



Andrew Sutherland
Marine Renewables Licensing Advisor
Marine Scotland
375 Victoria Road
Torry
Aberdeen
AB11 9DB
ms.marinelicensing@scotland.gsi.gov.uk

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND A MARINE LICENCE UNDER PART 4, SECTION 20 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE AN OFF-SHORE WINDFARM, ABERDEEN BAY, ABERDEEN

**Heritable Fishing Rights** Dear Mr Sutherland, AOWFL are aware of the ongoing issues with regard to and the content of your recent telephone conversation with him of the 8th October 2012 (Marine Scotland File Reference 018/OW/AOWFL – 9). Notwithstanding that all salmon fishing in Scotland is a heritable right, we understand that has requested Marine Scotland to impose a specific condition to protect private heritable salmon fishing rights. In particular, is seeking a legal condition which considers the times that AOWFL may be required to visit the site or undertake work at the site either on land or by vessel. has indicated that this should take place via an access agreement. We understand has stated that Vattenfall had already agreed to provide this access agreement, as well as to pay for any losses might incur should the project, if consented, impact on fishery in a negative manner. With regard to onshore access, we advise that AOWFL currently has a lease option with for onshore infrastructure works, which gives AOWFL access to land, including the beach (to the high water mark). We note however, that AOWFL intend to submit planning applications for two substations and cable route alternatives and that only one of these options relates to land under ownership If cable works were to utilise land during the legitimate fishing season, then this ability to access the beach and the fishery temporarily during those works where such works affect access. The lease agreement therefore will interfere, and in certain circumstances will prevent access to the beach during the temporary cable installation works over the leased land, as rights are deemed to be secondary in the lease to those of AOWFL. This does not extinguish or interfere with the heritable fishing rights nor does it extinguish ability to exercise heritable fishing rights.





AOWFL have recently sought legal advice with regard to Heritable Salmon Fishing Rights and its interaction with s36 of the Electricity Act 1989, which we provide below (without prejudice) for your information.

'Schedule 9 of the Electricity Act incorporates certain statutory duties imposed both on Applicants and the Scottish Ministers in considering Section 36 Applications. Paragraph (3), sub-paragraph (3) incorporates the following provision: "...in exercising any relevant functions each of the following, namely a licence holder, a person authorised by an exemption to generate or supply electricity and the Secretary of State (now the Scottish Ministers) shall avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters." The ES has fully considered the potential impacts that the development of the project would have on fish stocks and species. It has also identified appropriate mitigation measures to minimise the potential impacts.

who owns salmon fishing rights on the coast has raised concerns about the application on the grounds of potential interference with these rights. AOWFL understands that has not expressed any specific concerns about the potential impact that the development may have on the fishery itself to Marine Scotland, rather, concerns appear to relate to impacts on rights (per se). While it is clear that the potential impact on the fishery could be a material consideration in relation to the granting of a marine licence or Section 36 consent, this is distinct and separate from the legal rights that has to fish.

Certain cabling works may take place within the area within Black dog fishery. Any such construction effects would be temporary in nature and there is no evidence provided that they would have an adverse effect on the fishery itself. Our understanding is that the spatial extent of the fixed nets only extend to 1300m from the low water mark except for the mooring warps and anchors, and that there have been limited returns from the Don District in recent years. In addition, the close time for salmon netting in the Don district runs from 27 Aug-10 Feb inclusive and is subject to a 'weekly slap' (closed period) 6pm Friday to 6am Monday. The rod fishing extends to 31 October (and can recommence on 11th Feb, the same as nets) as set out in section 13 of the 2003 Salmon and Freshwater Fisheries Consolidation etc Act.

has also raised issues regarding potential compensation. This is not a matter which should be taken into account in the consenting process.

As indicated above, AOWFL believe that issues relating to compensation for commercial losses and/or private access agreements are outwith the remit of the s36 and/or marine licensing process. AOWF confirm that if legal obligations are identified in response to heritable fishing rights, we will honour those obligations at the appropriate time.

We continue to be in discussions with about a range of issues, including circumstances whereby the construction may take place through the Blackdog Fishery.

Please do not hesitate to contact me if you have any further queries.

Yours sincerely (By email)

Beverley Walker Interim Consents Manager, Aberdeen Offshore Wind Farm Limited



By Post

Ledingham Chalmers LLP Solicitors Johnstone House 52-54 Rose Street Aberdeen AB10 1HA Your Ref: TIH/42766.0015 Our Ref 79289754.1\nwalker 644615.07013

DDI +44 (0)1224 377966

E natalie.walker@pinsentmasons.com

22 December 2016

Without Prejudice

**Dear Sirs** 

Our client: Aberdeen Offshore Wind Farm Limited
Your clients: Salmon Fishing- Works at Blackdog, Aberdeen

We refer to your letter of 15 December 2016.

