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04 August 2023

Dear Ms Bamlett

Electricity Act 1989 (as amended)
The Electricity (Applications for Consent) Regulations 1990 (as amended)
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)
Marine and Coastal Access Act 2009
Marine (Scotland) Act 2010
The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Berwick Bank Wind Farm Limited (BBWFL) Submission of Additional Environmental Information in Relation to the Application for Consent to Construct and Operate a Generating Station, Berwick Bank Wind Farm

Berwick Bank Wind Farm Limited (BBWFL) is a wholly owned subsidiary of SSE Renewables Limited. SSE Renewables is a leading developer, owner and operator of renewable energy across the UK and Ireland with a UK portfolio that includes the 1.1 GW Seagreen Offshore Wind Farm in the Firth of Forth and the 3.6 GW Dogger Bank Wind farm in the North Sea.

In December 2022, BBWFL submitted an application for consent under Section 36 of the Electricity Act 1989 (Section 36 Consent) for the construction and operation of an offshore generating station (the Berwick Bank Wind Farm) comprising up to 307 wind turbines, their foundations and associated inter-array cabling. That submission also included applications for Marine Licences under Part 4 of the Marine and Coastal Access Act 2009 and Part 4 of the Marine (Scotland) Act 2010 for the generating station and associated offshore transmission infrastructure.

The application was supported by an Environmental Impact Assessment (EIA) Report prepared in accordance with the relevant EIA Regulations, a Report to Inform an Appropriate Assessment (RIAA) and a Derogation Case, both prepared in accordance with the Habitats Regulations and other supporting documents including an Offshore Planning Statement and Pre-Application Consultation (PAC) Report.

Post submission consultation on the Section 36 and Marine Licence applications for the Proposed Development closed on 21st February 2023 (except where Scottish Ministers had

formally granted requests for an extension to the deadline for the submission of a written representation).

The documents included with this letter have been prepared in response to a formal request from MD-LOT, on behalf of Scottish Ministers, dated 26 May 2023, for the provision of Additional Environmental Information (AEI) ('additional information' under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, also known as 'further information' under the Marine Works (Environmental Impact Assessment) Regulations 2007). BBWFL has also taken the opportunity as part of this submission, to provide other supplementary information, the purpose of which is to further demonstrate the robustness and completeness of the Berwick Bank Wind Farm application and give further reassurance around the deliverability and effectiveness of the Derogation Case and the proposed compensatory measures.

The information presented in the application and this additional and supplementary information demonstrates that Berwick Bank would deliver substantial benefits for Scotland, securing 4.1GW of clean energy to decarbonise the energy sector and increase security of supply before 2030. This capacity would be delivered by an established developer, with a proven track record in Scottish waters. Berwick Bank would also secure and deliver substantial ecological benefits, to compensate for residual ecological effects, provide ecological resilience and establish a pathway to consent future projects.

Taken together, these documents ensure that the Scottish Ministers have all necessary information required to determine the applications for Berwick Bank and that it is rational, reasonable and in the public interest to grant the Section 36 consent and marine licences.

Additional Environmental Information (AEI) Request

The full request for AEI is presented in Annex A. The responses to the AEI request have been submitted in two separate documents:

- Addendum to the EIA and HRA
- Addendum to the Derogation Case

A summary of the information submitted in response to the request for AEI and key conclusions presented in those documents is provided below:

Addendum to the EIA and HRA

AEI Submission	Submission Overview
Marine Mammal AEI	Document provides additional information on approaches used to modelling potential effects of underwater noise from piling and UXO detonation on marine mammals. Based on the additional information provided, it is concluded there are no changes to the conclusion of effect significance presented in the EIA Report, volume 2, chapter 10 for the Proposed Development or cumulatively with other projects. Conclusions presented in the RIAA that there are no Adverse Effects on Site Integrity (AEOSI) of Special Areas of Conservation where Annex II marine mammals are a qualifying feature also remain unchanged.

AEI Submission	Submission Overview
Ornithology AEI	Additional information on the effects of disturbance from vessels, helicopters and drones on the requested qualifying features of the Outer Firth of Forth and St Andrews Bay (OFFSAB) Special Protection Area (SPA). Based on the additional information provided the conclusions presented in the RIAA remain unchanged in that there are no AEOSI on the OFFSAB SPA.

