

Marine Scotland
Licensing Operations Team
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

CNS REN OSWF Beatrice

For the attention of: Alexander Ford

28 August 2015

BEATRICE OFFSHORE WIND FARM

SNH & JNCC COMMENTS ON BOWL'S CONSTRUCTION PROGRAMME, ENVIRONMENTAL MANAGEMENT PLAN AND CONSTRUCTION METHOD STATEMENT

We have read BOWL's draft Construction Programme (CoP), Environmental Management Plan (EMP) and Construction Method Statement (CMS) together, anticipating some cross reference between them. In providing the following advice we have reviewed a range of other available plans alongside these from BOWL, including those for Robin Rigg and Gwynt y Mor offshore wind farms and the Stroupster onshore wind farm in Caithness.

Overall, we consider the documents from BOWL to be well-written and prepared to a high standard. Our key comments are as follows:

Communications

We are happy with the proposed arrangements for environmental reporting, for which the Ecological Clerk of Works (ECoW) has a key responsibility. As set out in **Table 5.2** of the Environmental Management Plan (p50), SNH and JNCC will be copied into the compliance reports when these are sent to MS-LOT. If necessary, we will be happy to provide advice or comments on these reports, or to take part in any associated discussions.

We are also represented on the Moray Firth Regional Advisory Group (MFRAG) and will receive project updates, mainly in respect of environmental monitoring, via MFRAG and its sub-groups. We confirm that we do not wish involvement in incident reporting (with the exception of standard procedures and guidance relating to oil spills where we may potentially be notified).

In line with other major construction projects, we recommend that BOWL provide a 24-hour customer service helpline for members of the public who may have queries about the onshore or offshore elements of this construction work.

Plan Iteration

We consider that BOWL have clearly laid out the arrangements for any required plan iteration. We do not anticipate that there would be significant involvement from SNH or JNCC in this regard, but we have agreed with MS-LOT that they will seek our advice where relevant.

Construction Programme

SNH & JNCC discussed the construction programme with BOWL at the project meeting held on 7 July 2015. We have no further comments on this document specifically: we think it gives a clear summary (at this stage) of construction programming and indicative timings, particularly the flow diagram provided in Appendix A.

In relation to Figure 3.1 (p12) on change management procedures, MS-LOT have clarified that they appreciate the programme could change once work starts, but consider that only a change to major milestone dates would trigger the need to issue a revised programme.

Scope of Plans / Document Summaries

In terms of presentation, our key recommendation is for a clearer up-front statement on the scope of the Environmental Management Plan and Construction Method Statement. We consider that a brief project description, diagram of project organisation (key roles / responsibilities), scope of the plan, structure of the plan, key audiences for the plan and locations where the plan will be held is the key information that should be presented before any detail on the wording / discharge of consent conditions. This key information could potentially be provided in a document summary preceding the contents page, or else the introductory sections could be rearranged to ensure this information is presented closer to the start.

Role of the Environmental Clerk of Works

We think that there could be greater reference to the role of the Environmental Clerk of Works at various points in the Environmental Management Plan and Construction Method Statement, particularly the latter:

- The ECoW role is missing from Figure 4.2 and Table 4.4 in the CMS (p36-38), providing an overview of “key BOWL roles and responsibilities”. Figure 3.1 (p22) and paragraph 4.9.8 are the only places in the CMS where the ECoW role is referenced and we think a bit more detail could be provided here (cross referenced to the EMP).
- We think the EMP gives a good description of the ECoW role and responsibilities in the introductory sections, see paragraphs 5.4.17 – 5.4.25 in particular (p45-46). However, we recommend that the topic chapters – chapter 7 on environmental management and mitigation, chapter 9 on pollution prevention, chapter 10 on chemical usage, chapter 11 on invasive non-native species, chapter 12 on waste management and chapter 13 on the notification of dropped objects – are explicit on whether and/or what role the ECoW has in relation to these issues.
- We note the references to marine co-ordination in each plan, and that there will be a co-ordination centre (site office) based in Wick harbour. When appropriate, we would welcome further detail on the staff to be based there (and timings) and the facilities available (we recommend that video-conferencing / tele-conferencing is made available).