Our client's position is that they have the necessary consents for the construction of the wind farm and the conditions of these are being complied with. These consents were granted following a lengthy consenting process in which your clients had the opportunity to make representations. We understand that your clients in fact objected to consent being granted pursuant to section 36 of the Electricity Act 1989 (as amended) however this objection was withdrawn. As such we do not see the relevance of any report that your clients have purported to have obtained.

As previously stated, our client is prepared to meet with your clients with both parties' legal representatives being present to discuss this matter. Our client remains of the view that this meeting would be more productive for all concerned if your clients would set out prior to this meeting the basis they have for asserting that their heritable fishing rights would be impacted by our client's works, including the nature and extent of any losses your clients contend they have or will sustain.

We look forward to hearing from you.

Yours faithfully

[2 lines redacted]

Partner for Pinsent Masons LLP

Pinsent Masons LLP

13 Queen's Road Aberdeen AB15 4YL

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## ledingham Ichal mersLLP

Pinsent Masons LLP Solicitors **DXAB32** ABERDEEN Ref. Your Ref: TTH/42766.0015 77116194.1 /BC06 644615.07013

Date:

15 December 2016

Dear Sirs, [1 line redacted]

## Aberdeen Offshore Wind Farm Limited Salmon Fishings - Works at Blackdog, Aberdeen

We refer to the above and previous correspondence resting with your letter of 18 November 2016.

Our clients have become increasingly concerned by the position adopted by your clients in this matter.

As your clients are fully aware, our clients own the heritable fishing rights. Your clients propose to erect this wind farm and lay cables within our clients' fishings. Recent correspondence demonstrates that the position adopted by your clients now is significantly removed from previous dialogue and agreements entered into.

It had previously been agreed that separate discussions would take place with our clients regarding the construction of the project and that no construction, or related works, would proceed without reference to them.

Whilst your clients may have been granted a licence to carry out certain works, that is an entirely separate issue to that of our clients' heritable fishings. Crown Estates do not own the sea or the water column inhabited by the salmon and sea trout. It is incumbent upon your clients to consult with our clients and any other interested parties and ensure that their interests are not prejudiced by this development.

In light of recent actions and the position adopted by your clients, our clients have instructed a detailed evaluation of the potential impact of this development on salmon and sea trout ("the Evaluation"). This is not a step our clients have taken lightly, but given the content of your correspondence they have been left with little choice.

Professor Anthony Hawkins, CBE, a world renowned expert in salmon and fish behaviour, has prepared this comprehensive document extending to some 133 pages. A one page summary of the Evaluation is enclosed.

Our clients find Professor Hawkins' conclusions and comments both compelling and alarming.

### ledingham IchalmersLLP

In essence, the Evaluation finds that the information relied upon in obtaining the necessary consents for this project is flawed and that the conditions of the licence granted are not being complied with. He determines that there are a number of factors, arising from both the construction and operation of the proposed development including the cables, which may have an adverse and, in some instances, long term effect on our clients' fishings. Furthermore, your clients appear to be content to proceed with this construction without having any regard to the impact on our clients' fishing rights.

In light of Professor Hawkins' Evaluation it is clear that extensive research into the effects of this wind farm development on salmon and sea trout requires to be undertaken and then evaluated before there is any question of proceeding further. Accordingly, our clients require your clients' immediate written undertaking that no fuffier works in relation to this development will take place pending completion of this process.

Yourk faithfully

Tiinothy R Thomas Partner An Independent Evaluation of the Potential impact of the Aberdeen Offshore Wind Farm upon Salmon and Sea Trout has been carried out by Professor A. D. Hawkins CBE FRSE, a former Director of Fisheries Research for Scotland, and a specialist on the behaviour of salmon and other fishes. Professor Hawkins was an Assessor to the Scotlish Salmon Strategy Task Force.

The following is a summary of the key matters covered within the 133-page Evaluation

The review evaluates the potential impact upon salmon and sea trout of the proposed Aberdeen Offshore Wind Farm. Salmon and sea trout migrate to and from rivers along the Aberdeenshire coast, including the Dee, Don and Ythan, and also pass through the area on their way to other east coast rivers. Salmon have strong protection under the EJ Habitats and Species Directive and salmon and sea trout are listed as Priority Species under the UK Biodiversity Action Plan. The River Dee has been designated as a Special Area of Conservation because of the presence of the salmon and other key species. Delays and diversions to migratory fish are likely to occur during construction or operation of the wind farm. Any alterations to the migratory cues on which migratory fish depend must be avoided.

Both the construction of a wind farm and its subsequent operation will generate underwater noise that may affect the behaviour of fishes directly, or might mask the detection of important biological signals and orientation cues. The electromagnetic fields (EMFs) from subsea cables might also interact with migrating fishes in the close vicinity of the cables, particularly in shallow water. Sediment release may affect the ability of fish to identify their home rivers using their sense of smell.