Addendum to the Derogation Case

AEI Submission	Overview
Gannet Compensation	<p>This document presents a proposed compensatory measure to reduce the gannet cull at Sula Sgeir, provided on a 'without prejudice' basis in response to comments from NatureScot where they identified AEOSI, or have been unable to conclude no AEOSI, for gannet.</p> <p>Evidence and information have been provided to quantify the benefit and how the measure can be implemented. Proposals for a monitoring, reporting and adaptive management plan provide evidence to demonstrate that Scottish Ministers can rely on this measure to compensate for gannet if required. As with the other compensation measures provided by the Applicant, a full feasibility assessment of the measures is provided which demonstrates the measure is feasible and can be secured.</p>
Implementation, monitoring and adaptive management	<p>This report presents a step-by-step approach to implementation, monitoring and adaptive management, to enable stakeholders to be clear on what actions will be taken, and when, in the delivery of the compensatory measures.</p> <p>This report demonstrates the Applicant's understanding of the adaptive management process and how it should be applied to reduce any residual uncertainty in the compensatory measures. Read alongside the Implementation and Monitoring Plan, it demonstrates that monitoring and adaptive management of each measure is feasible, and contingency measures are also available. Robust implementation of this approach together with an overall monitoring framework provides Scottish Ministers with full confidence that compensation to offset the potential adverse effects of the Proposed Development can be secured and that the overall coherence of the National Site Network will be protected.</p>
Dunbar colony measures	<p>This document covers the quantification of impacts from the Proposed Development on the Dunbar kittiwake population and presents quantitative evidence of disturbance including SMP productivity data to further support the wardening of kittiwake colonies on the mainland site of Dunbar Castle as one of a suite of compensatory measures. The report demonstrates that there is reasonable evidence, based on the best scientific information available, that human disturbance at Dunbar Castle is impacting seabirds, including seabird productivity, as evidenced in section 3.3.2 (human disturbance) of the CCM Evidence Report. Specifically at Dunbar, there is sufficient evidence to support a reasonable decision that Dunbar Castle wardening would result in a</p>

AEI Submission	Overview
	<p>reduction in disturbance and benefits to the affected populations. This is compared with the proposed quantification of impacts to demonstrate that compensation will be provided.</p>
Handa rat eradication feasibility study	<p>This full feasibility report has been provided to fulfil the request from MD-LOT. The feasibility study has been assessed against the 7 internationally recognised feasibility criteria described in the UK Rodent Eradication Best Practice Toolkit (Thomas <i>et al.</i>, 2017). It demonstrates that the eradication of brown rats (<i>Rattus norvegicus</i>) from Handa Island, its islets and sea stacks followed by on-going biosecurity monitoring and control on the adjacent mainland is feasible and will be effective.</p> <p>This report also provides information on the effective measures that will be taken to minimise the loss of great and arctic skua eggs and additional information on the potential poisoning of non-target species and the steps that will be taken to minimise this risk. Clarification on the use of land on the mainland as a rat free buffer is provided and an assessment of the feasibility and effectiveness of this management measure shows that has the potential to provide additional benefits to reduce the risk of rat re-incursion.</p>
Inchcolm rat eradication feasibility study	<p>Inchcolm has previously been recognised as a priority island for restoration by the RSPB. The feasibility report has been provided to demonstrate that this measure can be relied on as a contingency compensatory measure if required.</p> <p>The feasibility report has been completed against the seven internationally recognised feasibility criteria described in the UK Rodent Eradication Best Practice Toolkit (Thomas <i>et al.</i>, 2017) and has found that the eradication of black rats (<i>Rattus rattus</i>) from Inchcolm island and its islets and sea stacks followed by on-going biosecurity monitoring and control is feasible.</p>
Updated EIA and HRA for compensation measures	<p>The EIA for the compensatory measures has been updated and now includes an assessment of the reduction in the gannet harvest compensatory measure (provided without prejudice) and an assessment of the measures proposed to reduce the impact on great and arctic skua eggs and on non-target species.</p> <p>The EIA concludes that all impacts are beneficial with the exception of an adverse effect on local Niseach culture and identity.</p> <p>The RIAA for the compensatory measures has been updated and now includes an assessment of the reduction in the gannet harvest compensatory measure (provided without prejudice) and an assessment of the measures proposed to reduce the impact on great and arctic skua eggs and on non-target species.</p> <p>For the “Without Prejudice” Gannet Compensatory Measure, no LSE was identified. Therefore, no requirement to progress beyond Stage 1 has been identified.</p>

AEI Submission	Overview
	For the other measures, LSE could not be ruled out and an appropriate assessment was carried out. A conclusion of no risk of AEoI has been drawn for all of the potential effects identified for these proposed compensatory measures. Therefore, there is no requirement to progress beyond Stage 2.

