios only, and are presented in-combination including the mortality contribution of Berwick Bank Offshore Wind Farm throughout, consistent with the position set out above.

3.10 The presentation of these combinations should not be taken as agreement that species and sites not listed here are free from significant impact. It reflects only that the applicant has not carried out a PVA for those combinations, so no conclusion can be reached from the assessment as submitted. This includes guillemot, the most abundant species recorded in the survey, which is scoped out of the SPA assessments entirely, and the qualifying features screened in but not taken to PVA, both of which are addressed separately below.

Black-legged Kittiwake

3.11 **Buchan Ness to Collieston Coast SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Buchan Ness to Collieston Coast SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9959 and 0.9969. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 86.14% and 89.51% of what it would have been in the absence of the development.

3.12 **Copinsay SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Copinsay SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9981 and 0.9987. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 93.52% and 95.47% of what it would have been in the absence of the development.

3.13 **East Caithness Cliffs SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the East Caithness Cliffs SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9907 and 0.9937. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 71.38% and 79.69% of what it would have been in the absence of the development.

3.14 **Fair Isle SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Fair Isle SPA declining with a ratio of impacted to

unimpacted population growth rate of between 0.9957 and 0.9969. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 85.43% and 89.46% of what it would have been in the absence of the development.

3.15 **Farne Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Farne Islands SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9931 and 0.9948. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 77.93% and 82.95% of what it would have been in the absence of the development.

3.14 **Flamborough and Filey Coast SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Flamborough and Filey Coast SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9950 and 0.9957. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 83.52% and 85.52% of what it would have been in the absence of the development.

3.15 **Forth Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Forth Islands SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9953 and 0.9966. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 84.26% and 88.40% of what it would have been in the absence of the development.

3.16 **Fowlsheugh SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Fowlsheugh SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9934 and 0.9950. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 78.83% and 83.52% of what it would have been in the absence of the development.

3.17 **Hoy SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual

population growth rate of kittiwake at the Hoy SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9960 and 0.9970. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 85.10% and 89.40% of what it would have been in the absence of the development.

3.18 **North Caithness Cliffs SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the North Caithness Cliffs SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9964 and 0.9974. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 87.76% and 91.06% of what it would have been in the absence of the development.

3.19 **St Abb's Head to Fast Castle SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the St Abb's Head to Fast Castle SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9812 and 0.9853. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 50.53% and 58.60% of what it would have been in the absence of the development.

3.20 **Troup, Pennan and Lion's Heads SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the Troup, Pennan and Lion's Heads SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9948 and 0.9963. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 82.95% and 87.58% of what it would have been in the absence of the development.

3.21 **West Westray SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of kittiwake at the West Westray SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9892 and 0.9926. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 67.64% and 76.38% of what it would have been in the absence of the development.

Razorbill

3.22 **East Caithness Cliffs SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the East Caithness Cliffs SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9930 and 0.9970. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 77.80% and 88.60% of what it would have been in the absence of the development.

3.23 **Flamborough and Filey Coast SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Flamborough and Filey Coast SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9960 and 0.9980. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 85.30% and 92.30% of what it would have been in the absence of the development.

3.24 **Forth Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Forth Islands SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9880 and 0.9940. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 64.50% and 79.20% of what it would have been in the absence of the development.

3.25 **Fowlsheugh SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with oth wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Fowlsheugh SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9910 and 0.9950. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 73.30% and 84.50% of what it would have been in the absence of the development.

3.26 **Mingulay and Berneray SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Mingulay and Berneray SPA declining with a ratio of impacted to unimpacted population growth rate of 1.0000 (upper mortality scenario only). This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be 98.90% (upper mortality scenario only) of what it would have been in the absence of the development.

3.27 **North Caithness Cliffs SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the North Caithness Cliffs SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9950 and 0.9980. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 84.60% and 93.10% of what it would have been in the absence of the development.

3.28 **Rathlin Island SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Rathlin Island SPA declining with a ratio of impacted to unimpacted population growth rate of 1.0000 (upper mortality scenario only). This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be 99.10% (upper mortality scenario only) of what it would have been in the absence of the development.

3.29 **Troup, Pennan and Lion's Heads SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of razorbill at the Troup, Pennan and Lion's Heads SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9950 and 0.9980. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 82.80% and 93.60% of what it would have been in the absence of the development.

Puffin

3.30 **Coquet Island SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of puffin at the Coquet Island SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9995 and 0.9997. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 98.18% and 98.84% of what it would have been in the absence of the development.

3.31 **Farne Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of puffin at the Farne Islands SPA declining with a ratio of impacted to unimpacted

population growth rate of between 0.9992 and 0.9995. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 97.01% and 98.14% of what it would have been in the absence of the development.

3.32 **Forth Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of puffin at the Forth Islands SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9973 and 0.9983. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 90.60% and 94.18% of what it would have been in the absence of the development.

3.33 **North Caithness Cliffs SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of puffin at the North Caithness Cliffs SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9904 and 0.9942. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 70.71% and 80.95% of what it would have been in the absence of the development.

Gannet

3.34 **Fair Isle SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Fair Isle SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9986 and 0.9993. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 95.12% and 97.59% of what it would have been in the absence of the development.

3.35 **Flamborough and Filey Coast SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Flamborough and Filey Coast SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9900 and 0.9941. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 69.68% and 80.68% of what it would have been in the absence of the development.

3.36 **Forth Islands SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in

combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Forth Islands SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9919 and 0.9946. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 74.65% and 82.37% of what it would have been in the absence of the development.

3.37 **Hermaness, Saxa Vord** and Valla Field SPA Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Hermaness, Saxa Vord and Valla Field SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9976 and 0.9989. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 91.68% and 96.09% of what it would have been in the absence of the development.

3.38 **North Rona and Sula Sgeir** SPA Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the North Rona and Sula Sgeir SPA declining with a ratio of impacted to unimpacted population growth rate of 0.9996 (upper mortality scenario only). This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be 98.51% (upper mortality scenario only) of what it would have been in the absence of the development.

3.39 **Noss SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Noss SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9981 and 0.9991. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 93.53% and 96.94% of what it would have been in the absence of the development.

3.40 **Sule Skerry and Sule Stack SPA** Within the range of likely mortalities derived using the methods advocated by NatureScot, Marine Directorate and RSPB Scotland during scoping, the impacts arising from distributional change and collision mortality associated with Bellrock Offshore Wind Farm in combination with other wind farms including Berwick Bank are predicted to result in the annual population growth rate of gannet at the Sule Skerry and Sule Stack SPA declining with a ratio of impacted to unimpacted population growth rate of between 0.9974 and 0.9981. This means that after the 35-year lifetime of Bellrock Offshore Wind Farm, the population size of the SPA feature is expected to be between 90.94% and 93.34% of what it would have been in the absence of the development.

Appendix 2
RSPB Scotland commentary on the Applicant's proposed compensation measures for Bellrock Offshore Wind Farm

1. RSPB Scotland approach to evaluating compensation measures

Introduction

1.1. According to the Ornithology Compensation Plan, the Applicant has identified the following options for compensation:

a. Strategic compensation through the MRF (para 4.1)

Alternatively, short-listed projects (para 4.3 page 95 of 182) are:

b. Mammalian predator control and management

c. Bycatch reduction

d. Disturbance reduction

e. Management of breeding habitats

1.2. It is vital that details and evidence are provided to enable confidence ecologically, financially and legally, in the compensation proposals and such information must be available for review by all Interested Parties. This appendix sets out the EC's guidance and RSPB's general approach to assessing compensation proposals and the level of detail we consider is required in order to evaluate compensation proposals as part of the Application's determination. We will then apply that guidance to the measures proposed by the Applicant and draw out some general comments. We have set it out under the following headings:

- RSPB Scotland's approach to assessing compensation proposals;
- Comments on measures proposed by the Applicant:
  - Lack of specific proposals and locations for compensation measures
  - Scale of compensation
  - Lead-in times for compensation
  - Lifetime of compensation in relation to damage
  - Environmental assessment of the proposed compensation measures.

2. RSPB Scotland's approach to assessing compensation proposals

2.1 Set out below are the key criteria and requirements from the EC guidance[1] on compensatory measures, along with additional commentary based on RSPB Scotland's experience of the principles that should be applied when assessing compensatory measures.

[1] EC (2018) Managing Natura 2000 sites – The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (21/11/18) C(2018) 7621 final

EC criteria	EC guidance summary (emphasis added)	RSPB Scotland additional commentary
Targeted	Measures should be the **most appropriate to the impact predicted** and **focused on objectives and targets addressing the Natura 2000 elements affected**. Must **refer to structural and functional aspects of site integrity and habitats/species affected**. **Must consist of ecological measures**: payments to individuals/funds are not appropriate.	Clear objectives and success criteria must be established for the compensation measures. Must address the ecological functions and processes required by impacted species/habitat. Requires shared understanding and agreement on what the impacts are i.e. need to agree nature, magnitude including that they will continue for as long as the project's impacts. This includes the time likely to be required for the SPAs to recover from those impacts in the case of proposals that are in place for a specified time period. This is in order to define objectives for compensation measures and to set out the success criteria to determine whether those objectives have been/are being achieved.
Effective	**Based on best scientific knowledge available alongside specific investigations for the location where the measures will be implemented**. Must be **feasible and operational in reinstating the conditions needed to ensure the overall coherence** of the Natura 2000 network. **Measures where no reasonable guarantee of success should not be considered**. The likely success of the compensation scheme should influence final approval of the plan or project in line with the prevention principle. The **most effective option, with the greatest chance of success, must be chosen**. **Detailed monitoring required** to ensure long-term effectiveness with remediation provisions if shown to be less effective.	Scientific evaluation of proposed measures must be carried out before consent is granted to avoid agreeing to measures that is/are not effective or technically feasible. This should include appropriate baseline survey and assessment. Compensation must address the impacted SPAs features to ensure overall coherence of the network for that feature is maintained. Substitution is not acceptable. Must be clearly defined timescales for delivery and measuring success (See success criteria under Targeted above). Monitoring must directly relate to the target species and the relevant ecological functions and processes. The compensation measures should be provided in perpetuity in line with obligations to ensure the overall coherence of the UK Site Network is maintained. Where it is not possible to devise compensatory measures to offset the adverse effects on site integrity, the project should not proceed.
Technical feasibility	**Design must follow scientific criteria and evaluation** in line with best scientific knowledge and take into account the specific requirements of the ecological features to be reinstated.	See **Effective** above.
Extent	Extent required **directly related to**:	Based on an assessment of the necessary ecological requirements to restore species' populations and the related habitat structure and functions identified in the compensation objectives. Determining the minimum

