#### Tait A (Adrian) (MARLAB)

From: Glen, Ian <iglen@eastlothian.gsx.gov.uk>

**Sent:** 07 August 2013 16:23 **To:** MS Marine Licensing

Subject: NEART NA GAOITHE: EAST LOTHIAN COUNCIL COMMENTS ON ADDENDUM

#### **FAO Adrian Tait**

Adrian

Thanks for the opportunity to comment on the supplementary environmental information provided in support of the application for the abovea windfarm. While I am conscious that we have exceeded your 1<sup>st</sup> August deadline I hope you will still be able to consider the following comments. Please note that our comments on the original submission remain.

#### **Landscape and Visual**

The number of turbines has now been fixed at 90, which is 35 turbines less than the previous maximum. The gap between the lowest point of the sweep of the blade and the sea has been increased, but the overall height is no higher than the original maximum. The changes to the design envelope do not appear to have a significantly different effect in landscape and visual terms than the maximum height scenario in the original.

In landscape and visual terms, it is preferable to have more, larger turbines (as chosen) than fewer, smaller turbines, as included in the original design envelope as the development will appear less cluttered. From key viewpoints at Tantallon, Dunbar and North Berwick, the appearance of the windfarm is reasonably evenly spaced. 'Stacking' (where one turbine is seen in front of others) is not particularly evident, and neither are there noticeable 'outliers'. This is welcome as I recognise it would be difficult to avoid entirely for a large windfarm such as this.

I welcome the provision of further wireframes at the Seabird Centre and Tantallon Castle, and also the improved quality of the photomontages. For the additional viewpoint at the Seabird Centre, I do not agree with the assessment of the significance of the impact as Moderate. I consider the magnitude of change at the Seabird Centre to be High as there is "a clearly perceptible change in key characteristics and character e.g. introduction of a new large scale feature into views from a character area where they are not typical." The significance of the impact would therefore be Major. For Tantallon Castle, the significance of the effect could be less (as stated) as it is seen more in context of open ocean (away from the more sensitive islands) and is a lower proportion of the sea horizon. In addition, landward views are more important from this point than from the Seabird Centre.

#### **Military and Aviation**

Military and Aviation Appendix 1 gives a scheme of lighting and sound to warn maritime and flying users of the area that the scheme is there. Minimum distances have been given for where the sound or light should be audible/visible. It appears that at least some of these lights, mainly the aviation lights, may be visible from East Lothian, though it is not entirely clear from the report. I am unclear whether the sound will be audible from the shore. Without compromising safety, it would be desirable if both the sound and the light could be restricted to the minimum necessary for safety to reduce visibility/audibility from the shore. This could be done for example by seeking 'powering down' of the lights under conditions of good visibility.

#### Ornithology

We do not have the expertise within the Council to assess this information and so leave comment on this area to SNH.

Without SNH input, it is not clear whether the cumulative impact of all of the proposed Firth of Forth windfarms on the Firth of Forth SPA windfarms is acceptable. If Marine Scotland do consider that the amount of development which can be accommodated in the Firth of Forth is limited by impact on Natura 2000 sites, it is our view that of

these schemes Neart Na Gaoithe will have the greatest adverse landscape and visual impact on East Lothian (and potentially other areas though this is for others to comment on) – see for example the cumulative assessment table in the addendum SLVIA Appendix 2 Table 3.3 on prominence. While this impact is not unacceptable given the need to produce renewable energy, it is to be hoped for the good planning of the area that this generation could be achieved with as little impact as possible. For East Lothian, the greatest impact of these schemes – without prejudice to our consideration of the details of other schemes – would appear at present to be the landscape and visual impacts associated with NNG. We hope you would take this into account in consenting these schemes.

#### Regards

# Ian Glen Policy & Projects Manager

Services for Communities Housing & Environment East Lothian Council John Muir House Haddington EH41 3HA

01620 827395 iglen@eastlothian.gov.uk

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#### Tait A (Adrian) (MARLAB)

**From:** @hotmail.co.uk>

 Sent:
 01 July 2013 17:30

 To:
 MS Marine Licensing

Cc:Mainstream wind farmSubject:Naert Na Gaoithe Offshore Windfarm

Dear Sir / Madam

This is my consultation response.

I am more than upset that there have been no indepth surveys or consideration of the benthic lobster population, with special regar to the sea bed disturbance involved in bringing the cables ashore at Thorntonloch.

I am also upset that for commercial fisheries it has been assessed minor significance as I am sure all the fishermen on marginal economic viability may be adversely affected by this development. This will upset the local cultural heritage associated with many lobster fishermen and their families.

