

FAO Rhianna Roberts
MS-LOT

Via Email

ABZ Ref: ABZ2757

16th November 2018

Dear Rhianna

**Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) -
Seagreen, Alpha and Bravo**

I refer to your consultation request received in this office on 21st September 2018.

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

- (1) That, prior to the commencement of development, a Primary Radar Mitigation Scheme setting out measures to be taken to prevent the impairment of the performance of aerodrome navigation aids and the efficiency of air traffic control services at Aberdeen Airport must be submitted to, and approved in writing by, the Consenting Authority, in consultation with Aberdeen Airport Limited.

Reason: In the interests of aviation safety.

- (2) No wind turbine forming part of the Development shall be erected other than in accordance with the approved Primary Radar Mitigation Scheme.

Reason: In the interests of aviation safety.

- (3) The development must be constructed, commissioned and operated at all times fully in accordance with the approved Primary Radar Mitigation Scheme.

Reason: In the interests of aviation safety.

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



It is important that any conditions requested in this response are applied to a planning approval. Where a Planning Authority proposes to grant permission against the advice of Aberdeen Airport, or not to attach conditions which Aberdeen Airport has advised, it shall notify Aberdeen Airport, the Civil Aviation Authority and the Scottish Ministers as per Circular 2/2003: Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003.

Yours Sincerely

[Redacted]

Kirsteen MacDonald

Safeguarding Manager

Aberdeen Airport

07808 115 881

abzsafeguard@aiairport.com

Your Ref:
Our Ref: 18/00765/S36/KC

9 January 2019

Dear Ms Humphries
Marine Scotland
By email to: MS.MarineRenewables@gov.scot



PLACE
Strategic Director:
Alan McKeown

Dear Ms Humphries,

**The Electricity Act 1989
The Electricity Generating Stations (Applications for Variation of Consent) (Scotland)
Regulations 2013
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000**

**Application for Consent Under Section 36 of The Electricity Act 1989 (As Amended)
and Marine Licence Under Part 4 of The Marine (Scotland) Act 2010 to Construct and
Operate Project Alpha Offshore Wind Farm and Project Bravo Offshore Wind Farm
Located Approximately 27km and 38km East of the Angus Coastline**

I write in response to your email of 21 September 2018 in respect of the above noted application, requesting comments from Angus Council as a consultee.

Appendix 1 to this letter forms Angus Council's formal response to the consultation.

I trust that the above/enclosed are in order. Should you have any queries, however, please do not hesitate to contact my colleague Ruari Kelly on 01307 473306 or email KellyR@angus.gov.uk. We look forward to hearing of progress with the application/consent in due course.

Yours sincerely

Kate Cowey
Service Leader – Planning & Communities

Appendix 1: Angus Council Response to Consultation

Appendix 1: Angus Council Response to Consultation

Angus Council has previously provided responses for the consented project. The parameters of the consented and the project now proposed are:

Parameter	The Consented Project	The Proposed Project
Maximum Turbine Generating Capacity	No Max (following variation)	No Max
Total Number of Turbines	150	120
Maximum Turbine Hub Height	126.2m above LAT	170m above LAT
Maximum Turbine Height	209.7m above LAT	280m above LAT
Maximum Rotor Diameter	167m	220m

As previously identified the proposed development will give rise to some potentially significant impacts on Angus Council's administrative area. The assessment for the purposes of the current consultation will focus on any changes arising from the proposed variations to the scheme for the material considerations identified by Angus Council in the original consultation, which are:

1. Seascape, Landscape and Visual Impacts;
2. Cumulative Seascape, Landscape and Visual impacts;
3. Impact on Cultural Heritage; and

Seascape, Landscape and Visual Impacts

Chapter 13 of the Environmental Impact Assessment Report assesses Seascape, Landscape and Visual Impacts (including cumulative effects). This undertakes an assessment of the 'worst case' design scenario and considers the effects of installing 120 turbines with a hub height of 170m above LAT, a maximum blade tip height of 280m above LAT and a maximum rotor diameter of 220m. It is considered that this assessment captures the potential effects associated with the proposed turbine specification sought when compared to the consented project, and the associated impact, would not be any greater than that predicted in the EIA Report.

Whilst the development proposes to reduce the overall number of turbines the respective increase in tip height and rotor diameter will invariably make the individual turbines more visible. However it is still considered that given the separation distance from Angus, the resultant impacts would not be adverse or significant in landscape and seascape terms. In relation to visual impacts whilst this development is located furthest from Angus the turbines will still result in a significant visual impact. Notwithstanding this, the findings of the EIA Report are considered to be accurate; the visual impact on Angus is not considered to be unacceptable.

This Authority previously identified in its consultation to the original proposal the matter of lighting associated with the windfarm for both shipping navigation and aviation. It is evident that this matter has been assessed in greater detail in the EIA Report although it is highlighted that there are limitations to this assessment. The late dusk viewpoint suggests the lighting would not be visible. It is evident from the visualisations associated with the other developments that lighting both aviation and navigation would be visible from Angus and consider that the impacts

associated with this development have potentially been downplayed. It is acknowledged that the EIA Report suggests that the aviation lighting on the WTGs and meteorological masts is likely to be red or infra-red and unlikely to be visible from land-based receptors. Whilst this may be the case further consideration requires to be given to this matter in order to ensure an appropriate technical solution is identified and if this is the case the associated effects would be unlikely to be unacceptable.

Cumulative Seascape, Landscape and Visual Impacts

In relation to cumulative impacts the EIA Report at Chapter 13 identifies the 'worst case' design scenario for the other offshore windfarm developments as those presented in the Scoping Reports submitted to Marine Scotland for the respective developments which assume a smaller number of larger turbines. Such an approach to the cumulative assessment appears logical as it seems unlikely the consented projects will now not be constructed.

Our concerns in relation to cumulative impacts remain as previously expressed in our consultation to the original proposal. We would stress that a key cumulative consideration is the relative height and design of the three different off-shore windfarm developments. A level of consistency is important to prevent the collective view becoming visually inconsistent or distorting seascape perspective by for example, having turbines of noticeably different sizes within the same view. Whilst the worst case scenario for this development at 280m is not too discernable to the Inch Cape development which proposes the potential use of 291m high turbines (blade tip). The scale of these turbines would be greater in height than the potential 208m high turbines (blade tip) proposed by Neart Na Gaoithe. This would lead to a situation whereby larger turbines are located in the foreground with smaller turbines in the background. Although this proposal is not unacceptable in its own right, in order to avoid a confusing and poorly harmonised visual image a co-ordinated approach to the finalised height of each development should be considered.

It is also relevant for consideration to be given to the cumulative impacts associated with the lighting of the proposed developments. The presence of three developments will result in them being viewed alongside or in front of each other typically extending the extent of horizon affected by aviation lighting. There will also be lights in front of lights along some parts of the horizon which will significantly increase night time impacts of the developments. The lighting will likely be visible in prominent views from long distances across Angus with navigation lighting likely to be visible from higher ground which will further increase the cumulative impacts of the developments. The Bell Rock Lighthouse would be typically viewed within the same part of the horizon which would contain the turbine lighting which would significantly erode the presence of this landmark in the seascape. Further consideration requires to be given to the lighting of the developments in order to ensure a consistent lighting solution is identified and to identify methods to mitigate adverse impacts.

Impact on Cultural Heritage

Chapter 13 of the EIA Report also considers potential impacts on cultural heritage interests resulting from the construction and operation of the wind farm in a worst case scenario.

Angus Council has previously expressed its concerns regarding the impact of the development on the Bell Rock Lighthouse and whilst Historic Environment Scotland were content for effects on their remit to be scoped out of the EIA Report we would highlight that the EIA Report does still have limitations in terms of assessing impacts of aviation and navigation lighting on the setting of the asset.

Conclusion

It is concluded that the impacts of the proposed Sea Green Alpha and Bravo offshore wind farms, in terms of material considerations relevant to Angus Council administrative area, do not raise any new or significant issues. The comments provided previously by Angus Council on the original Section 36 application still, remain relevant. Angus Council does not object to this application.

Roberts R (Rhianna)

From: paul.3.atkinson@openreach.co.uk on behalf of radionetworkprotection@bt.com
Sent: 16 October 2018 13:35
To: Lovatt, Martha
Subject: [EXTERNAL] FW: The optimised Seagreen Project EIA Report
Attachments: LF000009-ENV-MA-FGR-0002-01 - Marine Licence Application - Project Alpha Boundary.pdf; LF000009-ENV-MA-FGR-0004-01 - Marine Licence Application - Project Bravo Boundary.pdf; Site Boundary Shapefiles.zip

WARNING: this email has originated from outside of the SSE Group. Please treat any links or attachments with caution.

OUR REF; WID10856 / 57

Hi Martha,

Thank you for your email dated 09/10/2018.

We have studied both Wind farm proposals with respect to EMC and related problems to BT point-to-point microwave radio links.

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

Kind Regards,
Paul Atkinson
Fibre and Network Delivery
Radio Frequency Allocation & Network Protection (BNJ553)
Openreach
Tel: 0113 8074481
Mobile 07711111453
Web: www.openreach.co.uk
PLEASE ALWAYS RESPOND TO radionetworkprotection@bt.com

We build and maintain the digital network that enables more than 600 providers to deliver broadband to homes, hospitals, schools and businesses large and small. Our engineers work in every community, every day, because we believe everyone deserves decent and reliable broadband.

This email contains Openreach information, which may be privileged or confidential. It's meant only for the individual(s) or entity named above. If you're not the intended recipient, note that disclosing, copying, distributing or using this information is prohibited. If you've received this email in error, please let me know immediately on the email address above. We monitor our email system and may record your emails.

Openreach Limited
Registered Office: Kelvin House, 123 Judd Street, London WC1H 9NP
Registered in England and Wales no. 10690039

Our Ref: CONS/GOV/2018 Seagreen
Your Ref: None given

Date: 23/01//2019

Monica Patterson
EXECUTIVE DIRECTOR
(SERVICES FOR COMMUNITIES)

Via email to Seagreen.Representations@gov.scot

John Muir House
Haddington
East Lothian
EH41 3HA
Tel 01620 827827
Fax 01620 824295

Dear Sir/Madam,

ELECTRICITY ACT 1989 (As Amended)

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

The Electricity (Applications For Consent) Regulations 1990 (as amended)

MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)

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

APPLICATION FOR CONSENTS UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE PROJECT ALPHA OFFSHORE WIND FARM AND PROJECT BRAVO OFFSHORE WIND FARM LOCATED APPROXIMATELY 27KM EAST OF THE ANGUS COASTLINE.

I refer to your email of 21 September 2018 inviting representations on the above.

The Council does not wish to object to the application provided:

1. Conditions are placed on the consent which achieve the aims of the conditions appended; and
2. SNH consider that any adverse effects on the integrity of a Natura 2000 site within or adjacent to East Lothian, or where the qualifying interests visit the East Lothian or the coast off East Lothian, are less than the currently consented scheme in the same location.

However, if SNH consider that there are adverse effects on the integrity of a Natura 2000 site within or adjacent to East Lothian, and considers that those effects are greater than the effects of the currently consented scheme, the Council objects to the granting of consent for this application.

The Council has the following comments.

General comments on the EIA process

A request for a Scoping Opinion in relation to this proposal was made on 15th May 2017. This means that the transitional provisions of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 apply.

The EIA Report (ER) notes in paragraph 1.26 and other places that the offshore transmission asset was separately licensed and that as no further changes are proposed to these assets, there is no further assessment of those assets within the ER. Earlier (paragraph 1.10) the ER notes that

planning permission in principle has been granted by Angus Council for onshore transmission assets, though no reference is made to any EIA for this part of the project. It is for Scottish Ministers to determine if this approach to EIA is acceptable.

Planning history and current application

The application is for a site in the Firth of Forth, some 27 km east of the Angus coastline at its nearest point. Consent and licences were awarded for Seagreen Alpha and Seagreen Bravo Offshore windfarm, along with the offshore transmission asset in October 2014 (the 'original consents') in this location. Those windfarms comprised up to 75 wind turbines in each area, with up to 150 across the sites. These consents were for a period of 25 years from the Final Commissioning of the Development. The total consented height to blade tip was 209.7m.

The optimised Seagreen development subject of this application is for Project Alpha and Project Bravo offshore windfarms, which consist of up to 70 wind turbines on each site, to a maximum of 120 turbines across both sites. Tower structures, foundations, substructures, subsea array cabling, scour and cable protection, and wavebuoys and LiDAR are also included. The application is made on the basis of a 'Design Envelope' to allow for change. Paragraph 10 states that within this, flexibility is retained for wind turbine layout, type and specification of wind turbines including height to blade tip, foundation types, design and location of the offshore platforms and wavebuoys. Total height to blade tip is also included in the envelope, with paragraph 5.36 states the maximum height to blade tip is expected to be 280m from Lowest Astronomical Tide to blade tip, and this is what has been used for assessment. The rotor, nacelle and upper tower sections will be painted in semi-matt pale grey, while the lowest section (to 15m above highest astronomical tide) will be a high visibility yellow colour. Aviation lighting is include on the nacelle. Flashing amber lighting is also included on the wave buoys. Temporary navigation lights may be fitted during construction. The period from the start of construction to commissioning is expected to be 4 years. Construction may involve piling which is known to potentially affect marine mammals and some fish. Both cable array and scour protection require further material (concrete or rock). For the cable arrays, it is stated that rock normally comes from land quarries. The amounts required are not specified.

The EIA notes that the expected design life of the project is 25 years, however does not appear to confirm that this is the period for which consent is sought. Likewise the EIA Report states that the height to blade tip used for assessment is 280m, but not that this is the highest height intended to be applied for.

The EIA Report states that the onshore components including the onshore export cables and onshore converter/substation received planning consent in 2013, since renewed. There are no onshore works in East Lothian.

East Lothian Council raised no objection to the original consents application.

The Council notes that a full description of the Offshore Transmission Asset is described in Chapter 5 of the 2012 Offshore ES. The EIA Report notes that the onshore components of the Transmission Asset project received consent from Angus Council in 2012, though it does not state if EIA was carried out for this part of the project. Paragraph 5.173 notes that the port and onshore operation and maintenance facilities are not considered in this EIA Report. East Lothian Council considers that to meet the terms of the EIA Directive the whole project should be described and assessed, and that the grid connection of a windfarm is among its integral parts. However it is for Marine Scotland to determine if the EIA Report is satisfactory.

Planning Policy

Section 25 of the Town and Country Planning (Scotland) Act 1997 requires that planning applications should be determined according to the development plan unless material considerations dictate otherwise. As a Section 36 application, this does not apply, however it is usual practice to take the policies of the development plan into consideration in Section 36 applications, along with other relevant material considerations.

National Planning Framework 3

NPF3 sets out four planning outcomes. Two of these are most relevant to this application. Planning should make Scotland a **successful, sustainable place**, supporting sustainable economic growth and regeneration, and the creation of well-designed places. It should make Scotland a **low carbon place**, reducing our carbon emissions and adapting to climate change. It should make Scotland a natural, resilient place, helping to protect and enhance our natural and cultural assets and facilitating their sustainable use.

Paragraph 1.7 notes that “Scotland’s varied coast and islands have an exceptional, internationally recognised environment. They now have an unprecedented opportunity to secure growth from renewable energy generation as well as other key economic sectors including tourism and food and drink”. The section on ‘Edinburgh and the South East’ notes the importance of both tourism and energy. Paragraph 3.9 notes ‘we want to continue to capitalise on our wind resource, and for Scotland to be a world leader in renewable energy’. Paragraph 3.41 notes that “the low carbon agenda forms crucial part of our strategy”. NPF3 also acknowledges the important role that landscapes have to play in sustaining local distinctiveness and cultural identity and supporting health and well-being (paragraph 4.4). The importance of designated and undesignated biodiversity, including marine wildlife, is noted in paragraph 4.5. The historic environment is also noted as an integral part of our well-being and cultural identity.

Scottish Planning policy likewise contains strong support for the development of renewable energy as well as protection of the natural and historic environment.

The Council notes the provisions of the National Marine Plan. This contains a presumption in favour of sustainable development and use of the marine environment when consistent with the policies and objectives of this plan. Chapter 11 covers Offshore Wind. Map 9 shows the site of this proposal as a Round 3 offshore wind site.

RENEWABLES 1: Proposals for commercial scale offshore wind and marine renewable energy development should be sited in the Plan Option areas identified through the Sectoral Marine Plan process (Map 9). Plan Options are considered the preferred strategic locations for the sustainable development of offshore wind and marine renewables. This preference should be taken into account by marine planners and decision makers if alternative development or use of these areas is being considered. Proposals are subject to licensing and consenting processes.

RENEWABLES 9: Marine planners and decision makers should support the development of joint research and monitoring programmes for offshore wind and marine renewables energy development.

RENEWABLES 10: Good practice guidance for community benefit from offshore wind and renewable energy development should be followed by developers, where appropriate.

The National Marine Plan refers to a Sectoral Plan for Offshore Wind. The document 'Blue Seas Green Energy' covers energy within Scottish Territorial waters, and although it doesn't cover this site, notes that the Round 3 offshore wind development lies just outwith the area.

Development Plan

The current (at time of writing) development plan for the area is the SESPlan 1 Strategic Development Plan June 2013 (SDP1) and the East Lothian Local Plan 2008 (ELLP2008). The replacement for SDP1 (SESPlan Proposed Strategic Development Plan 2016) (SDP2) is at Examination, with the Examination Report having just been published. SDP2 is now with Scottish Ministers. The proposed East Lothian Local Development Plan (ELLDP) has recently been adopted. The ELLDP designates Special Landscape Areas as the local landscape designation, replacing Areas of Great Landscape Value. Supplementary Planning Guidance on Special Landscape Areas has recently been approved.

SDP1 Policy 1B instructs Local Development Plans to ensure there are "no significant adverse impacts on the integrity of international, national and local designations in particular ... Special Protection Areas, SSSI's and Area of Great Landscape Value ... and European Protected Species" and "contribute to the response to climate change through mitigation and adaptation". Policy 10 notes the SDP seeks to promote sustainable energy sources. Proposed SDP2 likewise recognises the importance of moving to a low carbon economy as well as protection of the natural and cultural environment.

The ELLDP contains policy on Wind Turbines, stating that they will be supported where they are acceptable in terms of cumulative issues; landscape and/or visual impacts; impacts on natural and cultural heritage assets including their settings where relevant; impact on tourism and recreation; and has no adverse effect on the integrity of European sites either alone or in combination with other projects and plans. The policy also notes that the economic impact of proposals, the scale of contribution to renewable energy targets and effects on greenhouse gas emissions will be considered. The ELLDP also contains policies protecting the natural and cultural heritage, including Policy NH1 which provides for protection of Natura 2000 sites. In addition it designates Special Landscape Areas (SLA) to replace Areas of Great Landscape Value as the local landscape designation.

Consultation by East Lothian Council

The Council consulted the following Community Councils: North Berwick, Gullane and District, Dunpender, and Dunbar. These are the community council areas which have the greatest theoretical visibility of the proposal, and are closest. Dunbar and West Barns Community Councils expressed concern regarding this application. They feel that the turbines are too high, and also the effects on bird life, and that this new application must be rejected. They have remaining concerns about the approved application. Their response is appended.

Consideration

The Council considers there may be impacts on East Lothian in the following areas:

Biodiversity

The Council values its birdlife, including that of the Firth of Forth SPA, the Forth Islands SPA and offshore, and that of the Outer Firth of Forth and St Andrews Bay Complex proposed marine SPA. It also values the marine mammals which are visitors to the East Lothian coast, including those from the nearby Isle of May SAC and further afield Moray Firth SAC. There is legislative provision for the

protection of such sites and some such species. The Council does not support development that would have an adverse impact on the integrity of European sites within East Lothian, or involving such an effect on qualifying interest species of sites outwith East Lothian that visit East Lothian or its coast, in line with Policy NH1 of the East Lothian Local Development Plan.

The Council notes that where Appropriate Assessment is required, as in this case, the competent authority must consult the appropriate nature conservation body, which is Scottish Natural Heritage. SNH have expertise on whether or not the development, either alone or in combination with other developments, would adversely impact the integrity of European sites. As SNH are the statutory consultee on this matter, if they advise that there will be an adverse effect on the integrity of a European site within or affecting East Lothian, the Council cannot be entirely content with the application. The Council notes that SNH object to this application as due to the way the information is supplied it cannot be certain that there is no adverse impact on the integrity of all Natura 2000 sites. The Council also notes that SNH consider that even if the information is supplied as requested at Scoping, it is likely that in combination with Neart Na Gaoithe and Inchcape and other offshore windfarms, the proposal is likely to have an adverse effect on site integrity for black-legged kittiwake and northern gannet, and that it could have such an effect for razorbill, as qualifying interests for the Forth Islands SPA

It is not clear however whether the impacts of this scheme are greater or less than the previously consented scheme. If SNH considers the schemes now proposed to be less harmful than that consented, the Council does not object to this proposal due to its impact on these Natura 2000 sites as it would prefer that a less harmful scheme is implemented. However, if SNH consider that the scheme will be more harmful than the consented scheme to these Natura sites, the Council does object to this application.

Pollution and shipping

The Council is concerned about the safety of shipping based in or visiting the coast of East Lothian, and also that risks of pollution are minimised and appropriate arrangements are made if an incident for which the developer is responsible occurs. Such an incident could affect East Lothian if pollution were to reach the shores of East Lothian, which could affect recreation and wildlife, and require remediation; as well as a possible impact on fish caught by those living here. We note that the Environment Report considers risk to shipping from project Alpha and Bravo to be Broadly Acceptable (not significant) and, combined, Tolerable with mitigation. We note there is embedded mitigation in place to mitigate risk and leave comment on this to others better placed to do so. However, we would request that conditions are placed upon the consent to ensure;

- (1) that in the details of construction, operation and decommissioning phases of the development best practice is adhered to avoid risk of pollution as far as possible; and
- (2) financial provision is in place such that if an incident does occur for which the developer is responsible, that sufficient resources are available for remediation and any associated costs do not fall to the Council.