Supplementary Information

As discussed above, in addition to the responses to the request for AEI, BBWFL has also provided supplementary information to provide further clarification and evidence in relation to specific points and areas of concern noted by key stakeholders. This supplementary information includes:

Supplementary Information	Overview
Sufficiency and immediate benefit of the sandeel compensation measure	<p>The purpose of this report is to provide evidence and additional analysis to address and allay concerns expressed by NatureScot concerning the timing of realisation of ecological benefits from the management of closures of the sandeel fishery and the potential impacts from the Proposed Development.</p> <p>The analyses presented in the report demonstrate that in the short term the likely response of populations to relatively small increases in sandeel TSB is sufficient to compensate for the most precautionary predicted impact of the Proposed Development. This is supported by an analysis of hindcast data which showed that had the sandeel fishery in SA4 been closed prior to the 2017 catch, the number of additional adult birds predicted to survive would have been much larger for all species than the number of predicted mortalities from the project across the same period (had Berwick Bank been constructed in 2017). There is therefore no need to even rely on the productivity benefits that may take up to six years to be realised.</p> <p>Much greater benefits to seabird populations can also be expected over a longer time period from productivity increases and as Sandeel TSB recovers.</p>
Consideration of precaution	<p>In response to consultation comments from NatureScot and to further support the Developer Approach to ornithology assessments, this document sets out the case that there is no evidence in support of the assertion by NatureScot that predicted impacts are due to extremely high densities of birds present in the Proposed Development, with densities being comparable or lower than densities recorded in other offshore wind farm developments within the Firth and Tay region. It presents three areas where the advice provided in the Scoping Opinion is considered to lead to an overestimation of predicted impacts by applying an excessive level of precaution. Cumulatively, the Applicant estimates that precaution applied in assessments utilising the Scoping Opinion approach to ornithological assessment overestimates bird mortality by between 136% and 548%.</p>

**Supplementary
Information****Overview****Alternatives and
additionality**

This document presents the Applicant's response to consultation comments from RSPB on the consideration of alternatives in the Derogation Case, and the principle of additionality with regards to the sandeel fisheries management compensation measure.

With regards to alternatives, the assessment presented in the Derogation Case includes a detailed analysis of relevant law and policy and establishes appropriate and compliant project objectives for Berwick Bank, against which to consider whether there are alternative solutions. Following a detailed analysis against those objectives, the firm conclusion is that there are no feasible alternative solutions to Berwick Bank.

RSPB alleges there are alternative solutions to Berwick Bank, specifically other (unspecified) ScotWind projects. The argument that ScotWind project(s) are an alternative solution to Berwick Bank fails on two fronts. First, ScotWind does not meet the legitimate project objectives established in the Derogation Case. Second, even if those project objectives were met (which the Applicant strongly rejects), ScotWind projects will also have ornithological impacts on European sites, which are as yet unquantified and the information does not exist to meaningfully comparatively assess them, and so there is no rational basis on which to conclude that any ScotWind project(s) are alternative solutions. It would be unreasonable and irrational to conclude that one or more inchoate potential future projects (which may not come forward), with uncertain timelines, unspecified turbine numbers and locations, and unquantified and unknown impacts, constitute an alternative solution.

With regards to additionality of the compensation measures, the Applicant's firm and evidenced position is that sandeel fisheries management is additional. Whilst regulators are under a duty to achieve favourable conservation status (FCS) of protected species, sandeel fisheries management does not occur in the normal course of management of the national site network, or for the management of any individual SPA, and sandeel fisheries management does not feature as a management measure of relevant SPA management plans which the relevant management body is required to carry out (to the extent any such plans exist). It is not normal practice within financial and political realities to manage/close fisheries to benefit European sites. In addition to the general duty to achieve FCS, regulators are also under a duty to achieve Good Environmental Status (GES) pursuant to the Marine Strategy Regulations 2010. It is not however possible to reasonably "read in" an obligation to manage sandeel fisheries in the North Sea as something which must follow from either of these broad obligations.