EC criteria	EC guidance summary (emphasis added)	RSPB Scotland additional commentary
	- the **quantitative and qualitative aspects inherent to the elements of integrity likely to be impaired** - **estimated effectiveness of the measure(s)** Therefore, ratios best set on a case-by-case basis. Ratios should generally be well above 1:1. Ratios of 1:1 or below only considered when shown measures will be fully effective in reinstating structure and functionality in a short period of time.	appropriate quantity will require an understanding of the quality of the compensation measures and how effective they will be in reinstating the required structures and functions. Any identified uncertainty in success should be factored in to increased ratios. Ratios need to be used where they make ecological sense and will help secure a successful outcome by providing more of something. Simply multiplying capacity to address uncertainty risks giving a false level of confidence. If there is no reasonable guarantee of success that measure should not be considered (see **Effective** under EC criteria).
Location	**Located in areas where they will be most effective** in maintaining overall coherence of the Natura 2000 network. Pre-conditions to be met include: - **must be within same range/ migration route/wintering areas for bird species** and **provide functions comparable those justifying selection of original site esp. geographical distribution**; - **must have/be able to develop the ecological structure and functions required by the relevant species** (or habitat) - **must not jeopardise integrity of any other Natura 2000 site**. Spatial search hierarchy starting as close as possible to the impacted Natura 2000 site and working out from there.	While the preference is for compensation measures as geographically close to the location of the damage, it is important to consider whether or not the compensation measures will be subject to pressures impacting their efficacy in that location e.g. prey availability, disturbance, and/or other impacts from the same or similar developments such as collision risk or displacement due to offshore wind farms. Therefore, compensation measures should be located so as to maximise proximity while minimising external pressures that may reduce likelihood of success. Compensation measures proposed to benefit SPA features must not result in damage to the integrity of any other SPA, SAC or Ramsar site and their features.
Timing	Case by case approach but **must provide continuity in the ecological processes essential to maintain the structure and functions that contribute to the Natura 2000 network coherence**. Requires **tight co-ordination between implementation of the plan or project and the compensation measures**. Factors to consider include: - **no irreversible damage to the site before compensation in place**	Compensation measures should be fully functional before any damage occurs to ensure the overall coherence of the UK Site Network is protected. This requires careful alignment of the timelines for implementing the plan or project and the compensation measures. Suggested time lags in delivering fully functional compensation will need to be carefully considered and can only be accepted where this will not compromise the continuity of essential ecological processes, Any effect of delay should be factored into the design and additional compensation measures provided (see also **Extent** above).

EC criteria	EC guidance summary (emphasis added)	RSPB Scotland additional commentary
	- **compensation operational at the time damage occurs**. If not possible, over-compensation required - **time lags only admissible if will not compromise objective of "no net loss" to coherence of Natura 2000 network**; - May be possible to scale down in time depending on whether the negative effects are expected to arise in short, medium or long term. **All technical, legal or financial provisions must be completed before plan or project implementation starts** to prevent unforeseen delays that compromise effective compensation measures.	
Long-term implementation	**Legal and financial security required for long-term implementation** and **for protection, monitoring and maintenance of sites to be secured before impacts occur.**	Legal rights to secure and implement the compensation measures must be in place prior to consent being granted. And robust financial guarantees are required to fund implementation, monitoring and any necessary remediation measures.

Table 1: Criteria for designing compensatory measures

3. Commentary on measures proposed

Notwithstanding our comments on the ornithological assessment and the comments we make in our letter and accompanying Appendix 1 it is noted that adverse effects have not been identified for the project on its own but, they cannot be excluded for the following SPAs in-combination with other wind farms:

Kittiwake

1.3. Buchan Ness to Collieston Coast SPA

1.4. Fowlsheugh SPA

1.5. Farne Islands SPA

1.6. Troup, Pennan and Lion's Head SPA

1.7. East Caithness Cliffs SPA

1.8. Flamborough and Filey Coast

Farne Islands (seabird assemblage)

Gannet

1.9. Forth Islands SPA

Razorbill

1.10. Fowlsheugh SPA

The Applicant has concluded that AEoSI cannot be ruled out (when considering in-combination impacts, including Berwick Bank) at the above seven breeding colony SPAs. However, we would also highlight that the species worst hit are kittiwakes at St Abb's which are predicted a 50% decline through in-combination impacts but, they do not appear in the Applicant's list.

3.2 Where an adverse effect is identified, in line with the points made in Appendix 1, it follows that the Applicant must propose compensation that protects the overall coherence of the UK's National Site Network.

3.3 We note that the proposed compensation plan relies heavily on strategic funding. However, if SMRF is unavailable or delayed, then the short-listed project-level plans will have to be used and therefore need close consideration. As it stands, the details provided within the Ornithology Compensation Plan are extremely vague (no details have been provided for two of the proposed plans) and are not yet ready for consideration.

3.4 In relation to the proposed plans, we would make the following general comments:

- Mammalian predator control and management
    - many of the sites identified have already been identified for compensation by other wind farm developers
    - This would have no 'like for like' benefit for kittiwakes and gannets and only help them on a Tier 2 or Tier 3 basis.
    - It appears that many of the approvals are conditional on landowners' consent and those consents have yet to be obtained
- Bycatch reduction
    - The Applicant accepts that the delivery of bycatch reduction at a project level is unlikely to be feasible and it would most likely take place a long way from the affected site (such as in Portuguese fisheries) and therefore would only support on a Tier 3 basis
    - The Applicant states that because there is some evidence that bycatch reduction may be effective for guillemot it is 'reasonable to assume' that such measures could also benefit razorbills. Clearly, evidence will need to be adduced before this assumption can be relied upon. The Applicant also accepts that for kittiwake and puffin there is very limited evidence that bycatch is a significant concern, and therefore unlikely that reduction measures would provide tangible benefit to these species.
- Disturbance reduction
    - No details provided
- Management of breeding habitats
    - No details provided

3.5 Before progressing this application the Competent Authority will need to satisfy itself that it has sufficient information to ensure that the proposed compensation is genuinely additional to those commitments to the environment that exist already and will protect the coherence of the UK's National Site Network, ideally prioritising Tier 1 solutions. It will also have to satisfy itself that this compensation is genuinely available given the number of developers referring to the same generic measures and sometimes the same actual measures at the same geographic location. RSPB Scotland would wish to remain actively engaged in this application as the planning develops and further information is presented by the Applicant.

THE ROYAL YACHTING ASSOCIATION SCOTLAND

admin@ryascotland.org.uk 0131 202 4985

24 April 2026

Christine McGhie
Marine Licensing and Consenting Casework Officer
Licensing Operations Team
Marine Directorate
Marine Laboratory,
375 Victoria Road,
Aberdeen,
AB11 9DB

MD.MarineRenewables@gov.scot

Dear Ms McGhie,

MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm

RYA Scotland has no objection to consent being given for the section 36 and marine licence applications. I note that wet storage, if required, will be subject to a separate risk assessment to which we will wish to contribute.

Yours sincerely,

[redacted]

Dr G. Russell FCIEEM(retd) FRMetS

Planning and Environment Officer, RYA Scotland

SCOTTISH & SOUTHERN ELECTRICITY NETWORKS
TRANSMISSION

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Bellrock Offshore Wind Farm Ltd
1st Floor
2 Lochrin Square
96 Fountainbridge
Edinburgh
EH3 9QA

and

Marine Directorate – Licensing and Operations Team
By email: MD.MarineRenewables@gov.scot

25th May 2026

Dear Sir/Madam,

REF: Bellrock Offshore Wind Farm - Marine Licence Application 00011977

Thank you for the opportunity to respond to the Marine Licence application associated with the Bellrock Offshore Wind Farm Development.

As the owner of the electricity transmission network in the North of Scotland, Scottish Hydro Electric Transmission Plc (trading as Scottish and Southern Electricity Networks (SSEN) Transmission) are currently progressing over £22bn of investment across our network area, both onshore and offshore. This will enable the connection of the renewable energy needed to meet the Scottish and UK Government's 2030 renewable energy targets and beyond, providing greater home-grown energy security and supporting Scotland and the UK's pathway to Net Zero.

SSEN Transmission welcomes the inclusion of subsea cables, specifically Eastern Green Link 2 (EGL2) (Marine Licence reference: MS-00011033), Eastern Green Link 3 (EGL3) (Marine Licence application reference: MD-00011426) and Eastern Green Link 5 (EGL5) (early development) within 'Chapter 14: Marine Infrastructure and Other Users' under section 14.6.3, and elsewhere within this report as well as Figure 14.4 in Volume III of the appendices.

It is acknowledged that there is no direct interaction between the EGL projects and the Bellrock Offshore Wind Farm development area and that export cables from the Bellrock Wind Farm do not form part of this application. However, given the nationally important status of our critical infrastructure to both energy security and Scottish and UK net zero ambitions, SSEN Transmission request that planned array and future export cables, both power and telecoms, in association with this Project 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.