- At some point, we would welcome further discussion with BOWL to better understand the internal communications and staff inter-relationships on-site. If necessary, during pre-construction and planning stages, SNH and JNCC are happy to be contacted by the ECoW or consents and licensing team for formal or informal advice.
- As indicated above, we are happy with the proposed arrangements for environmental reporting, for which the ECoW has a key responsibility. We recommend that monthly compliance reports are provided from financial close onwards. This is because we would welcome updates on the QA of contractor plans, staff training and other aspects that will be occurring prior to commencement of construction.
- The EMP is due to be updated three months prior to commissioning the wind farm in order to address long-term operation and maintenance requirements. We recommend that the ECoW scope of works is reviewed at this point in respect of these long-term requirements.

Environmental Monitoring

Environmental monitoring is mentioned as a relevant consent plan in Figure 1.1 and Table 1.3 of the EMP, however, no mention is made of it in the corresponding sections of the CMS. Section 6.4 of EMP (p58 & 59) provides a very brief outline of project environmental monitoring and we recommend that some further information is provided, including the receptors to be monitored and the role of the Moray Firth Regional Advisory Group (and relevant sub-groups).

We consider that it may be helpful to clarify the difference between compliance monitoring (an auditing function to be undertaken by the ECoW during construction) and environmental monitoring (pre-, during and post-construction monitoring requirements for a number of key environmental receptors). There is little overlap between each type of monitoring with the possible exception of marine mammal responses to piling noise.

We provide our full comments on the Environmental Management Plan and Construction Method Statement in **Appendix A**.

Further Advice

For any queries in relation to this advice, please contact me in the first instance. We do not anticipate any further formal consultation, however, I am happy to talk through this advice on the phone to help BOWL finalise the documents.

Yours sincerely,

Catriona Gall

Marine Renewables Casework Adviser (Offshore Wind)
SNH Policy & Advice

cc. Enrique Pardo, JNCC

APPENDIX A

EMP / CMS List of Abbreviations and Definitions

We recommend explanation of the term “marine co-ordination” in each glossary (see further discussion below).

EMP Chapter 1/ CMS Chapter 1: Introduction

Having read the introductory sections of both plans together, we consider that much of the text, figures and tables in chapter 1 should be kept the same between the two documents.

We recommend including a 1-2 page document summary for each plan, perhaps located in front of the contents page? This could include the following key information:

- the objectives of the plan;
- the purpose and scope of the plan;
- the document structure;
- the key audiences: and
- the locations where the plan will be held.

Section 1.2 on document objectives – we think this introductory section needs to include a clear definition of the scope of the plan (which could incorporate text from paragraph 4.1.1 for the EMP and paragraph 3.1.1 for the CMS). We think it should be mentioned that these plans set out the principles for environmental management and good practice working: principles that are to be adopted by contractors and sub-contractors in formulating their own plans.

Related to this, we think it would be useful to have a brief statement, close to the beginning of the plan or in the document summary, on the intended audience(s) for each plan. Currently much of the emphasis is placed on the production of these plans solely to discharge consent conditions (i.e. MS-LOT is the key audience), rather than on their practical application as site documents (for use by the ECoW, contractors and others).

For the EMP, we also think it could be made clearer that the current iteration of the plan focuses on construction, and that it will be updated three months prior to wind farm commissioning in order to address long-term operation and maintenance requirements. (This is discussed under section 4.2, but does need some explanation in the introductory text in order to explain the current focus / scope of the plan.)

CMS paragraphs 1.2.4 and 1.2.5 – the submitted CMS is for construction of the offshore wind farm and the transmission works only as they relate to offshore transformer modules. There will be a further CMS specifically addressing the export cable.

Table 1.1 of each plan provides reference to the consent conditions (S36 / marine licence) requiring it. We raise for discussion whether these summaries could be moved to an appendix in order to rationalise the amount of information presented in the main document relating to discharge of conditions.

Section 1.3 on document structure – if it is decided that a one page document summary is helpful then this would preclude the need to have EMP section 1.3 (Table 1.3.1) and CMS section 1.3 (Table 2) in the main body of the text. Another option is to have this supporting explanation on the contents page and at the start of each chapter.

We think that **Figure 1.1** – linkages between consent plans – should be kept the same for each document (CMS, p15 and EMP, p20). In this regard we prefer the figure from the EMP as this includes the wider range of plans (including project monitoring), provides clearer groupings of these plans and also refers to other relevant information such as the ECoW and FLO roles. We recommend that full document titles are used, not acronyms, as this diagram should act as a clear, stand-alone overview for all intended audiences (some of whom may not be familiar with these acronyms).