There is nothing in the HRA Regulations which prevents measures being relied upon as compensation whilst also serving another purpose, e.g. wider ecological benefits. The current legislative framework therefore enables the Scottish Ministers to consent Berwick Bank and to rely on sandeel fisheries management as compensation, whilst also

Supplementary Information	Overview
	<p>acknowledging the wider environmental benefits including increased resilience in the seabird populations. It would be entirely reasonable for them to do so.</p>
<p>Analysis of NatureScot RIAA conclusions</p>	<p>This report provides an update to Table 18 of the Derogation Case, to summarise predicted mortalities for the conclusions drawn by NatureScot in relation to the additional sites and features for which they concluded an Adverse Effect on Site Integrity in their consultation response.</p> <p>As outlined in the Derogation Case and the AEI Submission Supplementary Information – Note on Precaution, this worst-case approach is considered by the Applicant to overestimate precaution, but it is presented here to allow Scottish Ministers to consider all the potential requirements for compensation and, therefore, all measures put forward as options.</p>
<p>EDF Torness Consultation Response – Sediment and Kelp Technical Note</p>	<p>Technical Note prepared in response to concerns raised by EDF Energy Nuclear Generation Limited (ENGL) in relation to the potential for suspended sediment and detached macroalgae occurring during installation and operation and maintenance of the offshore export cables to lead to blockages of the cooling water intakes at Torness Nuclear Power Station (TOR). TOR is scheduled to be decommissioned in 2028.</p> <p>Historically storm events, when coinciding with particular wind directions and tide states have carried detached kelp to TOR’s cooling water intakes. In extreme cases this has required the reactor to be shut down. There is an existing seaweed management zone in place at TOR.</p> <p>Physical processes modelling of suspended sediments and a study of kelp-TOR interactions based on the possible trenchless technology (e.g. HDD) punch out locations identified that suspended sediments and detached kelp, under typical conditions, is expected to be transported in a southeasterly direction and is not expected to enter the bay or reach TOR’s cooling waters intakes. During atypical storm events there is potential for kelp to reach TORs cooling water intake. The Applicant is committed to managing activities during these conditions to reduce the risk of kelp reaching the TOR cooling water intakes.</p>

Public Notices / Advertisements

Public notices advising that BBWFL has submitted Additional Environmental Information for a Section 36 Consent and accompanying Marine Licences to the Marine Directorate and inviting the public to submit comments on the application have been placed in the following publications:

- East Lothian Courier
- The Herald
- The Courier
- Edinburgh Gazette

- Fishing News
- Lloyds list

The adverts will advise the public how to participate in the consultation on the submitted Additional Environmental Information (AEI) in accordance with The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended), The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Electricity (Applications for Consent) Regulations 1990.

Hard copies of the AEI Submission documents will be made available for the public to view in the following locations:

Location	Address	Opening Hours
East Lothian Council Headquarters	John Muir House Brewery Park Haddington EH41 3HA	Open Monday to Thursday 9am - 5pm Friday 9am - 4pm
Dundee City Council	Dundee House 50 North Lindsay Street Dundee DD1 1QE	Open Monday, Tuesday, Thursday and Friday 8.30am - 5pm Wednesday 9.30am - 5pm
Scottish Borders Council Council Headquarters	Newtown St. Boswells Melrose TD6 0SA	Monday to Thursday: 8am- 5pm Friday 8am - 4pm Saturday 9am - 12noon
Angus Council	Orchardbank Business Park Orchardbank Forfar Angus DD8 1AN	Monday to Friday: 8am-5pm
Fife Council	Methil Customer Service Centre and Library Wellesley Road, Methil, Fife KY8 3PA	Monday, Tuesday, Thursday & Friday 9-12 and 1-5. Wednesday 10-12 and 1-5.

In addition to the hard copies available to view at the locations above, an electronic copy of the application will also be made available at the following location:

Location	Address	Opening Hours
Dunbar Library	Bleachingfield Community Centre Dunbar EH42 1DX	Monday, Tuesday and Friday 9 am to 1 pm, 2 pm to 5 pm Wednesday 10 am to 1 pm, 2 pm to 5 pm Thursday 9 am to 1 pm, 2 pm to 7 pm

Once the AEI Submission has been accepted by the Marine Directorate's Licencing Operations Team, the application documents will be published online at: <https://www.berwickbank.com>

Hard copies can also be made available on request. These will be subject to a charge of £150. Requests for hard copies of the application documents can be made at: berwickbank@sse.com

We look forward to hearing from you in relation to the formal acceptance of the applications.