Scottish & Southern Electricity Networks

North of Scotland
0800 300 999

Central Southern England
0800 072 7282

SSEN Transmission remains committed to working with other legitimate users of the sea in a proactive and constructive manner, enabling all parties to deliver successful projects wherever reasonably possible. We would therefore welcome ongoing discussion and consultation between both parties as projects progress, and where necessary that proximity and crossing agreements are developed.

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

Yours Sincerely,

[redacted]

Dr Kirsty Drysdale

Marine Consents and Environment Manager

[redacted]

SCOTTISH ENVIRONMENT PROTECTION AGENCY

From:	Planning.North
To:	MD Marine Renewables
Subject:	PCS-20008598 SEPA Response to MD-00011977
Date:	23 April 2026 09:49:30
Attachments:	image.png

To Whom It May Concern,

Electricity Act 1989 - Section 36
MD-00011977
Bellrock Offshore Wind Farm
Approximately 120km East of Stonehaven

Thank you for the above consultation. We have no comments to make on these application as works which are purely within the marine environment, including at any stage of EIA, fall below our consultation thresholds. Please refer to SEPA standing advice for the Department for Business, Energy and Industrial Strategy and Marine Scotland on marine consultations which is available here. In addition, please refer to our standing advice and other guidance which is available on our website.

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,
Georgia Burborough
Senior Planning Officer

sepa Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba
For the future of our environment

dìomhair, agus cha bu chòir am fiosrachadh a bhith air a chleachdadh le neach sam bith ach an luchd-faighinn a bha còir am fiosrachadh fhaighinn. Chan fhaod neach sam bith eile cothrom fhaighinn air an fhiosrachadh a tha sa phost-d no a tha an cois a’ phuist-d, chan fhaod iad lethbhreac a dhèanamh dheth no a chleachdadh arithist. Mura h-ann dhuibhse a tha am post-d seo, feuch gun inns sibh dhuinn sa bhad le bhith cur post-d gu postmaster@sepa.org.uk. Togalach Aonghais Mhic a' Ghobhainn, 6 Craobhraid Parklands, Eurocentral, Baile a' Chuilinn, Siorrachd Lannraig a Tuath, ML1 4WQ. Faodar conaltradh còmhla ri SEPA a sgrùdadh no a chlàradh no a sgaoileadh gus obrachadh èifeachdach an t-siostaim a ghlèidheadh agus airson adhbharan laghail eile.

SCOTTISH FISHERMEN'S FEDERATION

Our Ref: OB MD-00011977 Bellrock OWF EIA/0026/001

Your Ref: MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation

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20th June 2026

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SFF Response to MD-00011977 - Bellrock Offshore Wind Farm Limited – Bellrock Offshore Wind Farm – EIA Section 36 consent and Marine Licence Application - Consultation

The Scottish Fishermen's Federation (SFF) welcomes the opportunity to respond to the statutory consultation on the applications submitted by Bellrock Offshore Wind Farm Limited for Section 36 consent and associated Marine Licences.

The SFF represents the 450 plus fishing vessels through its constituent associations, including the Anglo Scottish Fishermen's Association (ASFA), Fife Fishermen's Association, Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association (MNWFA), Orkney Fisheries Association (OFA), Scottish Pelagic Fishermen's Association (SPFA), the Scottish White Fish Producer's Association (SWFPA) and Shetland Fishermen's Association (SFA).

SFF recognises the role of offshore renewable energy in contributing to Scotland's climate and energy objectives. However, SFF emphasises that such development must proceed in a manner consistent with statutory marine planning duties, including the safeguarding of existing and legitimate marine uses of the sea, particularly commercial fishing.

Summary Position
Having reviewed the Environmental Impact Assessment Report (EIAR) and supporting documentation, SFF considers that the impacts on commercial fisheries have not yet been sufficiently characterised, avoided or mitigated to support conclusions of no significant residual effect.

Across the EIAR, there is a clear and consistent pattern where:

- The scale and duration of physical impacts are not reflected in impact magnitude
- Fisheries displacement is acknowledged but systematically downgraded
- Mitigation is largely procedural and not outcome-based
- Design uncertainty is retained and relied upon
- Cumulative and long-term effects are not robustly assessed
- There are material inconsistencies between technical chapters

As a result, key impact pathways, including displacement, loss of access and gear interaction are systematically assigned low magnitude and non-significant classifications. This position is reflected across technical chapters and consolidated within the EIAR summary.

In particular, the EIAR acknowledges that fishing activity is unlikely to resume within the Wind Farm Development Area (WFDA) yet concludes that impacts on most fleets are of low magnitude and not significant. The Summary of Effects presented within the EIAR (Chapter 20) reinforces this position, indicating that the majority of impacts on commercial fisheries are classified as minor adverse or negligible and therefore not significant. SFF considers that this overarching conclusion does not reflect the scale, duration and functional characteristics of the proposed development, nor the displacement mechanisms identified elsewhere in the EIAR.

The Non-Technical Summary (NTS) confirms that the assessment identifies a significant adverse effect on the Nephrops (TR2) trawl fleet as a result of loss of access to fishing grounds. However, this effect is immediately qualified as being capable of reduction to non-significant through ongoing engagement and mitigation measures. SFF considers that this approach places undue reliance on future, plan-based mitigation, the effectiveness of which has not been demonstrated within the EIA.

Taken together, these issues raise substantial uncertainty regarding the robustness of the assessment and the reliability of the conclusions of no significant effect.

Accordingly, SFF does not consider that the EIAR provides a sufficiently robust or precautionary basis to support determination of the applications in respect of commercial fisheries.

Policy and Legislative Context[1]

SFF notes that Chapter 2 places strong emphasis on climate and renewable energy policy with extensive reference to net zero targets and offshore wind ambitions[2] but provides comparatively limited application of policies relating to commercial fisheries and existing marine users.

Under the Marine and Coastal Access Act 2009[3] and the Marine (Scotland) Act 2010[4] decision-makers must have regard to the need to:

- protect the environment
- protect human health
- prevent interference with legitimate uses of the sea

Commercial fishing constitutes a legitimate use of the sea within this framework. However, the EIAR does not adequately demonstrate how interference with fishing activity has been avoided or minimised through project design.

While SFF recognises the importance of offshore wind in meeting national targets, policy also requires that development is delivered in a way that supports coexistence and sustainable use of marine resources. This is not clearly evidenced within the EIAR.

The National Marine Plan[5] requires that development supports the sustainable use of marine resources, including the continued use of the marine environment by existing sectors such as commercial fisheries.

[1] Bellrock Offshore Wind Farm Limited (2026) Bellrock Offshore Wind Farm Environmental Impact Assessment Report, Volume 2, Chapter 2: Policy and Legislative Context. April 2026

[2] Bellrock EIAR Volume 2, Chapter 2, Sections 2.2–2.3

[3] UK Government (2009) Marine and Coastal Access Act 2009. London: The Stationery Office Section 69(1)

[4] Scottish Government (2010) Marine (Scotland) Act 2010. Edinburgh: The Stationery Office

[5] Scottish Government (2015) Scotland's National Marine Plan: A Single Framework for Managing Our Seas. Edinburgh: Scottish Government GEN 1 (General planning principle), GEN 9 (Natural heritage), GEN 14 (Fisheries)

However, although the EIAR summarises marine planning policy[6] it does not demonstrate how these policies have been applied in practice to the project design or assessment of impacts on fisheries.

In particular, key General Policies of the National Marine Plan (including those relating to sustainable development, coexistence, and economic benefit) require that development avoids, minimises, or mitigates adverse impacts on existing users. SFF does not consider that the EIAR provides sufficient evidence that these requirements have been met.

Although the development area has been identified through a plan-led process, this does not remove the requirement for project-specific assessment[7]. Impacts on commercial fisheries must still be robustly evaluated at a local scale, which is not sufficiently demonstrated.

Under the EIA Regulations[8], projects of this scale and nature are required to provide a robust assessment of likely significant effects. Chapter 2 confirms that these regulations apply to the Proposed Development, yet SFF does not consider that this standard has been met in relation to commercial fisheries.

The scale of offshore wind development anticipated under ScotWind and wider policy initiatives[9] further reinforces the importance of robust cumulative assessment across multiple projects [10]. In this context, the treatment of cumulative effects on commercial fisheries within the EIAR is not considered adequate particularly given the scale of planned development and the acknowledged importance of offshore wind as a dominant future use of the marine space.

Consideration of Alternatives[11]

The EIA Regulations require the identification and assessment of reasonable alternatives, including a comparison of their likely environmental effects. In this context, SFF does not consider that the EIAR clearly demonstrates that reasonable alternatives have been fully assessed in relation to minimising impacts on commercial fisheries. In particular, Schedule 4 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 requires a description of reasonable alternatives studied and an indication of the main reasons for the option chosen, taking into account environmental effects.[12]

SFF notes that commercial fisheries are identified as a constraint within the site selection process. However, there is no clear evidence that avoidance of fishing grounds was a determining or primary factor in project design. While the development area has been identified through a plan-led process, this does not remove the requirement for project-specific assessment of alternatives and their implications for existing marine users[13]. The assessment does not provide:

- A transparent comparison of alternative locations or layouts in respect of fisheries impacts
- Evidence that lower-impact options were comparatively evaluated in relation to commercial fisheries
- Project objectives relating to coexistence with fisheries

Instead, project objectives are strongly weighted toward energy generation and economic output with no equivalent objective relating to coexistence with commercial fishing activity. This approach is inconsistent

[6] Bellrock EIAR Volume 2, Chapter 2, Section 2.4 and Table 2.2
[7] Bellrock EIAR Volume 2, Chapter 2, Sections 2.5–2.6
[8] Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)
[9] Bellrock EIAR Volume 2, Chapter 2, Section 2.6
[10] Scottish Government (2020) Sectoral Marine Plan for Offshore Wind Energy. Edinburgh: Scottish Government; ScotMER Fish and Fisheries Receptor Group (2023) Evidence Map and Gap Analysis for Commercial Fisheries and Offshore Renewable Energy Interactions. Scottish Government Research Programme
[11] Bellrock Offshore Wind Farm Limited (2026) Bellrock Offshore Wind Farm Environmental Impact Assessment Report, Volume 2, Chapter 3: Site Selection and Consideration of Alternatives
[12] Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended), Schedule 4
[13] Scottish Government (2015) Scotland's National Marine Plan: A Single Framework for Managing Our Seas. Edinburgh: Scottish Government

with good practice guidance, which emphasises the need to integrate effects on existing marine users into the iterative design process.[14]

The 'do nothing' scenario is dismissed solely in the context of project objectives and energy policy, without equivalent consideration of the implications for existing marine industries including commercial fisheries. Although commercial fisheries are acknowledged within the site selection process, the EIAR does not demonstrate how alternative options were comparatively assessed in terms of reducing impacts on fishing activity. In particular, there is no clear evidence that design choices have been informed by a comparative evaluation of fisheries impacts[15].