EMP Chapter 2: Project description

Possibly this chapter of the EMP could be moved so that it is located after the BOWL statements of compliance and after the chapter on EMP updates and amendments. If this was done, then the order of the EMP and CMS introductory sections could be kept the same between documents and this might help with navigation.

We think it's easier to conceptualise the information in **Table 2.1** as a diagram or flow chart. Perhaps include a specific reference to the project calendar in Appendix A of the construction program. (In terms of the text, note that we prefer the term intra-array cabling to denote the cabling between turbines *within* an array.)

EMP figure 2.2 / paragraph 2.1.2 – the title of the figure is clear enough, but in case a reader misses this, the text in paragraph 2.1.2 should also state the layout is indicative at this stage. At what point will the layout be finalised for inclusion in a final plan?

EMP paragraph 2.2.3 – it is anticipated that there will be 24 hour working, 7 days a week. This has implications for marine mammal monitoring and mitigation measures during piling, currently under discussion via the MFRAG marine mammals sub-group and in relation to the BOWL piling strategy (on which we are due to be providing our comments by 9 September 2015).

EMP paragraph 2.2.4 – "...where piles are installed and left at the seabed for a period of time before the jackets are then installed, suitable provision will be made to ensure the safety of marine navigation and commercial fishing – see Section 8 of this EMP (and the LMP and NSP)." Noted: it's helpful to have confirmation that measures will be put in place.

CMS Chapter 2 / EMP Chapter 3: BOWL statements of compliance

We welcome these statements of compliance, but recommend that the text of these chapters is kept the same – there's no real reason for the minor variations between the plans as currently drafted. Keep consistency in the use of acronyms, decide whether "SHE" or "HSE" is to be used as the acronym for "Safety, Health and the Environment".

CMS paragraph 2.3.2 (p18), **EMP paragraph 3.3.7** (p30) – reference is made in each document to the Construction (Design and Management) Regulations 2015 (CDM regulations). While the CMS discusses this legislation in a bit more detail – see paragraphs 6.3.2 & 6.3.3 (p82) – there is very little mention of it in relation to organisational roles & responsibilities either in the CMS or in the EMP. We recommend that Annex 2 of the EMP includes reference to the CDM regulations.

CMS section 2.4 – we query whether this section on the inspection of equipment and materials should also be included in the EMP? These aspects may be relevant to consider in relation to EMP chapter 11 which gives further detail on management measures and procedures to reduce the risk of introducing invasive non-native species into the Moray Firth.

CMS section 2.5 – we recommend that the text in this section on construction personnel, training and competence, aligns with that in section 5.5 of the EMP. We also query whether it would be appropriate to include reference to the ECoW's role in respect of environmental awareness raising, staff induction and tool box talks.

CMS paragraph 2.5.2 / EMP paragraph 3.4.2 – possibly include reference to relevant industry guidance in this regard (or to the section of the plan where this detail is provided)?

CMS paragraph 2.5.4 / EMP paragraph 3.4.3 – include reference to the relevant figure in each plan that provides the project organogram and the sections of each plan that address project roles and responsibilities?

EMP section 3.7 – we query whether this section on legislative requirements should also be included, or referred to in the CMS? Annex 2 of the EMP provides a list of relevant legislation for project construction but it does not include mention of the Construction (Design and Management) Regulations 2015.

CMS Chapter 3 / EMP Chapter 4: Updates and amendments to plans

These sections provide a clear and helpful process for updating plans – see Figure 3.1 of the Construction Method Statement (p22) and Figure 4.1 of the Environmental Management Plan (p34). We do not anticipate that there would be significant involvement from SNH or JNCC in this regard, but we have agreed with MS-LOT that they will seek our advice where relevant. (We recommend that MS-LOT and BOWL agree on the criteria to assess what constitutes a significant change to each plan.)

CMS Chapter 4: Project construction overview

CMS paragraph 4.1.1 – here we think it would be helpful to state that the CMS relates to wind farm construction and installation of the offshore transformer modules only (NB. this is stated earlier in paragraphs 1.2.4 and 1.2.5 and can also be inferred from paragraphs 4.2.6 and 4.2.7, however, there's no harm in repeating this information for clarity).