There does not appear to be inclusion of or assessment of audible warning sounds. Should these be required, it is unlikely that they would be audible from East Lothian however if they are required the volume should be kept to the minimum required for safety purposes.

Seascape and Landscape

The previous scheme was for 150 turbines with a maximum hub height of 126m, maximum tip height of 209m and a maximum rotor diameter of 167m. East Lothian Council did not comment on the previous application.

The current proposal has reduced the number of turbines to a maximum of 120 but has increased the size of the turbines to a hub height of 170m, tip height of 280m and diameter of 220m. Given the significant increase in size of the proposed turbines the Council asked that consideration be given to the impact on the landscape and visual impact of the revised scheme on East Lothian.

Two viewpoints were considered from East Lothian at Scoping stage.

The first viewpoint from Dunbar cliffs, representative of views of residents and visitors to the East Lothian coast appreciating the wide open uninterrupted views of the North Sea, is from the area of East Lothian coast closest to the development. A wireline submitted from Viewpoint 10 at Dunbar Cliffs at Scoping Stage indicated the lack of significance of the turbines in this view with just the tips of blades visible along the horizon and we agreed to this viewpoint being scoped out of the report. The wireline has been included within the SLVIA but not fully assessed.

The second viewpoint from North Berwick Law is a raised viewpoint location widely visited for the spectacular panoramic views it affords over both the Firth of Forth and North Sea and landscape of East Lothian and beyond. It affords particularly good views of the Bass Rock sitting within the natural context of undeveloped seascape. Its raised location affords a greater view of the proposals, although they are at a further distance, than from the Dunbar cliffs. The Council asked for the submission of a wireline from Viewpoint 9 North Berwick Law given the importance of this viewpoint from East Lothian and the location of the proposed turbines in relation to the Forth Islands visible in this view. The Council agreed that this viewpoint should be included and fully assessed in the SLVIA, although a wireline, not a photomontage, would be sufficient.

The visibility of turbines at over 50km is assessed to be less than 8% of the year, equivalent to 29 days. Although it must be considered that these days of good clear weather are more likely to attract larger visitor numbers to the coast. Therefore although the development lies 70km from the coastline of East Lothian, it is likely at times to be visible on the horizon. This introduction of a permanent new feature to the seascape changes the open undeveloped character of the seascape and introduces lighting into a previously dark scene. This leads to the loss of the unbroken horizon line of the sea and could detract from the appreciation of the coast as a natural area.

North Berwick Law has High visual receptor sensitivity. It is a valued panoramic viewpoint marked on the OS maps, which people visit purely to experience the view. It affords a spectacular view of the Bass Rock set off the rocky coast from Tantallon Castle within open undeveloped sea. The wireline submitted for viewpoint 9, North Berwick Law clearly shows that the turbines will be visible with hubs and therefore aviation lighting above the horizon line. However the proposed turbines have a limited extent of effect on this view due to the long viewing distance from the coastline and the small proportion of the field of view occupied by the turbines. The wind farm will not act as a focal point in this view and will not detract from the Bass Rock as a focal point within this view.

Although development within the sea will change the seascape character by introducing development into a previously undeveloped seascape, the distance of the development from East Lothian and the limited spread of development reduces the magnitude of this effect. Given this, although the turbines will be visible as certain times throughout the year, the magnitude of their effect on the appreciation of the sea views from East Lothian in the daytime will be very low and is therefore not considered to be a significant effect.

However we would ask that consideration be given to the requirement for lighting of the turbines. The turbines are to comprise aviation, navigation and identification lighting. Identification lighting is

anticipated. This should be conditioned to be directional (canopied down) to limit the extent of its visibility.

The turbines will have flashing navigation lights visible to approximately 9km in accordance with International Association of Lighthouse Authorities standards.

Aviation lighting will be designed with reference to section 223 of the Air Navigation Order 2016. The proposed height of these turbines requires them to have at least one medium intensity steady red light positioned as close as reasonably practicable to the top of the fixed structure although it notes that with CAA permission this could be reduced to only those on the periphery of the group. It also notes the angle and intensity of light emission in paragraph (5) and in paragraph (8) that the intensity can be reduced depending on visibility. All of these recommendations should be applied.

Lighting in this form is very different to the transitory nature of passing ships or the clustered effect of settlement street lighting. Although the SLVIA notes that lighting of structures at this distance from the coast and at the level proposed is not *anticipated* to be visible for land-based receptors, we would ask that any approval be so conditioned that the lighting is kept to the minimum and its visibility from East Lothian be kept under review.

The Council would therefore ask that a condition be placed on any granted application for lighting to be monitored and should visibility be apparent from East Lothian that this be addressed and reduced where possible with the replacement of lighting as new systems/methods become available during the life of the windfarm. We would ask that a maximum as well as a minimum lighting requirement be included within the condition and the condition include the requirement for dimming when visibility is greater than 5km.

Decommissioning

The Council recommends that provision be made for decommissioning, as noted in the project description. Due to impacts on biodiversity, landscape and seascape, among others, the Council is particularly concerned about the removal of the turbines, towers and other offshore works above the sea bed however, it may be that best practice at the time of decommissioning seeks further (or less) work. The Council would prefer that the decommissioning condition retains the option of removing all elements of the project above the sea bed. The Council therefore requests a condition requiring decommissioning in accordance with best practice or advice at the time, and seeks to be consulted on the Decommissioning Programme both prior to construction and prior to agreement on decommissioning.

The Council also requests that a condition be placed on consent to ensure financial arrangements are put in place to secure decommissioning in the event that the owner of the scheme cannot or does not carry it out.

Conclusion

The Council considers that the proposal will have adverse effects on interests within East Lothian as detailed above. However, the amount of renewable energy projected to be produced is significant and will help address climate change and air pollution through displacing fossil fuel generation.

Both the ELLP2008 and the proposed or adopted East Lothian Local Development Plan support the generation of renewable energy, subject to consideration of landscape and other interests.

There is an adverse landscape/seascape impact of the scheme, in that it introduces a built element into an area of sea that is currently undeveloped. However, there are consented schemes which if built will alter the undeveloped appearance of this area of sea, including consented schemes at this site. There is also predicted to be a limited number of days when the scheme is visible, albeit these are the days with the finest overall visibility, so that the best conditions the scheme will always be expected to be visible. Lighting of the scheme is a particular concern, with aviation lighting having the greatest potential to be visible from East Lothian; if more than one light is in the same line, either from this scheme or others, the apparent brightness of the lighting could increase. The Council recognises that the scheme will have to meet safety standards, and does not consider the effect of lighting, considering the amount of renewable energy to be generated, to be such as to render the scheme unacceptable. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 place increased importance on mitigation and monitoring. Visible lighting in this location is a significant adverse effect, and the Council would expect to see mitigation for this.

The Council would not support the application however if SNH considers the impacts on Natura 2000 sites are greater than the consented scheme at this site.

Subject to the views of SNH on Natura 2000 sites, the Council does not object to the application that provided conditions are placed on the consent to achieve the aims appended below and discussed above.

Note on Community Benefits from Offshore Renewable Energy Developments – Draft Scottish Government Good Practice Principles.

The Scottish Government draft Good Practice Principles document sets out key principles of designing and providing a community benefit package. In this regard, the Council recognises the voluntary nature of the benefits, and the value of the project in contributing to low carbon generation. However, the Council also recognises that while the impacts are considered acceptable when balanced against the need to generate renewable energy, nonetheless, the impacts are felt within a particular area which includes parts of East Lothian, whereas the benefits such as reduced carbon dioxide emissions will be more widely distributed.

The main adverse impacts are an adverse impact on landscape and seascape resource both on and offshore including impacts on recreational and daily experience of landscape/seascape. The areas which have the most predicted visibility in East Lothian are the coastal areas, and areas of higher ground. Although other areas may have greater impact, there is nonetheless adverse effects in this area. For these reasons, it is our view that some areas within East Lothian should be considered as part of the community if community benefits are to be considered.

If you would like to discuss the contents of this letter further, please contact J Squires (Monday to Thursday only) on 01620 827370, or email to jsquires@eastlothian.gov.uk

Yours sincerely,
[Redacted]

J Squires (Planner)
pp Iain McFarlane
Planning Service Manager

APPENDIX 1 – Conditions

The Council would require that conditions be placed on the consent to ensure:

1. That the applicant does not build or operate this scheme if they have built or do build the existing consented scheme.
Reason: to meet the terms of the EIA and HRA regulations as the impact of both schemes together has not been assessed.
2. That the duration of the consent is limited to 25 years from final commissioning or 30 years from first export of electricity, whichever is earlier.
Reason: to define the duration of the consent and to meet the terms of the EIA regulations (as the impact of permanent development has not been assessed in the EIA Report).
3. That height to blade tip above LAT is limited to 280m.
Reason: to meet the requirements of the EIA regulations as higher turbines have not been assessed.
4. A maximum rating for light emission should be included such that the lighting of the scheme is maintained at a level below which it is expected to be visible from East Lothian, as reported in the Environment Report. No further lighting should be permitted other than for temporary emergency health and safety reasons, without prior written approval from Scottish Ministers in consultation with ELC. The lighting should be dimmed when the visibility is greater than 5km. The visibility of the lighting from East Lothian should be assessed within 6 months of installation, and if it is visible from mainland East Lothian, remedial action should be taken.
Reason: Lighting should be kept to a level where it is not visible from East Lothian in the interests of visual amenity of East Lothian.
5. The effects of any audible warning sound should similarly be kept to the minimum required for safety.
Reason: in the interests of avoidance of disturbance from noise.
6. That East Lothian Council be consulted on details of design not fixed by the application including the final layout of the turbines, prior to approval.
Reason: in the interests of preserving the natural beauty of the area.
7. That in the details of construction, operation and decommissioning phases of the development best practice is adhered to avoid risk of pollution as far as possible.
Reason: to avoid pollution of the marine and intertidal area.
8. That financial provision is in place such that if a polluting incident does occur for which the developer is responsible, that sufficient resources are available for remediation and any associated costs do not fall to the Council
Reason; to avoid costs of any polluting incident falling to the public authorities.
9. That provision for decommissioning of the project in line with best practice at the time is made. This must allow for the possibility that all elements of the project (a) visible from East Lothian or (b) having an adverse impact on its biodiversity; are removed. A draft decommissioning plan should be submitted prior to commencement of development showing how decommissioning of these elements could be achieved and with a bill of quantities to allow valuing of financial provision for decommission.

Reason: to establish that decommissioning is possible to avoid any adverse impacts associated with the project continuing unreasonably beyond its operational life.

10. That financial provision is made to ensure sufficient funds are available to decommission the project, should the owner of the scheme be unwilling or unable to do so at the end of the term of consent.

Reason: to avoid the costs of decommissioning the project falling to the public authorities

APPENDIX 2: Community Council response

From: **NAME AND EMAIL ADDRESS REDACTED**

Date: Thu, 6 Dec 2018 at 19:34

Subject: Re: FW: Consultation on application under Section 36 of the Electricity Act 1989 for offshore windfarm

To: Dunbar CC <dunbarcommunitycouncil@gmail.com>

Thanks

Concerns are expressed by members of Dunbar and West Barns Community Councils regarding this new application.

Members are aware of the history of this site and the actions of RSPB.

The new turbines are felt to be too high...higher than the pillars of the new Queensferry Crossing There are concerns about the affects on bird life.

We thus feel that the new application must be rejected.

We have remaining concerns about the approved application.

NAME REDACTED

Secretary Dunbar Community Council

Minute Secretary West Barns Community Council

Lees E (Emma)

From: Papanastasouli N (Nikoleta) on behalf of MS Marine Renewables
Sent: 18 December 2018 15:54
To: Lees E (Emma)
Subject: FW: 26/09/18- PRIORITY- KW- 18/02799/CON- Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo

From: Martin McGroarty <Martin.McGroarty@fife.gov.uk>
Sent: 13 December 2018 13:27
To: Humphries S (Sophie) <Sophie.Humphries@gov.scot>
Subject: 26/09/18- PRIORITY- KW- 18/02799/CON- Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo

ELECTRICITY ACT 1989 (As Amended)

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)
The Electricity (Applications For Consent) Regulations 1990 (as amended)

MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)

APPLICATION FOR CONSENTS UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE PROJECT ALPHA OFFSHORE WIND FARM AND PROJECT BRAVO OFFSHORE WIND FARM LOCATED APPROXIMATELY 27KM EAST OF THE ANGUS COASTLINE.

Good afternoon Sophie,

Having consulted with Elected Members and colleagues on this matter, I can confirm that Fife Council has no objection to the proposal but would add the following.

Fife Council's previous comments on offshore windfarm developments have indicated that the cumulative impact of the developments on bird species from European designated sites within the Forth of Firth, in particular the Forth Islands SPA, is a potential cause for concern and this remains the case. It is expected that SNH specialists will advise regarding any adverse effect on the integrity of the Forth Islands SPA and any other European site.

Kind regards,
Martin

Martin McGroarty,

Lead Professional (Minerals)

Economy, Planning & Employability Services, Fife Council, Kingdom House, Kingdom Avenue, GLENROTHES, Fife. KY7 5LY

Lees E (Emma)

From: Pamela Smyth <Pamela.Smyth@forthports.co.uk>
Sent: 13 November 2018 14:49
To: Roberts R (Rhianna); MS LOT Seagreen Phase One Representations
Cc: Drew J (Jessica); Bell V (Victoria); Sandra Robson
Subject: RE: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo - NIL RETURN ASSUMED

Rhianna

Apologies you should have been sent a note as follows.

Our Harbour Master suggests the cumulative effect of traffic and the need for a coastal VTS service should be addressed.

Regards

Pamela

Pamela Smyth
General Counsel and Company Secretary
FORTH PORTS LIMITED
1 PRINCE OF WALES DOCK,
EDINBURGH EH6 7DX
Telephone 0131 555 8700
Direct Telephone 0131 555 8731
Mobile 07760991219

From: Rhianna.Roberts@gov.scot [mailto:Rhianna.Roberts@gov.scot]
Sent: 07 November 2018 16:07
To: Seagreen.Representations@gov.scot
Cc: Jessica.Drew@gov.scot; Victoria.Bell@gov.scot
Subject: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo - NIL RETURN ASSUMED

Dear Sir/Madam

The closing date of the 6th November 2018 for the consultation on this application has now passed and we haven't received a response from you. Therefore, we are assuming a Nil return.

Yours faithfully,
Rhianna Roberts

From: Humphries S (Sophie)
Sent: 21 September 2018 10:13
To: MS LOT Seagreen Phase One Representations <Seagreen.Representations@gov.scot>
Cc: Drew J (Jessica) <Jessica.Drew@gov.scot>; Humphries S (Sophie) <Sophie.Humphries@gov.scot>; Roberts R (Rhianna) <Rhianna.Roberts@gov.scot>
Subject: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo - Response requested by 06/11/2018

Dear Sir/Madam,

ELECTRICITY ACT 1989 (As Amended)

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

The Electricity (Applications For Consent) Regulations 1990 (as amended)

MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)

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

APPLICATION FOR CONSENTS UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE PROJECT ALPHA OFFSHORE WIND FARM AND PROJECT BRAVO OFFSHORE WIND FARM LOCATED APPROXIMATELY 27KM EAST OF THE ANGUS COASTLINE.

On 14th September 2018 Seagreen Wind Energy Limited (“the Applicant”) submitted applications to the Scottish Ministers in accordance with the above legislation to construct and operate the Project Alpha Offshore Wind Farm and Project Bravo Offshore Wind Farm located approximately 27km east of the Angus coastline. The applications are subject to an environmental impact assessment and as such the applications are accompanied by an Environmental Impact Assessment Report (“EIA Report”) which has been submitted by the Applicant. In addition, the Applicant has also provided an Habitats Regulations Appraisal (“HRA”) Report.

The application documentation, including the EIA Report and HRA Report can be downloaded from:

<http://marine.gov.scot/ml/seagreen-phase-1-offshore-windfarm-project>

If you wish to submit any representations in response to the consultation regarding the above applications please ensure they are submitted to the Scottish Ministers, in writing, to Seagreen.Representations@gov.scot no later than **Tuesday 6th November**. As per our e-mails of 8th November 2017 (sent to Statutory Consultees) and 16th November 2017 (sent to Non-Statutory Consultees), it is expected that the consultation deadline will be met by all consultees. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team (“MS-LOT”) on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a ‘nil return’.

Marine Scotland Licensing Operations Team (“MS-LOT”) will make your representations publicly available. Personal information (such as names, signatures, home and email addresses) will be redacted before the representations are made public. If you have any queries or concerns about how your personal data will be handled please visit the MS-LOT [website](#) or contact MS-LOT at MS.MarineRenewables@gov.scot.

If you have requested a hard copy of the Application and do not receive it by Tuesday 25th September 2018, please contact Nick Brockie (Nick.Brockie@sse.com) or Lis Royle (lis.royle@sse.com) at Seagreen Wind Energy Limited.

If you have any queries please do not hesitate to contact [MS-LOT](#).

Kind regards,

Sophie Humphries
Casework Manager (Regulatory Compliance)

[marinescotland](#)
Marine Scotland Licensing Operations Team
Scottish Government
Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Phone: +44 (0)131 244 3989
Sophie.Humphries@gov.scot / MS.MarineRenewables@gov.scot
<http://www.gov.scot/Topics/marine/Licensing/marine>

This e-mail (and any files or other attachments transmitted with it) is intended solely for the attention of the addressee(s). Unauthorised use, disclosure, storage, copying or distribution of any part of this e-mail is not

permitted. If you are not the intended recipient please destroy the email, remove any copies from your system and inform the sender immediately by return.

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

Tha am post-d seo (agus faidhle neo ceanglan còmhla ris) dhan neach neo luchd-ainmichte a-mhàin. Chan eil e ceadaichte a chleachdadh ann an dòigh sam bith, a' toirt a-steach còraichean, foillseachadh neo sgaoileadh, gun chead. Ma 's e is gun d'fhuair sibh seo gun fhiosd', bu choir cur às dhan phost-d agus lethbhreac sam bith air an t-siostam agaibh agus fios a leigeil chun neach a sgaoil am post-d gun dàil. Dh'fhaodadh gum bi teachdaireachd sam bith bho Riaghaltas na h-Alba air a chlàradh neo air a sgrùdadh airson dearbhadh gu bheil an siostam ag obair gu h-èifeachdach neo airson adhbhar laghail eile. Dh'fhaodadh nach eil beachdan anns a' phost-d seo co-ionann ri beachdan Riaghaltas na h-Alba.

--

This email transmission is privileged, confidential and intended solely for the person or organisation to whom it is addressed. If you are not the intended recipient, you must not copy, forward, distribute or disseminate the information, or take any action in reliance of it. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Forth Ports Limited. If you have received this message in error please notify Forth Ports Limited immediately by email to enquiries@forthports.co.uk, and delete the message from your computer. All messages passing through this gateway are checked for viruses but we strongly recommend that you check for viruses using your own virus scanner as Forth Ports Limited will not take responsibility for any damage caused as a result of virus infection. Also, as Internet Communications are capable of data corruption, it may be inappropriate to rely on advice contained in an e-mail without obtaining written confirmation of it, and Forth Ports Limited takes no responsibility for changes made to this message after it was sent. The expression for the purposes of this disclaimer includes all Forth Ports group and associated companies.

Forth Ports Registered Offices:

Forth Ports Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 134741 Port of Tilbury London Limited, Registered Office: Leslie Ford House, Tilbury Freeport, Tilbury, Essex, RM18 7EH, Registered in England No 2659118 Port of Dundee Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 155442 Forth Estuary Towing Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 76746 Forth Properties Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 124730 Forth Property Developments Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 223863 Forth Property Holdings Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 223868 Forth Property Investments Limited, Registered Office: 1 Prince of Wales Dock, Edinburgh, EH6 7DX, Registered in Scotland No 102967 Nordic Limited, Leslie Ford House, Tilbury Freeport, Essex RM18 7EH Registered in England No 5396187 Nordic Holdings Limited, Leslie Ford House, Tilbury Freeport, Essex RM18 7EH Registered in England No 3118969 Nordic Recycling (Lincoln) Limited, Leslie Ford House, Tilbury Freeport, Essex RM18 7EH Registered in England No 06232146 Nordic Data Management Limited, Leslie Ford House, Tilbury Freeport, Essex RM18 7EH Registered in England No 3033517 London Container Terminal (Tilbury) Limited, Leslie Ford House, Tilbury Freeport, Tilbury, Essex, RM18 7EH Registered in England No 01249844.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

By email to:

Seagreen.Representations@gov.scot

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

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

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

Our ref: AMN/16/TA
Our case ID: 300021099

04 October 2018

Dear Ms Humphries

**The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Seagreen Phase 1 Offshore (Optimised) Wind Farm
EIA Report**

Thank you for your consultation which we received on 21 September 2018. We have considered it and its accompanying EIA Report in our role as a consultee under the terms of the above regulations and for our historic environment remit. Our remit is world heritage sites, scheduled monuments and their setting, category A-listed buildings and their setting, and gardens and designed landscapes (GDLs) and battlefields in their respective inventories.

You should also seek advice from Angus Council's archaeology and conservation advisors for matters including unscheduled archaeology and category B and C-listed buildings.

Our Advice

We have considered the information received and do not have any comments to make on the proposals. Our scoping response of 28 June 2017 confirmed that we were content for effects on our remit to be scoped out of the EIA for this proposal. We are therefore content that the EIA Report does not contain a cultural heritage assessment. Our decision not to provide comments should not be taken as our support for the proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy guidance.

Further Information

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

Historic Environment Scotland – Longmore House, Salisbury Place, Edinburgh, EH9 1SH

Scottish Charity No. **SC045925**

VAT No. **GB 221 8680 15**



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

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

Please contact us if you have any questions about this response. The officer managing this case is Victoria Clements who can be contacted by phone on 0131 668 8730 or by email on Victoria.Clements@hes.scot.