The project has also undergone material evolution, including an increase in generating capacity and associated infrastructure, which has implications for the scale of interaction with commercial fisheries. However, the implications of these changes are not reflected through a reassessment of alternatives focused on reducing fisheries impacts. Good practice EIA requires that design evolution is accompanied by iterative reassessment of environmental effects, including consideration of alternatives.[16]

The use of a parameter-based design envelope approach does not remove the requirement to assess reasonable alternatives, particularly where different design options may result in materially different effects on commercial fisheries. This is consistent with established UK case law and guidance emphasising that Rochdale Envelope approaches must still enable meaningful assessment of environmental effects.[17]

While consultation with the fishing industry is documented, the EIAR does not clearly demonstrate how issues raised by stakeholders have influenced the selection of alternatives or led to the identification of lower-impact design solutions. Effective stakeholder engagement is a core component of alternatives development and should demonstrably influence project design.[18]

SFF therefore considers that the alternatives assessment does not demonstrate that impacts on commercial fisheries have been minimised through site selection or iterative design, nor does it provide a transparent comparison of alternatives in terms of their effects on fishing activity, as required under the EIA Regulations.

Project Description[19]

The Project Description identifies a large-scale and highly complex offshore development, comprising up to 132 floating offshore units (FOUs) supported by extensive mooring systems, anchors, inter-array cables and associated seabed infrastructure.[20]

The development area of approximately 280 km², [21] together with the density and configuration of infrastructure, creates a structurally complex and highly constrained operating environment. In particular, the extent of mooring systems and their associated spatial footprint substantially increases the effective area of constraint beyond turbine locations alone. Mooring systems may extend up to 1,300 m radius per unit[22], with significant seabed interaction and swept zones associated with catenary and semi-taut configurations[23].

[14] IEMA (2017). Delivering Proportionate EIA: A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice

[15] ICES (2019). Effects of Offshore Wind Farms on Fisheries and Ecosystems

[16] IEMA (2017). Delivering Proportionate EIA: A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice

[17] Planning Inspectorate (2018). Advice Note 9: Rochdale Envelope; Marine Scotland (2020). Sectoral Marine Plan for Offshore Wind Energy

[18] ScotMER (2020). Evidence Map and Research Priorities for Offshore Wind

[19] Bellrock Offshore Wind Farm Limited (2026) Bellrock Offshore Wind Farm Environmental Impact Assessment Report, Volume 2, Chapter 4: Project Description

[20] Bellrock EIAR Volume 2, Chapter 4, Section 4.4.1

[21] Bellrock EIAR Volume 2, Chapter 4, Table 4.3

[22] Bellrock EIAR Volume 2, Chapter 4, Table 4.7

[23] Bellrock EIAR Volume 2, Chapter 4, Section 4.4.4.1

The assumption that the entire Wind Farm Development Area (WFDA) may be used for infrastructure placement[24] implies that the full spatial extent may be affected.
The reliance on a wide design envelope with final layout and infrastructure configurations to be determined post-consent[25] introduces additional uncertainty in the spatial extent and nature of seabed interaction. This is reinforced by inter-array cable installation assumptions, with burial "where possible" and protection required where burial cannot be achieved[26]. This introduces uncertainty in the extent of exposed or protected infrastructure on the seabed and therefore in the degree of interaction risk with fishing activity.

The marine geology and physical processes assessment[27] identifies spatially variable seabed conditions, including mobile sand waves, areas of coarse sediments and boulders and complex geomorphology. These conditions influence the effectiveness of cable burial and indicate that exposure and re-exposure of infrastructure is a realistic outcome over the operational life of the project. The EIAR also confirms that ongoing monitoring and remedial works may be required where cable exposure occurs[28], further indicating that burial cannot be assumed to be permanent

The presence of dynamic inter-array cables, designed to accommodate movement of floating structures, introduces additional interaction risk not typically associated with fixed-bottom offshore wind developments.

SFF considers that, in practical and operational terms, the scale, density and configuration of the proposed infrastructure would represent a substantial limitation on fishing activity, particularly for mobile demersal gears and would constrain safe gear deployment and may also create interaction risks for certain pelagic fishing operations. The proposed infrastructure vessel manoeuvrability and the continued use of established fishing practices within the WFDA.

Certain mooring configurations involve direct and ongoing contact between mooring lines and the seabed[29], further increasing interaction with fishing gear and seabed disturbance.

Site preparation activities, including pre-lay grapnel runs and boulder clearance[30], indicate that interaction with existing fishing activity occurs prior to construction, further extending the temporal scope of impacts. The EIAR also identifies that certain fish and shellfish receptors, including herring and sandeel spawning grounds, are sensitive to temporary habitat loss and physical disturbance associated with seabed works, with potential implications for commercially important fish and shellfish resources.[31]

However, this level of physical constraint is not reflected in the scale of impacts identified in the Commercial Fisheries chapter. This is particularly notable given that the Commercial Fisheries assessment separately concludes that fishing activity is unlikely to resume within the WFDA[32], indicating a functional loss of access that is not reflected in the assigned impact magnitude**.**

EIA Methodology[33]

[24] Bellrock EIAR Volume 2, Chapter 4, paragraph 32 – Whole WFDA assumed available for infrastructure placement
[25] Bellrock EIAR Volume 2, Chapter 4, Section 4.1.2
[26] Bellrock EIAR Volume 2, Chapter 4, Sections 4.4.6–4.4.7
[27] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 6: Marine Geology, Oceanography and Physical Processes
[28] Bellrock EIAR Volume 2, Chapter 4, Section 4.8.1.4
[29] Bellrock EIAR Volume 2, Chapter 4, Section 4.4.4.1.1 / 4.4.4.1.3
[30] Bellrock EIAR Volume 2, Chapter 4, Section 4.5.1.2
[31] Bellrock Offshore Wind Farm Limited (2026) Bellrock Offshore Wind Farm Environmental Impact Assessment Report, Volume 2, Chapter 8: Fish and Shellfish Ecology
[32] Bellrock EIAR Volume 2, Chapter 11 Section 11.9
[33] Bellrock Offshore Wind Farm Limited (2026) Bellrock Offshore Wind Farm Environmental Impact Assessment Report, Volume 2, Chapter 5: EIA Methodology

The EIA Methodology set out in Chapter 5 establishes the framework through which impacts are identified, assessed and classified. As such, the application of this methodology has a direct influence on the conclusions reached in the topic-specific chapters including Commercial Fisheries[34].

SFF considers that, while the methodology broadly follows standard EIA practice[35], its application in this instance introduces a number of assumptions and structural features which may lead to an underestimation of the magnitude and significance of effects on commercial fisheries.

The assessment of effects relies heavily on professional judgement in defining both receptor sensitivity and impact magnitude[36]. In the case of commercial fisheries, sensitivity is described in terms of the ability of receptors to adapt, tolerate or recover from impacts[37]. This approach risks assigning relatively low sensitivity to fishing activity on the basis that it is mobile or adaptable. However, fishing activity is often dependent on specific grounds, seasonal patterns and operational constraints and is not readily interchangeable. In the absence of clear evidence demonstrating the capacity of affected fleets to adapt without consequence, the approach to sensitivity may result in the underestimation of effects on commercial fisheries.

Similarly, the definition and application of impact magnitude introduces further uncertainty. The significance criteria set out in Table 5.8 rely on qualitative definitions such as 'large' or 'very large' change in receptor condition[38], which are not clearly quantified and therefore rely heavily on professional judgement in their interpretation[39]. This introduces additional subjectivity into the classification of effects and may contribute to impacts on commercial fisheries being assigned lower levels of significance. Magnitude is determined based on spatial extent, duration, frequency and reversibility[40]. However, for fisheries receptors, effects such as displacement and loss of access may occur over large spatial areas and extended timeframes[41]. In this case, the Project Description identifies a substantial and long-term physical footprint, including infrastructure with an operational lifespan of several decades.
SFF considers that the classification of such effects as partial or temporary may not adequately reflect the practical realities of fishing activity and may lead to impacts being assigned a lower magnitude than is warranted. This is particularly relevant where construction activities extend over multiple years and operational constraints persist throughout the lifetime of the development.

The methodology also places significant reliance on embedded mitigation measures, which are incorporated into the assessment prior to the evaluation of impact magnitude and significance[42]. These measures include, for example, commitments to cable burial where possible, minimisation of cable protection and the implementation of fisheries liaison and mitigation plans[43].