CMS paragraph 4.2.2 / figure 4.1 – in contrast to the EMP, the text here acknowledges that the wind farm layout is “subject to confirmation through final project design and engineering work”, however figure 4.1 does not then make it clear that an “indicative” layout is represented.

CMS table 4.1 – we recommend that these boundary co-ordinates are provided in an appendix.

CMS paragraph 4.3.4 – this is a helpful overview of the broad sequence of pile-driving.

CMS table 4.2 – we think it's easier to conceptualise the information in this table as a diagram or flow chart. Perhaps include a specific reference to the project calendar in Appendix A of the construction program. (In terms of the text, note that we prefer the term intra-array cabling to denote the cabling between turbines *within* an array.) There is a typo in that the first sequence of intra-array cabling is presumably due to take place July – September 2017 (not 2018).

CMS table 4.3 – it may be helpful to note the key contractor in relation to the cable installation support vessel, cable trenching support vessel and fall pipe vessel, (similar to the approach taken for the other vessels), or explicitly indicate if this is not yet confirmed.

CMS section 4.7 – as noted above, we think it would be helpful for the glossary (in the CMS and also the EMP) to include a definition of “marine co-ordination”. The EMP refers to vessel management and navigational safety (see EMP table 1.3, paragraphs 5.4.5, 8.1.2 and section 8.2), although the CMS possibly implies a wider scope (see list of topics under 4.7.3).

We would find it helpful to understand which staff on the BOWL project team (or in the contractor teams) have responsibility in respect of marine co-ordination, and we think this should be mentioned in the EMP as well as the CMS. Note that EMP chapter 9 makes reference to a “marine co-ordinator” in paragraph 9.3.3 and Figure 9.1 in the EMP (p69 & 71), so that it may be helpful to include a description of this role in section 5.4 of the EMP and Table 4.4 of the CMS.

We consider there could be a closer match between **CMS fig 4.2** (p36) and **EMP fig 5.3** (p41) on project organisation and lines of communication. We like the greater detail provided in the CMS (although references to the ECoW and FLO roles are missing), however, we think the organisational structure and inter-relationships may be slightly clearer in the EMP.

Again we advise consistency in terminology: the CMS refers to a “consents and stakeholder management team”, whereas the EMP refers to a “consents and licensing team”. (It is our understanding that the latter term will be adopted.) We query whether or not the consents and licensing team can seek support direct from the SHE manager, or whether this contact is always to be made via the senior project manager?

CMS table 4.4 provides an overview of “key BOWL roles and responsibilities” during construction but is missing reference to the ECoW and FLO roles, as well as any mention of marine co-ordination (see 4.7 above). The note on the ECoW role in paragraph 4.9.8 could be included in this table rather than presented separately. We think it may be helpful to include a brief summary in relation to the ECoW’s responsibilities for QA of constructor’s method statements and environmental management plans for each of the key contractors.

We consider it helpful that BOWL have provided detail on the organisational structures and main staff for each of their key contractors during construction: Seaway Heavy Lifting Ltd. (SHL) for installation of turbine and offshore transformer foundations, also intra-array cabling (p38 & 39); Siemens Wind Power Ltd (SWPL) for installation and commissioning of wind turbines (p40), and Siemens Transmission and Distribution Ltd (STDL) for supply of transformer modules, installing the export cable and associated offshore transmission works.

We query whether reference should be made in the CMS to a summary of the procedures on incident reporting? Perhaps a specific reference to the EMP where this is discussed under paragraph 5.7.2 and Annex 5 (also see next section):

In general, incidents will be managed according to a process aligned with the BOWL incident and emergency response workflow set out in Annex 5 but also according to the Contractors own, compliant response procedures set out in Contractor EMP, incident response and pollution response plans.

CMS Chapter 5: Construction methods and procedures

We consider this chapter provides a clear and helpful summary of each stage in the construction process on-site: the flow diagrams (Figures 5.3, 5.13, 5.19 and 5.24) and illustrations are particularly helpful.

Our main comments on construction methods will relate to piling work (stages F1-F5 in Fig 5.3), as this may give rise to underwater noise impacts on marine mammal species. In this regard, we will shortly be providing comment on the piling strategy, which we have received for consultation and on which our comments are due by 9 September 2015.