Yours sincerely

Historic Environment Scotland

Marine Scotland Licensing and Operations Team

Scottish Government

Marine Laboratory, PO Box 101

375 Victoria Road

Aberdeen

AB11 9DB

26/10/2018

Subject: Inch Cape Offshore Limited's (ICOL's) representation on the Optimised Seagreen Project application, submitted to Marine Scotland Licensing and Operations Team (MS-LOT) in September 2018.

Dear Sophie,

Thank you for consulting with Inch Cape Offshore Limited on Seagreen Wind Energies (Seagreen's) Environmental Impact Assessment (EIA) Report submitted as part of their revised design application for the Optimised Seagreen Project.

The following information presents ICOL's representations on the application.

General comments

ICOL welcome the opportunity to review and comment on the information provided in the Optimised Seagreen Project EIA Report. Information presented in cumulative assessments in relation to Inch Cape Offshore Wind Farm is largely representative of information provided in either ICOL's 2013 Environmental Statement (ES) or 2017 Scoping Report. ICOL note that methodologies for cumulative assessments, most notably with respect to marine mammals and ornithology, differ between ICOL's and Seagreen's assessments. In both cases, ICOL's methodology for cumulative assessments were agreed with stakeholders prior to submission and outlined in the 2018 application. More specific comments relating to the cumulative assessments for ornithology and marine mammals are outlined below.

Chapter 8 Ornithology

ICOL note that Chapter 8, Paragraph 8.572 discusses the approach to the cumulative assessment and states that the cumulative ornithology assessment has been carried out on ICOL's design parameters as outlined in ICOL's 2017 Scoping Report as '*the primary focus of the cumulative impact assessment will be with the most recent evidence base, i.e. the revised applications for both projects*'.

ICOL note that Seagreen's Collision Risk Modelling outlined in Appendix 8B has been undertaken based on ICOL's 2014 consented parameters and 2017 scoping parameters. However, the assessment appears to be based on ICOL's 2017 scoping parameters as stated in Paragraph 8.570. For ICOLs applications it was agreed with stakeholders that as a worst-case scenario, assessments should consider the applicants latest design against the previously consented parameters for the other Forth and Tay projects. ICOL does not comment on the

validity of Seagreen's assessment, however ICOL notes that Seagreen's approach to cumulative assessment differs from ICOL's which provided an assessment based on agreed worst-case scenarios of Seagreen's and NNG's 2014 consented parameters. This has resulted in differences between the scenarios assessed by ICOL and Seagreen, with the ICOL assessment being more conservative and Seagreen potentially providing a more realistic scenario if all Forth and Tay projects are developed based on their 2018 applications.

Parameters for Inch Cape Offshore Wind Farm used in Collision Risk Modelling (CRM) outlined in Appendix 8B, Para 2.2.4 are consistent with ICOL's 2017 scoping report and subsequent 2018 submission.

In Table 8.40, ICOL note the use of Nocturnal Activity Rates (NAR) are based on Orsted's, 2018 study (Full reference for Orsted 2018 seems to be omitted from reference list). ICOL welcome progression in discussions relating to realistic NAR assumptions, either from the Orsted study or work undertaken by MacArthur Green in relation to Kittiwake (ongoing)¹ and Gannet (published)² NAR in 2018. ICOL would like to note that ICOL's assessment used agreed generic NAR for CRM, which include 25% for gulls and 25% for Kittiwake and 0% for gannet. This would result in some differences in CRM estimates between ICOL and Seagreen's 2018 assessments.

It is also noted that Seagreen's assessment includes discussion of as-built scenarios and headroom estimates based on MacArthur Green's 2017 work which highlight potentially large decreases in cumulative impact as a result of consented projects not building their fully consented windfarm designs. ICOL support the continued discussion of using as-built scenarios as the basis of assessments.

Chapter 10 Marine mammals

In Chapter 10, Paragraph 10.309 states; *'It is key to note that these overall cumulative levels of impact are driven by the high predictions of grey seals disturbed at Neart na Gaoithe (1,357 disturbed per day) and Inch Cape (810 disturbed per day) compared to Seagreen (42 disturbed per day). These differences in impact levels are likely due to the different dose-response curves used for seals between the three assessments'*.

ICOL agree that the large difference in numbers of grey seal disturbed between the projects is likely to be an artifact of differences in assessment methodology rather than significantly more seals being impacted as a result of piling at NNG or Inch Cape.

Chapter 10, Paragraph 10.328 states; *'However, there are a number of issues which raise question as to whether the inclusion of PTS impacts is appropriate. There are a number of differences between the methodology used in the original Inch Cape assessment and current best practice'*.

ICOL would like to note that methodology used in the Inch Cape 2013 ES was in keeping with best practice at the time of writing but remain valid as they present a precautionary assessment.

¹ Vattenfall., 2018. Norfolk Vanguard Environmental Statement – Chapter 13 Offshore Ornithology.

² Furness et al., 2018. Nocturnal flight activity of northern gannets *Morus bassanus* and implications for modelling collision risk at offshore wind farms. EIA Review, Vol 73, November 2018 Pages 1-6.

In relation to the assessment of the impacts of cumulative PTS impacts on bottlenose dolphin, ICOL agree with the conclusion of Chapter 10, Paragraph 10.329 that Inch Cape would not result in cumulative PTS impacts on bottlenose dolphin. However, ICOL would like it noted that it was agreed through consultation with stakeholders that ICOL were not required to consider Seagreen Phase 1 in ICOLs iPCoD cumulative impact assessment (CIA) as the numbers of animals predicted to experience PTS and/ or displacement from pile driving noise (including installation of monopiles) on the Seagreen site were not available to ICOL at the time of undertaking the assessment. Numbers to be used in iPCoD CIA were requested from SSE but were not provided in time to be included in ICOLs assessment. Therefore, it was advised by MS-LOT, MS Science and SNH that Seagreen Phase 1 was removed from ICOLs iPCoD assessment on the grounds that, with the best information available in the public domain at the time of the assessment, it was predicted that no bottlenose dolphins would experience disturbance or PTS (this information was taken from the AA for the Aberdeen Harbour Expansion Project (AHEP)).

Chapter 11 Commercial Fishing

Chapter 11, Paragraph 11.293 states; *'Local smaller scallop dredgers would be primarily affected by construction activities at other projects within the regional study area. It should be noted, however, that with the exception of Inch Cape, these projects support relatively low levels of scallop dredging activity (Figure 11.26 and Figure 11.27).'*

ICOL note that scallop landings by value (Figure 11.26) and scallop fishing effort by VMS dredge effort (Figure 11.27) appear to be higher in Seagreen Alpha and Seagreen Bravo development areas than in the Inch Cape Development Area or the NNG development area. On this basis, ICOL does not consider that *'construction activities at other projects'* would be the primary source of disruption to scallop dredging activity during construction.

Chapter 11, paragraph 11.3.01 states; *'The potential for cumulative loss of grounds/restricted access to grounds for the lobster and crab fishery would for the most part be a result of construction activities at Inch Cape and Neart na Gaoithe, as well as the Seagreen Offshore Transmission Asset Project, with the contribution of Project Alpha and Project Bravo to any cumulative impact being very small (Figure 11.32).'*

Figure 11.32 appears to show that the majority of the Seagreen Alpha development area is used by up to three lobster creel vessels and the majority of Seageen Bravo is used by a single lobster vessel. Fishing activity within NNG appears to consist of Vessel A utilising less than 50% of NNGs development area and fishing activity within Seagreen Alpha appears comparable with the level of fishing activity within the Inch Cape Development Area. Therefore, ICOL consider that Figure 11.32 does not support Seagreen's conclusion and suggests that the contribution to cumulative fishing impacts from Seagreen Alpha and Seagreen Bravo appear to be similar if not larger than the contribution from NNG and Inch Cape.

Chapter 13 SLVIA

Chapter 13 Paragraph 13.423 states that; *As set out in the IALA standards, the WTG lighting will consist of flashing lights which will be visible to at least 5 nautical miles (approximately*

9km). Aviation lighting on the WTGs and meteorological masts is likely to be red or infra-red and unlikely to be visible from land-based receptors. Chapter 13 Paragraph 13.424 states; The optimised Seagreen Project is located at approximately 30km from the nearest land-based receptors. Lighting of structures at this distance from the coast and at the level proposed is not anticipated to be visible for land-based receptors.

ICOL note that the technical report used to inform the Inch Cape Wind Farm 2018 EIA Report identified that red aviation lighting (typically 2000 candella) may theoretically be visible at approximately 37km. Whilst it is not clear what intensity of lighting Seagreen is considering, this suggests that the fact that Seagreen is 30km from the nearest receptor does not necessarily preclude a theoretical impact without additional justification. As previously stated in the ICOL response to NNG's 2018 application, ICOL consider that it would be beneficial for an industry decision on standardising night time visual assessments in the future.

Kind regards,

Benjamin King

Offshore Consents Manager

SDIC  **Red Rock Power Limited**

5th floor, 40 Princes Street
Edinburgh EH2 2BY
United Kingdom
Tel: +44 (0) 131 557 7101
DL: +44 (0) 131 557 7133
Email: ben.king@redrockpower.co.uk

Lees E (Emma)

From: Chikwama C (Cornilius)
Sent: 30 July 2019 13:26
To: Lees E (Emma)
Cc: Agnisola G (Giulia); Drew J (Jessica); Irvine S (Sophia); Sekhon C (Chahat)
Subject: RE: Seagreen Optimised Project Application - Socio-economics Advice request

Dear Emma

I have now reviewed the Optimised Project Application – Socioeconomic Impact Assessment.

Overall, the socioeconomic assessment is consistent with what we would expect from the optimisation element covered in the current application relative to the original consented in 2014, i.e., that socioeconomic impacts would at most not change significantly. The evidence presented suggest increase in socioeconomic impacts measured in terms of GVA and employment in Scotland and the UK, to reflect growth in the local supply chain since 2014 and increased capital expenditure for the optimised developments. We should note however that there is always significant uncertainty about the actual impacts, which will be influenced by awards of contracts for the development and construction works.

To conclude, the socioeconomic assessment of the optimised Seagreen Project does not present any significant issues relative to the original project consented in 2014.

Please let me know if you would like to discuss.

Cornilius

From: Lees E (Emma) <Emma.Lees@gov.scot>
Sent: 16 July 2019 07:44
To: Chikwama C (Cornilius) <Cornilius.Chikwama@gov.scot>
Cc: Agnisola G (Giulia) <Giulia.Agnisola@gov.scot>; Drew J (Jessica) <Jessica.Drew@gov.scot>; Irvine S (Sophia) <Sophia.Irvine@gov.scot>
Subject: Seagreen Optimised Project Application - Socio-economics Advice request

Dear Cornilius,

I hope this email finds you well.

It has been brought to our attention that MS-LOT have not yet consulted with you on the [Socio-economic impact assessment](#) provided by Seagreen Wind Energy Limited as part of their optimised project application for the construction of two generating stations in the Firth of Forth area. Please accept our apologies.

MS-LOT would therefore be grateful if you could provide any comments or advice to us by Friday, 09 August 2019.

If you have any further questions, or if you need more information, please do not hesitate to contact me.

Best regards,

Emma

Emma Lees | Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

Roberts R (Rhianna)

From: Helen Croxson <Helen.Croxson@mcga.gov.uk>
Sent: 06 November 2018 19:55
To: MS LOT Seagreen Phase One Representations
Subject: FW: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo

Dear MS LOT,

Thank you very much for the opportunity to comment on the application for consent under section 36 of the Electricity Act 1989 for the Seagreen Alpha and Bravo Offshore Windfarm.

The MCA's remit for Offshore Renewable Energy Installations (OREIs) is to ensure that the safety of navigation is preserved, and our search and Rescue capability is maintained, whilst progress is made towards government targets for renewable energy.

We note that the original Seagreen project received development consents from Scottish Ministers in 2014, and after a legal challenge to the consent award decision, Seagreen is now applying for additional consents for an optimised design based on higher capacity Wind Turbine Generators (WTGs) that are now available, and the inclusion of monopiles as a foundation option.

Seagreen has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance (MGN 543 and its supporting annexes, and risk assessment methodology), and we are satisfied that all aspects of the NRA have been adequately addressed, including the traffic surveys. However, there are still aspects of the project that will need to be discussed beyond consent, and concerns which will need to be addressed and agreed with MCA, as follows:

Layout Design

The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats and search and rescue aircraft operating within the site. As such, MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. The turbine layout and orientation must be discussed and agreed with MCA at the earliest opportunity. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 543 Annex 5, will be agreed at the approval stage.

Marking and Lighting

MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the area. All lighting and marking arrangements will need to be agreed with MCA and the Northern Lighthouse Board.

Emergency Response & Co-operation Plans

A SAR checklist 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 should be included as a formal condition of consent.

Construction scenarios

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

Hydrographic Surveys

The applicants are reminded that hydrographic surveys are required as part of fulfilling MGN 543. The final data supplied as a digital full density data set, and the report of survey, should be submitted to the MCA Hydrography Manager and the UK Hydrographic Office. All hydrographic surveys should provide full seafloor coverage that meets the requirements of IHO Order 1a. Further details can be found in the Hydrography guidelines for offshore developers, available on our website at: <https://www.gov.uk/guidance/offshore-renewable-energy-installations-impact-on-shipping>.

Cable Routes

Export cable routes, cable burial protection index and cable protection are issues that are yet to be fully developed. However, due cognisance needs to address cable burial or protection and any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum.

Safety Zones

The requirement and use of safety zones as detailed in the application is noted and supported. Safety zones during the construction, maintenance and decommissioning phases are supported, however it should be noted that operational safety zones may have a maximum 50m radius from the individual turbines. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case.

Kind regards

Helen



Helen Croxson, Offshore Renewables Advisor

Navigation Safety Branch, Bay 2/25
Maritime & Coastguard Agency
Spring Place, 105 Commercial Road, Southampton, SO15 1EG
Tel: 0203 8172426
Mobile: 07468353062
Email: Helen.Croxson@mcga.gov.uk

Please note I currently work Tuesdays, Wednesdays and Thursdays.

From: Sophie.Humphries@gov.scot <Sophie.Humphries@gov.scot>

Sent: 21 September 2018 10:12

To: MARINEENERGY@nature.scot; planning.se@sepa.org.uk; navigation safety <navigationsafety@mcga.gov.uk>; navigation@nlb.org.uk; hmconsultations@hes.scot

Cc: Erica.Knott@nature.scot; Helen Croxson <Helen.Croxson@mcga.gov.uk>; Jessica.Drew@gov.scot; Nicola.Bain@gov.scot; Rhianna.Roberts@gov.scot

Subject: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo

Dear Sir/Madam,

ELECTRICITY ACT 1989 (As Amended)

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)
The Electricity (Applications For Consent) Regulations 1990 (as amended)

MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)

APPLICATION FOR CONSENTS UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE PROJECT ALPHA OFFSHORE WIND FARM AND PROJECT BRAVO OFFSHORE WIND FARM LOCATED APPROXIMATELY 27KM EAST OF THE ANGUS COASTLINE.

On 14th September 2018 Seagreen Wind Energy Limited (“the Applicant”) submitted applications to the Scottish Ministers in accordance with the above legislation to construct and operate the Project Alpha Offshore Wind Farm and Project Bravo Offshore Wind Farm located approximately 27km east of the Angus coastline. The applications are subject to an environmental impact assessment and as such the applications are accompanied by an Environmental Impact Assessment Report (“EIA Report”) which has been submitted by the Applicant. In addition, the Applicant has also provided an Habitats Regulations Appraisal (“HRA”) Report.

The application documentation, including the EIA Report and HRA Report can be downloaded from:

<http://marine.gov.scot/ml/seagreen-phase-1-offshore-windfarm-project>

If you wish to submit any representations in response to the consultation regarding the above applications please ensure they are submitted to the Scottish Ministers, in writing, to Seagreen.Representations@gov.scot no later than **Tuesday 6th November 2018**. As per our e-mails of 8th November 2017 (sent to Statutory Consultees) and 16th November 2017 (sent to Non-Statutory Consultees), it is expected that the consultation deadline will be met by all consultees. If you are unable to meet this deadline please contact the Marine Scotland Licensing Operations Team (“MS-LOT”) on receipt of this e-mail. If you have not submitted a response by the above date, MS-LOT will assume a ‘nil return’.

Marine Scotland Licensing Operations Team (“MS-LOT”) will make your representations publicly available. Personal information (such as names, signatures, home and email addresses) will be redacted before the representations are made public. If you have any queries or concerns about how your personal data will be handled please visit the MS-LOT [website](#) or contact MS-LOT at MS.MarineRenewables@gov.scot.

If you have requested a hard copy of the Application and do not receive it by Tuesday 25th September, please contact Nick Brockie (Nick.Brockie@sse.com) or Lis Royle (lis.royle@sse.com) at Seagreen Wind Energy Limited.

If you have any queries please do not hesitate to contact [MS-LOT](#).

Kind regards,

Sophie Humphries
Casework Manager (Regulatory Compliance)

[marinescotland](#)

Marine Scotland Licensing Operations Team

Scottish Government

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

Phone: +44 (0)131 244 3989

Sophie.Humphries@gov.scot / MS.MarineRenewables@gov.scot

<http://www.gov.scot/Topics/marine/Licensing/marine>

This e-mail (and any files or other attachments transmitted with it) is intended solely for the attention of the addressee(s). Unauthorised use, disclosure, storage, copying or distribution of any part of this e-mail is not permitted. If you are not the intended recipient please destroy the email, remove any copies from your system and inform the sender immediately by return.

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

Tha am post-d seo (agus faidhle neo ceanglan còmhla ris) dhan neach neo luchd-ainmichte a-mhàin. Chan eil e ceadaichte a chleachdadh ann an dòigh sam bith, a' toirt a-steach còraichean, foillseachadh neo sgaoileadh, gun chead. Ma 's e is gun d'fhuair sibh seo gun fhiosd', bu choir cur às dhan phost-d agus lethbhreac sam bith air an t-siostam agaibh agus fios a leigeil chun neach a sgaoil am post-d gun dàil.

Dh'fhaodadh gum bi teachdaireachd sam bith bho Riaghaltas na h-Alba air a chlàradh neo air a sgrùdadh airson dearbhadh gu bheil an siostam ag obair gu h-èifeachdach neo airson adhbhar laghail eile. Dh'fhaodadh nach eil beachdan anns a' phost-d seo co-ionann ri beachdan Riaghaltas na h-Alba.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>



Defence Infrastructure Organisation

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

Your Reference: Section 36

Our Reference: DIO 16092 & 16093

Telephone +44 (0)121 311 3847

[MOD]: +44 (0)121 311 2218

Facsimile

[MOD]:

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

Ms Rhianna Roberts
Scottish Government
Marine Laboratory,
375 Victoria Road, Aberdeenshire
AB11 9DB

16th November
2018

Dear Rhianna

Site Name: Project Alpha and Project Bravo Offshore Windfarms

Application for Consents under Section 36 of the Electricity Act 1989 (as amended) and Marine Licences under Part 4 of the Marine (Scotland) Act 2010 to construct and operate Project Alpha Offshore Windfarm and Project Bravo Offshore Windfarm located approximately 27KM East of the Angus Coastline.

I write to confirm the safeguarding position of the Ministry of Defence (MOD) in relation to the above application to construct and operate both Project Alpha and Project Bravo Offshore Windfarms.

This proposed development will comprise of up to 70 wind turbine generators in each zone, with a total number of 120 turbines across both projects, up to 280metres(m) in height (to blade tip) that will be located in the North Sea approximately 27 Kilometers east of the Angus coastline, Project Alpha will be closest to the shoreline with Project Bravo abutting it to the east. In addition to the turbine structures there will be up to three wave buoys in each area, subsea cabling and associated infrastructure.

The MOD has assessed the location and layout information provided for the proposed development and has identified the following:

Defence Maritime Interests and Military Low Flying

Project Alpha and Project Bravo

The proposed development will not adversely affect MOD offshore Danger and Exercise Areas or defence maritime navigational interests.

The proposed development will affect military low flying training activities that may be conducted in the area, it will therefore be necessary for the turbine structures to be fitted with appropriate aviation warning lighting to maintain the safety of military aviation.

Air Traffic Control (ATC) Radar

Project Alpha

The turbines will be 83.3 Kilometres(km) from, detectable by, and will cause unacceptable interference to the primary surveillance ATC radar at Leuchars Station (formerly RAF Leuchars).

Project Bravo

The turbines will be 83.3km from, detectable by, and will cause unacceptable interference to the primary surveillance ATC radar at Leuchars Station (formerly RAF Leuchars).

Wind turbines have been shown to have detrimental effects on the performance of Primary Surveillance Radars. These effects include the desensitisation of radar in the vicinity of the turbines, shadowing and the creation of "unwanted" aircraft returns which air traffic controllers must treat as aircraft returns. The desensitisation of radar could result in aircraft not being detected by the radar and therefore not presented to air traffic controllers. Controllers use the radar to separate and sequence both military and civilian aircraft, and in busy uncontrolled airspace radar is the only sure way to do this safely. Maintaining situational awareness of all aircraft movements within the airspace is crucial to achieving a safe and efficient air traffic service, and the integrity of radar data is central to this process. The creation of "unwanted" returns displayed on the radar leads to increased workload for both controllers and aircrews. Furthermore, real aircraft returns can be obscured by a turbine's radar return, making the tracking of both conflicting unknown aircraft and the controllers' own traffic much more difficult.

An operational assessment of this proposal has identified that the proposed windfarms will have a significant and detrimental effect on the provision of air traffic services at Leuchars Station.