While such measures may contribute to reducing impacts, the effectiveness of plan-based or procedural mitigation particularly in relation to commercial fisheries has not been demonstrated within the EIAR. As a result, the assumption that these measures will reduce impacts prior to assessment introduces a risk that the magnitude of effects is reduced without sufficient supporting evidence[44] and therefore may lead to an underestimation of residual impacts.

[34] Bellrock EIAR Volume 2, Chapter 5, Section 5.1
[35] Bellrock EIAR Volume 2, Chapter 5, Section 5.5
[36] Bellrock EIAR Volume 2, Chapter 5, Section 5.9.2
[37] Bellrock EIAR Volume 2, Chapter 5, Section 5.9.2.2
[38] Bellrock EIAR Volume 2, Chapter 5, Table 5.8
[39] Institute of Environmental Management and Assessment (IEMA) (2017). Environmental Impact Assessment Guide to: Delivering Quality Development
[40] Bellrock EIAR Volume 2, Chapter 5, Section 5.9.2.3

[42] Bellrock EIAR Volume 2, Chapter 5, Sections 5.9.2.5 and 5.9
[43] Bellrock EIAR Volume 2, Chapter 5, Sections 5.9.2.5 and 5.4
[44] MD-LOT Scoping Opinion (2024) – requirement to demonstrate mitigation effectiveness

The Mitigation and Monitoring Register indicates that measures for commercial fisheries are primarily procedural in nature [45], including liaison, communication and post-impact management, rather than measures which actively avoid or reduce displacement or loss of access.

In addition, measures such as the Seabed Obstruction Mitigation Plan are developed following post-construction surveys[46], meaning that risks to fishing activity may only be identified and addressed after installation has taken place. This reinforces the reliance on reactive and post-consent mitigation measures, the effectiveness of which is not demonstrated within the EIAR.

Many measures rely on adherence to best practice guidance and standard industry procedures, which do not in themselves reduce impacts but rather govern how activities are undertaken[47].

The application of the significance matrix further reinforces this effect. Effects classified as minor adverse or negligible are considered not significant and are not subject to detailed assessment. This creates a threshold effect, whereby impacts must reach a moderate level before being considered significant. Where sensitivity and magnitude are both conservatively defined, there is a risk that effects on commercial fisheries are consistently assessed as minor adverse, despite having measurable and potentially cumulative consequences for fishing activity.

In addition, the assessment of impacts through discrete pathways for example displacement, increased steaming, and gear interaction may result in the fragmentation of effects on commercial fisheries. While each pathway may be assessed individually, there is limited evidence that their combined or cumulative impact on fishing operations has been fully considered. In practice, these effects are experienced collectively by fishing vessels and may give rise to greater overall impact than is captured by the assessment of individual pathways.

The cumulative effects assessment approach presents further limitations. The cumulative effects assessment is also dependent on an initial screening process[48], whereby only projects with identified impact pathways, overlap and sufficient available information are taken forward for detailed assessment with others excluded at an early stage. The selection of relevant projects within a restricted temporal window and the screening out of effects considered to be localised may not adequately reflect the regional nature of fishing activity and displacement.
Commercial fisheries operate across wide spatial areas and are subject to pressures from multiple developments simultaneously. As such, an approach that excludes projects outside a defined window or discounts effects on the basis of locality may underestimate the cumulative impact on fishing activity. In addition, projects may be excluded from detailed cumulative assessment where insufficient information is available which does not necessarily reflect their potential to contribute to cumulative effects on commercial fisheries.
The screening approach is also based on defined overlap criteria (conceptual, physical and temporal)[49], which may not fully capture the behavioural and spatial nature of fishing activity where cumulative effects arise through displacement and redistribution of effort across the wider region.

In addition, projects may be excluded from detailed cumulative assessment where insufficient information is available, which does not necessarily reflect their potential to contribute to cumulative effects on commercial fisheries.

[45] Appendix 5.1 – Mitigation and Monitoring Register
[46] Bellrock EIAR Volume 2, Chapter 5, Section 5.9.2.5
[47] ibid
[48] Bellrock EIAR Volume 2, Chapter 5, Section 5.13
[49] Bellrock EIAR Volume 2, Chapter 5, Section 5.13.1

The use of a parameter-based design envelope introduces an additional level of uncertainty. While the assessment is based on a 'reasonable worst case' scenario [50], the final layout and configuration of infrastructure within the Wind Farm Development Area will not be defined until post-consent. As demonstrated in the Project Description, key elements such as mooring layouts, anchor types, cable burial success and infrastructure density remain uncertain.
In the absence of a defined layout, it is not clear that the 'reasonable worst case' adopted reflects the worst-case scenario for commercial fisheries, whose interaction with the development is highly dependent on the spatial arrangement and density of seabed infrastructure. This uncertainty may therefore limit the reliability of the conclusions presented in the Commercial Fisheries assessment.

Finally, the methodology acknowledges that the assessment is undertaken "so far as can be ascertained at this stage"[51], reflecting the evolving nature of the project and the separation of the Wind Farm Development Area from the Offshore Transmission Infrastructure. While a staged approach to assessment is recognised, this introduces further uncertainty in the evaluation of impacts on commercial fisheries, particularly in relation to the full spatial extent of displacement and interaction risk.

Taken together, the combined application of sensitivity judgements, magnitude definitions, embedded mitigation and significance thresholds results in a framework in which impacts are more likely to be assessed as minor adverse. SFF considers that this approach may mask the scale, duration and cumulative nature of effects on commercial fisheries, particularly where impacts such as displacement and loss of access occur across large spatial areas and extended timeframes. The assessment of effects on commercial fisheries is not supported by a corresponding suite of defined and effective mitigation measures, indicating that conclusions of low impact may be driven primarily by initial assumptions rather than demonstrated mitigation.

SFF also notes that the project definition has evolved since the original scoping phase, including changes to grid connection and associated infrastructure. This introduces additional uncertainty into the assessment, particularly where conclusions rely on a project description established at an earlier stage.

As a result, the conclusions of the Commercial Fisheries assessment should be interpreted with caution and further consideration should be given to whether the methodology, as applied, adequately reflects the practical and operational realities of commercial fishing activity.

Benthic Ecology and Fish Ecology [52]
These chapters identify substantial areas of seabed disturbance including:
• approximately 47 km² of disturbance associated with mooring systems
• permanent habitat loss and long-term operational interaction

However, these impacts are consistently classified as negligible or minor on the basis of:
• proportional area relative to the Wind Farm Development Area
• assumed rapid recovery
• ecological resilience

This reliance on proportional area framing reduces the apparent scale of impact, despite the absolute footprint of disturbance extending over tens of square kilometres.

SFF considers that the classification of impact magnitude does not adequately reflect the spatial extent, duration and nature of disturbance associated with floating offshore wind infrastructure. The scale of seabed interaction, including extensive mooring systems and long-term operational presence, represents a sustained and recurring source of disturbance over the operational lifetime of the project. This is characterised within

[50] Bellrock EIAR Volume 2, Chapter 5, Section 5.7
[51] Bellrock EIAR Volume 2, Chapter 5, Section 5.12
[52] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 7: Benthic Ecology; Chapter 8: Fish and Shellfish Ecology

the assessment as intermittent and recoverable, which is not consistent with the scale and persistence of interaction described.

This approach also appears inconsistent with the Project Description, which identifies a dense and spatially extensive mooring and anchor footprint across the development area. The ecological assessment assumes relatively localised and recoverable effects, despite the presence of ongoing seabed interaction over the lifetime of the project.

In addition, while changes in fishing activity are identified within the Fish and Shellfish Ecology assessment as a potential ecological pressure, the scale of displacement identified elsewhere in the EIAR is not reflected or integrated within the ecological assessment. This results in a disconnect between the recognition of fishing activity as an ecological driver and its treatment across chapters.

This is particularly relevant in relation to benthic habitats that support commercially important species. The assessment identifies the presence of burrowed mud habitats associated with Nephrops[53], which are a key target species for local fisheries. The Fish and Shellfish Ecology assessment also identifies herring and sandeel spawning grounds as sensitive to physical disturbance and temporary habitat loss associated with seabed works. However, the implications of disturbance to these habitats are not consistently carried through into the commercial fisheries assessment, resulting in a disconnect between ecological impact pathways and fisheries impact conclusions.

The assessment also relies on assumptions regarding ecological resilience and rapid recovery of seabed habitats[54], typically within short timeframes. These assumptions are typically derived from one-off or short-term disturbance scenarios and do not account for the continuous and repeated nature of seabed interaction associated with mooring line abrasion, cable interaction and operational activity over the lifetime of the development. In addition, the use of scour protection and potential seabed remediation measures may result in long-term alteration of seabed characteristics and introduce pathways for colonisation by invasive non-native species (INNS), which are not clearly reflected within the recovery assumptions adopted.

As a result, SFF considers that the magnitude of ecological effects may be systematically underestimated, and that the interaction between seabed disturbance, ecological processes and fisheries displacement is not fully or consistently assessed within the EIAR.

Commercial Fisheries [55]

Chapter 11 provides the primary assessment of fisheries impacts[56]. SFF notes the following key findings:

- Fishing activity is present and economically important within the WFDA[57]
- The Nephrops trawl fleet is identified as particularly sensitive[58]
- Fishing activity is unlikely to resume within the WFDA during construction and operation[59]

Despite this, the assessment concludes that:

- Displacement magnitude is low for most fleets[60]
- Most impacts are minor adverse and not significant[61]

[53] OSPAR Commission (2010). Background Document for Burrowed Mud Habitats
[54] ibid
[55] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 11: Commercial Fisheries
[56] Bellrock EIAR Volume 2, Chapter 11, Section 11.1
[57] Bellrock EIAR Volume 2, Chapter 11Section 11.6
[58] Bellrock EIAR Volume 2, Chapter 11Sections 11.6.2 and 11.8
[59] Bellrock EIAR Volume 2, Chapter 11Table 11.12
[60] Bellrock EIAR Volume 2, Chapter 11Section 11.8 / Table 11.21
[61] Bellrock EIAR Volume 2, Chapter 11Table 11.8

SFF considers that these conclusions are not consistent with the evidence presented. In particular, the acknowledgement that fishing activity is unlikely to resume within the WFDA over the operational lifetime is not reconciled with the assessment of most effects as low magnitude and not significant.