I advise the Ministers concerned to show more interest in the local people and economies affected by this work

by reviewing the fisheries income in this area, and indeed consider the use of hatcheries along the disrupted coast for future sustainable fishing of lobsters.

yours aye

The Firth of Forth Lobster Hatchery Limited

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Longmore House Salisbury Place Edinburgh EH9 1SH

Direct Line:

Switchboard: 0131 668 8600

Robin.Campbell@scotland.gsi.gov.uk

Our ref: AMN/16/TA Our Case ID: 201301827

31 July 2013

Mr Adrian Tait
Marine Scotland
Scottish Government
Marine Laboratory
Po Box 101
375 Victoria Road
ABERDEEN
AB11 9DB

Dear Mr Tait

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) Application for consent to construct and operate an offshore wind farm, Firth of Forth (Neart na Gaoithe Offshore Wind Farm) Environmental Statement Addendum

Thank you for your letter dated 17 June 2013 and the accompanying Environmental Statement (ES) Addendum requesting comments on the above. For information, this letter covers our comments on the Addendum for our role as consultees through the Scottish Ministers under the terms of the above Regulations. The comments in this letter relate to our statutory remit for scheduled monuments and their settings, category A listed buildings and their settings, gardens and designed landscapes appearing in the Inventory, Inventory Battlefields and designated wreck sites (Protection of Wrecks Act 1973). In this case, our advice also includes matters relating to marine archaeology out with the scope of the terrestrial planning system.

#### **The Proposed Development**

I understand the proposed offshore wind farm will be approximately 15.5 km to the East of Fife Ness and that the Addendum relates to certain refinements of the proposal. These are as follows:

- Fewer turbines the original Design Envelope comprised a maximum of 125 turbines, which has now been reduced to a maximum of 90 turbines; and
- Increased minimum rotor height, however, I understand the maximum blade tip height of 197 metres remains unchanged from the ES.

#### **Terrestrial Assets**

We are content that the proposed amendments to the offshore works shall not have direct impacts on terrestrial assets within our statutory remit. In terms of indirect impacts, we have considered the potential for impacts on the setting of terrestrial assets, including the following:

#### Scheduled Monuments

- Tentsmuir Coastal defences (Index no. 9712);
- Crail Airfield, airfield 1km E of Kirklands Farm (Index no. 6642);
- St Andrews Castle (Index no. 90259);







- St Andrews Cathedral and adjacent ecclesiastical remains (Index no. 90260);
- Crail Airfield,pillbox,Foreland Head (Index no. 6461);
- Crail Airfield, airfield 1km E of Kirklands Farm (Index no. 6642);
- Isle of May,lighthouse (Index no. 887);
- Isle of May Priory (Index no. 883)
- Tantallon Castle (Index no. 90295).

#### Category A Listed Buildings

- St Andrews Harbour (HB no. 40596);
- Bell Rock Lighthouse (HB no. 45197);
- Ladyloan, Bell Rock Lighthouse Signal Tower and Entrance Lodges (HB no. 21230)

#### Gardens and Designed Landscapes

- St Andrews Links;
- Cambo

Having reviewed the submitted information, we are content that the proposed amendments shall not have significant adverse indirect or cumulative impacts on terrestrial assets within our statutory remit.

#### **Marine Assets**

Within our response dated 7 September 2012 we indicated that we were content with the proposed mitigation measures identified in the ES, which included temporary exclusion zones to be put in place through a Written Scheme of Investigation and a Protocol for Archaeological Discoveries. We would reiterate the need for these measures to be carried forward in order to protect the recorded or chartered wrecks and the identified anomalies within the development area.

#### Conclusion

Overall, we remain content with the principle of the development, and consider that the proposed amendments to the proposal will not result in significant adverse impacts on marine or terrestrial assets within our statutory remit. The proposed mitigation strategy in relation to identified sites which have archaeological potential and for unexpected archaeological discoveries should remain in place. On this basis, we maintain our original position and offer no objection.

Please contact me should you wish to discuss the contents of this letter.

Yours sincerely



#### **Robin Campbell**

Senior Heritage Management Officer (EIA)





### Tait A (Adrian) (MARLAB)

From: andy.mulholland@dundeecity.gov.uk

Sent: 08 July 2013 11:16 MS Marine Licensing To:

Consultaion Response on Addendum. Neart Na Gaoithe Offshore Windfarm. Subject:

fao Adrian Tait

Please note that I have no planning comments to make on the above addendum. Regards Andy

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Safeguarding

Kingston Road

Sutton Coldfield

West Midlands B75 7RL

**United Kingdom** 

Telephone [MOD]: +44 (0)121 311 2443

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

E-mail: <u>DIOODC-IPSSG2@mod.uk</u>

Adrian Tait

Marine Scotland

Licensing Operations Team

375 Victoria Road

Aberdeen

AB11 9DB 17 Sept 2013

Dear Mr Tait,

# Application for consent under Section 36 of the Electricity Act 1989 and Marine Licences under Part 4, to construct and operate an offshore wind farm, Firth of Forth Neart Na Gaoithe offshore wind farm

The Ministry of Defence (MOD) objected to the proposed Neart Na Gaoithe Offshore wind farm in the letter to Marine Scotland dated 19<sup>th</sup> October 2012.