The Environmental Statement on which the Scottish Ministers' consent was based was flawed in the way that it evaluated the effects of underwater noise. It did not take the generation of particle motion and seabed vibration by construction work and operational wind turbines fully into account, and it did not consider the impact of infrasound, to which salmon are sensitive. There was also insufficient evidence available to enable full assessment of the overall effect of EMFs from subsea cables on the migrations and behaviour of salmon and sea trout. The assessment of the impact of suspended sediments did not consider sediment release from the placement of suction bucket foundations. There is a strong case for applying the precautionary principle and delaying the wind farm development until valid evidence on these issues can be considered and properly evaluated. The development may adversely affect salmon and sea trout and the River Dee Special Area of Conservation.

Appropriate mitigation and monitoring measures were intended to be discussed with stakeholders and regulators. A Project Environmental Management Programme was to be prepared, prior to the commencement of development, to be approved by the Scottish Ministers. This programme has yet to be made available to the public, or discussed with stakeholders, although survey work for the development has already begun. There have also been a number of changes to the development since the Environmental Statement was prepared, in particular suction bucket foundations are now to be used. It is important that the impact of these changes be examined.

A Marine Licence was applied for and was granted for the development. Such a licence sets out conditions for carrying out a wide range of marine activities. There is a need to protect the environment, protect human health, and prevent interference with legitimate uses of the sea. So far, there has not been sufficient consultation with coastal salmon fishers. It is important that the developers and the Crown Estate reach agreement with those who make their living in areas adjacent to the wind farm, as this development may have a major impact on legitimate uses of the sea.

Prior to the commencement of cable laying, a Cable Laying Strategy had to be submitted to the Scottish Ministers for approval. Cable laying was supposed to avoid any coastal netting stations, but it would now appear (from information provided by the owners of the Blackdog Fishing Station) that the cables are directly where the main operation of Blackdog Fishing Station launches boats, deploys anchors and erects poles and nets, and will affect fishing operations there. The owners of salmon fishing rights must be consulted by the developers and the Crown Estate on any proposals regarding the location and laying of cables. The cable routes were supposed to avoid coastal netting areas, but that is no longer the case.

Information gaps on the impact of wind farm developments upon salmon and sea trout have been identified. A €3million scientific research programme has now been formulated. Key components of this programme should take place before the Aberdeen wind farm is allowed to proceed.





By Hand

Ledingham Chalmers Solicitors Johnstone House 52-54 Rose Street Aberdeen AB10 1HA Your Ref: SDS/42766 Our Ref 77011251.1 \BC06 644615.07013

DOI +44 (0)1224 377966

E natalie.walker@pinsentmasons.com

14 October 2016

Without Prejudice

Dear Sirs

Our client: Aberdeen Offshore Wind Farm Limited Your clients:

Salmon Fishing- Works at Blackdog, Aberdeen

We refer to your letters dated 11 and 14 October 2016 in respect of the above.

Our client has been granted a lease of parts of the sea bed at Aberdeen Bay by the Crown Estate Commissioners ("the Leased Area"). The buoy station is to be deployed by our client within the Leased Area. The creation of a buoy station in the Leased Area will not in any way interfere with your clients' heritable interests in the fishings.

Our client has also previously advised your clients of the installation of the buoy station. Please find enclosed an email that was sent by our client to your client on 5 July 2016 advising . of the details of the deployment of the buoy.

Our client has also 'discussed the construction of the project' with your client on many occasions since 2012.

Despite the above, our client would be willing to meeting with your clients with both parties' lawyers being present. Please let us have proposed dates.

Separately, Babcock International Group are acting as agents for our client on this matter so all further correspondence on this matter should be addressed to us.

Partner for Pinsent Masons LLP

Pinsent Masons LLP

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#### **WALKER Natalie**

Subject:

FW: AOWF Floating lidar deployment

From: Jameson Helen (WB-0) Sent: 05 July 2016 17:22

To: Sleightholme Edwina (WB-0); Beattie Andrew (WE-W)

Subject: Fwd: AOWF Floating lidar deployment

**FYI** 

Sent from Samsung Mobile

From: Original message ----

Date:05/07/2016 16:47 (GMT+00:00)

To: "Jameson Helen (WB-0)"

Subject: Re: AOWF Floating lidar deployment

Thanks Helen, that's fine, notification received.

From: <a href="mailto:helen.jameson@vattenfall.com">helen.jameson@vattenfall.com</a>
Sen ♦ 16 2:48 PM

To: . . . . . . .

Subject: AOWF Floating lidar deployment

Hi-

We are intending to deploy a floating LIDAR device and a metocean buoy offshore within the wind farm area to take various environmental measurements for a period of up to two years. They will be anchored to the seabed (the buoy via a single anchor and the FLIDAR with three) and sited in close proximity to each other. The proposed locations are as follows, although these may be adjusted:

	Latitude	Longitude
FLIDAR	13.509 N	59.895 W
Metocean buoy	13.474 N	59.895 W

We are aiming to get them out in August or possibly September, though I will let you know when nearer the time.

Any concerns please let me know, otherwise just let me know you've received the notification.