Displacement

The assumption that fishing activity will not resume within the WFDA represents functional loss of access over a 35-year operational period. This is not consistent with the classification of displacement as low magnitude[62] particularly given the scale of the development280 km² and its long-term operational presence. Such effects would more appropriately be characterised as long-term in nature rather than temporary or reversible.

The NTS reinforces this approach by identifying multiple impact pathways (including displacement, additional steaming and gear conflict), yet only one fleet is identified as subject to significant effects. Given the scale of the development and its location within a recognised Nephrops fishing area, this suggests that displacement effects may not have been fully captured or quantified.

No quantitative analysis is provided to demonstrate how displaced fishing effort will be redistributed or whether alternative grounds have sufficient capacity. The assessment assumes that displaced fishing effort can be accommodated on alternative grounds; however, no evidence is provided regarding the capacity of these grounds[63], the level of existing fishing pressure, or whether they are operationally or economically viable for displaced fleets. While the assessment recognises that displacement may occur at a regional scale, including secondary displacement and increased competition for space, these effects are not quantified or reflected in the assigned magnitude of impact.

The assessment also refers to loss of access to a "small portion" of the Devil's Hole Nephrops grounds[64]. SFF considers that this framing is misleading, as fisheries impacts are determined by the functional importance of grounds rather than proportional area, and even limited spatial overlap may affect key fishing activity.

In addition, spatial data presented within the assessment is aggregated at the level of ICES statistical rectangles[65], which represent relatively large geographic areas. This approach introduces a level of spatial averaging which may obscure localised fishing activity within and around the development area. As a result, areas of concentrated or functionally important fishing activity may not be fully captured in the assessment of impact magnitude.

The assessment also relies on AIS data to characterise fishing activity, despite AIS being limited to vessels over 15 metres and unable to distinguish between active fishing and transit behaviour. As such, its use may under-represent actual fishing effort[66] within the development area.

The baseline evidence also identifies the presence of active fishing within the WFDA, including sustained demersal trawling activity in the eastern portion of the site. Industry-supplied plotter data further confirms that fishing activity occurs within the development area. This indicates that impacts relate to the displacement of existing activity, rather than hypothetical or low-use areas.

The assessment acknowledges limitations in available data, particularly in relation to smaller vessels and the spatial resolution of fishing activity, which introduces further uncertainty in the representation of baseline activity and the assessment of displacement effects.

[62] Bellrock EIAR Volume 2, Chapter 11Table 11.12
[63] Bellrock EIAR Volume 2, Chapter 11 Section 11.6
[64] Bellrock EIAR Volume 2, Chapter 11 Section 11.7
[65] Bellrock EIAR Volume 2, Chapter 11Section 11.5.1
[66] European Commission (Joint Research Centre) / STECF (2019). Fisheries Dependent Information and Spatial Data Limitations

In addition, the baseline is derived primarily from desk-based data sources[67], with no dedicated site-specific commercial fisheries survey undertaken. This limits the ability to verify the accuracy of the baseline against site-specific, real-world fishing activity within the development area and introduces further uncertainty into the assessment.

Sensitivity and Magnitude

Sensitivity is partly determined by the availability of alternative grounds and assumed adaptability[68]. This approach under-represents the spatial dependency of fishing activity.

The baseline also identifies that the local study area generates significant economic value, with commercial fisheries contributing approximately £1.6 million annually, further indicating the functional importance of the area to fishing activity[69].

Given the scale, duration and intensity of the development, impacts should reasonably be expected to be of at least moderate magnitude where fishing is displaced from the site.

The definitions of magnitude within the assessment framework indicate that a partial loss of the ability to carry out fishing activity would correspond to at least a medium magnitude impact. Given that fishing activity is assumed unlikely to resume across the WFDA, the classification of displacement effects as low magnitude appears inconsistent with the assessment criteria applied.

Snagging Risk and Infrastructure Interaction

The Project Description identifies extensive seabed infrastructure including moorings, anchors and cables. However, the fisheries assessment concludes that snagging risk is of low magnitude[70]. This conclusion does not reflect the acknowledged potential for cable exposure and re-exposure identified in the EIAR[71].

This is inconsistent with the scale and complexity of the seabed infrastructure described in the Project Description, including extensive mooring systems, anchors and dynamic cables, which introduce a level of interaction and entanglement risk not typically associated with fixed-bottom developments.

This approach reflects the same reliance on assumed adaptability and alternative spatial options identified in Chapter 5, which may not adequately represent the constrained and location-specific nature of commercial fishing activity.

Additional steaming

Stakeholders have identified that displacement may result in increased steaming distances to reach alternative fishing grounds. However, the assessment concludes that this effect is of low magnitude and not significant. SFF notes that no quantitative assessment has been provided of the associated increases in fuel costs, time at sea or reductions in fishing efficiency. As such, the economic implications of displacement-related steaming have not been fully considered[72].

Overall SFF considers that the significance conclusions in Chapter 11 do not logically follow from:

- The scale of infrastructure
- The acknowledged loss of access
- The long-term duration of impacts

The baseline assessment also recognises that increasing offshore renewable development will contribute to spatial conflict, displacement of fishing activity and increased operational pressure on remaining grounds.

[67] Bellrock EIAR Volume 2, Chapter 11Section 11.5.2
[68] Bellrock EIAR Volume 2, Chapter 11Table 11.3
[69] Bellrock EIAR Volume 2, Chapter 11Section 11.6.1
[70] Bellrock EIAR Volume 2, Chapter 11Section 11.8 / Table 11.21
[71] Bellrock EIAR Volume 2, Chapter 4 ; Chapter 6
[72] Bellrock EIAR Volume 2, Chapter 11 Section 11.9

While the assessment identifies significant effects for the Nephrops trawl fleet, this highlights a broaderinconsistency between the acknowledged functional loss of access to fishing grounds across the WFDA and the classification of most other effects as not significant.

Shipping and Navigation[73]

Chapter 12 provides important cross-chapter context. The assessment assumes that vessels, including fishing vessels are expected to avoid navigating internally within the WFDA[74], particularly during construction and where safety zones and surface infrastructure are present, and instead transit around or through the area.

This represents clear acknowledgement of displacement behaviour. Appendix 12.1[75] further indicates that vessel traffic, including fishing vessels, is expected to avoid navigating within the WFDA, with construction buoyage and infrastructure presence discouraging internal navigation. This provides additional confirmation that displacement is an inherent outcome of the project. The navigation assessment explicitly anticipates that vessels will avoid operating within the WFDA, which represents de facto displacement. However, this behavioural assumption is not consistently reflected in the magnitude of impacts assigned within the Commercial Fisheries assessment.

The navigation assessment treats fishing vessels primarily as transiting receptors, with limited or no consideration of active fishing operations within the WFDA. Appendix 12.1 explicitly confirms that the navigational risk assessment considers commercial fishing vessels only in transit[76], with hazards relating to active fishing operations addressed separately in Chapter 11.

This indicates that the navigation assessment does not consider fishing activity as an operational use of the site. This contrasts with Chapter 11, which explicitly recognises active fishing activity within the WFDA and the displacement of fishing effort from the site, reinforcing a clear inconsistency between chapters.

More broadly, the representation of fishing activity varies across the EIAR. Chapter 11 characterises the WFDA as an area of active, spatially targeted and economically important fishing activity. In contrast, Chapter 12 presents fishing vessels primarily through AIS-based traffic data and treats them largely as transiting receptors. Chapter 8 similarly treats fishing activity as a secondary ecological pressure without clear spatial or quantitative linkage to fishing effort.

This results in an inconsistent representation of the baseline conditions across the EIAR, whereby the same activity is described differently depending on the discipline and dataset applied. As a consequence, the scale and significance of fisheries displacement, ecological interaction and economic impact may not be consistently or fully assessed.

Fishing activity within Chapter 12 is also characterised primarily through AIS data[77], which underrepresents vessels under 15 metres and does not capture fishing effort. As such, its use limits the ability of the navigation assessment to reflect the full extent and nature of fishing activity within the development area.

This also influences the representation of baseline activity within Chapter 12, where fishing activity appears limited relative to other vessel types. This apparent reduction in fishing presence is likely a function of AIS data limitations rather than a reflection of actual activity levels. As a result, the relative importance of fishing activity within the navigation baseline is likely understated, which in turn influences the assessment of risk and interaction.

[73] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 12: Shipping and Navigation
[74] Bellrock EIAR Volume 2, Chapter 12, Section 12.9
[75] Bellrock EIAR Volume 2, Chapter 12, Appendix 12.1
[76] ibid
[77] Bellrock EIAR Volume 2, Chapter 12, Section 12.6

The assessment further assumes that sufficient sea room exists[78] for vessels to reroute around the development area. While this assumption may be appropriate for commercial shipping, it is not directly applicable to commercial fisheries, which are dependent on fixed fishing grounds and cannot readily relocate activity without operational or economic consequence.

This approach is reflected more broadly across the EIAR. For other marine users, including offshore wind and oil and gas infrastructure, impacts are similarly assessed as negligible despite high sensitivity, based on assumptions regarding the ability of vessels and operators to reroute and maintain operations. However, such assumptions are not directly applicable to commercial fisheries, which are dependent on access to fixed fishing grounds. This highlights a fundamental difference in how mobility and spatial flexibility are applied across receptors within the assessment.