The MOD objected to the Neart Na Gaoithe offshore wind farm on the grounds that the proposed development would have an unacceptable impact upon the Air Traffic Control (ATC) radar and the Precision Control Radar (PAR) at RAF Leuchars and the Air Defence (AD) radar at Remote Radar Head (RRH) Brizlee Wood. The MOD noted that if the developer is able to overcome these unacceptable impacts that all turbines should be fitted with appropriate aviation lighting.

The MOD completed a reassessment of the proposal in June 2013 based on data provided by the applicant. A copy of the reassessment letter dated 1<sup>st</sup> July 2013 was copied to you for information.

As you are aware, the MOD has been in discussions with the applicant since the submission of the original objection letter, and particularly since the reassessment, with a view to reaching agreement on appropriate mitigation to address the unacceptable impacts of this development. The updated MOD position is set out below:

#### ATC Radar at RAF Leuchars

The applicant, Mainstream Renewable Power Ltd, submitted a technical proposal to mitigate the unacceptable impacts of the proposed development on the ATC radar at RAF Leuchars. The proposal has been accepted by the MOD and a planning condition has been agreed with the applicant. A draft is included at Annex A for Marine Scotland's consideration.

#### RAF Leuchars PAR and AD Radar at RRH Brizlee Wood

For confirmation, and as detailed in my letter dated 1<sup>st</sup> July 2013, following the reassessment of the proposal the MOD has no concerns regarding the impact of the proposed development on the PAR at RAF Leuchars or the AD radar at RRH Brizlee Wood.

#### **Aviation Lighting**

The MOD proposed an aviation condition to the applicant in a letter dated 2<sup>nd</sup> August 2013. I enclose a copy of this letter for your information. Following liaison with the applicant, including legal input by both parties, the MOD has not been able to reach agreement with the applicant regarding the wording and format of the condition, although both parties do agree on the content of the condition including its purpose. The MOD has advised the applicant that the final format of the aviation lighting condition will be determined by Marine Scotland and I understand that the applicant will contact you directly to discuss this matter.

In light of the above, the MOD would be prepared to remove its objection to this application subject to appropriate conditions being imposed upon the consent, should this be forthcoming. Should Marine Scotland be minded to amend any of the conditions in Annex A, the MOD would welcome the opportunity to discuss these amendments if requested.

Please do not hesitate to contact me should you wish to discuss matters.

Yours sincerely

Lucy Hodgetts BSc (Hons) MA MRTPI Senior Safeguarding Officer (Engagements)

Encs.

#### Annex A

#### Air Traffic Control radar

Prior to the erection of any turbines on the site, the Company shall submit an Air Traffic Control Radar Mitigation Scheme to be approved in writing by the consenting authority.

The Air Traffic Control Radar Mitigation Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a) The mitigation measures which the approved scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b) Any performance criteria specified in the approved scheme and which the approved scheme requires to have been satisfied have been satisfied; and
- c) That implementation and satisfaction of the performance criteria have been approved by the consenting authority.

The Company shall thereafter comply with all other obligations contained within the Air Traffic Control Radar Mitigation Scheme.

#### **Aviation Lighting**

The Company shall install such lighting as may be required by the Civil Aviation Authority from time to time or as specified in the Proposed Scheme of Aviation and Maritime Marking and Lighting submitted by the Company as part of the Addendum of Supplementary Environmental Information and agreed in writing by the consenting authority or in default MOD-accredited 200 candela omnidirectional aviation lighting on all perimeter turbines at the highest practicable point. Each turbine will be erected with this lighting installed and the lighting will remain operational throughout the duration of this consent.

#### Tait A (Adrian) (MARLAB)

From: ROSSI, Sacha <Sacha.Rossi@nats.co.uk>

**Sent:** 16 July 2013 10:09 **To:** Tait A (Adrian) (MARLAB)

**Cc:** MS Marine Licensing; NATS Safeguarding

**Subject:** RE: Na Gaoithe Offshore Wind Farm ADDENDUM

Thanks for the clarification Andrew,

I can confirm NATS does not anticipate an impact and has no further comments on the documentation.