We note that BOWL do not anticipate any requirement for scour protection in relation to turbine foundations (paragraph 5.3.33). We recommend this issue is revisited at the point the EMP is updated for the long-term operation and maintenance of the wind farm. Nor is any protection anticipated in respect of the intra-array cables, however, this matter is due to be addressed in more detail in the cable plan (paragraph 5.4.20).

EMP Chapter 5: Environmental management framework

EMP section 5.3 – BOWL’s policy and commitments on Safety, Health and the Environment are welcome and we note the development of a project specific SHE management plan (paragraphs 5.3.2 – 5.3.7). While this is not a consent plan, it could be helpful to delineate its relationship with the consent plans, particularly the EMP and navigational safety plan, and indicate who in BOWL has responsibility for its implementation. Similarly, it may be helpful to know who in BOWL has responsibility for the QA of contractors’ SHE plans.

EMP section 5.4 – the role and key responsibilities of the ECoW are set out in paragraphs 5.4.17 – 5.4.25 (p45-46). We are broadly happy with the scope of this work, although we note, under 5.4.22, that mention should be made of the ECoW’s role in long-term project monitoring (pre-, during and post construction) and participation in the Moray Firth regional advisory group and sub-group. These act as the forum for developing and co-ordinating project environmental monitoring for BOWL and MORL wind farms. The section on BOWL consents & licensing team could include reference to their role in respect of long-term project monitoring and MFRAG groups (paragraphs 5.4.14 – 5.4.16). We also think it may be helpful to include a description of the “marine co-ordinator” role referenced in chapter 9 (paragraph 9.3.3 and Figure 9.1).

We are very supportive of liaison between project ECoWs, especially on adjacent wind farms, as included under paragraph 5.4.22.

Under paragraph 5.4.23 we query the arrangements for the ECoW to “halt or suggest modifications to activities” – this implies the ECoW could have direct contact with the BOWL senior project manager but this is not indicated in Figure 5.3 (p41) on project organisation, Figure 5.4 (p54) on incident reporting, or in paragraph 5.6.1 relating to internal communications.

The contact directory supplied in **Annex 3** (p122 & 113) looks helpful. Can JNCC’s contact details also be provided in respect of oil spill notifications:

- office hours telephone: 01224 266556
- fax: 01224 896170
- 24 hour telephone: 07974257464
- email: pollutionadvice@jncc.gov.uk

EMP section 5.5 – we are supportive of the arrangements in this section, including the responsibilities of the ECoW for staff training and awareness on environmental issues.

EMP section 5.7 – we think the arrangements for incident reporting are clear, including the ECoW's role in this regard. However, we recommend that the reporting process outlined in Figure 5.4 (p54) is integrated more fully into the flow charts provided in **Annex 5** (p118 & 119). These flow charts use terminology that is not explained elsewhere in the document and we think could be more closely aligned with the project-specific roles and requirements that are set out in sections 5.4 and 5.7.

EMP Chapter 6: Environmental management & mitigation measures from the application

EMP section 6.2 – we note the development of a “commitments register”, set out in full in Annex 1 (p85 to 101). We think it would be clearer to have a single register for the CMS to refer to, rather than duplicating information in Appendix A of the CMS (p96 to 101).

EMP section 6.4 – we recommend that this section on environmental monitoring includes reference to MFRAG and associated sub-groups. We also recommend making a clearer distinction between the compliance monitoring to be carried out by the ECoW during construction, and this environmental monitoring for key receptors of concern (seabirds, marine mammals and fish species).

EMP Chapter 7: Natural & Historic Environments

It could be made clearer that this chapter relates to construction impacts on natural heritage interests (see list in paragraph 7.1.2). Longer-term operation and maintenance (O&M) impacts, including possible seabird displacement and collision risk, are under discussion via MFRAG and will be presented in the project environmental monitoring plan, so that it may be worth mentioning this here. We consider that any O&M environmental management and mitigation measures can be addressed when the EMP is updated 3 months prior to the commissioning of the wind farm.

We recommend dividing up this chapter to address “disturbance to marine animals during construction” (including marine mammals, seabirds and fish species) and “marine archaeology”. As it stands, we think the chapter heading is somewhat unclear and implies a wider scope than what is actually under discussion. We think these two topics might be better addressed separately, in line with the subsequent chapters (which separate rather than group issues such as pollution prevention and chemical usage). We note that these later topic chapters, 9 – 13, also address issues relating to “environmental management and mitigation of effects on the natural environment”.