In addition, the navigation assessment and supporting consultation responses identify entanglement and interaction risks[79] associated with moorings and cables. However, these risks are not fully reflected in the Commercial Fisheries assessment, further highlighting inconsistencies in the treatment of fishing activity and associated impacts across chapters.

This is further reinforced by Chapter 19 (Major Accidents and Disasters), which identifies commercial fishing vessels as receptors for interaction risks including vessel collision, gear snagging and cable interaction. While these risks are recognised, they are assessed as acceptable on the basis that they are managed to "As Low As Reasonably Practicable" (ALARP)[80] through procedural mitigation measures such as plans, liaison and notification. However, such measures do not remove the underlying presence of these risks or the associated operational constraints on fishing activity.
This indicates that risks to fisheries are effectively deferred to management controls rather than reflected in the assessment of impact magnitude or significance.

Mitigation measures identified within the navigation assessment, including marking, notification and safety zones, are designed to manage navigational risk. However, such measures do not address the loss of access[81] to fishing grounds or reduce displacement of fishing activity.

Finally, spatial figures presented in Volume 3 indicate that vessel traffic is distributed across a wide offshore area rather than concentrated within defined corridors, supporting the conclusion that shipping activity retains flexibility in routing. In contrast, the Commercial Fisheries assessment does not demonstrate an equivalent level of spatial analysis or consideration of operational constraints, despite fishing activity being inherently location dependent.
The navigation assessment also adopts a broader spatial approach to cumulative effects, considering activity across a wide offshore area. This contrasts with the Commercial Fisheries assessment, where cumulative effects are more narrowly defined and screened, potentially underrepresenting the regional nature of fishing activity and displacement.

The assessment frameworks applied across chapters are also not aligned. The navigation assessment applies a risk-based "tolerability" framework[82], whereby impacts are considered acceptable if risks are deemed manageable. In contrast, the Commercial Fisheries assessment applies an EIA significance framework based on sensitivity and magnitude. These differing approaches are not directly comparable and limit the ability to consistently interpret and integrate effects across chapters.

[78] Bellrock EIAR Volume 2, Chapter 12, Section 12.9
[79] Bellrock EIAR Volume 2, Chapter 12, Appendix 12.1
[80] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 19: Major Accidents and Disasters,
[81] Bellrock EIAR Volume 2, Chapter 12, Section 12.11
[82] Chapter 12 (Navigation Risk Assessment framework) and Chapter 5 (EIA Methodology)

Socioeconomics[83]

Chapter 16 concludes that impacts on fisheries are negligible, largely based on comparison with aggregated port landings data[84].

The approach adopted also reflects a mismatch in the spatial and economic scale of assessment. The socioeconomic benefits of the project, including employment and gross value added (GVA), are presented at national and regional scales[85], whereas impacts on commercial fisheries are assessed using aggregated port-level landing values. This results in an imbalance whereby project benefits are maximised through broad economic framing, while fisheries impacts are diluted within larger datasets.

SFF considers that this approach masks the economic importance of fishing activity at:

- vessel level
- fleet level
- gear-specific level

In particular, the Nephrops trawl fishery represents a substantial proportion[86] of the economic value of fishing activity in the area, indicating a high level of dependency which is not fully reflected in the sensitivity and magnitude assigned.

The use of aggregated economic data reduces the visibility of impacts on specific sectors such as the Nephrops fleet. Port-level landing values are strongly influenced by pelagic fisheries, such as mackerel, which account for a substantial proportion[87] of total landings by value. The use of these aggregated figures masks the economic importance of demersal sectors, including the Nephrops fishery, and dilutes the impacts on fleets directly affected by the development.

Furthermore, a high level of displacement is assumed to reduce economic loss[88], without evidence that suitable alternative fishing grounds are available or capable of supporting displaced effort. This assumption is embedded within both the Commercial Fisheries assessment and the Socioeconomics assessment, where it reduces the magnitude of environmental impacts, and again within the Socioeconomics assessment, with the effects of displacement carried through from the environmental assessment into the economic analysis. As a result, displacement contributes to a cumulative underestimation of impacts.

In addition, a consistent economic methodology has not been applied across sectors. The assessment of offshore wind benefits includes direct, indirect and induced economic effects, capturing wider supply chain and multiplier impacts. In contrast, the assessment of commercial fisheries is limited to direct loss of landings value, with no equivalent consideration of indirect or induced effects[89]. This results in an imbalance in the evaluation of impacts, where the full economic contribution of commercial fisheries is not reflected within the assessment.

The assessment does not consider the downstream economic effects[90] associated with fisheries activity, including processing, transport, maintenance and associated employment. The omission of these supply chain linkages further contributes to the underestimation of the economic importance of commercial fisheries within the study area.

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[83] Bellrock Offshore Wind Farm Limited (2026) Environmental Impact Assessment Report, Volume 2, Chapter 16: Socioeconomics and Tourism

[84] Bellrock EIAR Volume 2, Chapter 16, Section 16.6

[85] Bellrock EIAR Volume 2, Chapter 16, Sections 16.7–16.9

[86] Bellrock EIAR Volume 2, Chapter 11: Commercial Fisheries and Chapter 16, Baseline sections on fleet composition and landings value

[87] Bellrock EIAR Volume 2, Chapter 16, Section 16.6

[88] Bellrock EIAR Volume 2, Chapter 11 and Chapter 16, Sections 11.9 and 16.8

[89] Bellrock EIAR Volume 2, Chapter 16, Section 16.8

[90] Seafish (UK Sea Fish Industry Authority). The Economic Impact of the UK Seafood Sector

SFF notes a clear inconsistency between:

- Chapter 11, which identifies significant impacts on the Nephrops fleet
- Chapter 16, which concludes negligible economic impacts

This inconsistency indicates that the same underlying impact is being interpreted differently depending on the assessment framework applied, rather than reflecting a fundamentally different outcome. As such, the economic conclusions do not appear to be reconciled with the environmental significance identified elsewhere in the EIAR.

The assessment also does not adequately distinguish between localised and regional economic effects. Offshore wind benefits are presented in terms of local employment and regional economic uplift, while fisheries impacts are diluted within broader geographic aggregates[91]. This limits the ability to understand the localised economic consequences for affected fishing communities.

Cumulative Effects

The cumulative assessment relies on:

- limited project inclusion criteria
- spatial overlap methods
- qualitative judgement

SFF considers that this approach does not adequately capture:

- regional displacement pressure
- sequential loss of fishing grounds
- interaction with wider offshore wind development

In addition, the staged consenting approach means that the full spatial footprint of the project, including transmission infrastructure, is not yet defined.

As a result, cumulative effects on fisheries are likely to be underestimated. In particular, impacts such as displacement, additional steaming and interaction risk are treated as localised effects, despite the fact that fishing activity is inherently regional, and cumulative impacts are more likely to arise through redistribution of effort across wider areas.

Mitigation and FMMCP

SFF notes that mitigation is primarily delivered through:

- Fisheries Mitigation, Monitoring and Communication Plan (FMMCP)[92]
- liaison and engagement processes[93]
- future plan development[94]

These measures are predominantly procedural and do not:

- constrain the project footprint
- reduce displacement
- address seabed interaction risks

Plans and engagement processes do not constitute mitigation. As such, they cannot be relied upon to inform the assessment of impact magnitude or the determination of significance under the EIA Regulations[95].

The Fisheries Mitigation, Monitoring and Communication Plan (FMMCP) forms the primary mechanism through which impacts on commercial fisheries are proposed to be managed. However, the measures set out within the FMMCP are largely procedural in nature, including liaison, communication, and the development of additional plans. While these measures may support engagement with the fishing industry,

[91] Bellrock EIAR Volume 2, Chapter 16, Sections 16.7–16.9
[92] FMMCP, Section 1.1.2
[93] FMMCP, Sections 1.3 and 1.5
[94] FMMCP, Section 1.1.5 / Table 1.1
[95] Electricity Works (EIA) (Scotland) Regulations 2017 – mitigation must reduce effects prior to significance determination.

they do not in themselves avoid or reduce key impacts such as displacement, loss of access, or gear interaction risk.

The FMMCP is explicitly framed around achieving "coexistence" between offshore wind and commercial fishing[96], rather than demonstrating the avoidance or reduction of impacts. While coexistence may be a stated objective, this does not in itself address the loss of access to fishing grounds or displacement of fishing activity identified within the assessment. The FMMCP also continues to rely on industry guidance produced by the Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW)[97], which is no longer supported by SFF and does not form part of the statutory framework for assessment under the EIA Regulations.

The Applicant confirms within the submitted FMMCP that it will continue to rely on FLOWW guidance as the basis for fisheries liaison and mitigation, despite acknowledging that SFF and its constituent associations no longer support this framework. This does not address SFF's concern. Continued reliance on FLOWW represents the application of guidance which does not reflect the position of SFF and should not be relied upon as a basis for mitigation or decision-making.

The FMMCP does not provide clearly defined or secured mitigation outcomes, nor does it demonstrate how identified impacts will be reduced to an acceptable level. Instead, it establishes a framework for future discussion and management, with many measures to be developed or agreed post-consent[98]. As such, the effectiveness of the FMMCP in reducing impacts on commercial fisheries remains uncertain.

In addition, measures such as Safety Zones and construction exclusion areas, which are set out within the FMMCP, would restrict access to parts of the WFDA during construction and potentially operation.[99] The plan also acknowledges a worst-case scenario in which fishing activity does not resume within the WFDA[100]. This reinforces that displacement is an anticipated outcome, rather than an impact that is avoided or reduced through mitigation.

While the Applicant has clarified that this represents an assessment assumption, the FMMCP and wider EIAR continue to be structured on the basis that fishing will not return to the WFDA in practice. This assumption is therefore operationalised within the assessment and mitigation approach, resulting in the effective treatment of displacement as an inevitable outcome rather than an impact to be avoided or reduced.