Many thanks Helen

Helen Jameson Vattenfall Wind Power Ltd Development Offshore

helen.jameson@vattenfall.com











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Page 1 of 4

# Aberdeen Offshore Wind Farm Salmon & Trout R&D – preliminary meeting notes

**Meeting date:** 3<sup>rd</sup> September 2012 13:00

Place: Marine Laboratory, Victoria Quay, Aberdeen

Participants: Ian Davies (Marine Scotland Science)

John Armstrong (Marine Scotland Science)
Callum Sinclair (Rivers and Fisheries Trusts of

Scotland)

Nathalie Stevenson (Vattenfall/AOWFL) Helen Jameson (Vattenfall/AOWFL)

Stephen Appleby (Brown & May Marine Ltd) Sara Xoubanova (Brown & May Marine Ltd)

#### **Background to meeting**

As part of the Aberdeen Offshore Wind Farm project, a proposal has been made to allocate approximately £2.7 million to environmental R&D. In order to allocate these funds appropriately, consultation with researchers and statutory bodies is required to identify existing gaps in knowledge and tailor programme design accordingly.

A particular need for further research investigating how salmonids utilise the Aberdeen Bay area, the wider marine environment and their broader interactions with offshore wind farms has been identified. A meeting was held on 3<sup>rd</sup> September 2012 between representatives from AOWFL, Marine Scotland Science, RAFTS and Brown & May Marine to discuss the existing level of understanding, current research and opportunities to invest a proportion of the proposed grant monies to salmonid research.

The intention is to implement a salmonid advisory group whereby experts and stakeholders can inform the research programme. Although, the exact nature of any programme will not be defined prior to consent, this meeting constitutes the first of several initial consultations with potential expert group members.

#### **Attendees**

Marine Scotland Science (MSS) is the science and research division of Marine Scotland which provides expert advice on the marine and freshwater environment to inform the activities of the Scottish Government. In attendance were Dr Ian Davies of the Marine Laboratory and Dr John Armstrong of the Freshwater Laboratory.

Rivers and Fisheries Trusts of Scotland (RAFTS) is an independent charitable trust which represents Scotland's national network of rivers and fisheries trusts. Their core objective is to conserve and enhance native freshwater fish and their environments in Scotland. In attendance was RAFTS Chairman Callum Sinclair.

Brown & May Marine Ltd are leading fisheries consultants for the offshore energy industry. In attendance were Stephen Appleby, Managing Director and Sara Xoubanova, Senior Consultant.

AOWFL representatives were Nathalie Stevenson, Project Manager and Helen Jameson, Environmental Officer.

#### **Discussions**

#### **Funding**

The need to separate consent conditions and further R&D was reiterated, as there had been some confusion over this distinction. Any EU R&D expenditure is distinct from that allocated to meet consent conditions, although there may be some linkages in subject area. The deadline for R&D defrayal is the end of 2016. Beyond this date it is anticipated research would carry on via top up funding and that Aberdeen Renewable Energy Group (AREG) would continue to take forward any research programmes beyond that date. However, initial R&D funds are dependant on AOWF gaining consent. Commissioning of research is planned for next year, following achievement of internal and regulatory hurdles.

Discussions were held on the subject of the £6 million Ocean Laboratory and whether the budget for this endeavour might be better invested on environmental and other research. In due course AOWFL will be assessing the budget going forward, but at this time do not know whether this reallocation would be possible. This will be considered in due course if consent is granted and the project progresses.

#### Subject areas & current research

It is apparent that the biology of salmon and sea trout is an area of marine science which is greatly lacking in available published literature and funding. Numerous uncertainties exist regarding potential and likely interactions between salmonids and offshore wind farms. The following were proposed as general research areas worthy of further consideration in due course:

- Salmon and trout migratory routes
  - There is limited information on smolt migratory routes
  - It is not known whether salmon smolts hug the coast in the 'surf' zone or travel further offshore as they head north to main feeding grounds
  - Limited data on sea trout on the west coast of Scotland suggest that fish adopt a range of strategies, from remaining close to the river mouth to migrating offshore. Such data are consistent with results of tagging programmes on the east coast, but there is no understanding of the extent and use of feeding areas overall by populations that may occur near Aberdeen
- Adult feeding areas salmon tagged in Scotland have been recorded in fisheries as far afield as Greenland. The routes taken by salmon from the Scottish east coast to and from those feeding grounds are not clear
- Genetic studies to identify the natal river of adult fish may be useful in targeting tracking of returning adult salmon as they move around the coast during their homing migration on specific river populations.
- Clarification of swimming depths would inform likelihood of interacting with electromagnetic fields from cables
- Characterisation of hearing thresholds for salmon and trout at different life stages
- Characterisation of piling noise and other construction/operational noise sources
- Responses to AC and DC electromagnetic fields

Some specific research questions which could be explored at the AOWF/EOWDC site were also discussed including:

- Acoustic tagging of smolts and deployment of an acoustic array north and south of Aberdeen Bay to give information on migratory routes
- Acoustic tagging of adults north and/or south and monitoring of migration distance from the shore using an acoustic array
- Monitoring of adult auditory responses in the laboratory
- Increased efforts into EMF research currently underway
- Cable cameras to monitor avoidance behaviours
- Potential applications of fish counting systems to monitor adults returning to rivers

AOWFL currently has plans for marine mammal monitoring using CPOD devices and it was proposed that fish and marine mammal monitoring could be combined by attaching acoustic receivers to CPODs. AOWFL has a number of CPOD devices intended for use in marine mammal monitoring and Marine Scotland has approximately 30 more which may be used for such studies.