Air Defence (AD) radar

Project Alpha

The turbines will be 122.4km from, detectable by, and will cause unacceptable interference to the AD radar at Remote Radar Head (RRH) Brizlee Wood and 89.4km from, detectable by and cause unacceptable interference to AD at RRH Buchan.

Project Bravo

The turbines will be 125.1km from, detectable by, and will cause unacceptable interference to the AD radar at RRH Brizlee Wood, and 89.4km from, detectable by and cause unacceptable interference to AD at RRH Buchan.

Wind turbines have been shown to have detrimental effects on the operation of radar. These include the desensitisation of radar in the vicinity of the turbines, and the creation of "false" aircraft returns. The probability of the radar detecting aircraft flying over or in the vicinity of the turbines would be reduced, hence turbine 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.

I can confirm that, due to the adverse impacts the proposed development will have upon the effective operation of air defence and air traffic control radars, the MOD objects to this application in its current form.

It should be noted that our radar assessments have been completed using the coordinates provided for the maximum extent of the offshore windfarms development areas identified in this application. Once

further details on the layout and dimensions of both proposed windfarms are available further technical and operational assessments can be completed to clarify the impact the development will have upon the MOD radars identified. We will gladly review more detailed plans and mitigation proposals that the applicant may wish to submit to us.

MOD Safeguarding wishes to be consulted and notified about the progress of planning applications and submissions relating to this proposal to verify that it will not adversely affect defence interests.

I trust this clarifies our position on this application. Please do not hesitate to contact me should you require any further assistance.

Yours sincerely
[Redacted]

Teena Oulaghan

Safeguarding Officer
Defence Infrastructure Organisation



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



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

Comments due: 20 November 2018

051/OW/SG1 - 10 - SEAGREEN - SEAGREEN ALPHA & BRAVO (REVISED DESIGN) – SECTION 36 APPLICATION

Marine Scotland Science has reviewed the submitted application and has provided the following comments.

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

Marine Mammals

MSS have reviewed Chapter 10 (marine mammals) and the five associated appendices.

MSS acknowledge that the assessment for noise modelling has incorporated the use of ADDs and used a 0.5% conversion factor (Chapter 10). MSS also acknowledge, and welcome, the inclusion of the re-analysis of noise modelling presented in Appendix E, whereby ADDs have been removed and a 1% conversion factor has been used.

MSS consider the approach in Appendix E to be more reflective of: the precautionary principle based on the current best scientific advice (i.e. using a 1% conversion factor) and the worst case scenario(s) (i.e. removing ADDs as embedded mitigation from the PTS assessments). Therefore, MSS consider the re-analysis presented in Appendix E as the most informative of the documents, with respect to the assessment of impact from pile driving activities and the need for mitigation measures. With respect to the latter, MSS are in agreement with SNH, such that a piling strategy (submitted to MS-LOT for approval prior to piling activities), should incorporate appropriate mitigation measures to minimise the risk of PTS.

MSS also acknowledge the statements made in Section 10.369: "recent preliminary analysis of data collected at the Beatrice offshore wind farm, also suggested that porpoise activity reduced prior to the ADD deployment and that the use of ADDs may contribute to disturbance. The implication of this could be that ADD use is unnecessary. Appropriate measures for the Piling Strategy in light of the best available evidence will be discussed with statutory consultees." MSS welcome the consideration of the current best scientific knowledge when devising the piling strategy, and we would welcome further discussion on development of the piling strategy.

With respect to the use of the 1% conversion factor (Appendix E); there is an increase in the number of animals predicted to experience PTS, however, the percentage of the reference population is still small. Consequently, MSS are content with the conclusion of both Seagreen and SNH, that the magnitude of impact is low and the significance of effect from PTS is low for all species and scenarios. MSS draw the same conclusion for the disturbance assessment (as do Seagreen and SNH).

As noted by SNH, some scenarios do have large effect zones for cumulative PTS for minke whale, which are at distances that are unlikely to make current mitigation practices effective. Therefore, an EPS license for injury may be required. MSS note that this is likely to be a precautionary measure. For example, one important assumption of the model is that the animal will flee to a maximum of 25 km; therefore, if the noise modelling predicts that the sound propagates further than 25 km and/or if the animal flees towards the coast and

Marine Laboratory, PO Box 101, 375 Victoria Road,
Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland



becomes 'trapped', it is possible for the animal to accumulate the dose, and thus exceed the cumulative PTS threshold. However, MSS consider these to be unlikely real-world scenarios.

MSS note that the cumulative impact assessment for the bottlenose dolphin population modelling (iPCoD) suggests a large decrease in population size after 24 years when PTS is included. However, as SNH note, this work was done using iPCoD version 3, which is known to overestimate the impact of PTS on populations. MSS are of the same opinion as SNH, in that, if iPCoD version 4 were used (which was not available at the time), the impact is likely to be far less than predicted here. Seagreen also provide justification in sections 10.329 and 10.330 to support their opinion that the most appropriate assessment for cumulative impact for bottlenose dolphins is disturbance only. MSS consider the justifications to be sound (specifically: the approach used for the consented ICOL project is sufficiently different and overly precautionary that if the approach used by Seagreen were applied to ICOL, no PTS would be predicted for that development; and even if the predictions for PTS were realistic, mitigation measures would be put in place, such that risk of PTS would be deemed negligible) and are in agreement with Seagreen's opinion.

In addition, MSS note that Seagreen have not included BOWL in the cumulative assessment on account of numbers not being presented in the BOWL ES (Table 10.54). However, MSS are aware of other EIAs providing numbers of bottlenose dolphins with PTS (n = 0) and disturbed (n = 19), which were taken from the BOWL piling strategy. Nevertheless, if these were included in the cumulative assessment, MSS consider it unlikely to have changed the conclusion of the assessment.

Ornithology

MSS have reviewed Chapter 8 (ornithology), Chapter 16 (HRA), and associated appendices (8a-d).

The assessed impacts for the revised design used in 2018 application are likely less than those for the 2014 consented design. This is owing to fewer larger turbines in the revised (2018) design over the consented (2014) design. The revised design will reduce assessed collision mortality (relevant to northern gannet, black-legged kittiwake, and herring gull) though will not affect assessed displacement mortality (relevant to kittiwake and auk species including razorbill), as the displacement assessment is affected by the footprint of the development only. However, the increased spacing between the turbines in the revised design is likely to reduce the displacement rate assumed in this assessment.

As SNH note in their consultation response (dated 2nd November 2018) the developers have deviated from the scoping advice in the environmental assessment, the PVA model outputs have also apparently been misinterpreted. Together these mean that it is not possible to confidently assess potential impacts on SPA populations. SNH do give provisional assessments for impacts for SPA sites (paragraphs 9-14 of Appendix A of SNH consultation response). Though in combination impacts cannot currently be clearly assessed based on the presented information as all east coast developments (i.e. including English North Sea developments) were included in Seagreen's in combination assessments rather than the Scoping advised Forth and Tay developments only (during the breeding period).

Assessment methodology

The main assessed impacts for ornithology are collision risk assessed via collision risk modelling (CRM) and displacement.

Collision risk modelling (CRM)

The Scoping Opinion (section 9.4, MS-LOT 15th September 2017, <https://www2.gov.scot/Topics/marine/Licensing/marine/scoping/SeagreenPhase1-2017/SO-15092017>) advised that CRMs should be performed using the Band 2012 CRM with Option 2 (generic flight height data taken from Johnson et al. 2014) for kittiwake and gannet, and that those outputs should be used for the population viability analyses (PVA), if sufficient site specific flight height data were available Option 1 was also requested (but not asked to be taken forward to the PVA). For herring gull CRM with Option 3 was advised for the PVA, though outputs for Option 2 were also requested, then if suitable site specific flight height data were available, also Options 1 and 4.

SNH state in their consultation response that the Scoping Opinion has not been fully followed in the assessment of collision risk mortality (SNH consultation response, Appendix A, paragraph 4). The developer does present collision mortality estimates following both options 1 and 2 for kittiwake and gannet (presented in detail in Appendix 8b of EIA report, volume 3, with results in table 13 therein) as requested. For herring gull options 1, 2, and 3 are presented, also as requested in scoping. Thus, it would be helpful if SNH can provide clarification on what their specific concerns are with the assessed collision mortality estimates. Is it in the collision risk modelling itself (Appendix 8b of EIA report, volume 3) which MSS find to be line with scoping

opinion and/or in how these numbers were used further on in the assessment, in the PVA and the Ornithology chapter (chapter 11 of EIA) where the numbers and approach are different?

CRMs are performed both for Alpha, Bravo, and combined Alpha+Bravo options. Differences in flight height distribution (for option 1 of CRMs) and/or in bird densities (Options 1 and 2) between Alpha and Bravo lead to collision risk estimates that differ substantially between the two areas for kittiwake and gannet (Table 13, Appendix 8b of EIA report, volume 3). This variation in observed bird density across the Seagreen area does suggest the potential for assessed impacts to be mitigated through adjusting turbine layout as highlighted in the Ornithological technical appendix (Appendix 8a to EIA volume 3).

Use of site specific flight height data (Option 1) may better reflect collision risk within the development area, as SNH note in their response (Appendix A, paragraph 4). It is helpful that a study has been done to assess reliability of boat based observer flight height data (Appendix 1 to Ornithological Technical Report, Appendix 8a of EIA report volume 3) which has been published as a peer reviewed paper after the submission of Seagreen's application (see: Harwood et al. 2018. Journal of Field Ornithology. <https://doi.org/10.1111/jof.12269>). Optical range finders give quite accurate flight height estimates, thus can be used to validate boat based visual observations. This work indicates broad agreement between observer and optical range-finder based methods, however, it does suggest potential for quite large differences in estimates of the proportion of birds at collision risk height. Observer data were found to be biased towards lower (less precautionary) flight heights for gannets and towards slightly higher (more precautionary) flight height for kittiwake.

Collision mortality estimates for all the Forth and Tay developments, both for the 2014 consented designs (except for Seagreen) and the revised designs (2017/2018 applications) are summarised in tables 15-17 (Appendix 8b of EIA report, volume 3) including breakdowns for the breeding and non-breeding seasons. These tables apparently meet the Scoping Opinion requirement (section 9.4.10, MS-LOT 15th September 2017), and provide the required numbers for the Appropriate Assessment. However, the ornithology chapter (Chapter 8) uses a different approach including developments other than those of the Forth and Tay (e.g. Table 8.42 for gannet in combination impacts).

The Ornithology Chapter of the EIA (Chapter 8) includes discussion of the influence of different parameters and options used in collision risk models (paragraph 8.115 onwards). While the discussion is useful for context, the assessment should follow the options and parameters advised in the Scoping Opinion. There is not new agreed guidance on how different parameters should be updated, for example, as noted Skov et al. (2017) found lower flight speeds for kittiwake than those generally used in CRMs, however those numbers are somewhat below what has been found in other studies of kittiwake flight speed (see table 2 in Elliott et al. Movement Ecology (2014) <https://doi.org/10.1186/s40462-014-0017-2>) and originate from a single site.

There are discrepancies between the collision mortality estimates presented in the CRM appendix (Appendix 8a of EIA report volume 3) and those summarised in the EIA Ornithology Chapter (Chapter 8 of EIA). For example for the advised option 2 CRM outputs estimates for gannet during breeding are 356 in the CRM appendix (Table 16) but 280 in the Ornithology chapter (Table 8.29). Similarly for kittiwake the corresponding numbers are 180 in the CRM appendix (Table 15) while 142 is given in the Ornithology chapter (Table 8.30). These are just two examples. The developer should explain why these numbers differ.

Displacement

The Scoping Opinion (paragraphs 9.3.2-9.3.11) advised for displacement mortality to be estimated for puffin, guillemot, razorbill, and kittiwake. With the Matrix approach to be followed for assessment. If the SeabORD displacement tool were available that was also to be run for context (paragraph 9.3.5). SeabORD was not available at the time of the assessment, and results are thus not presented for this. If SeabORD were not available it was requested that the Searle et al. 2014 displacement modelling be used instead for context (paragraph 9.3.5). The Seagreen assessment has followed this guidance, following the Scoping Opinion guidance for using the matrix approach with agreed displacement and mortality rates, and discussion of the Searle et al. 2014 modelling is included.

Population Viability Analysis (PVA) and Habitats Regulation Appraisal (HRA)

The potential effect of the impacts assessed following displacement and CRM are modelled for a given SPA species population using population viability analysis (PVA). The PVA modelling along with assessed mortality estimates from collision and displacement are after apportioning to SPA populations considered in the HRA.

The PVA modelling approach follows the scoping advice and is described in detail (Appendix 8d to EIA volume 3). However, as SNH note in their consultation response (paragraph 6, appendix A of SNH consultation response), PVAs are ran in 50 bird increments rather than for the specific mortality levels assessed, though graphical presentation of the PVA modelling results does mean that it is possible to infer likely PVA values where mortality impacts fall between the increments used.

Marine Laboratory, PO Box 101, 375 Victoria Road,
Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland



PVA results in relation to assessed impacts and SPA populations are presented in the HRA chapter (chapter 16 or EIA) with tabulated results for combined Seagreen Alpha and Bravo displacement (Table 16.39) and collision (Table 16.41). As SNH note in their consultation response, the counterfactual of population size (CPS) estimates appear to correspond to those presented in the PVA analysis (Appendix 8d) and be in line with expectations, however the numbers presented for counter-factual of population growth rate (CPG) and the centile of unimpacted population equal to the 50th centile of the impacted population (centile) measures appear to be incorrect. For example Fowlsheugh kittiwake collision CPG is given as 1.00 and centile 0.63 (Table 16.41 in chapter 16 of EIA), but the Fowlsheugh PVA modelling results (section 4.8 of appendix 8d) suggest CPG of around 0.995 (from figure 39 in appendix 8d) and centile of 0.37 (from figure 38 in appendix 8d). CPG would be expected to be <1.0 given that additional mortality should reduce population growth rate, while centile values should be <0.50, as the centile of the unimpacted population would be expected to be less than the centile of the impacted population. This suggests that the PVA outputs have been incorrectly interpreted in the HRA chapter.

The CRM options taken forward to the PVA and presented in the HRA are using option 1 for gannet and kittiwake (e.g. table 16.40 of chapter 16 of EIA) which goes against the Scoping Opinion (advised option 2, see CRM section above). This along with the apparent misinterpretation of the PVA modelling results (above), and of not following the Scoping opinion on advised developments to be used for in combination assessment mean that it is not possible to confidently assess impacts on the SPA populations according to the requirements of the Scoping Opinion.

Commercial Fisheries

Considering the 2014 'originally consented Project' and the 2018 EIA of the Revised Design, the two OWFs are assessed as having minor combined and cumulative impacts on commercial fisheries. The revised design is based on fewer, larger, higher capacity wind turbines (total of 120 WTGs) and includes no changes in other key design parameters impacting on commercial fisheries (e.g. same location, total area 391 km²).

MSS has no objections to the information presented as part of Chapter 11 on commercial fisheries. Most potential impacts have been assessed as non-significant in EIA terms. Attention is required on the potential impacts of moderate significance on scallop dredgers through temporary loss or restricted access to traditional fishing grounds and displacement during the 3 years of construction (as per Table 2; Non-Technical Summary). Applicants have committed to additional mitigation measures in respect of local scallop dredgers during the construction of the project. Despite transmission assets having been licensed separately, it is pointed out that potential impacts on the Nephrops fisheries along the export cable still remain relevant to the overall project and mitigation will have to be incorporated as part of the Fisheries Management and Mitigation Plan (FMMP). Proposed mitigation measures will be refined and finalised as part of the FMMP as part of the Forth and Tay Commercial Fisheries Working Group (CFWG). MSS involvement to the FT CFWG is advised to support discussion on mitigation, and validation of assessment assumptions which affect impact significance calculations (in relation to Table 11.19).

Marine Fish Ecology

MSS has reviewed chapter 9, the Natural Fish and Shellfish Resource chapter and considered this, alongside the relevant appendices, with regard to marine fish. As agreed, this chapter focuses on assessing the potential effects of underwater noise from pile driving. Assessments utilise of the Popper (2014) criteria. This is welcomed alongside the precautionary assumption used within noise modelling that fish do not flee from piling noise, but remain stationary. The chapter also considers sedimentation and smothering from gravity base installation in relation to scallops and *Nephrops*. A technical note on acoustic particle motion is presented in Appendix 9B.

Overall, MSS is broadly content with the assessments presented. When assessing potential effects on herring, it is reported that there may be some spatial overlap between the potential area for behavioural impacts and the indicative herring spawning area to the North. Consideration of this alongside spawning maps produced as part of the ORJIP fish piling study shows that the area of overlap is not likely a significant spawning area.

Embedded mitigation measures are presented, as are consent conditions from the original consents received for the Seagreen Project in 2014. This is welcomed.

MSS were interested to read of anecdotal reports of shoals of mackerel remaining present in close proximity to pile driving operations during offshore wind farm construction programmes, with no apparent behavioural responses to noise. Any information in this regard would be welcomed, although not expected as part of the application process.

Marine Laboratory, PO Box 101, 375 Victoria Road,
Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland



Hopefully these comments are helpful to you. If you wish to discuss any matters further contact the MSS Renewables in-box at MS_Renewables@gov.scot

Yours sincerely

Paul Stainer

Marine Scotland Science

[Redacted]

Roberts R (Rhianna)

From: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Sent: 27 September 2018 11:37
To: 'Dominic Waller (DWA)'
Cc: MS LOT Seagreen Phase One Representations; MS Marine Renewables
Subject: RE: The optimised Seagreen Project EIA Report [Our Ref: SG09266]

Follow Up Flag: Follow up
Flag Status: Completed

Hi Dominic

NATS have reviewed the proposed variation and remain of the opinion that the development will degrade the performance of the en-route radar at Perwinnes, but that this degradation is potentially mitigatable. It is therefore remains the NATS position that the planning condition imposed on the original consent remains appropriate should the Scottish Ministers be minded to approve the proposed variation.

Kind regards

Yours Faithfully



NATS Safeguarding

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

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



From: Dominic Waller (DWA) [mailto:DWA@niras.com]
Sent: 21 September 2018 15:06
Subject: The optimised Seagreen Project EIA Report

Hello,

Seagreen have submitted their revised designs application to Marine Scotland. The Environmental Impact Assessment report is now available via this link: <http://marine.gov.scot/ml/seagreen-phase-1-offshore-windfarm-project>

You were previously contacted regarding receipt of a hard or electronic (CD) copy of the report. These are now being sent out and should be with you next week.

Best Regards

Dominic Waller
Environmental Consultant



St Giles Court, 24 Castle Street
CB3 0AJ, Cambridge
United Kingdom
www.nirasconsulting.co.uk
www.niras.com

M: +44 (0)7702812391
P: +44 (0)1223803736
E: dwa@niras.com

Follow us:  



The information contained in this email is confidential and intended solely for the individual (or entity) to whom the email is addressed. The use or disclosure of such information to third parties is prohibited. If you have received this email in error, please notify the sender by return email and immediately delete this message and any attachments herein.

Please note that neither NIRAS Consulting Ltd nor the sender accept any responsibility for viruses and it is your responsibility to scan any attachments.

If you are not the intended recipient, please notify our Help Desk at Email.Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

Northern Lighthouse Board

CAPTAIN PHILLIP DAY
DIRECTOR OF MARINE OPERATIONS

Your Ref: Email – Seagreen OWF – S. 36
Our Ref: AL/OPS/ML/O6_02_533

84 George Street
Edinburgh EH2 3DA
Switchboard: 0131 473 3100
Fax: 0131 220 2093
Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk



Marine Renewables
Marine Scotland – Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
ABERDEEN
AB11 9DB

17 October 2018

ELECTRICITY ACT 1989 (AS AMENDED)

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended)

The Electricity (Applications for Consent) Regulations 1990 (as amended)

MARINE (SCOTLAND) ACT 2010 and MARINE & COASTAL ACCESS ACT 2009

The Marine Works (Environmental Impact Assessment) Regulations 2017 (as amended)

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended)

We are in receipt of correspondence dated 21st September 2018 requesting comments regarding the amended application submitted by **Seagreen Wind Energy Ltd** to construct and operate the **Project Alpha Offshore Wind Farm** and the **Project Bravo Offshore Wind Farm**, located approximately 27km east of the Angus coastline. Northern Lighthouse Board have already provided comment on previous iterations of this application, and welcome the inclusion of these previous recommendations within this updated document. We have reiterated these requirements below.

We note that whilst the application does note the maximum number of turbines permitted in the Project Alpha and Bravo sites, both individually and cumulatively, it does not define the final number, size and location of turbines; as such our response is correspondingly general in nature.

Northern Lighthouse Board also note that the adjacent 'Neart na Gaoithe' and 'Inch Cape' Offshore Wind Farm proposals are similarly under development, and as such, the cumulative impacts of these sites will require further assessment and monitoring throughout all stages of development and operation. We welcome the applicant's continued involvement in the 'Forth & Tay Offshore Windfarm Developer's Group'.

the safety of all

to: ISO 9001:2000 · The International Safety Management Code (ISM) · OHSAS

We require the developer to establish a Navigational Safety Plan and a Lighting and Marking Plan. The latter should indicate proposed marking and lighting for the three phases of the wind farm life, namely the construction, operational and de-commissioning phases, to give the best possible indication to the mariner of the nature of the works being carried out.

The marking and lighting of the wind farm may require to be altered or amended to reflect future development of the adjacent 'Neart na Gaoithe' and 'Inch Cape' sites in order to form a continuation of a suitable marking of the area occupied by turbines and sub-stations. The licence holder will be expected co-operate fully in this matter.

Construction Phase

During the construction phase we would require that the site boundary shall be marked by a mixture of lit Cardinal Mark and lit Special Mark buoys, to be agreed with Northern Lighthouse Board. These buoys shall be a minimum of 3 metres in diameter at the waterline, have a focal plane of at least 3 metres above the waterline and be fitted with a topmark and radar reflector. The light range on these buoys shall be 5 Nautical Miles. AIS Aids to Navigation (AtoN) should be fitted to Cardinal Marks.