The FMMCP further identifies that 500 m Safety Zones may be applied not only during construction and major maintenance, but are also under consideration for the operational phase, with no defined limits on their scale, duration or spatial application. This introduces an additional and unquantified source of displacement which has not been fully assessed within the EIAR.

This approach is consistent with other management plans submitted as part of the application, which rely on post-consent plan development and adaptive management rather than defined mitigation measures at the point of assessment. This further reinforces the reliance within the EIAR on procedural mitigation, rather than demonstrable reduction of impacts.

A number of additional implementation gaps remain within the FMMCP. The Plan does not commit to the provision of fisheries-relevant spatial data in defined, plotter-compatible formats, limiting its operational usability for fishing vessels. Commitments in relation to liaison structures, including the roles of FLOs and

[96] FMMCP, Section 1.1.2 / 1.3
[97] FMMCP, Section 1.1.3
[98] FMMCP, Table 1.4
[99] FMMCP, Section 1.3.5.2
[100] FMMCP, Section 1.3.5.2 / 1.5.1

OFLOs, do not establish clearly defined or secured arrangements for managing disputes or claims, including how potential conflicts of interest would be addressed. While OFLOs are expected to be deployed on active work vessels, the Plan retains broad discretion for deployment on guard vessels, which risks reducing the effectiveness of real-time liaison. These issues further limit confidence that the measures set out in the FMMCP will be effective in practice.

As a result, the assessment of effects appears to rely on the assumed effectiveness of the FMMCP rather than evidence demonstrating that impacts on commercial fisheries will be reduced.

This reliance is also reflected in the Non-Technical Summary, which indicates that significant effects can be reduced through engagement and management measures, rather than through clearly defined and assessed mitigation.
While consultation with the fishing industry has been undertaken, the EIAR does not clearly demonstrate how issues raised through that process have influenced project design or reduced identified impacts on commercial fisheries.

Furthermore, the inclusion of procedures for gear loss, damage claims and compensation mechanisms indicates that impacts on fishing activity are anticipated and managed retrospectively, rather than prevented through embedded or defined mitigation measures. Such measures do not constitute mitigation under the EIA Regulations and cannot be relied upon to offset or reduce the significance of impacts.

While the Applicant has introduced reference to independent dispute resolution within the FMMCP, the structure, governance and criteria of this process are not defined and are deferred to a post-consent stage. As such, the claims process remains effectively developer-controlled at the point of application, with no secured mechanism to ensure independence, transparency or consistency in the assessment of claims.

The Applicant's responses to SFF's pre-application consultation comments, as reflected in the submitted FMMCP, are largely clarificatory in nature and do not materially alter the substance of the Plan. Key issues raised by SFF, including reliance on unsupported industry guidance, the absence of defined and independent claims processes, uncertainty regarding Safety Zones, and the lack of secured, outcome-based mitigation, remain unresolved. As such, the FMMCP continues to function primarily as a procedural framework rather than a mechanism for avoiding or materially reducing impacts on commercial fisheries.

In addition, where compensation or disruption arrangements are proposed, these are typically contingent on impacts being identified as significant within the EIA. As the EIAR concludes that impacts on commercial fisheries are not significant, this creates uncertainty as to whether such measures would be triggered in practice. This is further illustrated by the treatment of the Nephrops fleet, where a significant effect is identified but no clearly defined mechanism is set out to address the resulting impact.

SFF notes that any compensatory measures considered under the Habitats Regulations Assessment are intended to address effects on designated sites and do not mitigate impacts on commercial fisheries.

Project Scope and Design Uncertainty
SFF notes that the current application relates only to the WFDA, with offshore transmission infrastructure to be assessed separately.
This introduces uncertainty in relation to:

- the full spatial extent of displacement
- cumulative interaction with fishing activity
- cable-related impacts

Given the importance of subsea cables in fisheries interactions, the absence of defined transmission infrastructure limits the completeness of the assessment.

The EIAR indicates that a "whole project" approach has been applied within certain topic assessments, including elements of the Offshore and Onshore Transmission Infrastructure, in order to capture overall project effects. However, this approach has not been applied consistently to commercial fisheries, where the assessment is largely confined to the Wind Farm Development Area. As a result, the assessment does not fully reflect the functional footprint particularly in relation to displacement, interaction risk and cumulative effects on commercial fisheries.

Habitats Regulations Assessment (HRA)
SFF notes that any compensatory measures considered under the Habitats Regulations Assessment relate to ecological receptors and the integrity of designated sites. Such measures do not address or mitigate the effects of the Project on commercial fisheries.
Accordingly, the presence of compensatory measures under the HRA should not be taken into account in the assessment of impacts on commercial fisheries under the EIA, where effects such as displacement, loss of access and operational constraint remain unmitigated.

Decommissioning and Financial Security
SFF highlights the need for robust, secured and inflation-linked financial provisions to ensure the full and effective decommissioning of offshore wind infrastructure. Given the scale of the project and the use of floating infrastructure, there is uncertainty regarding the long-term costs and technical requirements associated with removal of moorings, anchors, scour protection and subsea cables.

Recent offshore wind experience elsewhere in the UK has demonstrated that decommissioning liabilities can be underestimated, particularly for early-generation projects and for floating infrastructure, where removal costs are likely to be significantly higher than for fixed-bottom foundations.

Incomplete or partial removal of infrastructure has the potential to result in long-term seabed obstruction, continued snagging risk and ongoing constraints on fishing activity. This includes the potential for residual impacts associated with anchor footprints, mooring systems and seabed depressions, which may require active remediation to restore seabed functionality. SFF also notes that the retention of infrastructure elements in situ, including scour and cable protection, has the potential to create long-term obstructions and associated safety risks for fishing vessels where full removal is not secured at decommissioning.
While detailed decommissioning programmes are secured post-consent under the Energy Act 2004, insufficient clarity is provided at the EIA stage regarding the extent of infrastructure removal and the long-term restoration of seabed functionality. SFF considers that the EIA stage provides an appropriate opportunity to identify and address these risks, particularly in the context of emerging floating wind technologies and associated uncertainty in decommissioning outcomes. In particular, the circumstances under which infrastructure may be retained on the seabed, and the implications of such retention for commercial fisheries, are not clearly assessed within the EIAR.

Given Marine Directorate Licensing Operations Team's existing powers to require financial guarantees under both the Marine (Scotland) Act 2010 and the Energy Act 2004, SFF considers that clear, enforceable and adequately secured financial provisions should be in place at consent stage to ensure that decommissioning obligations are deliverable, realistic and inflation-adjusted, and that liabilities are not transferred to other marine users, including the fishing industry.

Conclusion
SFF considers that the EIAR demonstrates a consistent pattern of:

- Underestimation of impact magnitude
- Reliance on assumptions regarding adaptation and mitigation
- Inconsistencies between technical chapters
- Insufficient treatment of cumulative and long-term effects

In particular, the acknowledgement that fishing activity is unlikely to resume within the WFDA is not reconciled with conclusions of low magnitude and non-significant effects.

Accordingly, SFF does not consider that the EIAR provides a sufficient evidential basis to demonstrate that impacts on commercial fisheries have been adequately assessed or mitigated.
SFF therefore considers that, prior to determination, further clarity, reduced uncertainty and strengthened, outcome-based mitigation should be sought to ensure that statutory duties in respect of commercial fisheries can be satisfied.

In the absence of clearly defined, secured and demonstrably effective mitigation measures, the conclusion of no significant residual effects on commercial fisheries cannot be substantiated.

For and on behalf of the Scottish Fishermen's Federation

[redacted]

Oliwia Biros
Offshore Consents Assessments Manager
Scottish Fishermen's Federation

TRANSPORT SCOTLAND

From:	[Redacted]
To:	MD Marine Renewables
Cc:	[redacted]
Subject:	EIA - A90 - Aberdeenshire - MD-00011977 - Bellrock Offshore Wind Farm Section 36 Consent and Marine Licence Application - TS Consultation Response - 2-Jun-26
Date:	02 June 2026 14:51:34
Attachments:	image001.png image002.png image003.png image004.png image005.png image006.png

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FAO Christine McGhie

Afternoon Christine,

Thank you for the opportunity for Transport Scotland to comment on the EIA prepared in support of the Bellrock Offshore Wind Farm, located approximately 120km east of Stonehaven.

Transport Scotland was consulted on the Scoping Report (SR) for this application and provided comment in our letter dated 3rd May 2024. In this, we noted that the SR only identified the proposed assessment of the potential offshore impacts. We, therefore, sought assurance that a separate Onshore EIA would be prepared which considers all activities associated with the onshore aspects of the WFDA, extending landwards from MLWS.

Having reviewed the EIA supporting the Section 36 consent and marine licence application, I note that the Bellrock Project also includes two other Development Areas, the Offshore Transmission Development Area (OfTDA) within which the Offshore Transmission Infrastructure will be developed; and the Onshore Transmission Development Area (OnTDA) within which the Onshore Transmission Infrastructure will be developed. The EIA states that the OnTDA does not form part of the Bellrock consent applications, and that a separate planning application for the Onshore Transmission Infrastructure will be submitted by the Applicant in due course.

I also note that at the time of writing the EIA, the Applicant was undertaking site selection studies for the OfTDA and OnTDA. I can confirm that Transport Scotland has been approached by the Applicant as they seek to identify potential crossings of the A90 trunk road associated with the OnTDA, and discussions are ongoing.

Consequently, I can confirm we have no comment to make on the offshore EIA and will provide comment on the OnTDA assessment as and when this is made available.

Kind regards,

Iain

Development Management
Roads Delivery & Operations
transport.gov.scot

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CÒMHDHAIL ALBA

Transport Scotland, the national transport agency
Còmhdhail Alba, buidheann nàiseanta na còmhdhail