In all cases, the lack of background data implies some level of feasibility study will be required in order to refine the design of any research programme. The focus should be on answering some of the more basic questions such as establishing the routes smolts take when leaving their natal river, rather than aiming to plug every gap in knowledge which is not going to be feasible within the available EU R&D budget. Simplistically at this time, there is limited evidence to determine for instance whether smolts and returning adults travel inshore or further offshore, and if R&D results demonstrated movements close inshore, then

the likelihood of interactions of salmon with the wind farm may be limited to passing over export cables close inshore.

It was also recognised that groups such as RAFTS, ASFB and regulatory advisors such as Marine Scotland Science have much to contribute in terms of expertise, and guidance as well as potential volunteers who could assist with tagging or similar programmes requiring widespread manual labour which might otherwise be unaffordable.

The potential for collaboration with other developers and The Crown Estate (i.e. involvement with TCE noise working group) was also explored as a means to maximise the potential benefits of an Aberdeen Bay R&D programme and potential to tie in with other projects in the Moray Firth, and Forth and Tay.

Current research is being conducted within Marine Scotland Science which is beginning to address some of the key areas outlined above. For example:

Renewable energy & marine spatial planning (lan Davies)

- Characterisation of auditory thresholds in fish species and production of audiograms of responses to certain sounds e.g. pile driving
- Characterisation of noise profiles for turbine construction and operational noise

Fish behaviour unit (John Armstrong)

- Current research into AC EMF fields and avoidance of these by smolts (DC research is not currently being carried out but would be very relevant to offshore wind)
- Research into swimming depths to determine whether EMF from cables is likely to be a problem

The importance of communicating what research is currently underway, both at MSS and elsewhere, cannot be underemphasised in order to prevent duplication of research effort.

#### Partnership working & information dissemination

There is the potential for misalignment between the governmental perspective of Marine Scotland and the more grass roots charitable trusts conservation priorities and this needs to be borne in mind in future discussions in order to find a solution which will be useful and acceptable to both. Representatives from RAFTS and or ASFB should be encouraged to join the expert group in due course.

Potential involvement of academic institutions, for example:

- University of Aberdeen, Paul Thompson & Beth Scott
- University of Highlands and Islands, Jacqueline Black & Angus Jackson
- Universities of Stirling & St Andrews

Research by proxy i.e. involvement of fishermen and research vessels was suggested as a way of utilising existing vessel resource and engaging with local industry.

An independent party who set up a marine laboratory with private funds on the Scottish coast near St Abs has interests in EMF research and would be worth looking into.

Attendees to provide further recommendations on potential expert group members in due course.

#### **Pendrey D (Daniel)**

From: Sutherland AI (Andrew)
Sent: 05 June 2013 16:58
To: Sutherland AI (Andrew)

**Subject:** FW: Invitation to attend mtg MS ref Salmon R&D and AOWF

**Attachments:** Joint Ythan Don Dee Response to Aberdeen Bay Wind Farm Sep 2011.pdf;

AOWFL Addendum June 2012 R&D proposals & responses.pdf; Invitation to RAFTS

to attend MS mtg 3.9.12.pdf

Follow Up Flag: Follow up Flag Status: Flagged

From: nathalie.stevenson@vattenfall.com [mailto:nathalie.stevenson@vattenfall.com]

**Sent:** 28 August 2012 14:26

To: callum@rafts.org.uk; chris@rafts.org.uk

Cc: Davies I (Ian) (MARLAB); <a href="mailto:helen.jameson@vattenfall.com">helen.jameson@vattenfall.com</a>; MS Marine Licensing; Sutherland AI (Andrew)

Subject: Invitation to attend mtg MS ref Salmon R&D and AOWF

Dear Mr Sinclair,

On behalf of Aberdeen Offshore Wind Farm Ltd I wish to invite you and Chris Horrill to attend a meeting at 1pm on the 3rd September 2012 at Marine Scotland Science's Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB.

The session has been organised as part of our commitment to environmental R&D and how this relates to the comments received from the Dee, Don and Ythan District Salmon Fishery Boards in response to the AOWF consent application, made on the 1<sup>st</sup> August 2011. For your information, the Dee, Don and Ythan District Salmon Fishery Boards consultation response is attached, alongside a preliminary proposals for R&D document (this latter document was submitted to MS in August 2012 as part of the Addendum to the consents & S36 application)

Attendees will include representatives from Marine Scotland Science, Vattenfall Wind Power Ltd and Brown & May Marine Ltd. The focus will be on the development of mitigation strategies for salmonid species in relation to the proposed development and exploration of additional research opportunities intended to advance scientific knowledge in offshore wind and salmon interactions.