Regards Sacha NATS Safeguarding Office



#### Mr Sacha Rossi

ATC Systems Safeguarding Engineer

★: 01489 444 205★: sacha.rossi@nats.co.uk

NATS Safeguarding 4000 Parkway, Whiteley, PO15 7FL

http://www.nats.co.uk/windfarms

From: Adrian.Tait@scotland.gsi.gov.uk [mailto:Adrian.Tait@scotland.gsi.gov.uk] On Behalf Of

MS.MarineLicensing@scotland.gsi.gov.uk

**Sent:** 12 July 2013 16:33

To: ROSSI, Sacha

Subject: RE: Na Gaoithe Offshore Wind Farm ADDENDUM

Dear Sacha,

Many thanks for the quick reply. Just to confirm that there was not a change in height of the actual turbines from the 197m, as outlined within the Design Envelope of the original application, rather there was a change in the air gap below them.

Kind regards,

Adrian

**Adrian Tait** 

#### marinescotland

Marine Renewables Licensing Manager Marine Scotland Licensing Operations Team Scottish Government Marine Laboratory | 375 Victoria Road Aberdeen, AB11 9DB

Phone: 01224 295 668 | 07557 848 720

From: ROSSI, Sacha [mailto:Sacha.Rossi@nats.co.uk]

**Sent:** 05 July 2013 17:06 **To:** MS Marine Licensing **Cc:** NATS Safeguarding

Subject: Na Gaoithe Offshore Wind Farm ADDENDUM

NATS does not anticipate an impact due to the change in height of the turbines and therefore has no comments to make on the Supplementary Information.



Regards S. Rossi NATS Safeguarding Office

### **NATS**

**Mr Sacha Rossi** ATC Systems Safeguarding Engineer

**≘**: 01489 444 205

⊠: <u>sacha.rossi@nats.co.uk</u>

**NATS Safeguarding** 

http://www.nats.co.uk/windfarms

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Dh'fhaodadh gum bi teachdaireachd sam bith bho Riaghaltas na h-Alba air a chlàradh neo as 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.		
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# CAPTAIN PHILLIP DAY DIRECTOR OF MARINE OPERATIONS

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Mr Adrian Tait
Marine Renewables Licensing Casework Manager
Marine Planning and Policy Division
Marine Laboratory
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

05 July 2013

Dear Adrian

Addendum to the Environmental Statement supplied supporting the application for consent under Section 20 of the Marine (Scotland) Act 2010 and Section 36 of The Electricity Act 1989, The Electricity Works (EIA) (Scotland) Regulations 2000 to construct and operate an Offshore Wind Farm, Neart na Gaoithe, Firth of Forth.

Please find our response to the addendum supplied by **Mainstream Renew able Power** regarding the Environmental Statement submitted for the Neart na Gaoithe

Offshore Wind Farm in the Firth of Forth.

With regard to the consultation and the scope of the Environmental Statement, we would only comment on any information or amended information relating to Shipping and Navigational Safety relating to this project.

We note the additional information with respect to the number of turbine masts, turbine size, rotor diameter and clearance at Lowest Astronomical Tide height as well as the proposed aviation marking scheme.

The Northern Lighthouse Board will confirm a definitive lighting and marking schedule on receipt of final turbine layout information. We do not necessarily agree with the comment on page A1-3 that offshore sub-stations and other structures do not require navigational marking and lighting of any sort.

With regards to the aviation lighting suggested in the proposed marking and lighting scheme, NLB would draw the developers attention to CAA trials with synchronised flashing medium intensity red morse 'W' (Whisky) lights replacing the fixed red lights that may have the potential to be interpreted as Marine Navigation lights when viewed from a distance. NLB would encourage the dev eloper to seek approval from the CAA to use the synchronised red morse 'W' and we are aware that this request would be favourably met.

We also note that it is the intention of the developer to all turbines fitted with low intensity green lights that will be illuminated when the turbine is locked in a safe

Page 2

Mr Adrian Tait

05 July 2013

position. The proposal is that these lights should be capable of both flashing and fixed display. The NLB would require further discussion with the developer on this proposal, as again, the green lights may have the potential to be interpreted as Marine Navigation lights when viewed from a distance. They may also have the potential to be displayed for extended periods when the turbine is locked off for operations other than that of the Search and Rescue or Helicopter Winching operations. We would also enquire if having two different modes of display (flashing and fixed) that this may add further confusion with regards to the locked state of the turbine.

As previously stated, all navigational marking and lighting of the Offshore Wind Farm site or its associated marine infrastructure will require the Statutory Sanction of the Northern Lighthouse Board prior to deployment.