Operational Phase

In general terms, during the Operational Phase the windfarm site shall be marked and lit as per IALA Recommendation O-139 as follows:

- The tower of every wind generator should be painted yellow all round from the level of Highest Astronomical Tide (HAT) to 15 metres or the height of the Aid to Navigation, if fitted, whichever is greater.
- The structures designated as Significant Peripheral Structures (SPS) shall have lights visible from all directions in the horizontal plane. These lights should be synchronised to display a character of one yellow flash every 5 seconds, and should have a nominal range of not less than 5 nautical miles.
- All lights shall be placed not less than 6 metres and not more than 30 metres above Mean High Water Springs (MHWS)
- A sound signal shall be attached to Significant Peripheral Structures (SPS) as to be audible upon approaching the wind farm from any direction. The sound signal should be placed not less than 6 metres and not more than 30 metres above MHWS and should have a range of at least 2 nautical miles. The character shall be rhythmic blasts corresponding to Morse letter 'U' every 30 seconds. The minimum duration of the short blast shall be 0.75 seconds. The sound signal shall be operated when the meteorological visibility is two nautical miles or less. All sound signals should be synchronised.
- AIS Aids to Navigation (AtoN) should be fitted to a limited number of turbines, indicating the name and location of the turbine. A radio licence will be required from OFCOM to establish these AtoN.
- Each tower shall display identification panels with black letters or numbers one metre high on a yellow background visible in all directions. These panels shall be easily visible in daylight as well as at night, by the use of illumination or retro-reflecting material.

- All navigation lights should have an availability of not less than 99.8% (IALA Category 1) over a rolling three year period. Sound signals and AIS AtoN should have an availability of not less than 97% (IALA Category 3) over a rolling three year period.
- Where aviation anti-collision lights are installed, these should be synchronised lights flashing Morse character 'W'. A derogation from the requirement for fixed red lights should be obtained from the Civil Aviation Authority.
- It may also be necessary to mark the landfall site of the export cable routes. We would then require that Cable Marker Boards should be positioned as near as possible to the shoreline so as to mark the points at which the cable comes ashore. The Cable Marker Boards shall be diamond shaped, with dimensions 2.5 metres long and 1.5 metres wide, background painted yellow with the inscription 'Cables' painted horizontally in black. The structures shall be mounted at least 4 metres above ground level.

Decommissioning Phase

When the site reaches the end of its designed life and there is a need to enter into dialogue with stakeholders on decommissioning options, we would require that the Northern Lighthouse Board is consulted on the requirement for marking and lighting during this phase.

General

All navigational marking and lighting of the site or its associated marine infrastructure will require the Statutory Sanction of the Northern Lighthouse Board prior to deployment.

We would require that Notice(s) to Mariners, Radio Navigation Warning and publication in appropriate bulletins will be required stating the nature and timescale of any works carried out in the marine environment relating to this project.

We would require that the turbine installation locations, cable routes and cable landing points should be communicated to the United Kingdom Hydrographic Office in order that all relevant charts and publications can be correctly updated.

We note that a comprehensive contingency plan will be required, detailing the emergency response to all possible catastrophic failure and collision scenarios.

Please advise if we can be of any further assistance, or you require clarification of any of the above.

[Redacted]

Privacy Statement

NLB take seriously the protection of your privacy and confidentiality, and understand that you are entitled to know that your personal data will not be used for any purpose unintended by you. In line with our document retention schedules, copies of this correspondence will be retained on our live internal system in line with our legislative requirements and obligations, before being archived as required for conformance with our data Protection Policy and the associated Data Retention Schedules. Archived copies may be retained indefinitely in the public interest. Our Privacy Notice can be accessed via the following link: <https://www.nlb.org.uk/Terms/Privacy/>.

Sophie Humphries
Casework Manager
Marine Scotland Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

8th November 2018

Dear Ms Humphries,

APPLICATION FOR CONSENT TO CONSTRUCT AND OPERATE SEAGREEN'S ALPHA AND BRAVO OFFSHORE WINDFARM PROJECTS

Thank you for consulting RSPB Scotland on the application for Seagreen's 'optimised' offshore wind farm project. RSPB Scotland continue to support renewables, including offshore wind, and we are committed to help find solutions for the continued delivery of renewables alongside the required protection and restoration of Scotland's internationally and nationally important seabird populations.

Whilst we appreciate that the proposed new design for the above includes fewer turbines compared to the original consented project and therefore a reduction in the predicted impacts to seabirds is expected. Even with this predicted reduction the 'optimised' design will cause significant adverse impacts on seabird populations both in isolation (Alpha and/or Bravo sites in isolation) and in-combination with the other Firth of Forth offshore wind projects. The environmental assessment predicts a total of 1,500+ bird mortalities per year from the in-combination impacts of Seagreen and the other two new design Firth of Forth projects. Additionally, 2,200+ non-breeding season bird mortalities per year are predicted from other wind projects located in UK waters.

The scale of impact described above will have population level effects on a number of protected species. For some species, the scale of impact predicted would mean Scotland would fail to meet its international obligations to protect the natural environment. The worst-case scenario estimates for Seagreen Alpha and Bravo projects and the other Forth wind farms all operating for 25 years and using designs with the most severe predicted impacts on seabirds would see gannet and kittiwake populations at Forth Islands Special Protection Area (SPA) being 17% and 11% smaller respectively than they would otherwise be if the wind farms were not to be built. At Fowlsheugh SPA the population of kittiwake would be 17% smaller than it otherwise would be without the wind farms.

Scotland Headquarters
2 Lochside View
Edinburgh Park
Edinburgh
EH12 9DH

Tel: 0131 317 4100
Facebook: RSPBScotland
Twitter: @RSPBScotland
rspb.org.uk

The scale of these impacts would result in a significant adverse effect on the integrity of both SPAs.

In addition we note that both the new proposals at Inch Cape and Nearth na Gaoithe are applying for 50 year consents, resulting in an additional 25 years' worth of impacts on the same receptor species and populations.

RSPB Scotland disagree with the conclusions reached in the environmental assessment; consider it to be flawed; and that it fails to incorporate information and data that, if included in the assessment, would result in an increase in the level of predicted impacts. Given the impacts will have a significant adverse effect on integrity of relevant SPAs and given the shortcomings of the environmental assessment, **RSPB Scotland object to the Seagreen 'optimised' project, including either Alpha and/ or Bravo OR a combination of the two.**

We remain hugely disappointed that despite the scale of proposed development, and unprecedented size of predicted impacts, there have been no concrete commitments by the developers or the sector to deliver positive conservation measures that would benefit seabirds. This is an issue which requires acknowledgement and action by the sector and Government.

Further detail supporting our reasons for objection are provided in the attached annex.

Yours sincerely,

{SENT BY EMAIL}

Charles Nathan
Senior Conservation Planner

ANNEX: RSPB SCOTLAND DETAILED RESPONSE TO ALPHA & BRAVO OFFSHORE WIND FARM APPLICATION NOVEMBER 2018

1.0 Species Summary

Black-legged Kittiwake: Kittiwake was recently transferred from “Least Concern” to “Vulnerable” on the IUCN Red List of Threatened Species as the global population has seen a decline of 40% since the 1970’s. In Scotland, which hosts 70% of the UK’s breeding kittiwake, a long-term downward trend has been recorded over the last 30 years. 366 kittiwake deaths are predicted per year from the best-case scenario, which is the new designs for all three Firth of Forth offshore wind projects. An additional 1,726 non-breeding season mortalities are predicted from existing operating, consented but not yet built and in-planning offshore wind projects in UK waters.

- **Forth Islands SPA:** The latest kittiwake population count from 2016/17 showed that the population is approximately 45% smaller than that cited at designation in 1990. The latest assessed condition is ‘unfavourable declining.’ The predicted population in 25 years’ time, including impacts from the worst case scenario (this proposal + 2014 designs for other Firth of Forth projects and other UK offshore wind farms), is ~11% smaller than it otherwise would be without this development. This scale of impact on a population in unfavourable condition would amount to an adverse effect on integrity.
- **Fowlsheugh SPA:** The latest kittiwake population count from 2015 showed that the population is approximately 74% smaller than that cited at designation in 1992. Following dramatic declines over the past 20-30 years, the population has stabilised in the last two counts for 2012 and 2015. Despite the trends the latest assessed condition from 1999 is favourable maintained for this species. The predicted population in 25 years’ time, including impacts from the worst case scenario (this proposal + 2014 designs for other Firth of Forth projects and other UK offshore wind farms), is ~17% smaller in 25 years’ time than it otherwise would be without the this development. This scale of impact on a population in unfavourable condition amounts to an adverse effect on integrity.

Gannet: The in-combination assessment estimates that in 25 years’ time the gannet population at Firth of Forth SPA would be approximately 17% smaller than it would be without the wind farms. Calculated using worst case scenario (this proposal + 2014 designs for other Firth of Forth projects and other UK offshore wind farms). The best-case scenario, where all new designs are commissioned, would equate to 632 annual mortalities from the Firth of Forth projects. This would be in addition to a further 581 non-breeding season mortalities from other UK offshore wind farms. This level of in-combination mortality is significant and whilst the population is currently in favourable condition such losses should be considered an adverse effect on integrity of the SPA.

Auks: Displacement impacts from the Firth of Forth developments on guillemot and razorbill amount to a predicted 365 deaths per year. There would also be 177 puffin deaths during each breeding season. On a population level these additional deaths are estimated to cause the following effects:

- **Guillemot:**
Forth Islands SPA: population would be 4% smaller after 25 years operation.
Fowlsheugh SPA: population would be 2% smaller after 25 years operation.
- **Razorbill:**
Forth Islands SPA: population would be 8% smaller after 25 years operation.
Fowlsheugh SPA: population would be 6% smaller after 25 years operation.
- **Puffin:**
Forth Islands SPA: population would be 3% smaller after 25 years operation.

There is a lack of empirical data to inform the displacement assessment and the estimated effects should be treated with caution. All the auk populations at these SPAs are experiencing relatively stable or increasing trends, however the scale of impact in addition to the high degree of uncertainty in the assessment is concerning.

2.0 Other technical points

2.1 Habitats Regulations Appraisal – tests

The Seagreen report to inform the HRA is fundamentally flawed and its conclusions should not be relied upon when determining whether it is possible to conclude that there will not be an adverse effect on any Special Protection Area. The ‘tests’ that are applied to inform the Appropriate Assessment are contradictory. On the topic of PVAs the HRA states:

‘The inability to add in real-world restrictions such as the limits on colony size imposed by the availability of viable nesting sites or food can result in population change trajectories calculating unrealistic final population figures.....’ (page 16-84, para 16.365).

The HRA goes on to state that:

‘...As the model produces simple trajectories, the difference between the populations is compounded each year in an unrealistic manner...’

concluding that:

‘the important factors in interpretation of PVA are primarily the relativities (differences) between the predicted growth rate with and without an impact (counterfactual of population growth rate) and the differences between the predicted end population size with and without an impact (counterfactual of end population size).’

RSPB Scotland acknowledge the limitations of PVA modelling and support the focus on counterfactual metrics to interpret the effects on populations. However, the ‘test’ for being able to conclude that there will not be an adverse effect on integrity of the SPAs relies solely on the PVA model population trajectories, specifically focusing only on the end population figures after 25 years and how these compare to the SPA citation populations:

‘For the purposes of this HRA, the population of a bird interest feature scoped into the HRA that is already in favourable condition is considered to remain a viable component of a (p)SPA if the PVA model outputs indicate that the impacted population will be maintained at or above the population at the time of designation. For populations that have already declined, are declining, and/or are in unfavourable condition, the test is whether the PVA model indicates that the predicted impacts will prevent the population from being restored to favourable condition.’ (page 16-20, section 16.81)

This ‘test’ contradicts the previous statements by dismissing the importance of considering the counterfactual metrics when interpreting impacts, whilst also suggesting additional adverse pressures arising from a new project are acceptable despite an internationally protected site being in unfavourable condition and failing its conservation objectives. The test is based on whether the projected change will result in the future impacted population being lower than the cited population and requires a prediction of absolute population size. This approach entirely misses the rationale behind the use of the counterfactual metric. It is scientifically impossible to make an *absolute* prediction of a population size 25 years into the future, hence why it is necessary to take the counterfactual approach which makes a *relative* prediction, which is scientifically robust, as highlighted in Green *et al.*, (2014) and Cook and Robinson (2017).

Furthermore the ‘test’ refers to the population size at time of designation without any consideration of whether, whilst still being sufficient to qualify for designation, those populations were favourable. The citation population of an SPA is the qualifying level for designation, which has been determined to expressly indicate the natural heritage importance of that site and the need to protect it for those species. Any growth of a population above the citation should not be regarded as a ‘harvestable’ surplus. In many circumstances it is an indication of the site (and its protection) fulfilling its requirements and enabling the species to be restored and within that area to reach favourable conservation status and/or the increasing conservation importance of the site since its designation. To consider this additional population as expendable would be contrary to conservation objectives and the conservation measures requirements of the Birds and Habitats Directives including the designation of SPAs.

2.2 Baseline Data

Additional survey data was gathered during 2017, which we welcome, and high densities of birds were observed during the July 2017 count. The assessment suggests these observed numbers are ‘atypical’ and for these reasons the July 2017 records are not included in the in-combination assessment for collision risk. Similarly, for the assessment of displacement two outputs are presented, one with and one without inclusion of this data set.

There's no justification for concluding these high densities are an anomaly and the full data-set should be included in the environmental assessment, including the in-combination assessment.

Seabird at sea distributions are highly variable and collectively there is insufficient data to determine whether observed at sea distributions of seabirds is normal or abnormal. Site surveys are undertaken once a month over a two-day period each time, which represents approximately 7% of available survey days per year. To dismiss counts for not being representative against such a small data-set is unfounded and not suitably precautionary.

We would also highlight that the original survey data are more than 5 years old and that this more recent survey may therefore be a more accurate characterisation of the birds now present at the site.

2.3 Assumptions and Precaution

The EIA and HRA provides a list of parameters where new and more detailed data is increasing our understanding of the potential risk of impacts to seabirds (see page 8-30, section 8.131 onwards). Parameters discussed in the assessment include flight speed, nocturnal activity and avoidance rates. RSPB Scotland is keen to support the scientific development and understanding of the parameters to reduce uncertainties of impact assessment. However, at this stage, unless new scientific literature or statutory agency advice exists, we cannot support individual project assessments diverting from the use of agreed parameters that are set out at the scoping stage. This issue is especially relevant where multiple projects are applying for licenses in parallel and the need for consistency of approach is paramount to enable a comprehensive appraisal of the potential in-combination impacts.

On the basis of the above, we do not accept the repeated statements throughout the assessment that suggest the methods are overly precautionary. Nor do we accept the proposal to consider assessment outputs that utilise alternative, unverified methods and parameters, particularly when considering the in-combination assessment with the other Firth of Forth projects.

Roberts R (Rhianna)

From: Gail Joyce <Gail.Joyce@ryascotland.org.uk>
Sent: 23 October 2018 09:55
To: MS LOT Seagreen Phase One Representations
Subject: FW: The optimised Seagreen Project EIA Report

Follow Up Flag: Follow up
Flag Status: Completed

Hi Rhiannon,
Pauline asked me to forward any reply from Graham Russell, please see below.
She is back from leave next Monday if there is anything else you need.

Kind regards
Gail

From: Graham Russell
Sent: 21 October 2018 22:20
To: Pauline McGrow <Pauline.McGrow@ryascotland.org.uk>
Subject: Re: The optimised Seagreen Project EIA Report

Pauline, I went back to our original response and our comments were in relation to the alignment of the turbines. However, this is no longer an issue and some other points that are no longer relevant. I guess that our response should have been 'no comment' but the wording was to indicate that we had responded the first time round.

best wishes,
Graham
Dr G Russell FRMetS MCIEEM
Planning and Environment Officer
RYA Scotland

From: Pauline McGrow
Sent: 19 October 2018 17:10
To: Graham Russell
Subject: RE: The optimised Seagreen Project EIA Report

Hi Graham,

I sent off the "that we had no additional comments" to make but Rhiannon from Marine Scotland called me back this morning to ask me what the original comments were? Can you advise and I will go back to her?

Many thanks

Kind Regards

Pauline

Pauline McGrow
Senior Administrator
Tel: 0131 317 4611

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



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

Protecting your personal information is important to us, view our full Privacy Statement [here](#)



From: Graham Russell
Sent: 17 October 2018 15:10
To: Pauline McGrow <Pauline.McGrow@ryascotland.org.uk>
Cc: Gillian.Kyle@sportscotland.org.uk
Subject: Re: The optimised Seagreen Project EIA Report

Pauline, thanks for the corrected CD. I have now been through the proposal, which basically means bigger but fewer turbines, and our response should be 'no additional comments'.

Thanks,
Graham

Dr G Russell FRMetS MCIEEM
Planning and Environment Officer
RYA Scotland

From: Pauline McGrow
Sent: 04 October 2018 10:39
To: Graham Russell
Subject: FW: The optimised Seagreen Project EIA Report

Hi Graham,

Please see below notification from Seagreen about an error with the CD I gave you on Tuesday! I will post the revised one out once I receive into the office.

Kind Regards

Pauline

Pauline McGrow
Senior Administrator
Tel: 0131 317 4611

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



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

Protecting your personal information is important to us, view our full Privacy Statement [here](#)



From: Dominic Waller (DWA) [<mailto:DWA@niras.com>]
Sent: 04 October 2018 09:47
Cc: David Cook (DCK) <DCK@niras.com>; Brockie, Nick <nick.brockie@sse.com>
Subject: The optimised Seagreen Project EIA Report

Hello,

You will recently have received by post a CD containing the Environmental Impact Assessment (EIA) Report for the Optimised Seagreen Offshore Wind Farm Project.

Due to a CD production error Volume II (containing the EIA Report figures) and Volume III (containing the EIA Report appendices) were omitted from the CD. Therefore, we have produced a replacement CD, which contains each of the three EIA Report Volumes as originally intended, and posted this out to you on 3rd October. You should receive the replacement CD within the next two days.

We would be very grateful if you could respond to this email to confirm receipt of the replacement CD. If you have any queries or concerns please contact us, by responding to this email or by phoning 01223 803750.

In the interim should you wish to view Volumes II and III of the EIA Report, they are available online at:
<https://www.seagreenwindenergy.com/eia-report.asp>

We apologise for this error and hope it has not inconvenienced you.

Please note that any representations in respect of the consent applications for the optimised Seagreen Project should be made in writing by email to: Seagreen.Representations@gov.scot or by post to The Scottish Government, Marine Scotland Licensing Operations Team, Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

Best Regards

Dominic Waller
Environmental Consultant



St Giles Court, 24 Castle Street
CB3 0AJ, Cambridge
United Kingdom
www.nirasconsulting.co.uk
www.niras.com

M: +44 (0)7702 812391
P: +44 (0)1223 803750
E: dwa@niras.com

Follow us:  



The information contained in this email is confidential and intended solely for the individual (or entity) to whom the email is addressed. The use or disclosure of such information to third parties is prohibited. If you have received this email in error, please notify the sender by return email and immediately delete this message and any attachments herein.

Please note that neither NIRAS Consulting Ltd nor the sender accept any responsibility for viruses and it is your responsibility to scan any attachments.

This email has been scanned for spam & viruses. If you believe this email should have been stopped by our filters, [click here](#) to report it.

Royal Yachting Association Scotland is a company limited by guarantee and is registered in Scotland. Registered business number SC219439. Registered business address is Caledonia House, 1 Redheughs Rigg, South Gyle, Edinburgh, EH12 9DQ. VAT Registration number 345 0456 69.

Email Disclaimer
<http://www.rya.org.uk/legal-info/Pages/email-disclaimer.aspx>

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

This email has been received from an external party and has been swept for the presence of computer

viruses.

CONSULTATION RESPONSE TO PLANNING OR RELATED APPLICATION



Comments provided by	Ecology Officer Name and Post:	Contact e-mail/number:
	Dr Andy Tharme, Ecology Officer	atharme@scotborders.gov.uk T: 01835-826514
Date of reply	18 January 2019	
Planning Application Reference	18/01345/S36	Case Officer: Craig Miller
Proposed Development	Off shore wind farm comprising of up to 70 wind turbines together with associated interconnecting cabling works	
Site Location	Sea Location 27km East Of Angus Coastline	
<p><i>The following observations represent the comments of the consultee on the submitted application as they relate to the area of expertise of that consultee. A decision on the application can only be made after consideration of all relevant information, consultations and material considerations.</i></p>		
Background and Site description	<p>The proposal is for an optimised scheme with a maximum of 70 wind turbines in each of Project Alpha and Project Bravo, with a maximum of 120 wind turbines in total across both sites.</p> <p>An earlier, consented proposal included up to 75 wind turbines in both Project Alpha and Project Bravo, with a maximum of 150 wind turbines in total across both sites and up to 6 meteorological masts.</p>	
Key Issues	<ul style="list-style-type: none"> Potential impacts on Natura Sites (Berwickshire and North Northumberland Coast SAC and St Abb's Head to Fast Castle SPA) 	
Assessment	<p>Relevant LDP policy is <i>EP1: International Nature Conservation Sites and Protected Species</i>.</p> <p>Development Proposals which will have a likely significant effect on a designated site or proposed Natura site are only permissible where:</p> <ol style="list-style-type: none"> An appropriate assessment has demonstrated that it will not adversely affect the integrity of the site, or There are no alternative solutions, and There are imperative reasons of overriding public interest including those of a social or economic nature <p>The only likely significant ecological receptors in Scottish Borders that may be affected by the proposal are the Berwickshire and North Northumberland Coast SAC (<i>qualifying interest grey seals, large shallow inlets and bays (Shallow inlets and bays), mudflats and sandflats not covered by seawater at low tide (Intertidal mudflats and sandflats) submerged or partially submerged sea caves (Sea caves), reefs</i>) and St Abb's Head to Fast Castle SPA (<i>qualifying interest seabird assemblage razorbill, common guillemot, black-legged kittiwake, herring gull and European shag</i>).</p> <p>Information has been provided to inform a Habitat Regulations Appraisal including an Appropriate Assessment (Chapter 16).</p>	

Marine Mammals

Impacts on grey seals may arise through displacement and permanent threshold shift (auditory injury to grey seals) from piling during construction. It is predicted in Chapter 16 *Habitats Regulation Appraisal* that impacts on grey seals as a qualifying interest of the Berwickshire and North Northumberland SAC, either alone or in combination with other proposals (Forth and Tay projects), will not cause significant injury or disturbance to grey seals, ensuring the integrity of the site is not adversely affected. Impacts on habitats supporting grey seal were scoped out of the assessment.