We would welcome your contribution to the above discussions and the opportunity to work in partnership with the Rivers and Fisheries Trusts of Scotland on this and future projects.

If you are able to attend, please confirm with myself, Nathalie Stevenson, at the above address.

This email has ben copied to the AOWF Marine Scotland Case Officer, Andrew Sutherland for his information

Yours Sincerely

Nathalie Stevenson, Project Manager, Aberdeen Offshore Wind Farm Limited

Nathalie Stevenson Vattenfall Wind Power Ltd Bridge End, Hexham, Northumberland, NE46 4NU, United Kingdom

Phone: +44 (0) 1434 611300 (switchboard) Phone: +44 (0) 1434 611318 (direct dial)

nathalie.stevenson@vattenfall.com

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nathalie.stevenson@vattenfall.com

[redacted]

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28 August 2012

Callum Sinclair, Director
Rivers and Fisheries Trusts of Scotland
CBC House
24 Canning Street
Edinburgh
EH3 8EG

Cc Andrew Sutherland Marine Renewables Licensing Advisor Marine Scotland

Your ref:

INVITATION TO ATTEND PRELIMINARY MEETING TO DISCUSS OPPORTUNITIES FOR RESEARCH AND MONITORING OF SCOTTISH SALMONIDS IN RELATION TO THE PROPOSED ABERDEEN OFFSHORE WIND FARM

Dear Mr Sinclair,

On behalf of Aberdeen Offshore Wind Farm Ltd I wish to invite you and Chris Horrill to attend a meeting at 1pm on the 3<sup>rd</sup> September 2012 at Marine Scotland Science's Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB.

The session has been organised as part of our commitment to environmental R&D and how this relates to the comments received from the Dee, Don and Ythan District Salmon Fishery Boards in response to the AOWF consent application, made on the 1<sup>st</sup> August 2011. For your information, the Dee, Don and Ythan District Salmon Fishery Boards consultation response is attached, alongside a preliminary proposals for R&D document

Attendees will include representatives from Marine Scotland Science, Vattenfall Wind Power Ltd and Brown & May Marine Ltd. The focus will be on the development of mitigation strategies for salmonid species in relation to the proposed development and exploration of additional research opportunities intended to advance scientific knowledge in offshore wind and salmon interactions.

We would welcome your contribution to the above discussions and the opportunity to work in partnership with the Rivers and Fisheries Trusts of Scotland on this and future projects.

If you are able to attend, please confirm with myself, Nathalie Stevenson, at the above address.

Yours Sincerely Nathalie Stevenson, Project Manager, Aberdeen Offshore Wind Farm Limited (by email)

#### Pendrey D (Daniel)

From: Sutherland AI (Andrew)
Sent: 15 June 2013 11:11
To: Sutherland AI (Andrew)

Subject:FW: AOWFL Outstanding responses to consultee comments 2: DSFB'sAttachments:Letter Marine Scotland AOWFL Response to Joint DSFBs dated 30th Sept.

2011.pdf; Attachment 1 \_ Salmon research meeting notes\_030912 FINAL.pdf

From: beverley.walker@vattenfall.com [mailto:beverley.walker@vattenfall.com]

**Sent:** 20 November 2012 14:04 **To:** Sutherland AI (Andrew)

Subject: FW: AOWFL Outstanding responses to consultee comments 2: DSFB's

Andrew

As discussed, please find below our forwarded email to the Joint DSFB's

regards Beverley

From: Walker Beverley (RW-SP) extern

**Sent:** 20 November 2012 13:58

**To:** 'info@riverdee.org' **Cc:** Jameson Helen (RW-SPU)

Subject: FW: AOWFL Outstanding responses to consultee comments 2: DSFB's

Dear Messrs Bilsby, Andrew and Davison,

Following consideration of all statutory and stakeholder comments to both the ES and the Addendum, please find attached our response to Marine Scotland regarding your joint comments re: the Aberdeen Offshore Wind Farm project.

We found your comments very valuable in formulating our way forward and trust as we are moving towards a consent decision in the near future, that these will be developed into appropriate conditions.

You will note the minutes of the preliminary meeting held with RAFTS and Marine Scotland Science, and hope that representatives of your Boards will be able to contribute to future meetings, as well as to the proposed Expert Panel to provide recommendations to Marine Scotland and the EOWDC Steering Committee on future research porojects with regard to migratory salmon and fish.