If I can be of any further assistance, or any of the please advise the Northern Lighthouse Board by telephone to above requires further clarification e-mail to <a href="mailto:navigation@nlb.org.uk">navigation@nlb.org.uk</a> or by telephone to







Adrian Tate (Licensing Casework Manager)
Marine Scotland – Renewables Licensing Operations Team
375 Victoria Road
Aberdeen
AB11 9DB

1<sup>st</sup> August 2013

Dear Mr Tate,

### Mainstream Renewable Power Limited's application for Marine License & Section 36 Consent – EIA Addendum

RSPB Scotland welcomes the opportunity to provide further comment on the application for the Neart na Gaoithe Offshore Wind Farm, situated in the Forth & Tay region some 15.5km to the east of Fife Ness. The applicant, Mainstream Renewable Power Limited, has submitted an Addendum of Supplementary Information to support their proposal. Following this submission, Mainstream met with RSPB Scotland to present the ornithological elements and we appreciate these efforts to keep stakeholders informed of the project's progress.

We acknowledge efforts taken by Mainstream in preparing the addendum, which clarifies concerns raised and addressed advice provided at the application stage by RSPB Scotland and other stakeholders. In particular, inaccuracies and discrepancies within the reporting have largely been addressed; the Rochdale Envelope has been refined and is presented as a project design envelope; and further information has been gathered to inform the cumulative impact assessment of Neart na Gaoithe with the other two projects in the Forth and Tay, Seagreen and Inch Cape. However, at this stage we require clarification on the issue of flight heights as detailed below. Furthermore, and as referred to in our original consultation letter of the 8<sup>th</sup> October 2012, prior to reviewing our position, we consider it necessary to await publication of the two directly relevant research projects commissioned by Marine Scotland looking into effects of displacement and population level effects of offshore wind on seabirds.

RSPB Scotland **maintains its objection** to Mainstream Renewable Power Ltd's application, pending further discussion on flight height data and publication of the above mentioned items, which we expect to provide important contextual information from which we can reassess our current position. Whilst we appreciate that the delays associated with waiting for this information will be frustrating for the applicant, we feel that the relative brevity of the timescales, and the novel nature and scale of the development merits these more detailed considerations.

**Flight Height:** Our main focus, ahead of receiving the research, is to seek clarification on the flight height data presented in the addendum. Obtaining height data correctly is extremely difficult, even for experienced observers such as those used for the survey and it is flight height which is crucial to the re-assessment of collision mortalities under the revised design envelope reported in the addendum. We would therefore welcome further discussion with Mainstream on this issue to seek assurances that the heights are accurate.

Scotland Headquarters 2 Lochside View

2 Lochside View Edinburgh Park Edinburgh EH12 9DH Tel 0131 317 4100 Fax 0176 768 5008 rspb.org.uk



RSPB Scotland seeks further discussion with Mainstream over the above raised issue and then, following sight of the Marine Scotland research outputs, we will review our position.

Yours sincerely,



Charles Nathan Conservation Planner (Marine)

Cc'd

Sophie Allen Catriona Gall

- Mainstream Renewable Power LtdJoint Nature Conservation CommitteeScottish Natural Heritage

### Tait A (Adrian) (MARLAB)

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To:	MS Marine Licensing
Subject:	Application to Construct and operate an offshore windfarm, Firth of Forth - Ref: 008/OW/MainS - 10
Dear Sir/Madam	
Thank you for sending thro	ough application for the above.
RYA Scotland agree that the conclusions.	he design envelope refinement will not affect the original impact assessment
Regards	
Senior Administrator	
Royal Yachting Association	n Scotland
T: _yaso	cotland.org.uk
	aledonia House, 1 Redheughs Rigg, South Gyle, Edinburgh, EH12 9DQ d.org.uk <b>T</b> : 0131 317 7388 <b>F</b> : 0844 556 9549
LOTTERY Spo	ortscotland
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Your Ref:

1st August 2013

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

Adrian Tait
Licencing Casework Manager
Marine Renewables, Marine Scotland
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

Dear Adrian,

#### Addendum to Neart na Goithe Consents application

The membership of the SFF consists of the Anglo-Scottish Fishermen's Association, the Clyde Fishermen's Association, the Fish-Salesmen's Association (Scotland) Ltd, the Mallaig and North-West Fishermen's Association, the Orkney Fishermen's Association, Scallop Association, the Scottish Whitefish Producers' Association Ltd and the Shetland Fishermen's Association.

Subsequent to SFF receiving the addendum to the Application for various consents for Neart na Gaoithe Windfarm Application, we have considered the new information and would make the following comments, which currently would be in addition to our previous response:-

#### Fish and Shellfish Ecology Appendix 2: HVAC EMF studies.

This is a good starting point, defining the possible density of any EMF created. Going forward the SFF would expect to see reliable scientific assessments of any effects this EMF could have on the habits of e.g. Scallops, Nephrops, Crabs, Starfish, Lobsters and general demersal species.