We recommend referring to the role of the ECoW in respect of environmental management and mitigation measures. This would bring it in line with Chapter 8, “other marine users”, which does include reference to the role of the fisheries liaison officer in section 8.4, p65-66. Potentially, there could be cross reference between chapter 7 of the EMP and section 6.6 of the CMS (p84 to 86) on project specific good working practice (relevant to environmental issues).

EMP Chapters 9 – 13: Pollution Prevention, Chemical Usage, Invasive Non-Natives etc.

We recommend that these topic chapters – chapter 9 on pollution prevention, chapter 10 on chemical usage, chapter 11 on invasive non-native species, chapter 12 on waste management and chapter 13 on the notification of dropped objects – includes advice on whether and/or what role the ECoW has in relation to these issues.

To avoid any ambiguity, we recommend that Marine Scotland is named specifically in these chapters, rather than referring to the “licensing authority”.

We welcome the various commitments made by BOWL, for example, paragraphs 9.3.6 – 9.3.9, 10.2.2, 10.3.1, 12.1.3. We query whether it is possible to clarify who in BOWL discharges / enforces these commitments – will the consents and licensing team have primary responsibility?

Aires C (Catarina)

From: Nick Salter <Nick.Salter@mcga.gov.uk>
Sent: 17 August 2015 11:30
To: Ford A (Alexander)
Cc: Jonathan Wilson
Subject: RE: 150730 - Consultation on BOWL's Post Consent Construction Programme - MS LOT to Consultees

Dear Ali,

I have reviewed the construction programme and I have no comments to make. All content.

Comments on the construction method statement to follow.

Best regards,

Nick

Nick Salter
Offshore Renewables Advisor
Navigation Safety Branch
Maritime and Coastguard Agency
Tel: 023 8032 9448
Mob: [REDACTED]
Email: nick.salter@mcga.gov.uk

From: Alexander.Ford@scotland.gsi.gov.uk [mailto:Alexander.Ford@scotland.gsi.gov.uk]
Sent: 30 July 2015 14:47
To: karen.hall@jncc.gov.uk; Enrique.Pardo@jncc.gov.uk; jnccadvice@jncc.gov.uk; Erica.Knott@snh.gov.uk; catriona.gall@snh.gov.uk; marineenergy@snh.gov.uk; Nick Salter; navigationsafety; ArchieJ@nlb.org.uk; navigation@nlb.org.uk; charles.nathan@rspb.org.uk; planning.scotland@rspb.org.uk; david.mudie@highland.gsx.gov.uk; service.point@highland.gov.uk; neal.macpherson@moray.gsx.gov.uk; development.control@moray.gov.uk
Cc: Nicola.Bain@scotland.gsi.gov.uk; Paul.Smith@scotland.gsi.gov.uk
Subject: 150730 - Consultation on BOWL's Post Consent Construction Programme - MS LOT to Consultees
Importance: High

Dear Sir/Madam,

Following my email on 11th June, please find attached a proposed 'Construction Programme' (Revision 1 issued 24/07/2015) ("EMP") post-consent plan and covering letter addressed to MS-LOT from Beatrice Offshore Windfarm Limited ("BOWL").

The purpose of the CoP is to attempt to satisfy the requirement of condition 10 of the Beatrice Offshore Wind Farm section 36 consent awarded to BOWL in March 2014; and condition 3.2.2.3 of the associated BOWL Offshore Transmission Works marine licence issued in September 2014.

(<http://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice>).

Northern Lighthouse Board

Your Ref: LF00005-PLN-143 BOWL Beatrice CoP
Our Ref: AJ/OPS/ML/O6_01_273

Mr Alexander Ford
Marine Licensing Casework Officer
Marine Scotland – Marine Planning and Policy Division
Scottish Government
Marine Laboratory
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Switchboard: 0131 473 3100
Fax: 0131 220 2093
Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk



27 August 2015

Dear Alexander,

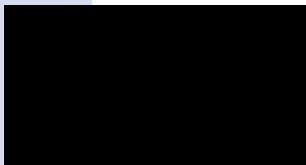
BOWL – Beatrice Proposed Construction Plan

Thank you for your correspondence dated 30 July 2015 regarding the submission of a proposed Construction Plan by **Beatrice Offshore Windfarm Limited** relating to the intention to install and operate wind turbines, offshore sub-stations and the associated electrical interconnecting and export cables at their wind farm site in the outer Moray Firth.