Please do not hesitate to contact me if you have any further comments and queries.

kind regards Beverley Walker

From: Walker Beverley (RW-SP) extern

Sent: 20 November 2012 12:53

To: Andrew.Sutherland@scotland.gsi.gov.uk

Cc: Jameson Helen (RW-SPU): Oakey Joanna (RW-QP)

Subject: FW: AOWFL Outstanding responses to consultee comments 2: DSFB's

Dear Andrew

Please find attached AOWFL's comments and response to the Joint Ythan, Dee and Don District Salmon Fisheries Boards

#### kind regards

**NE46 4NU** 

#### Beverley Walker

Consents Manager Aberdeen Offshore Wind Farm

Vattenfall Wind Power Ltd Business Division Renewables Bridge End Hexham Northumberland

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20 November 2012

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND A MARINE LICENCE UNDER PART 4, SECTION 20 OF THE MARINE (SCOTLAND) ACT 2010 TO CONSTRUCT AND OPERATE AN OFF-SHORE WINDFARM, ABERDEEN BAY, ABERDEEN

Response to comments from Joint Ythan, Don and Dee District Salmon Fisheries Boards

Dear Mr Sutherland.

I write with regard to the Joint Ythan Don Dee Response to Aberdeen Bay Wind Farm 30<sup>th</sup> Sept 2011, and respond to proposed consent conditions which may be considered by Marine Scotland in addressing this issue.

We note that the Boards' response particularly focuses on the function of the wind farm as a demonstrator site. Accordingly, interest is expressed by the Boards in the potential for the project to act as a useful trial to examine the deployment of offshore wind farms in close proximity to the thee major rivers of NE Scotland.

Key issues identified by the Boards include:

- potential impacts associated with the noise and vibration, particularly avoidance behaviour by salmon at distances from 3.5 to 4.2 km from the piling activities associated with installing up to an 8.5m diameter pile foundation, and effects on migratory behaviour of salmonid adults and smolts
- potential impacts due to EMF during the operation of the wind farm

In response we note that AOWFL are committed to the R&D element of the offshore project and that discussions are progressing with Marine Scotland Science and the Rivers and Fisheries Trusts of Scotland (RAFTS) regarding the potential research and monitoring of migratory salmon on the east cost of Scotland (see Attachment 1: Aberdeen Offshore Wind Farm Salmon & Trout R&D – preliminary meeting notes dated 3rd September 2012). We propose to invite the Boards to any further meetings to enable participation in ongoing discussions.

In addition to the preliminary proposals discussed to date, AOWFL are also aware of wider proposals for research on migratory salmon, as both enabling actions by TCE,











Scottish Government (SG) and other various research bodies (including Aberdeen University, the Association of District Salmon Boards themselves and the International Atlantic Salmon Research Board).

It is important that these research proposals are coordinated to avoid duplication and to ensure appropriate priority is provided to those research proposals for which funding has been provided, and which would be beneficial to other OWF developers and the broader understanding of the impacts of offshore wind farms to fisheries.

However it is also important to recognise the need to separate specific licensing and consent conditions directed to mitigating the identified impacts from the offshore wind farm, from broader R&D, as there appears to be some confusion over this distinction.

From a project viability perspective, any EU R&D expenditure is required to be distinct from that allocated to meet consent conditions, although it is recognised that there may be some linkages in subject area. The deadline for R&D defrayal is the end of 2016. Beyond this date it is anticipated research would carry on via top-up funding and that Aberdeen Renewable Energy Group (AREG) would continue to take forward any research programmes beyond that date.

However, initial R&D funds are dependent on AOWF gaining consent. This means that a significant component of the broader R&D programme cannot be undertaken prior to consent, as suggested by the joint Fisheries Boards. However it is intended that commissioning of research would occur immediately following consent and is planned for next year, following achievement of internal and regulatory hurdles

#### **Proposed conditions**

AOWFL support the implementation of conditions with regard to mitigating the potential effects of the construction and operation of the wind farm, particularly noise and EMF effects as requested by the Boards. These could be incorporated into the a broader set of conditions as already recommended by SNH. These conditions include:

- Establishment of an Expert Panel (for Migratory Salmon and Sea Trout)
- Establishment of an Monitoring Programme to address potential construction and operational effects on migratory Salmon & Sea Trout.
- Details on Construction Methodology (through a Construction Management and Monitoring Programme),
- · Environmental Management Plan, and
- A Decommissioning Plan

It is expected that these programmes will be developed in consultation with the joint Fisheries Boards and that a representative of the Boards be included in the expert panel.











# Comments on List of Proposed Conditions (AOWFL proposed amendments highlighted in RED)

Condition	Reason
Expert Panel and Monitoring Programme	
An independent expert panel should be established to provide scientific advice on a research and monitoring programme. The programme will specifically address the survey and monitoring of the likely impacts of the windfarm on important species and habitats in Aberdeen Bay. The programme should also include monitoring of the habitats and communities that develop on the submerged structures. The monitoring programme should be subject to input from the expert panel, consultation with consultees, be integrated with existing and proposed research programmes, and subject to agreed review periods. The programme should ensure monitoring is robust and covers pre, during and post construction aspects. Amongst the subjects appropriate for monitoring for the OWF, and desirable for the R&D programme are:	To ensure best available and most appropriate scientific information is used to inform and develop a monitoring plan.
OWF	
<ul> <li>Field-measurements of noise during piling at EOWDC to validate the results of the model and also during operation of the turbines.</li> </ul>	
<ul> <li>Deployment of appropriate Passive Acoustic Monitoring systems to record vocalisation of marine mammals, pre, during and post construction.</li> </ul>	
<ul> <li>Understanding of the effects of cable installation and turbine construction, and the operation of the wind farm on migratory salmon and trout.</li> </ul>	
R&D Programme	
<ul> <li>Boat or aerial based surveys to consider any changes to species, densities, behavioural implications during all phases of the windfarm;</li> </ul>	
☐ Measures to detect bird collisions.	
□ see Attachment 1 (Salmon Research Meeting Notes 030912)	