#### **Technical Appendix 1:**

Design Parameters (T1.10 and T1.11). The SFF welcomes this clarification of the Rochdale envelope and would emphasise our preference for spacing to be closer to the 1805 m limit than the 450m limit.

T1.12 - It is to be hoped that the Indicative Layout C will be discussed in detail with the catching sector, including the possible inter-array cabling design, before it becomes the definitive layout.



TFG 1.4 - The SFF would seek confirmation that any dredging of sand, clay or gravel would not occur on identified spawning grounds for commercial species.

EXC 1.6 - The SFF would expect that wherever possible the maximum burial depth would be the specification used.

Further to the above points, the SFF would expect that once they have been addressed to our satisfaction they are also promulgated within the Commercial Fisheries Working Group set up in the region,

Yours sincerely,



Fisheries Policy Officer Scottish Fishermen's Federation

#### **Trunk Road and Bus Operations**

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF Direct Line: 0141 272 7331, Fax: 0141 272 7350 Mark.paterson@transportscotland.gsi.gov.uk





Your ref: UK02-0504-0158-EMU-ADDENDUM-RPT-A3

Date: 30 July 2013

Dear Mr Walker,

# NEART NA GAOITHE OFFSHORE WIND FARM – ADDENDUM OF SUPPLEMENTARY ENVIRONMENTAL INFORMATION

I refer to your letter dated 2 May 2013 and the accompanying report. The comments of the Trunk Road and Bus Operations Directorate (TRBOD) are as follows.

TS has no comments on the information supplied

I trust this meets your requirements.

Yours sincerely,



Mark Paterson Development Management

cc. Alex Kerr SG DBE Planning (Email)





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30<sup>th</sup> July 2013

Dear Adrian,

WDC comments on the Neart na Gaoithe Offshore Wind Farm Addendum of Supplementary Environmental Information

Thank you for the opportunity to provide comments on this Addendum of Supplementary Environmental Information. Given our area of interest, we have only focused on the marine mammal sections.

WDC are endeavouring to assist with the environmentally sustainable development of marine renewable energy in Scotland. Whilst welcoming the Scotlish Governments' commitment to renewable energy generation, particularly noting the potential consequences of climate change for cetaceans, we have serious concerns about current levels of uncertainty and the possible negative impacts these developments, both individually and cumulatively, may have on cetaceans (whales, dolphins and porpoises) and seals in Scotlish waters.

#### In summary

The lack of a Marine Mammal Monitoring Programme (MMMP) and a detailed Mitigation Plan to reduce the impacts of pile driving, increased vessel movements and in combination/cumulative impacts on marine mammals in the area makes it difficult to provide comments on this Addendum. The Marine Mammal Protection Plan should be developed in consultation with scientists with expertise in the Natura species to ensure that monitoring of the bottlenose dolphin, and grey and harbour seal SAC populations contribute to existing monitoring studies, to understand how bottlenose dolphins and seals use the area and to assess any changes to site use. The MMMP should be appropriate to the level of works. WDC requests involvement in the development of the MMMP and also the Mitigation Plan.

There is considerable scientific uncertainty surrounding the impacts of pile driving during construction on all species, and in this region. As a result, our preference is that pile driving is not used at all during construction.

The predicted increase in disturbance and displacement of bottlenose dolphins, grey and harbour seals, from the construction of Neart na Gaoithe, and in-combination with other



proposed developments, leads us to believe that it is not possible to rule out Likely Significant Effects. We therefore recommend that Marine Scotland carries out an Appropriate Assessment as required to fulfil regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994.

We understand that for the Habitats Regulations Assessment only species listed in Annex II of the Habitats Directive need to be included e.g. for Neart na Gaoithe, only bottlenose dolphin, grey and harbour seals need to be included. However, other cetacean species commonly sighted in the area, such as minke whale, harbour porpoise and white-beaked dolphin, should all be given adequate consideration (see Table 5.6 for frequency of sightings).

#### Specific comments on the Addendum

The distribution of bottlenose dolphins in Map 5.1 only includes East Grampian. The map does not include the proposed development area, or the Moray Firth. It is known that animals from the Moray Firth SAC are observed as far south as the Firth of Forth, the lack of presenting the whole range of the animals, limits the value of the map.

Table 5.1: Number of harbour seals recorded within the offshore site and buffer zone from three years of site specific surveys. It is not clear what the difference between the different species categories are (the first column of the table).

Section 45: The site is used by harbour seals. Tagging studies are based on a few animals and seals are hard to observe 'at-sea'. Therefore use of the area by harbour seals is likely to be underestimated. Furthermore, Sparling et al. (2012) states that Neart na Gaoithe covers '*important travel routes for seals*'.