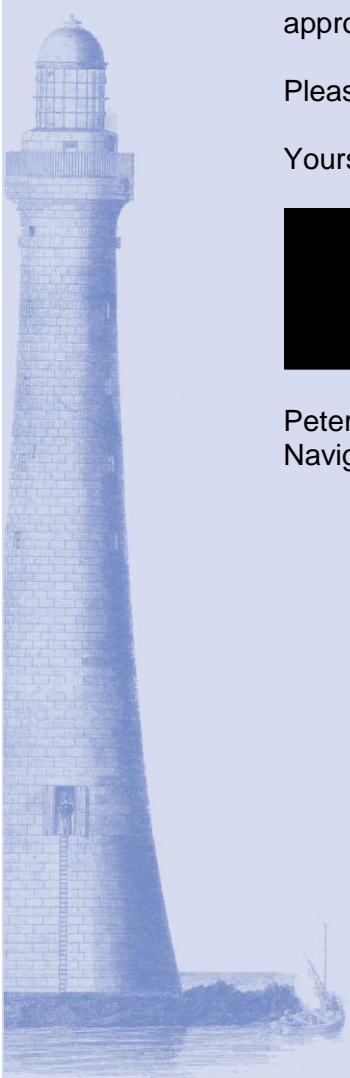
With regard to the submission of the Construction Plan to the Scottish Ministers for approval, NLB notes the plan proposed and sees no issues with the plan.

Please advise if we can be of any further assistance.

Yours sincerely



Peter Douglas
Navigation Manager



the safety of all

: ISO 9001:2000 · The International Safety Management Code (ISM) · OHSAS 18001

Aires C (Catarina)

From: Nathan, Charles <Charles.Nathan@rspb.org.uk>
Sent: 24 August 2015 15:28
To: Ford A (Alexander)
Subject: RE: 150730 - Consultation on BOWL's Post Consent Construction Programme - MS LOT to Consultees

Dear Mr. Ford,

Thank you for consulting the RSPB on the below mentioned programme. We have no comments to make on the proposals contained in this document.

Best regards,
Charles

Charles Nathan
Marine Conservation Planner

Scottish Headquarters 2 Lochside View, Edinburgh Park, Edinburgh, EH12 9DH
Tel 0131 317 4100

rspb.org.uk

Let's give nature a home in Scotland



RSPB Scotland is part of the RSPB, the country's largest nature conservation charity, inspiring everyone to give nature a home. Together with our partners, we protect threatened birds and wildlife so our towns, coast and countryside will teem with life once again. We play a leading role in BirdLife International, a worldwide partnership of nature conservation organisations.

The Royal Society for the Protection of Birds (RSPB) is a registered charity: England and Wales no. 207076, Scotland no. SC037654

From: Alexander.Ford@scotland.gsi.gov.uk [mailto:Alexander.Ford@scotland.gsi.gov.uk]
Sent: 30 July 2015 14:47
To: karen.hall@jncc.gov.uk; Enrique.Pardo@jncc.gov.uk; jnccadvice@jncc.gov.uk; Erica.Knott@snh.gov.uk; catriona.gall@snh.gov.uk; marineenergy@snh.gov.uk; nick.salter@mcga.gov.uk; navigationsafety@mcga.gov.uk; ArchieJ@nlb.org.uk; navigation@nlb.org.uk; Nathan, Charles; planning, scotland; david.mudie@highland.gsx.gov.uk; service.point@highland.gov.uk; neal.macpherson@moray.gsx.gov.uk; development.control@moray.gov.uk
Cc: Nicola.Bain@scotland.gsi.gov.uk; Paul.Smith@scotland.gsi.gov.uk
Subject: 150730 - Consultation on BOWL's Post Consent Construction Programme - MS LOT to Consultees
Importance: High

Dear Sir/Madam,

Mr A Ford
Licensing Operations Team
Marine Scotland
375 Victoria Road
Aberdeen
AB11 9DB



SSE RENEWABLES: BEATRICE, MORAY FIRTH, ENVIRONMENT MANAGEMENT PLAN & CONSTRUCTION PROGRAMME

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

Marine Scotland Science comments on marine mammals

Marine Scotland Science has no comments on marine mammals.