SNH (2nd November 2019) advise that there will be no adverse effect on site integrity for grey seals as qualifying interest of the Berwickshire and North Northumberland Coast SAC subject to conditions relating to construction including piling.

Ornithology

The Ornithological report focusses on the assessment for the five relevant breeding seabird colony SPAs on the Conservation Objective to maintain, in the long term, the “population of the species as a viable component of the site”. The Competent Authority will be required to carry out the Appropriate Assessment.

I note that SNH (2nd November 2019) object to the proposal. SNH have concerns regarding to the methodology used in the ornithological impact assessment and at this stage are unable to provide advice for the Seagreen proposal on its own. SNH require further clarification on the Ornithological Impact Assessment Methodology.

SNH’s preliminary conclusion with regard to in combination effects with other North Sea wind farms is that the proposal is likely to have an adverse effect on the site integrity for black-legged kittiwake and northern gannet as qualifying interest of the Forth Islands SPA, and an adverse effect on the site integrity for black-legged kittiwake as qualifying interest of Fowlsheugh SPA.

SNH advise that the proposal could have an adverse effect on site integrity for black-legged kittiwake as a qualifying interest of St Abb’s Head to Fast Castle SPA. The key impact is collision risk.

SNH are unable to provide formal advice regarding black-legged kittiwake at St Abb’s Head to Fast Castle SPA as to whether Seagreen in combination impacts for kittiwake collision will not have an adverse effect on site integrity at the St Abb’s Head to Fast Castle SPA. Population Viability Analysis (PVA) outputs for this species as a qualifying interest of this SPA have not been presented in the EIA or HRA. SNH base their provisional conclusion on information presented showing Seagreen in combination with UK wind farms indicate an increase in baseline mortality >1%.

SNH advise that there will be no adverse effect on the site integrity for herring gull, razorbill and common guillemot as qualifying interest of St Abb’s Head to Fast Castle SPA from Seagreen in combination with other wind farm proposals.

I note that the St Abb’s Head to Fast Castle SPA black-legged kittiwake population is in steep decline (the NNR component of the population was down to 3,244 apparently occupied nests, the second lowest count on record). The SPA citation

	<p>population is 21,170 pairs (at designation in 1997 or where amended by 2001 SPA review.)</p> <p>I am aware that further updated proposals for Neart Na Gaiothe and Inch Cape are being consulted on.</p> <p>There is uncertainty as to whether there is a significant adverse impact on the integrity of the St Abb's Head to Fast Castle SPA for its qualifying interest (black-legged kittiwake only). SNH are adopting the precautionary principle with regard to impacts on St Abb's Head to Fast Castle SPA.</p> <p>I am content that the statutory agency is addressing this matter which will need to be considered by the Competent Authority (Scottish Ministers).</p>			
Recommendation	<input type="checkbox"/> Object	<input checked="" type="checkbox"/> Do not object	<input type="checkbox"/> Do not object, subject to conditions	<input type="checkbox"/> Further information required
Recommended Conditions	<ul style="list-style-type: none"> • Condition for a Piling Strategy including mitigation measures to ensure sequential pile driving is avoided in relation to other in-combination proposals. • Condition to enable mitigation (e.g. curtailment) to address any significant adverse impacts on seabird populations at St Abb's Head to Fast Castle SPA that may arise that are identified through monitoring. 			
Recommended Informatives				

Lees E (Emma)

From: Miller, Craig <CMiller@scotborders.gov.uk>
Sent: 24 January 2019 11:18
To: Humphries S (Sophie)
Subject: Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen - Alpha: Bravo Wind Turbine Arrays 18/01345/S36
Attachments: 1801345S36.docx

Sophie

I refer to the above S36 application and your consultation to this Authority of 21 September 2018. I am not aware that Scottish Borders Council had been consulted on the original scheme but, in any case, have since raised no objections to proposals and amendments relating to wind turbine arrays at Inch Cape and Nearth Na Gaoith which are closer to the administrative boundary of the Scottish Borders than the Seagreen proposal. In raising no objections on those schemes, the Council had accepted that tip heights were increasing but offset by fewer turbines. It is noted this is also the case with the Alpha and Bravo proposals, where a 70m tip height increase is offset by a reduction of at least 30 turbines. We remain of the opinion that this amended array is still both so distant from the Borders coastline that such an increase would be unlikely to create any significant effects and that those effects have been offset by the reduction in turbine numbers from the 150 originally approved. We consequently raise no objections to this revised design of development.

For your information, I also attach comment from our Ecology Officer who recognises that there may be impacts on the St Abb's Head to Fast Castle SPA in relation to black-legged kittiwake but that the statutory agency (SNH) are addressing this matter in their response on the S36. Conditions are also recommended as stated in his response,

Regards

Craig

Craig Miller
Principal Planning Officer
Regulatory Services
Scottish Borders Council
Tel: 01835 825029
E-mail : cmiller@scotborders.gov.uk

[Web](#) | [Twitter](#) | [Facebook](#) | [Flickr](#) | [YouTube](#)

How are you playing [#yourpart](#) to help us keep the Borders thriving?





Click here to make your planning application and building standards submissions through the Scottish Government's online portal



This email and any files transmitted with it are privileged, confidential and subject to copyright. Any unauthorised use or disclosure of any part of this email is prohibited. If you are not the intended recipient please inform the sender immediately; you should then delete the email and remove any copies from your system. The views or opinions expressed in this communication may not necessarily be those of Scottish Borders Council.

Please be advised that Scottish Borders Council's incoming and outgoing GCSX email is subject to regular monitoring and any email may require to be disclosed by the Council under the provisions of the Freedom of Information (Scotland) Act 2002.

This email has been received from an external party and has been swept for the presence of computer viruses.

Our ref: PCS/161357
Your ref:

If telephoning ask for:
Paul Lewis

24 October 2018

Sophie Humphries
Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

By email only to: Sophie.Humphries@gov.scot

Dear Ms Humphries

The Electricity Act 1989

Planning application:

**Applications for consent under Section 36 of The Electricity Act 1989 (As Amended)
Seagreen, Alpha and Bravo**

Thank you for your consultation which SEPA received on 21 September 2018.

Advice for Marine Scotland

The original design (150 WTG) is being amended (120 WTG), with no changes to proposed transmission to shore connection.

The location of the site is such that the closest point lies approximately 27km offshore, i.e. beyond the 12 nm limit and certainly beyond the normal regulatory limit of SEPA. No issue arises on which we have any grounds for comment.

We have commented on the proposal for onshore connection which does raise issues of relevance to SEPA's remit and I attach our response of 08 September 2016 (our reference PCS/148316) below. Should the proposals for onshore connection be altered we may have comments and should be consulted.

If you have any queries relating to this letter, please contact me by telephone on 0131 273 7334 or e-mail at planning.se@sepa.org.uk

Yours sincerely

Paul Lewis
Senior Planning Officer
Planning Service

Disclaimer

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

Our ref: PCS/148316
Your ref: 16/00520/EIAN

Murray Agnew
Angus Council
Planning & Transport
County Buildings
Market Street
Forfar
DD8 3LG

If telephoning ask for:
Alex Candlish

8 September 2016

By email only to: PLNProcessing@angus.gov.uk

Dear Mr Agnew

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000
Town and Country Planning (Scotland) Acts
Planning application: 16/00520/EIAN
Formation of onshore electrical transmission infrastructure between Carnoustie and Tealing to service Seagreen Alpha and Seagreen Bravo Phase 1 Offshore Wind Farms, comprising of 19km of underground electricity transmission cables, a new substation/convertor station at Tealing and formation of associated vehicular access and temporary and permanent ancillary works.
Land Between Mean Low Water Mark At Carnoustie Beach and Tealing Substation Tealing Angus

Thank you for your consultation email which SEPA received on 4 August 2016.

A revised ES has been prepared in support of an application for Planning Permission in Principle for this development. A previous application for PPP was granted in 2013. A further application for amendment of a small section of the approved cable route was granted in February 2015.

The Project seeking consent is a combination of the original and amended PPP applications. The amendment to the cable route is no longer required, so this is not included in the new application.

This response should be read in conjunction with previous responses dated July 2013 (PCS127089) to planning application 13/00496/PPPM and to an extent our response dated November 2014 (PCS/136939) to planning application 14/00918/PPPN, particularly in relation to flood risk and the proposals requirements under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR).

We ask that the planning **conditions** in Sections 1.3, 2.4 and 2.9 be attached to the consent. If any of these are not applied, then please consider this representation as an **objection**.

In the event that the planning authority proposes to grant planning permission contrary to our advice in relation to flood risk the application must be notified to the Scottish Ministers as per The Town and Country Planning (Notification of Applications) (Scotland) Direction 2009.

We strongly recommend that Angus Council's Flood Prevention Officer comments on the proposals for underground cable crossings in sensitive areas around Carnousite including in the vicinity of the Flood Prevention Scheme and especially at Dalmore where Waterybutts ditch has caused issues of flooding in the past.

It should also be noted that our flood risk information requests for the proposed watercourse realignment and construction of new swale, planning application reference 16/00646/FULL, may have the potential to impact the flood risk information provided for this proposal. If this is the case then SEPA would be required to be reconsulted.

Notwithstanding our position we would expect Angus Council to undertake their responsibilities as the Flood Prevention Authority.

Please also note the advice provided below.

Advice for the planning authority

1. Flood risk

- 1.1 We have reviewed the information provided in this consultation and it is noted that the application site (or parts thereof) lies within the medium likelihood (0.5% annual probability or 1 in 200 year) flood extent of the SEPA Flood Map, and may therefore be at medium to high risk of flooding from both fluvial and pluvial sources.
- 1.2 The FRA dated April 2013 highlights that there were some early discussions regarding flood protection works to protect the existing substation. For information a planning application has recently been submitted, 16/00646/FULL which proposes to re align the watercourse and create a two stage channel. During the detailed design stage, the flood risk associated with the 16/00520/EIAN application may have to be revised if the associated risk of flooding is reduced in this area. Furthermore, if any additional modelling is undertaken, they should investigate the impacts to the 0.5% annual probability flood event which is deemed the functional floodplain within SPP. We do acknowledge that the 1 in 100 year and 1000 year have been investigated.
- 1.3 In summary we have no objection to the proposed development on flood risk grounds, subject to the following planning **condition** being imposed:
 - Existing ground levels within the functional floodplain are restored following the installation of any works associated with the underground cabling installation.

1.4 The FRA shows an increase in flood risk to neighbouring areas and generally we wouldn't support this. It is SEPA's understanding that discussions with landowners regarding flood risk took place in 2013. At no point within this submission does it state that the increase in flood risk has been agreed and accepted. If the increase in flood risk is not accepted by the landowners, then we couldn't support the development as it increases flood risk to someone else's property. If no agreement is reached then SEPA would require to be reconsulted on the proposal.

2. Construction Environmental Management Plan (CEMP) and pollution prevention

2.1 We would highlight that the production of a construction environmental management plan (CEMP) is essential. Before compilation of the CEMP, it is essential that baseline information is available for all environmental receptors on the site considered to be "at risk" from the development. It is important to identify ephemeral ditches and field drains that tend only to flow in wetter conditions and which may easily be overlooked during site survey work.

2.2 The effectiveness of any proposed mitigation measures must be assessed through regular environmental monitoring on site and comparison with conditions on site prior to any works commencing. We would expect to see the inclusion of monitoring proposals within the CEMP.

2.3 Having a CEMP will only be effective if it is fully implemented by all operators on site. When work commences, it is essential that there is a named person responsible for the CEMP who has the necessary expertise and authority to control works on site. A named responsible person should always be on site whenever works are in progress.

2.4 Some of proposed mitigation measures set out within the Environmental Statement (ES) relate to works which may be regulated by us. However, many of the works will not be regulated by us and need to be covered by condition. Therefore, we **require** a planning **condition** to be attached ensuring that no development can commence until a full site specific Construction Environmental Management Plan (CEMP) incorporating a Construction Method Statement (CMS) and a Site Waste Management Plan (SWMP) is submitted at least two months prior to commencement of development and approved by the planning authority, in consultation with SEPA and other agencies such as SNH.

2.5 The environmental mitigation measures and techniques outlined in our Pollution Prevention Guidelines should be incorporated into the CMS. This document should be agreed through discussion with us and it is imperative that it is seen as a 'live' document and is used to advise and educate all site operatives including sub-contractors working at the wind farm site. We would stress that the watercourses in the vicinity of the site are small upland streams and are sensitive ecosystems and form headwaters for larger watercourses and it is crucial that all necessary mitigation measures are taken to preserve their good status.

2.6 Additionally, we recommend the use of an accident management plan during construction which takes account of best practice, statutory requirements and sensitive areas in providing a site spill response procedure, emergency contact details and equipment inventories and their location.

Impacts on the water environment

- 2.7 We request that the applicant contacts SEPA's local Operations team to confirm the final details of each crossing to ensure accuracy in the plans as site inspection of the ground and location may lead to variation to the plans. Particularly in relation to the Ford that is mentioned as a crossing point. The proposal is close to the SSSI and the applicant should engage with SNH to ensure they comply with their instruction to protect habitat and species associated with the SSSI. Transition Joint bays do not have any CAR implications as long as they are sited well away from the watercourses involved where damage could be caused to the watercourse banks.
- 2.8 We note from Appendix 11.1 Paragraph 2.1 that the cable route will pass through shore defences to which SEPA does not control and Marine Scotland should be approached for any licences that may be required. Appendix 11.1 Paragraph 4 Table 4.1 appears to refer to 2014 classification data. We recommend that the applicant uses the most up to date data where possible.
- 2.9 The construction of a new substation at Tealing will require a sustainable urban drainage scheme (SUDS) which will be required during the construction phase and permanent treatment will need to be in place for the new structure and hard standing area. Therefore we request that a **condition** is attached to any consent requiring detailing of the SUDS scheme for the substation to be submitted prior to its construction for the approval of SEPA. This information can be incorporated into any CEMP.

Waste Management

- 2.10 The waste management proposals are, in principle, acceptable for the waste types being created and the operations taking place.
- 2.11 We note that no peat issues have been identified and it is unlikely, due to the location of the site, that very little peat is present.

3. Groundwater Dependent Terrestrial Ecosystems

- 3.1 Section 3.2.12 of the Extended Phase 1 Habitat Report states that the only potential GWDTE identified in the survey area was marshy grassland (M23), which is potentially highly groundwater dependent. Section 9.95 of the Environmental Statement Chapter 9 (Ecology and Ornithology) explains that the M23 is located 75m outwith the Application Site and forms part of an agricultural field separated from the Project by arable land, woodland and a field drain. Therefore, construction activities will not directly or indirectly affect this habitat. Table 9.11 provides the additional information that this habitat is species-poor and subject to grazing by livestock, therefore is considered of negligible ecological importance. Nonetheless, section 9.165 of Chapter 9 (Embedded Mitigation Measures) states that, to minimise of impacts to the marshy grassland, works should not take place within a 250metres buffer, if possible, with micro-siting of the cable route to avoid these areas.
- 3.2 We are satisfied with the above, and welcome the fact that the updated Extended Phase 1 Habitat Survey has been carried out.
- 3.3 In the original application, GWDTE - SD17b was found, however this does not appear to be mentioned in the updated report. If it is present, the original comments still apply which were:

GWDTE - SD17b was found near Arbroath and mentioned in Appendix 9.5 – 2.2.3 as ‘indicated although it is very poorly represented and limited in extent’. This habitat was not shown on the NVC map. If possible this area of habitat should be avoided by micro-siting. Mitigation measures to maintain the functionality of the wetland and prevent the structures from becoming preferential conduits of water should be applied.

- 3.4 All previous comments from our original response still apply. We have no additional concerns on the basis of the new information provided.

Detailed advice for the applicant

4. Flood risk

- 4.1 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river corridors and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland. For further information please visit <http://www.sepa.org.uk/environment/water/flooding/flood-maps/>
- 4.2 We refer the applicant to the document entitled: “Technical Flood Risk Guidance for Stakeholders”. This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>.
- 4.3 Please note that this document should be read in conjunction Policy 41 (Part 2). Our Flood Risk Assessment checklist should be completed and attached within the front cover of any flood risk assessments issued in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist our review process. It can be downloaded from <http://www.sepa.org.uk/media/159170/flood-risk-assessment-checklist.xls>.
- 4.4 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.
- 4.5 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Angus Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: “Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities” outlines the transitional changes to the basis of our advice in line with the phases of this legislation and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>.

5. CEMP and pollution prevention

- 5.1 Please note that we have requested that a planning condition is attached to any consent requiring the submission of a CEMP to be submitted at least two months prior to the proposed commencement of development. The CEMP should incorporate detailed pollution prevention and mitigation measures for all construction elements potentially capable of giving rise to pollution during all phases of construction, reinstatement after construction and final site decommissioning. Full details of what should be included in the EMP can be found on our website.
- 5.2 The applicant needs to ensure that they are following the principles that were agreed between SEPA and SSE in 12 March 2013, in relation to site drainage for the new substation. For the avoidance of doubt the principles that were agreed as follows and should be outlined or addressed in any CEMP:
- (1) An alarm will be fitted to each transformer to indicate any significant and/or rapid loss of oil;
 - (2) A reinforced concrete bund designed to accommodate a minimum of 110% of oil in the transformer (bund will be designed to comply with SEPA's PPG2 available on our website) will be provided;
 - (3) The bund wall will be designed to include a small weir immediately above an external gully so that in the event of an oil contaminated water over topping the bund wall, it will be directed via the gully directly (on the surface and visible for all to see) into the Full Retention Separator;
 - (4) The bund, weir, and all surfaces used to transport the oil to the interceptor will be impermeable to oil;
 - (5) There should be two oil detection bund pumps located within each bund. These pumps would allow rainwater to be pumped out of the bund, therefore maintaining maximum capacity of the bund at all times during normal usage. Each of these pumps will be fitted with sensors that ensure that they do not pump oil if present;
 - (6) The oil detection bund pumps must also be fitted with an alarm (each). Should the pumps fail, the alarm should notify SSE immediately of the failure by telemetry;
 - (7) The pump unit must be set to pump out only water and leave any hydrocarbons, including emulsified hydrocarbons, in the bunded area;
 - (8) An impermeable roadway with raised kerbs and ramps will be used to protect the delivery area during transfer of oil to the transformer. This area will act as a delivery storage area. This discharge from this area must also drain via an interceptor;
 - (9) Should spill occur during transfer, the oil should automatically shut off, thereby preventing a discharge;
 - (10) The separator will be sized in line with manufacturer's guidelines to cope sufficiently with the flows produced by both pumps and that of the surface water originating from the loaded area; and
 - (11) A swale or similar should be used to transfer the separators discharge to the water environment as this will provide an additional opportunity for a visual inspection prior to the discharge leaving the site

Regulatory advice for the applicant

6. Regulatory requirements

- 6.1 Proposed engineering works within the water environment will require authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012. Consider if other environmental licences may be required for any installations or processes.
- 6.2 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory team in your local SEPA office at:

SEPA Arbroath, 62 High Street, Arbroath, Angus, DD11 1AW, Tel – 01241 874370

If you have any queries relating to this letter, please contact me by telephone on 0131 273 7333 or e-mail at planning.se@sepa.org.uk

Yours sincerely

Alex Candlish
Planning Officer
Planning Service

ECopy to: David Scott, SSE Renewables, david.scott@sse.com.

Disclaimer

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

Lees E (Emma)

From: Lewis, Paul <paul.lewis@sepa.org.uk>
Sent: 03 September 2019 16:42
To: Lees E (Emma)
Cc: Wilson J (Jessica)
Subject: FW: Application for consent under Section 36 of the Electricity Act 1989 - Seagreen Alpha and Bravo Offshore Wind Farms
Attachments: PCS161357Response.doc; ATT00002.txt

Dear Emma

Thank you for confirming that Seagreen intends to retain their current offshore transmission asset marine licence for offshore cable landfall. We have no further comments on the aspect of this development on which I sent you comments (our reference PCS/161357) on 24 October 2019.

Kind regards,

Paul Lewis

Senior Planning Officer

Planning Service, SEPA, Silvan House, 231 Corstorphine Road, Edinburgh, EH12 7AT

Direct line: 0131 273 7334

Email: paul.lewis@sepa.org.uk

From: Emma.Lees@gov.scot <Emma.Lees@gov.scot>
Sent: 03 September 2019 15:55
To: Lewis, Paul <paul.lewis@sepa.org.uk>
Cc: jessica.wilson@gov.scot; Planning South East <Planning.SE@SEPA.org.uk>
Subject: Application for consent under Section 36 of the Electricity Act 1989 - Seagreen Alpha and Bravo Offshore Wind Farms

Dear Paul,

I refer to the attached consultation response received on 24 October 2018 in respect of the applications for consent for the Seagreen Alpha and Bravo Offshore Wind Farms.

I would wish to acknowledge receipt of your response and confirm to you that the current applications for consent are in relation to the aspect of the offshore wind farms only and that Seagreen intend to retain their current offshore transmission asset marine licence consented in 2014 which deals with the onshore aspects of cable landfall.