Condition	Reason
The research and monitoring programme advised by this panel will be agreed and implemented prior to the commencement of any works. Membership of the panel will be agreed by Marine Scotland and AOWFL in agreement with relevant consultees.  The data collected should be reported on and results made available publicly.  Details on Construction Methodology  A construction method statement or similar document should be provided to Marine Scotland for agreement with relevant consultees. This should include details of commencement dates, duration and phasing information of key elements of construction e.g. foundations, turbine placements, inter-array cabling and landfall cabling as well as details of onshore activities for the substation.  This statement should include measures to protect the marine environment (e.g. method and diurnal/seasonal timing of piling, soft-start procedure, use of Marine Mammal Observers, method and depth of cable laying, pollution prevention measures etc) and be cross referenced with the Environmental Management System/Plan  It must consider construction restrictions to avoid July/August and piling outwith daylight hours.  This statement should be submitted prior to the commencements of any works within a timescale to be agreed with Marine Scotland.	To ensure all environmental issues are taken into account in designing the construction of the windfarm  To minimise disturbance to birds during the moult periods (SPAs) and to minimise disturbance and injury to marine mammals and fish, including Atlantic salmon (SACs/EPS).  To allow for adaptive monitoring and management research programmes to be developed to test construction methods and their impacts
An Environmental Management System/Plan	
This system/plan should detail measures through all phases of the windfarm (pre, during and post construction) to prevent adverse impacts to marine mammals, birds, fish and habitats, and include species protection plans.  The system/plan should take account of and implement recommendations of the respective expert panels. It should be cross-referenced to the construction methodology documents and vessel management plans as well as recommendations within the ES. The system/plan should also detail how each and	To ensure all environmental issues are taken into account during construction and operation of the windfarm. To minimise disturbance to marine mammals (SACs/EPS) and birds (SPAs). 10 and how these have been addressed.











Condition	Reason
all contractors and sub contractors will be made aware of environmental sensitivities, what requirements they are expected to adhere to, how chains of command will work including shore to vessel communications etc	
As well as requiring regular updates on construction activity, issues encountered The system/plan should be submitted within a timescale specified by Marine Scotland in advance of the project construction commencing.	
It should be agreed by Marine Scotland in consultation with relevant consultees.	
Export Cables	
Details of the location and construction methods for the grid export cables, landfall site and substation, taking into account coastal processes and other environmental considerations, to be submitted within a timescale specified by Marine Scotland in advance of the project construction commencing.  A survey of the intertidal habits and species to inform the routing shall be carried out before the export cable routes are selected.  The export cables to be buried to a minimum depth to be agreed with Marine Scotland and relevant consultees. This will require consideration of the depth cables should be buried at to lessen any potential EMF effects on fish species. There should be monitoring of the cables to see if they become re-exposed and, if so, action taken to remedy this	To safeguard coastal processes in the wider Aberdeen Bay. To ensure all environmental issues are considered in the location and construction of the export cables. This should include coastal processes and benthic and intertidal habitats (see comments above).
A Decommissioning Plan.  A decommissioning plan will be required for the entire scheme. It is recommended that this is an iterative process and that an initial decommissioning strategy is produced. Timescale for the production, consultation and implementation of a decommissioning plan should be set out as part of any consent	To ensure all environmental issues are taken into account in decommissioning of the windfarm or individual turbines

It is considered important that any proposed monitoring programme developed as licence conditions for the OWF project (as above), be integrated with, contribute to, and be informed by wider research projects, and therefore it is likely AOWFL would propose an overlap, such that the same expert panel also provides advice to the R&D function of the project.











The Boards also make a suggestion regarding 'planning gain' and the potential to fund improvements in habitats and ecological status in the upstream rivers. As this is outwith the remit and objectives of the EU funded demonstrator project, this will not be possible and it is considered that other sources of funding may be more viable for this purpose.

I trust that this correspondence with regard to the protection of and ongoing monitoring of salmon and sea trout fisheries is useful. Should you have any further queries, please do not hesitate to contact me.

Yours sincerely (By email)

Beverley Walker Consents Manager, Aberdeen Offshore Wind Farm Limited

**CC:** Dee District Salmon Fisheries Board on behalf of the Dee, Don and Ythan District Salmon Fisheries Boards. River Office, Mill of Dinnet, Dinnet, Aboyne, Aberdeenshire, AB34 5LA