Marine Scotland Science comments on ornithology

Environment Management Plan

The generic text "Best practice monitoring of bird use within the Wind Farm Site and 4 km buffer will be undertaken: pre-construction, construction and post-construction monitoring in order to identify any changes in bird usage of the Wind Farm site attributable to the Development." Has been added to the Annex 1 tables but this monitoring is very unlikely to attempt (let alone be able) to identify impacts from various construction activities identified (Foundation and Jacket Installation, Tower and WTG Installation, Inter-Array Cable Installation). The text could be amended to make it clear that the monitoring would only distinguish pre-construction, construction and post construction activities, rather than distinguish between the different construction activities.

If possible, MSS would like to see any comments/ advice provided by SNH on both the Environmental management Plan and Construction Programme.

Marine Scotland Science comments on diadromous fish

Environment Management Plan

MSS would suggest that the EMP should include a commitment to report any incidents where disturbance or mortalities of fish are observed, promptly, presumably to LOT.
Other than 1. above, we have no changes to suggest.

MSS noted in 7.2 that, in order to take account of potential effects on marine mammals and a number of fish species, that there is a requirement to draft, for approval, a Piling Strategy, which is intended to ensure that the exposure to and/or the effects of underwater noise from piling operations have been mitigated to a reasonable level in respect of a number of key sensitivities, among which Atlantic salmon is included. We recently commented in relation to diadromous fish on a draft piling strategy for the Beatrice development.

We also noted in Annex 1.1. Wind Farm Construction Commitments Register in relation to foundation installation that the development of a piling strategy is mentioned and that BOWL will work

with key stakeholders and MS-LOT/Licensing Authority to identify any future monitoring programmes considered necessary in connection with fish, with Atlantic salmon monitoring surveys specifically mentioned. There is a similar statement in Annex 1.4 OfTW Operation Commitments Register in connection with presence of cables.

Construction Programme

MSS have noted that the pile foundation work for the wind farm itself is intended to be carried out April-November 2017 and April-September 2018 which includes the period when salmon smolts will migrate through the Moray Firth each year. In the case of the piling for the OTMs, the piling for the foundations is scheduled for April 2017 which would seem likely to be before the peak period of migration of salmon smolts through the Moray Firth.

Marine Scotland Science comments on commercial fisheries

MSS have no comments on the content of the construction programme and EMP at this stage. However, BOWL Construction Programme document (particularly Table 4.1 Summary of key milestone dates and section 6.4) should be shared and consulted with the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Group (MFOWDG-CFWG) before final approval.

The last meeting of the group was on Monday 15th September 2014 in Inverness. Neither these nor the Commercial Fisheries Mitigation Strategy (received in May 2015) were agenda item. MFOWDG-CFWG should be given the chance to comment on the document prior to MS-LOT's approval and its issue.

Marine Scotland Science comments on benthic ecology

Marine Scotland Science has no comments on benthic ecology.

Marine Scotland Science comments on physical environment

Marine Scotland Science has no comments on physical environment.

Marine Scotland Science comments on aquaculture

There are no specific comments to be made on the Environmental Management Plan, Construction Programme and Method Statement. The comments made on previous applications have not fundamentally changed however some aquaculture sites in this area have been deregistered since our first response to BOWL development in 2012 therefore for clarity proximity comments have been redrafted and remapped.

There are no aquaculture sites within the proposed boundaries of the Beatrice Offshore Windfarm site (see map in Annexe 1).

There are four active shellfish sites within the Moray Firth area, three in Cromarty Bay - a mussel long line site operated by Cromarty Mussels, a pacific oyster trestle site operated by Black Isle Seafood Ltd. and another pacific oyster trestle site operated by MacKenzie Oysters. There is also a wild bed of common mussels in the Dornoch Firth operated by the Highland Council. The closest site is approximately 90km from the boundaries of the Moray Offshore Wind Farm.

There are several land based freshwater sites displayed on the map but these are not expected to be effected by this development.

There is no other marine aquaculture sites on the east coast of Scotland, to the south of the proposed development until North Berwick and to the north the next closest aquaculture sites would be around Orkney.

Marine Scotland Science comments on socio economics

Marine Scotland Science has no comments on socio economics

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

Yours sincerely



Paul Stainer

Marine Scotland Science

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