Should you have any queries or concerns, please do not hesitate to contact.

Kind regards,

Emma

Emma Lees | Marine Licensing Casework Officer
Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB
Direct Line: +44 (0)131 244 1734 | General Queries: +44 (0)300 244 5046
Email: emma.lees@gov.scot | Website: <http://www.gov.scot/Topics/marine/Licensing/marine>



This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>



Our Ref: MM/dr -18-29

Your Ref:

6 November 2018

E-mail: Seagreen.Representations@gov.scot
ms.marinelicensing@gov.scot

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

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

www.sff.co.uk

Dear Sirs

Applications for consent under Section 36 of The Electricity Act 1989 (As Amended) - Seagreen, Alpha and Bravo

The Scottish Fishermen's Federation (SFF), on behalf of the 400 plus vessels in membership of its 8 constituent associations, the Anglo Scottish Fishermen's Association, Fife Fishermen's Association, Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association and Shetland Fishermen's Association, wish to formally object to this application. Throughout the document references to General Policy (GP) and Fisheries Policy (F) are the relevant policies in Scotland's National Marine Plan.

Referring first to the Non-Technical summary (NTS), whilst welcoming the reduction in numbers of turbines, the SFF is concerned that the spacing remains low at 1000m and also the 4 year timescale for completion, both of which likely to impinge on fishing activity and conflict with GP2 and 3, and particularly on F1 and 2.

The NTS also notes in the Summary of Assessment on Commercial Fisheries additional mitigation for "local scallop dredgers" neither explaining the definition or the reason for this, which conflicts with GP17, FP1 and 3. Any and all scallop fishers affected must be mitigated for the impact.

Finally from the NTS, the Socio Economic Assessment neglects to quantify the possible loss of fishing catches and the concomitant effect on the onshore supply chain, both in terms of jobs and value contrary to GP2 and 3, F1, 2 and 3.

Looking at chapter 3 on site selection, the SFF would note that in current terms the procedure was fatally flawed in that it is not consistent with the modern legislation exemplified in Scotland's National Marine Plan.

Moving to chapter 4, Policy and Legislation, para 4.10 on the UKMPS fails to consider the line, "fish is an important source of protein, can be part of a healthy diet and has a role in achieving food

Members:

Anglo Scottish Fishermen's Association Fife Fishermen's Association Fishing Vessel Agents & Owners Association (Scotland) Ltd
Mallaig & North-West Fishermen's Association Ltd Orkney Fisheries Association Scottish Pelagic Fishermen's Association Ltd
The Scottish White Fish Producers' Association Ltd Shetland Fishermen's Association

VAT Reg No: 605 096 748

security, which is an objective of the UK Administrations.” Thus conflicting with GP1, 2, 3, 17 and 19 and F1, 2 and 3. Furthermore the section on Scotland’s National Marine Plan para 4.25 onwards, fails to note the policies relevant to development and fisheries, particularly GP4, 17 and 19, and F1, 2 and 3.

The paragraph on the Marine Strategy Framework Directive 4.50, is short on detail, so the SFF would seek clarity that the development has considered Descriptor 1 - Biological Diversity, Descriptor 3 – Commercial fish and Shellfish, Descriptor 4 – Marine food webs and Descriptor 6 – Seafloor integrity.

Chapter 5 describing the project, notes that after 25 years there is to be either life extension, repowering to see out the 50yr lease or decommissioning. The SFF has always expected that decommissioning was the option, so the first 2 options conflict with GP4, 17 and 18, F1,2 and 3.

Para 5.47 speaks of the “vibration characteristics of the WTG,” an event, seabed thrumming, that the SFF has objected to many times to no avail. Since it is mentioned here it needs to be clarified and impacts defined in order to comply with GP4, 17 and 19, F1, 2 and 3.

Discussing the various foundations and sub structures the SFF has concerns about the extent of excavation and grouting which may occur. These impacts could well ruin the possibility of the areas being returned to their original condition and suitability for fishing, against GP1, 4, 17 and F1, 2 and 3. Furthermore the extent of this seabed works could extend the area lost to the possible return of fishing by increasing the effective exclusion zone around turbines, contrary to GP4 and 17, F1, 2 and 3.

As for the information on inter-array cable, given that there is a possibility of 10% remaining unburied, ie. 65km at least, there needs to be further discussion on the protection methods as modern GRP pipes are not included and concrete mattresses are contra-indicated for use in areas of scallop fisheries. This 65km may close areas to fishing so consultation and any necessary action must be done to comply with GP4, 17 and 18, F1, 2 and 3.

Paras 5.18-182 refer to Anchorages and safety zones, and the SFF accepts the need for the 50m and 500m safety zones. Anchorages however are likely to be a major problem unless properly sited in consultation with local fishing interests. Furthermore, experience has shown that tugs towing are unable to anchor and that must therefore be catered for during construction works to avoid impacts on fishers by queuing and moving tugs. This consultation is an essential part of FLO work and sets the scene for compliance with GP4, 17 and 18, and F1, 2 and 3.

Transit routes to and from ports and developments are recommended, especially for areas of intensive creeling and again highlights the FLO communications work as compliance with GP4, 17 and 19.

The SFF would expect to see consent conditions referring to waste management, oil spills and dropped objects in order to comply with GP4, 17, 18 and F1, 2 and 3.

Decommissioning, as referred to in paras 5.218 onward should not be left until 25 years have elapsed, the SFF accept that legislation and circumstances may change over time but see the return of clean seabed as the basis of any decommissioning proposal, which can be worked out well in advance of need, complying with GP1, 4, 17 and 18.

Chapter 9 on the Natural Fish and Shellfish resource assesses only pile driving noise, so, given that chapter 5 recognises the “vibration characteristics of wind turbines” the SFF believe that the thrumming – noise and vibration should be assessed and monitored, as both these can impact on the life cycle of fish and the science is as yet unclear on this effect, doing this would comply with GP1, 4, 13, 17, 18 and 19 and F1, 2 and 3.

The current baseline acknowledges that King and Queen scallops are the predominant species fished in the project area. With the recent evidence, from NASA satellite pictures, of sediment plumes caused by windfarms in English waters, the SFF would contend that the wind industry has under played the effects of suspended sediments and smothering especially in relation to scallops. Monitoring this effect should be a consent condition as it is important in order to comply with GP1, 2, 3, 4, 17, 18 and 19 and F1, 2 and 3.

Looking now at chapter 11 on commercial fisheries, the SFF would again seek clarity on how the project is defining the metier “local scallop dredgers” and the reason for additional mitigation without applying the same logic to “nomadic” scallop vessels, who are losing grounds sequentially all round the coast to Wind-farms and MPA’s.

The SFF would also expect the project and the FLO, in particular, to have extensive knowledge of the areas fished by creel vessels, since activity has been rising rapidly, in order to properly inform them of ongoing works and the need to avoid them. This knowledge is essential to comply with GP4, 17, 18 and 19, and F1 2 and 3.

The SFF would point out that para 11.12 is erroneous, in that the RIFG has no enforcement powers or byelaws. Referring to table 11.2 on cumulative impacts, the SFF is disappointed that the project declined to include Forth Ports activity (but in table 11.9 included the North Connect cable) in the cumulative assessment as our members in the project area are adversely affected by all of these developments, this is contrary to GP4, 17 and 18, F1, 2 and 3.

Again from table 11.2, there is mention of Vessel Management Plans and shelter areas and the SFF would expect that there would be full and proper consultation on these, including all construction traffic, in order to agree the best solution for all in order to comply with GP4, 17,18 and 19 and F1, 2 and 3. These plans should be agreed at the CFWG.

In para 11.34, there is again mention of separate assessments of local and Nomadic scallops, which seems disingenuous as the result in EIA terms means nothing will charge for either sector. This does not comply with GP4, 17, 18 or 19. In the long term there should be a consent condition to conduct proper scientific assessments of the scallop population in the area.

Para 11.56 and others further on referring to future fisheries, does not seem to have consulted the fishing industry about post Brexit scenarios contrary to GP4, 17, 18 and 19, F1, 2 and 3. And then to speak about restrictions on fishing due to an MPA, when the development has significant overlap with it seems at best deflection, as there are prohibited areas defined already.

Embedded measures described in 11.84 onward.

- Buoyed construction and decommissioning area must be properly marked as per coordinates issued, and abided by, especially by contractors, and should be a consent condition to protect the grounds left available to fishing.
- DSLP should be developed to assist where possible to allow for fishing, so consulted on at the CFWG and SFF would seem the least that can be done.
- FMMS and CFWG – the SFF would expect a license condition to delineate when there is agreement from industry on the FMMS, derived through the CFWG, before it is accepted.
- It cannot be emphasised often enough that the company FLO must be available at all times of activity to speak to FIR's and the local industry.
- G/Vs and OFLOs should only be employed if they have knowledge of the area, both in terms of fishing and language and abide by laws concerning employment at sea.
- The Marine co-ordination centre should use the mechanism of the FLO and FIR's to ensure safe dissemination of information.
- VMP needs to be consulted and agreed with SFF and those fishing in the area.
- Cable plans should be consulted on with SFF and local fishers, and as best as possible limit impact on fishing.
- The SFF would recommend that as a consent condition, all contractors and subcontractors should sign up to all relevant plans, accept and comply with them, or be subject to compliance measures.

Yours faithfully

Malcolm Morrison
Fisheries Policy Officer

Marine Scotland
Marine Laboratory
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

Our ref: CNS/REN/Offshore Wind/Outer
Forth/A2756572

Your ref: Seagreen Phase 1 Offshore
Windfarm Project

Date: 2nd November 2018

By email only:
ms.marinerenewables@gov.scot

Dear Sir/Madam,

SEAGREEN PHASE 1 OFFSHORE WINDFARM PROJECT – ALPHA and BRAVO.

Application for consent under Section 36 of the Electricity Act 1989 (as amended) and Marine Licence under part 4 of the Marine (Scotland) Act 2010

Thank you for your consultation on the 21st September 2018 for the Seagreen phase 1 Offshore Windfarm for sites Alpha and Bravo.

The proposal has been based on a design envelope consisting of a maximum of 120 turbines up to 280m tall, with the inclusion of monopiles as a foundation option, across both Seagreen sites (Alpha and Bravo). The Offshore Substation Platforms (OSPs), OPS interconnector cables and export cables are not considered within this application. These components have existing separate marine licenses.

SNH works in support of the government's vision for an energy sector that delivers secure, affordable and clean energy for Scotland¹. We recognise and welcome the very significant contribution that this development would make to achieving Scotland's low carbon ambitions. We provide advice in the spirit of Scotland's National Marine Plan² which balances the promotion of sustainable development of offshore wind whilst protecting our biodiversity and taking account of seascapes, landscapes and visual impacts.

Our advice considers the information presented for Seagreen (Alpha and Bravo) on their own merits as well as taking account of cumulative and in combination effects with other projects.

¹ Scottish Government Energy Strategy 2017: <https://beta.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/pages/0/>

² Scotland's National Marine Plan 2015: <https://beta.gov.scot/publications/scotlands-national-marine-plan/>

KEY ADVICE

Natura - Ornithology

We have reviewed the Environmental Impact Assessment (EIA) Report and Habitats Regulations Appraisal (HRA) information.

We advise that we are unable to come to a definitive conclusion on the predicted impacts of this application for Seagreen (Alpha and Bravo) offshore wind farm on its own or in combination. There are deviations from the scoping opinion in the impact assessment methods, in particular, incorporation of additional survey data, choice of Collision Risk Modelling options and outputs taken forward into the PVA modelling, and the presentation of PVA metrics. This results in our low confidence in the interpretation of the outputs from the Population Viability Analyses (PVAs) particularly the metric outputs (counterfactual of population growth rate, counterfactual of population size and the centile results).

We are therefore not able to provide our advice for the Seagreen proposal on its own at this stage.

Our preliminary conclusion, based solely on the Counterfactual of Population Size (CPS) results, is that **in combination** with the consented 2014 Neart na Gaoithe and Inch Cape and other North Sea offshore wind farms:

This proposal is likely to have an adverse effect on the site integrity for:

- **black-legged kittiwake and northern gannet as qualifying interests of Forth Islands SPA**
- **black-legged kittiwake as qualifying interests of the Fowlsheugh SPA**

This proposal could have an adverse effect on site integrity for:

- **razorbill as a qualifying interest of Forth Islands and Fowlsheugh SPAs**
- **kittiwake as a qualifying interest of St Abb's Head to Fast Castle SPA.**

Therefore, we **object to the proposal** as it stands. It is possible, but unlikely, that clarification with regard to aspects of the impact assessment methods and the presentation of results would allow us to change this position.

We present our detailed ornithological advice in **Appendix A**.

Seascape, landscape and visual impacts

The increased height of Seagreen, in addition to Neart na Gaoithe, Inch Cape and Kincardine offshore wind farms, contributes to widespread significant adverse cumulative effects on sensitive landscape, seascape and visual receptors on stretches of coastline from South Aberdeenshire and Angus and Fife.

The development site will be seen in conjunction with the Neart na Gaoithe and Inch Cape Offshore Wind Farm developments as part of the wider Forth and Tay offshore wind cluster. Cumulatively, and in addition to the operational EOWDC to the north (Aberdeen Bay) and Kincardine (under construction), these offshore wind farms will introduce significant effects in the regional context, further constraining the already limited onshore capacity for wind energy.

We present our detailed advice on seascape, landscape and visual impacts in **Appendix B**.

Construction impacts

For a number of other key natural heritage interests, including marine mammals, the greatest impacts will arise during the construction phase of the development. These can be mitigated through conditions on any consent / licence. We provide our detailed advice on marine mammals in **Appendix C** and other receptors such as diadromous fish species, marine fish and shellfish in **Appendix D**.

If Scottish Ministers consent this proposal, we wish to provide further advice on implementation of conditions required to mitigate impacts on natural heritage interests, including:

- the piling strategy,
- landfall construction for the export cable and
- other pre-construction, construction and operation related activities.

We would welcome further discussion on the aspects of the project that require to be further clarified and / any additional information required to enable us to provide Marine Scotland with further formal advice for the purposes of any appropriate assessment and recommendation to Ministers.

Please contact Kirstie.dearing@nature.scot telephone 01738 458624 or erica.knott@nature.scot, telephone: 01738 458674 in the first instance, if you wish to discuss any aspects of this letter.

Yours sincerely
[Redacted]

Nick Halfhide
Director of Sustainable Growth

APPENDIX A

SNH ADVICE ON ORNITHOLOGY

Summary of key effects

1. Our assessment, based on the information in the EIA Report and HRA information has identified several issues with the assessment methods and in particular the PVA metric outputs. However, based on the counterfactual of population size metric outputs as presented, our preliminary conclusions are:
 - **An adverse effect on site integrity for black-legged kittiwake and northern gannet, and potential adverse effect on site integrity for razorbill as qualifying interests of the Forth Islands SPA** from Seagreen **in combination** with UK offshore wind farms. The key impact is collision risk (black-legged kittiwake, northern gannet) and displacement (razorbill).
 - **An adverse effect on site integrity for black-legged kittiwake and potential adverse effect on site integrity for razorbill as qualifying interests of the Fowlsheugh SPA** from SeaGreen **in combination** with UK offshore wind farms. The key impacts are collision risk (black-legged kittiwake) and displacement (razorbill).
 - **There could be an adverse effect on site integrity for black-legged kittiwake as a qualifying interest of the St Abb's Head to Fast Castle SPA** from Seagreen **in combination** with UK offshore wind farms. The key impact is collision risk.
 - **No adverse effect on the site integrity of** the following qualifying interests and SPAs from Seagreen in combination with other wind farm proposals:
 - Forth Islands SPA – herring gull, Atlantic puffin and common guillemot
 - Fowlsheugh SPA – herring gull and common guillemot
 - St Abb's Head to Fast Castle SPA – herring gull, razorbill and common guillemot
 - Buchan Ness to Collieston Coast – common guillemot, herring gull and black-legged kittiwake.
 - **No adverse effect on site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA** from Seagreen in combination with other wind farm proposals.
2. We request that further clarification is provided on several aspects contained in the EIA and HRA information and provide further details on these aspects below.

Impact Assessment Methodology

3. We have reviewed the EIA Report and HRA information taking into account the advice contained in the scoping opinion and pre-application discussions. The impact assessment methods, in particular, incorporation of additional survey data, choice of Collision Risk Modelling options and outputs taken forward into the PVA modelling, and the presentation of PVA metrics do not follow the advice in the scoping opinion. The in combination assessment includes all North Sea wind projects and does not identify the combined impacts of the Forth and Tay proposals as requested. Together these issues make it difficult to provide Marine Scotland with our assessment of the 2018 Seagreen project in combination with the 2014 Inch Cape and Neart na Gaoithe consented projects or any consideration of the combined 2018 Forth and Tay applications.
4. The use of Option 1 to assess **collision risk** does not follow the advice in the scoping opinion i.e. to use Option 2. Site specific flight heights (Option 1) **may** reflect flight behaviour in the development area better than generic flight heights (Option 2). We would welcome further discussion on the use of site specific data and option 1 and how it may be presented alongside option 2 to enable a common comparison across all the Forth and Tay developments.
5. The **Population Viability Analyses** for kittiwake and gannet utilise Option 1 estimates of collision risk, using site-specific flight height data. This generates greater population-level effects for gannet and lower population-level effects for kittiwake than would be the case if option 2 were used.
6. The PVA models run at increments of 50 bird mortalities and presents two complications:
 - i) There is a lack of detail on which increments have been used to derive the PVA metrics. This reduces our ability to interpret the impacts.
 - ii) This scale of increments is not suitable for all species i.e. an incremental scale more relevant to the scale of the predicted impact would aid interpretation of the population level effects.
7. The PVA models presented for cumulative / in combination impacts consider all North Sea offshore wind farms and not just the other Forth and Tay projects (either the 2014 consented projects or the 2018 applications). The assessment does present estimates of predicted mortality from collision and displacement for individual wind farms in the Forth and Tay, but this does not allow us to consider the impacts for the Forth and Tay projects as a cluster.

Predicted impacts for 25 years

8. The table below summarises the presentation of the in-combination model metrics for Seagreen. The metrics are counterfactual of population size (CPS), counterfactual of population growth rate (CPG) and centile match of end point of the un-impacted

population (Centile). Whilst the CPS measures lie in the range that we would expect, the CPG and Centile measures are either neutral or positive. This is counter-intuitive and raises some doubts over their reliability and leads us to have reduced confidence in the metric results.

SPA	Qualifying feature	Impact	Counter-factual of population size	Counter-factual of population growth rate	Centile
Forth Islands	Gannet	Collision	0.83	0.99	0.88
	Kittiwake	Collision	0.89	1.00	0.64
		Displacement	0.96	0.99	0.56
	Herring gull	Collision	-	-	-
	Razorbill	Displacement	0.92	1.00	0.60
	Guillemot	Displacement	0.96	1.00	0.67
	Puffin	Displacement	0.97	1.00	0.53
Fowlsheugh	Kittiwake	Collision	0.83	0.99	0.72
		Displacement	0.97	1.00	0.54
	Herring gull	Collision	-	-	-
	Razorbill	Displacement	0.94	1.00	0.57
	Guillemot	Displacement	0.98	1.00	0.59

Provisional Conclusion

Northern gannet – Forth Islands SPA

9. PVA for **northern gannet collision** at **Forth Islands SPA** modelled with impacts from Seagreen in combination with North Sea wind farms suggest that the population size after 25 years will be 83% of the un-impacted population. Our interim conclusion is that Seagreen in combination impacts for gannet collision will lead to an adverse effect on site integrity at the Forth Islands SPA.

Black-legged kittiwake - Forth Islands SPA

10. PVA for black-legged kittiwake collision at Forth Islands SPA modelled with impacts from Seagreen in combination with North Sea wind farms suggest that the population size after 25 years will be 89% of the un-impacted population. Our interim conclusion is that

Seagreen in combination impacts for kittiwake collision will lead to an adverse effect on site integrity at the Forth Islands SPA.

Black-legged kittiwake - Fowlsheugh SPA

11. PVA for black-legged kittiwake collision at Fowlsheugh SPA modelled with impacts from Seagreen in combination with North Sea wind farms suggest that the population size after 25 years of 83% will be the un-impacted population. Our interim advice is that Seagreen in combination impacts for kittiwake collision will lead to an adverse effect on site integrity at the Fowlsheugh SPA. If collision and displacement are combined, the level of impact increases.

Black-legged kittiwake - St Abb's Head to Fast Castle SPA

12. We are unable to provide formal advice for black legged kittiwake at this SPA on whether or not there could be an adverse effect on site integrity, as a result of collision. PVA outputs are not presented for this species and SPA, but figures for Seagreen in combination with UK wind farms indicate an increase in baseline mortality of greater than 1%.

Razorbill

13. PVA for razorbill at Forth Islands SPA modelled with impacts from Seagreen in combination with North Sea wind farms, suggest a population size after 25 years of 92% of the un-impacted population. Our preliminary conclusion is that Seagreen in combination with the other UK windfarms will lead to an adverse effect on site integrity at the Forth Islands SPA.
14. PVA for razorbill at Fowlsheugh SPA modelled with impacts from Seagreen in combination with North Sea wind farms suggest a population size after 25 years of 94% of the un-impacted population. These in combination impacts for razorbill could lead to an adverse effect on site integrity at the Fowlsheugh SPA.