Section 59: Further information on the pile driving method and mitigation techniques to reduce the impact of underwater noise generated during pile driving needs to be covered more significantly. Alternatives to pile driving should also be considered.

Section 101: The use of ducted propellers should not be permitted unless they are guarded or potential impacts can be effectively mitigated in some other way, especially for harbour seals.

If ducted propellers are to be used, a proposed Seal Corkscrew Injury Monitoring Scheme (SCIMS) including

Marine Mammal Observer searches for seal carcasses to determine if injuries to seals are occurring. Beach searches should be conducted regularly enough to allow the carcasses to be 'fresh' enough for a cause of death, where possible, to be determined. There is growing evidence to suggest that harbour porpoises suffer from 'corkscrew injuries', in addition to seals (Deaville et al., 2013), therefore any stranded marine mammals should be reported to the Scottish Marine Animal Stranding Scheme (SMASS). Should any incident that results in mortality occur during construction, activities should be halted immediately until an investigation can be completed.

Section 108 states 'few, if any, harbour seals will be impacted from PTS. Based on the outputs from SAFESIMM modelling indicate that between 18 and 41 harbour seals may receive levels



of sound capable of causing PTS. This is based on a precautionary dose response curve and therefore is predicted to be a worst case scenario.' PTS in 18-41 harbour seals from such a small, declining population cannot be considered 'a few' animals. This is a significant number of the population and of great cause for concern.

Section 109: 'The regional population of harbour seal is 376 individuals (Sparling et al., 2011). Therefore, between 4.7% and 10.9% of the regional harbour seal population is at risk of receiving SELs that may cause PTS'. This value is very high and contradicts Section 108 (see above).

Section 110: 'Based on the results from the Moray Firth Framework of those predicted to be impacted there will be a loss of between 4.5 and 10.25 harbour seals from the population due to PTS. The loss of between 4.5 and 10.25 individuals is 1.2% and 2.7% of the regional seal population.' WDC considers that a loss of even 1 individual from this decreasing harbour seal population is considered to be 'too high' (and significant at a population level), especially considering the 38% annual decrease in the population (Section 110) which occurred without the construction of marine renewable developments in the area.

Noise modelling in Figure 6.2 shows underwater noise from pile driving is expected to be heard within the Firth of Tay and Eden Estuary SAC. This is unacceptable. Effective mitigation methods need to be implemented, including not piling or the use of noise-reduction techniques.

Section 112: The low number of sightings reflects the small population size and that seals 'at sea' are hard to observe. 'Based on the low number of sightings and the results from the tracking data it is not thought that between 4.7% and 10% of the regional harbour seal population will be within the area at the commencement of piling as indicated by the results from SAFESIMM'. The number of animals expected to be in the area is very high considering the status of the harbour seal population.

Section 113: More information on the proposed mitigation methods is required. WDC does not endorse the use of acoustic mitigation devices to deter seals from the area, especially not in such close proximity to a harbour seal SAC.

Section 115 states 'between 25% and 40% of the regional harbour seal population may receive sound levels that could cause TTS and/or displacement'. This is very high and unacceptable for a SAC population, especially a population that is declining.

Section 116: With such a declining population such as the harbour seals, non-SAC animals should be considered as important as animals from the SAC. Potentially affecting such a high percentage of animals is unacceptable.

Section 118: Whilst temporary loss of hearing would not affect the ability of harbour seals to forage effectively, seals use vocalisations and hearing for other aspects of their life histories e.g. communication and breeding. Temporary loss of hearing may have significant effects on the breeding success of the population.

Section 120: Modelling outputs indicate that between 283 and 314 (reflecting 75% and 83% of the SAC population) harbour seals may receive levels of sound capable of causing behavioural



change. Although this has been discussed further in Section 123, WDC feels that it is unacceptable to affect such a high number of animals that rely on hearing for many aspects of their life histories.

Section 121: Whilst we agree that seals forage mainly within the nearshore coastal waters of the Firth of Forth and Firth of Tay area, it should be remembered that tagging experiments are based on few animals and care must be taken when this data is extrapolated for the whole population.

Section 125 and 126: Seals show high site fidelity for all aspects of their life histories, especially breeding and pupping. The Firth of Tay and Eden Estuary SAC is a known pupping area for harbour seals. Displacement from their pupping site for 1-2 years will likely decrease pup survival and increase juvenile mortality rates. Pile driving must be conducted out of the harbour seal pupping and breeding season to avoid displacement of pregnant and/or nursing females.

Section 129: Such a high level of displacement and avoidance of harbour seals in Scotland could have devastating effects for the population.