Yours faithfully,

[Redacted]

Sarah Edwards

Berwick Bank Consent Team Manager

Annex A: Additional Environmental Information Request

Marine Mammals

MD-LOT advises that the following must be submitted as additional information on the basis of the NatureScot representation:

- Either the harbour seal assessment must be revised to include the updated Whyte et al. 2020 dose response information, or evidence must be provided to support the Russell et al. 2016 information being more precautionary.
- The 10% reducing to 1% Conversion Factor (CF) scenario must be included in the interim Population of Consequences of Displacement (iPCoD) cumulative assessment.

MD-LOT advises the following should be clarified on the basis of the NatureScot representation:

- In relation to UXO detonation impact ranges, for the low order 0.5kg charge (Table 10.46, Chapter 10), the very high frequency (VHF) hearing group has the largest Temporary Threshold Shift (TTS) SELweighted range of 3.1km of all the hearing groups. Berwick Bank should clarify whether this is correct, in light of NatureScot's expectation of the low frequency (LF) hearing group having the larger impact range.

Ornithology

MD-LOT advises that the following must be submitted as additional information on the basis of the NatureScot representation:

- NatureScot was unable to conclude no adverse effect on site integrity ("AEOSI") from vessel disturbance for common scoter, velvet scoter, red-throated diver, great northern diver and shag due to insufficient information. Additional information must be provided on indicative routes construction and/or operational vessels will take to reach the development site (as well as helicopter and/or drone usage), including whether these will pass through the marine SPA to reach the development site.

Derogation Case

Overall MD-LOT highlights the various concerns raised by consultees regarding the degree of uncertainty and insufficiency of the proposed compensation measures. Berwick Bank therefore may wish to consider providing information on other proposed compensation measures.

MD-LOT advises that the following must be submitted as additional information:

- Gannet has not been addressed within the derogation package. Additional information is required in relation to proposed compensatory measures for gannet (for which NatureScot has identified AEOSI, or been unable to conclude lack of AEOSI).
- It has been identified by NatureScot, Natural England and RSPB that there is insufficient information in relation to both sandeel fishery and colony compensation measures on implementation and monitoring and adaptive management, and each have provided further detail on specific points to be addressed. Additional information must be submitted on these points and MD-LOT advises that Berwick Bank contact NatureScot, Natural England and RSPB to inform the detail of information required.

- RSPB makes reference in paragraph 5.69 to its expectations around a full feasibility study in relation to rat eradication at Handa island, which MD-LOT advises must be provided as additional information. In paragraph 5.79, RSPB notes a feasibility study carried out for rat eradication on Inchcolm island referenced within the derogation proposals. If Berwick Bank intends on taking forward rat eradication at Inchcolm islands as a compensatory measure, this study should be provided as additional information.
- In relation to the Dunbar colony measures, assessment has not quantified impacts from development to the non-SPA colony which has been identified by NatureScot and RSPB. MD-LOT seeks additional information quantifying impacts from the development to the Dunbar kittiwake population, and any available quantitative evidence on disturbance limiting population expansion. Should this information not be available, this should be outlined and justified. NatureScot has highlighted that UK Seabird monitoring Programme database includes breeding success data from multiple kittiwake monitoring plots in the general Dunbar area that could be used to investigate whether there is any compelling evidence for localised effects at particular sub-colonies in the Harbour area. MD-LOT advise that this is investigated and provided as additional information.
- In relation to the derogation case EIA and HRA, additional information on additional targeted measures to minimise loss of great and arctic skua eggs is required as well as additional information on potential poisoning of non-target species, in particular wintering gulls, in line with NatureScot's representation.

MD-LOT advises the following should be clarified:

- Eradication of black rats, as well as biosecurity and colony management at Inchcolm was not taken forward as a compensatory measure, as noted by NatureScot and RSPB. MD-LOT seeks clarification on the reasoning behind this measure not being taken forward and whether Berwick Bank may reconsider this position.
- In relation to rat eradication on Handa, clarification should be provided on whether the adjacent land on the mainland will be maintained as a rat-free buffer, and whether this extends to other species including hedgehogs, minks and stoats. As noted by NatureScot, assessment of effectiveness and feasibility would be required should this measure be taken forward. If this is the case, MD-LOT would expect this to be submitted as part of the additional information to be provided on implementation and monitoring (above).