APPENDIX B

SNH ADVICE ON SEASCAPE, LANDSCAPE AND VISUAL IMPACTS

Summary

1. Viewers will see the development site in conjunction with Neart na Gaoithe and Inch Cape as part of the wider Forth and Tay offshore wind cluster.
2. The key issue is the cumulative effect of Seagreen in addition to the Neart na Gaoithe and Inch Cape developments. Cumulatively, these developments contribute to widespread significant adverse effects on sensitive landscape, seascape and visual receptors in South Aberdeenshire, Angus and Fife.
3. The increase in turbine height (210m to 280m) over the 2014 proposal is the key driver of cumulative effects on landscape and visual receptors. This overrides the mitigating fact that Seagreen's turbines are mostly seen at a greater distance from shore than both Inch Cape and Neart Na Gaoithe.
4. Where Seagreen is seen 'behind' Inch Cape and / or Neart Na Goaithe - from Lunan Bay southwards to the East Lothian coast, the increase in turbine height along with the increase in number from 110 to 120 will create a denser array overall. This would increase the adverse cumulative effects on landscape, seascape and views of southern Angus, Fife and the Forth and East Lothian coasts from those assessed in 2014.
5. Northwards of the Lunan Bay area the change in turbine height will also mean that the project would be clearly seen and 'read' as a separate wind farm with turbines of a similar height to Inch Cape's. This change would increase the visible horizontal extent of wind farms when seen from the coast. Seagreen would be the dominant scheme in these views. The taller, more visible turbines would exacerbate the effects of multiple wind farm development on the landscape, seascape and views of northern Angus and southern Aberdeenshire.
6. Cumulatively, and in addition to the operational EOWDC to the north (Aberdeen Bay), these offshore wind farms will introduce significant effects in the regional context, further constraining the already limited onshore capacity for wind energy.

EIA Report Project Scenarios

7. The Seagreen SLVIA is a stand-alone assessment of effects, with cumulative assessment carried out as a separate exercise against the following offshore schemes / parameters (see Seagreen SLVIA Figure 13.15):

- Revised 2018 Inch Cape application worst case: 72 x 291m tip
- Revised 2018 Neart na Gaoithe application worst case: 54 x 208m tip
- Kincardine - 7 x 191m tip
- Forthwind phase 1: 2 x 185m tip
- Forthwind phase 2: 7 x 225m tip

Landscape, Seascape and Visual Impact

8. Despite only a small change in theoretical visibility as shown in the submitted ZTVs, the 30% increase in turbine height would result in the proposed Seagreen turbines being more visible from the coast than those in the 2014 application.
9. Broadly speaking, we agree with the nature, extent and level of significant impacts identified by the applicant within the EIA Report. However, in several instances we consider that the magnitude of cumulative change with the addition of Seagreen to the Inch Cape and Neart na Goaithe baseline has been underestimated.

Cumulative Impacts on Coastal and Landscape Character

10. We largely agree with the nature and extent of cumulative impacts identified within the EIA Report, which concludes that the potential contribution that the optimised Seagreen Project will make to the cumulative effects is not considered to be a significant factor (para 13.400). The optimised Seagreen Project is predicted to combine with a number of other onshore and offshore wind farms, as well as other projects, to contribute to cumulative and in-combination effects, but the SLVIA predicts no change in significance from the earlier project.
11. However, in several instances we consider that the magnitude of cumulative visual change with the addition of Seagreen has been underestimated. It is important to recognise that the increased turbine height of Seagreen in combination with larger Inch Cape and Neart Na Goaithe turbines does contribute to a greater severity of cumulative change.
12. The EIA Report identifies no significant adverse cumulative effects for the following coastal character areas (CCAs) – i.e. no substantial change from the 2014 assessment:
 - SA4 Montrose Bay
 - SA5 Long Craig
 - SA6 Lunan Bay³

³ Within the Seascape Character Assessment completed by the landscape consultants acting on behalf of all the Forth and Tay wind developers, regional coastal character areas are defined as Seascape Areas (SAs).

13. We disagree and consider that there would be significant cumulative effects on coastal character areas SA 4, 5 and 6 due to the use of taller turbines.

Impacts on Visual Receptors

14. The EIA Report uses 14 representative viewpoints to assess the development (viewpoints incorporating both daytime and night-time photomontages).
15. For those viewpoints which were previously assessed, the SLVIA identifies no change in level of significance for Seagreen on its own. This includes no change for VP2 (St Cyrus) and VP5 (Braehead of Lunan) which were previously identified as likely to have Major to Moderate (significant) effects.
16. Whilst we agree that visual receptors at VP2 and VP 5 are likely to experience Moderate cumulative effects (not considered to be 'Significant' in SLVIA terms), we would also predict a Moderate to Moderate (significant) cumulative impact on views at VP 4 (Montrose) and at locations further up the coast from where Seagreen will appear at least as tall as Inch Cape.
17. We also advise significant adverse cumulative effects:
- along the NCN Route 1 from South Aberdeenshire into Angus
 - along the East Coast main rail route between Montrose and Carnoustie
 - along the A92 (Coastal Tourist Route) from both the cumulative effects of the offshore wind farms, and the combination of marine and terrestrial wind energy development. This takes account of the Kincardine floating wind farm, which contributes to cumulative sequential impacts.
18. Travellers on these routes, particularly the coastal A92 will experience frequent and sequential views of wind farm development, both marine and terrestrial. This is especially pronounced between Stonehaven and Montrose and further south in the vicinity of Dundee. The landscape character in southern Aberdeenshire from the lower Grampians through the agricultural heartlands extending to the coast, is now a 'landscape with wind turbines' with turbines viewed as familiar features. These existing cumulative impacts limit further capacity for development in the landscape character as previously appraised in 2014⁴. The introduction of offshore developments will further add to this change to the landscape and coastal character further constraining capacity for onshore wind energy.
19. We also advise that the operational EOWDC offshore wind farm, introduces large scale turbines which contribute to significant adverse cumulative effects across the central and northern coast of Aberdeen City and Shire. Due to its location it was agreed that it should lie outside of the scope of the study area for the Forth and Tay

⁴ Strategic Landscape Capacity Assessment for Wind Energy in Aberdeenshire Ironside Farrar March 2014

wind farms, however in a wider regional strategic context, these turbines do contribute significantly to an increased presence and experience of turbines in the eastern Aberdeenshire landscape and coast as a whole.

APPENDIX C

SNH ADVICE ON MARINE MAMMALS

Appraisal of EIA Reports and HRA information.

1. We provide the following advice on our appraisal of the impact assessment for marine mammals.

Use of acoustic deterrent devices (ADDs) and noise modelling

2. The applicant has incorporated the use of ADDs as embedded mitigation. Evidence from the Beatrice development suggests that ADDs may not be necessary. We would welcome further discussion during the development of the Piling Strategy.
3. We consider that submission of a Piling Strategy to MS-LOT for approval prior to the commencement of piling could mitigate any residual risk of PTS. Experiences from build out of other Scottish offshore wind farms will help inform development of the Piling Strategy and further discussion through the Forth and Tay Regional Advisory Group (FTRAG) can inform an appropriate Piling Strategy that will mitigate cumulative impacts.
4. The Piling Strategy should include further details of piling methods and timing, and the cumulative impact of any expected concurrent piling at different locations. It should also set out any measures to mitigate and manage the effects of pile installation.
5. We welcome inclusion of the additional analyses presented for underwater noise modelling using the 1% Conversion factor (CF) as well as for 0.5%. We remain of the view that a 1% CF is preferable to 0.5%. We consider that there is a range of appropriate CF, and advise that the chosen CF should reflect an appropriate degree of precaution, bearing in mind the current levels of uncertainty.
6. The contour maps for minke whale indicate that the cumulative PTS effect zones are larger for 1% than for 0.5%. Despite predicting effects on larger numbers of individual animals, the percentage of the reference population affected is still small. The predicted impacts for all other species remain low. **We therefore agree with the conclusion that the magnitude of impact is low and the significance of effect from PTS is minor or negligible for all species and all scenarios.**

EPS Licensing

7. The applicant has made preparation for future application of an EPS licence. **We advise that an EPS licence for disturbance is likely to be required for both piling and geophysical surveys.**

8. In addition, given that the applicant predicts large effect zones of cumulative PTS for minke whale, **we advise that an EPS licence for injury may be required.** Appropriate mitigation in a Piling Strategy would avoid this need.

Conclusion

Bottlenose dolphin

9. The bottlenose dolphin population modelling (iPCoD) suggests a large decrease in population size after 24 years when PTS is included. However, this work was done using iPCoD version 3, which is known to overestimate the impact of PTS on populations – our consideration of the iPCoD v3 and v4 model predictions indicate that the impact is likely to be far less than predicted here.
10. We advise that there will be **no adverse effect on site integrity for bottlenose dolphin as a qualifying interest of the Moray Firth Special Area of Conservation (SAC)**, subject to conditions on any consent / licences.
11. We also advise that there will be **no impact on the favourable conservation status (FCS) for bottlenose dolphins** as an EPS, subject to conditions on any consent / licences relating to the construction aspects including piling.

Harbour seal

12. Based on the information in the EIA report and HRA information, we advise that there will be **no adverse effect on site integrity for harbour seal as a qualifying interest of the Firth of Tay and Eden Estuary SAC**, subject to standard conditions on any consent / licences. Both alone and in combination with other developments, there was no significant long term effect on the population trajectory of harbour seals.

Grey seal

13. The reference population for grey seal has been calculated differently to other Forth and Tay Offshore Wind Farms. The applicant has combined populations from East Scotland MU and NE England MU, this means that the worst-case cumulative predictions of disturbance go from 20% to 7.2%. However we agree with the conclusion that the predictions are precautionary and, at population level, the impacts are unlikely to be significant.
14. We advise that there will be **no adverse effect on site integrity for grey seal as qualifying interests of the Isle of May SAC and Berwickshire and North Northumberland Coast SAC** subject to standard conditions on any consent / licences relating to construction aspects including piling. Both alone and in combination with other developments, there is no predicted significant long term effect on the population trajectory of grey seals.

Harbour porpoise

15. We advise that there will be **no impact on the FCS** for harbour porpoise as an EPS, subject to standard conditions on any consent / licences relating to construction aspects including piling.

Minke whale

16. We advise there will be **no impact on the FCS** for minke whale as an EPS, subject to standard conditions on any consent / licences.

White beaked dolphin

17. We advise that there will be **no impact on the FCS** for white beaked dolphins as an EPS, subject to standard conditions on any consent / licences.

Other cetaceans

18. We advise that it is **unlikely that there will be impact on the FCS** for any other cetacean species.

APPENDIX D

SNH ADVICE ON OTHER NATURAL HERITAGE INTERESTS CONSIDERED IN THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT

FISH (INCLUDING DIADROMOUS FISH) AND SHELLFISH

The most significant potential impacts on diadromous fish arise from noise, EMF and sediment from Seagreen alone and potentially cumulatively with other wind farm developments proposed for the Forth area.

Noise

The EIA Report presents the results of underwater noise modelling, and subsequent embedded mitigation. We welcome and support the proposed mitigation and consent conditions proposed by Seagreen including the submission of the following plans for approval:

- A Piling Strategy
- A Construction Programme
- A Project Environmental Management Plan

These plans would enable the construction of the wind farm to avoid or minimise further impacts on both diadromous and marine fish species, through the inclusion of a soft start piling to enable fish to move away from the vicinity of the piling operations.

Electro Magnetic Field (EMF) Impacts from Cables

The EIA Report assesses the research and evidence connected with EMF and the potential impacts to fish species. It further states the intention by the applicant to bury cables to a suitable depth for the majority of the inter-array cables and should be addressed within a Cable Laying Strategy.

Priority Marine Features (PMFs)

Some PMFs will be present within the development site, including herring, cod and sandeels. The EIA Report has considered these species for extent and distribution, the potential impacts are from habitat loss, underwater noise and vibration.

The embedded mitigation measures for soft start during piling to be used, with lower hammer energies used at the beginning of the piling sequence, is welcomed to allow fish to move from the area of operation. We also note the discussion paper on particle motion that has taken this topic as far as current research allows.

Roberts R (Rhianna)

From: Gillian Kyle <Gillian.Kyle@sportscotland.org.uk>
Sent: 01 October 2018 15:00
To: MS LOT Seagreen Phase One Representations
Subject: Seagreen Projects S36 Revised Design

Project Alpha Offshore Wind Farm and Project Bravo Offshore Wind Farm Applications for Marine Licences and Section 36 Consents – Revised design

Thank you for the above noted consultation. Having reviewed the documents and consulted RYAS, I confirm that sportscotland has no comments to make.

Kind regards,
Gillian

Gillian Kyle | Planner | sportscotland
Doges | Templeton on the Green | 62 Templeton Street | Glasgow | G40 1DA

t: 0141 534 6557
w: www.sportscotland.org.uk

Follow us on [twitter](#) and [facebook](#)

Nominations for the sportscotland Coaching, Officiating and Volunteering Awards are now open – [nominate](#) by Friday 7 September.

sportscotland – the national agency for sport
spòrsalba - am buidheann nàiseanta airson spòrs

[Awarding funds from The National Lottery](#)

Disclaimer - This email is confidential and intended solely for the use of the individual(s) to whom it is addressed. If you are not the intended recipient, please destroy this email and any attachments and all copies, and inform the sender immediately. Please be advised that any unauthorised use of this document is strictly prohibited.

As a public body, sportscotland falls under the requirements of the Freedom of Information (Scotland) Act 2002 to disclose any information (including electronic communication) that it may hold on a particular topic when requested to do so by a person or body. If this causes concern, sportscotland will be able to advise you further on this matter. For the avoidance of doubt sportscotland's decision with regard to questions of disclosure and non-disclosure shall be final.

sportscotland is the controller of the personal data provided by you in any email correspondence with us.

Please note that the personal data which you provide will be stored and/or processed by sportscotland in order for us to perform services for you or correspond with you. Please go to <https://sportscotland.org.uk/privacy/> for more information about the management of your personal data

Aithris-àichidh – Tha am post-d seo dìomhair agus air a rùnachadh a-mhàin don neach gu bheil e air a sheòladh. Mura h-e thusa an neach sin, feuch gun cuir thu às don phost-d seo is ceangalan sam bith agus leth-bhreacan uile, agus cuir fios sa bhàd gu an neach-seòlaidh. Cuimhnich mas e do thoil e gu bheil cleachdadh neo-ùghdarraichte sam bith air an sgrìobhainn seo air a thoirmeasg gu tur.

Mar bhuidheann poblach, tha spòrsalba a' tighinn fo riathanasan an Achd Saorsa Fiosrachaidh (Alba) 2002 a thaobh foillseachadh air fiosrachadh sam bith (a' gabhail a-steach conaltradh eileagtronaigeach) a dh'fhaodadh a bhith aige mu chuspair sònraichte,

nuair a thèid sin iarraidh air le neach no buidheann sam bith. Ma bhios dragh ann mu dheidhinn seo, is urrainn do **spòrsal**a comhairleachadh mun chùis. Gus teagamh a sheachnadh, bidh co-dhùnadh **spòrsal**a deireannach a thaobh ceistean foillseachaidh is neo-fhoillseachaidh.

Is e **spòrsal**a a tha a’ gleidheadh dàta pearsanta a bheir sibh dhuinn ann am puist-dealain sam bith.

Thoiribh an aire gum bi an dàta pearsanta a bheir sibh dhuinn air a stòradh agus/no air a ghiullachd le **spòrsal**a gus seirbheisean a libhrigeadh no conaltradh ribh. Feuch gun tèid sibh gu <https://sportscotland.org.uk/privacy/> airson tuilleadh fiosrachaidh mu làimhseachadh air an dàta phearsanta agaibh.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

This email has been received from an external party and has been swept for the presence of computer viruses.

Sophie Humphries
Marine Scotland
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Your ref:

Our ref:
TS00538

Date:
11/10/2018

Seagreen.Representations@gov.scot

Dear Sirs,

ELECTRICITY ACT 1989 (As Amended)

MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009

APPLICATION FOR CONSENTS UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) AND MARINE LICENCES UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND MARINE AND COASTAL ACCESS ACT 2009 TO CONSTRUCT AND OPERATE PROJECT ALPHA OFFSHORE WIND FARM AND PROJECT BRAVO OFFSHORE WIND FARM LOCATED APPROXIMATELY 27KM EAST OF THE ANGUS COASTLINE.

With reference to your recent correspondence on the above development, we acknowledge receipt of the Seagreen Offshore Wind Farm Environmental Impact Assessment (EIA) prepared by Seagreen Wind Energy Limited in support of the above development.

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

Consented Development

We note that consent was granted in October 2014 for the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms, which together form the Seagreen Phase 1 project. A Variation Application to remove the capacity limits was consented in August 2017. The offshore wind farm sites lie approximately 27 km and 38km respectively east of the Angus coastline, with the nearest trunk road to the site being the A90(T) approximately 15km inland.

The two sites comprise up to 70 turbine generators in each, totalling up to 120 turbines across both projects.

Revised Application

We understand that further to advances in turbine design and monopile construction which have occurred since the 2014 consent, the applicant is now seeking consent for an optimised Seagreen Project. The EIA states that, wherever possible, the design of the optimised scheme will result in impacts no greater than those identified in the original design consented in October 2014. The key design parameters which have been changed are:

- The maximum combined number of WTGs has reduced from 150 to 120;
- The 2014 consented rotor diameter is 167m; the optimised project is up to 220m;
- The 2014 consented blade tip height is 209.7m; the optimised project is up to 280m;
- The 2014 consented minimum blade tip clearance is 29.8m; the proposed blade tip clearance 32.5m; and
- The 2014 foundation options have been expanded to include the introduction of a monopile foundation option at up to 70 locations.

We note that the Original Consent included the following Condition in relation to the Trunk Road network:

Condition 25:

The Company must, at least 6 months prior to the Commencement of the Development, submit a Traffic and Transportation Plan (“TTP”) in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

Reason: To maintain the free flow and safety of the Trunk Road network.

Additional Conditions

With regard to potential environmental impacts, Transport Scotland is satisfied that the interests of the trunk road network will be covered by the continued application of Condition 25 to any varied consent that may be issued. We would ask, however, that, given the increase in the size of the turbines, the following additional Conditions are also attached to any consent issued in case there are any plans to move turbine components via the road network as well as by sea.

Condition 1:

Prior to commencement of deliveries to site, the proposed route for any abnormal loads on the trunk road network must be approved by the trunk roads authority prior to the movement of any abnormal load. Any accommodation measures required including the removal of street furniture, junction widening, traffic management must similarly be approved.

Reason: To minimise interference and maintain the safety and free flow of traffic on the Trunk Road as a result of the traffic moving to and from the development.

Condition 2:

During the delivery period of the wind turbine construction materials any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland before delivery commences.

Reason: To ensure that the transportation will not have any detrimental effect on the road and structures along the route.

I trust that the above is satisfactory and should you wish to discuss any issues raised in greater detail, please do not hesitate to contact Alan DeVenny at SYSTRA's Glasgow Office on 0141 343 9636.

Yours faithfully

[Redacted]

John McDonald

**Transport Scotland
Roads Directorate**

cc Alan DeVenny – SYSTRA Ltd.

Roberts R (Rhianna)

From: Sarah Dolman <sarah.dolman@whales.org>
Sent: 04 October 2018 09:49
To: Dominic Waller (DWA)
Cc: David Cook (DCK); Brockie, Nick; Fiona Read
Subject: [EXTERNAL] RE: The optimised Seagreen Project EIA Report

WARNING: this email has originated from outside of the SSE Group. Please treat any links or attachments with caution.

Dear Dominic

Thanks for your email.

WDC has invested considerable effort engaging with the marine renewable industry and responding to consultations surrounding offshore renewable developments since the inception of the industry. Our primary request has been to reduce noise outputs during construction of developments. Despite advances in technologies in other parts of Europe, noise reduction technologies have yet to be implemented at any scale on offshore developments in Scotland or in the UK. We wanted to bring this noise reduction report by WWF to your attention in case you were not aware of it: http://assets.wwf.org.uk/downloads/a_positive_future_for_porpoises_and_renewables_wwf_2016.pdf

As a result of reduced staff capacity, we are having to re-evaluate our work load and although we are interested to be kept in the loop, we do not consider it to be beneficial to continue to engage in detail at this time.

Thanks
Sarah

Sarah Dolman
Policy manager
End Bycatch Programme Lead

Telephone: +44 (0)1283 246 237
Mobile: +44 (0)783 449 8275
whales.org



From: Dominic Waller (DWA) [mailto:DWA@niras.com]
Sent: 04 October 2018 09:47
Cc: David Cook (DCK); Brockie, Nick
Subject: The optimised Seagreen Project EIA Report

Hello,

You will recently have received by post a CD containing the Environmental Impact Assessment (EIA) Report for the Optimised Seagreen Offshore Wind Farm Project.

Due to a CD production error Volume II (containing the EIA Report figures) and Volume III (containing the EIA Report appendices) were omitted from the CD. Therefore, we have produced a replacement CD, which contains each of the three EIA Report Volumes as originally intended, and posted this out to you on 3rd October. You should receive the replacement CD within the next two days.

We would be very grateful if you could respond to this email to confirm receipt of the replacement CD. If you have any queries or concerns please contact us, by responding to this email or by phoning 01223 803750.

In the interim should you wish to view Volumes II and III of the EIA Report, they are available online at:
<https://www.seagreenwindenergy.com/eia-report.asp>

We apologise for this error and hope it has not inconvenienced you.

Please note that any representations in respect of the consent applications for the optimised Seagreen Project should be made in writing by email to: Seagreen.Representations@gov.scot or by post to The Scottish Government, Marine Scotland Licensing Operations Team, Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

Best Regards

Dominic Waller
Environmental Consultant



St Giles Court, 24 Castle Street
CB3 0AJ, Cambridge
United Kingdom
www.nirasconsulting.co.uk
www.niras.com

M: +44 (0)7702 812391
P: +44 (0)1223 803750
E: dwa@niras.com

Follow us:  



The information contained in this email is confidential and intended solely for the individual (or entity) to whom the email is addressed. The use or disclosure of such information to third parties is prohibited. If you have received this email in error, please notify the sender by return email and immediately delete this message and any attachments herein.

Please note that neither NIRAS Consulting Ltd nor the sender accept any responsibility for viruses and it is your responsibility to scan any attachments.