Section 136: The use of Ducted Propellers should not be permitted (see comments on Section 101 for more information).

Section 138: The Mitigation Plan needs to be developed. Without access to the mitigation plan, we cannot comment on mitigation methods to reduce the impact(s) on marine mammals from construction of the proposed development.

Section 146 states 'if all harbour seals impacted are from the Firth of Tay and Eden Estuary SAC then, based on the latest counts from 2011, 93% of the harbour seal population may be impacted'. Even if this estimate is an over-estimation, this value is extremely high and unacceptable.

Section 151: Effecting 81-100% of the harbour seal population due to noise, behavioural change and/or displacement is unacceptable.

Section 173: Based on modelling outputs, between 61.1% and 88.7% of the SAC population may be impacted by temporary threshold shift or displacement. This magnitude of disturbance is too high for a declining SAC population.

Section 176: Like harbour seals, grey seals vocalise to communicate, especially in the breeding season. Affecting the hearing of the animals, may potentially have an impact on their life histories e.g. breeding. Where possible, pile driving should occur out of the breeding and pupping season.

Sections 178-182: The number of animals expected to be affected from displacement, and/or behavioural impacts from noise generated during pile driving is too high.

Bottlenose dolphins: Whilst it is expected that bottlenose dolphins will show strong avoidance of the area during pile driving, monitoring should continue throughout construction to observe any potential displacement of animals from pile driving and/or increased vessel activity.

A timetable needs to be developed which includes all proposed developments within the range of bottlenose dolphins, harbour and grey seals in order for the cumulative impacts to be better



assessed and allow a mitigation plan to be developed.

In conclusion, due to the declining harbour seal population, and the potential effects on the integrity of the Firth of Tay and Eden Estuary and Moray Firth SACs, WDC objects to this development, unless effective mitigation methods are developed and implemented during construction of the Neart na Gaoithe Wind Farm. We do not consider the proposed development to be compatible with the requirements on the Habitats Directive.

Whilst not a requirement for the HRA, the potential impact on other cetacean species e.g. minke whale, harbour porpoise and white-beaked dolphin, which are listed as Priority Marine Features and drivers in the Scottish Marine Protected Areas project, should also be fully considered.

Should consent be given, an annex of suggested license conditions is attached.

We hope you find these comments useful and would be happy to discuss these comments further.

Yours Sincerely,



Scottish Policy Officer

#### References

Deaville, R., Brownlow, A., Penrose, R., Smith, B., Barnett, J., Perkins, M. and Jepson, P. 2013. Turning the screw: Shipstrike in UK stranded cetaceans. 27th Conference of the European Cetacean Society Abstract book p 48-49. Available at http://www.escolademar.pt/ecs2013/scientific-program/

Sparling, C.E., Russell, D.F., Lane, E., Grellier, K., Lonergan, M.E., McConnell, B.J., Matthiopoulous, J. and Thompson, D. 2012. Baseline seal information for the FTWODG Area. SMRUL-FDG-2012-0. Unpublished.



#### ANNEX

Should consent be given to this proposed development, WDC suggests the following consent conditions:

- Alternative methods to pile driving should be investigated. If pile driving is used, a noise-reducing barrier (such as a bubble curtain) should be maintained around the source to mitigate the impacts of radiated noise levels. The barrier should remain in place until piling has been completed.
- Visual and acoustic monitoring should be ongoing throughout construction.
- Activities should be halted when marine mammals approach within a specified distance of operations (mitigation zone).
- Ground-truthing of modelled noise assessment data should be undertaken.
- The Marine Mammal Protection Plan should be developed in consultation with scientists with expertise in the Natura species to ensure that monitoring of the bottlenose dolphin, and grey and harbour seal SAC populations contribute to existing monitoring studies, to understand how bottlenose dolphins and seals use the area and to assess any changes to site use and are appropriate to the level of works.
- The monitoring plan should include the recommendations from the Aberdeen scientific study 'Population consequences of disturbance'.
- The monitoring plan should be appropriate to all developments in the area (Neart na Gaoithe, Inch Cape, Firth of Forth, Aberdeen Bay and the Moray Firth), scientifically robust, and all the developers should work together to achieve this.
- The use of ducted propellers should not be allowed.
- If the use of ducted propellers is permitted during construction and/or operation, there should be regular monitoring of beaches for stranded animals to determine if any injuries to marine mammals, e.g. corkscrew injuries, are occurring.
- Should any incident that results in mortality occur during construction, activities should be halted immediately until an investigation can be completed.

#### Recommendation to Marine Scotland

An audit of Environmental Impact Assessments associated with marine spatial planning and the renewable energy industry should be undertaken, to identify strengths and weaknesses in assessments, with a view to ensuring best practice.

