ESB Asset Development UK Ltd

Millmoor Rig Wind Farm

Further Environmental Information – Chapter 6 Ecology

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6 ECOLOGY

Introduction

6.1 This FEI Report is submitted as supplementary information under Regulation 19 of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and is relevant to enable the Scottish Ministers to reach a reasoned conclusion on the significant effects of the development on the environment.

6.2 This Chapter is included to presents the results of the additional survey work and reporting undertaken in response to consultee responses.

6.3 Following submission of the EIAR, the applicant received the following consultation responses in relation to ecology:

Table 6-1: Summary of Statutory Consultee Comments

Consultee	Date of response	Summary of consultation response	Further comment
Marine Science Scotland	21st November 2022	It is unclear whether data on water quality and fish populations has been updated since Highlee Hill. In accordance with our guidelines we advise that the results of up to date site characterisation surveys of watercourses that are at risk of an impact and full details regarding the proposed monitoring programmes and mitigation measures should be presented in the EIA report. MSS are content that a decommissioning and restoration plan will be prepared nearer the time of decommissioning. Water quality and fish population surveys may be required at least twelve months prior to decommissioning. MSS advise that the proposed decommissioning plan should be secured in a planning condition, '	Noted, additional surveys have been undertaken as discussed in this Chapter and **New Technical Appendix 8.6, FEI Report**.
NatureScot	2nd March 20223	In our view, this proposal is likely to have a significant effect on the qualifying interests of the River Tweed SAC. Consequently, Scottish Government, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests. We advise that, if the proposal is undertaken strictly in accordance with the application, then the proposal will not adversely affect the integrity of the site. There is potential to deliver much	Noted.

Consultee	Date of response	Summary of consultation response	Further comment
		more for biodiversity at this site, suggest the Outline HMP is re-worked to be broader and more ambitious in its aims and objectives, using information from the habitat surveys as a guide. This could include positive management of the botanically interesting areas, restoration of blanket bog and management of dry heath habitats	The Applicant has improved the proposed biodiversity enhancement measures as discussed in this Chapter and **Updated Technical Appendix 8.5, FEI Report**.
SEPA	2nd February 2023	Ecology - all potential GWDTE are near plantation so drainage sig. altered. The habitats are small and fragmented and likely rain fed and modified by artificial drainage.	Noted.
Fisheries Management Scotland (FMS)	21st December 2022	FMS's remit is confined mainly to alerting the relevant local DSFB/Trust to any proposal. As the proposed development falls within the jurisdiction of the River tweed Commission and Tweed Foundation FMS recommended that the proposals are conducted in full consultation with these organisations and provided a link to advice for DSFB's that FMS have prepared in conjunction with Marine Scotland Science	The Applicant has considered impacts on aquatic species in this Chapter and **New Technical Appendix 8.6, FEI Report**.
Marine Scotland	9th January 2023	MSS advise that up-to-date information on the fish species and their abundance in all watercourses at risk of an impact should be collected (from electrofishing surveys and/or obtaining up to date information on fish populations in all the relevant watercourses) to enable a full and accurate assessment of the potential impacts on the fish populations. This information should be used to draw up appropriate site-specific mitigation measures and to establish an integrated fish population and water quality monitoring programme.	The Applicant has considered impacts on aquatic species in this Chapter and **New Technical Appendix 8.6, FEI Report**.

6.4 This Chapter presents the results of additional survey work and reporting undertaken in response to consultee responses. Further habitat and protected species surveys were undertaken prior to confirming the new site access alignment to ensure that significant

impacts were avoided by design as required. The results of these surveys are summarised below and the implications for the assessment of effects considered.

6.5 Other design changes in the FEI Layout which included re-positioning of wind turbines T9, T11 and T13 would be within commercial forestry, which was scoped out as an ecological receptor in the EIA Report.

Outline Biodiversity Enhancement and Habitat Management Plan

6.6 An Outline Habitat Management Plan (OHMP) was included as part of the EIA Report. NatureScot (NS) responded to the Section 36 Application in March 2023 and stated "*The Outline Habitat Management Plan (OHMP) presents a very limited range of habitat enhancement and management measures on-site. These should be broader in scope and larger in area*". NS goes on to state "*In our view, there is potential to deliver much more for biodiversity at this site*".

6.7 In response, Alba Ecology was commissioned to consider the nature and scope of a range of potential biodiversity enhancement and habitat management options for the application boundary. **Updated Technical Appendix 8.5, FEI Report** provides a wide range of biodiversity enhancement and habitat management proposals. It is in accordance with the NS response, i.e. the measures herein are broader in scope and larger in area than outlined within the EIA Report OHMP. The options recommended within the updated OHMP which is now called an Outline Biodiversity Enhancement and Habitat Management Plan (OBE-HMP) are based on site specific evidence collected during the survey in March 2025, where a series of target notes were taken (**Annex 1 to Updated Technical Appendix 8.5, FEI Report**).

6.8 It is considered that the biodiversity enhancement and habitat management measures now proposed in the new OBE-HMP, satisfy all current policy requirements and guidance.

Fish and Water Quality Surveys

6.9 Following submission of the S36 application in November 2022, Marine Science Scotland submitted a request for up-to-date fish and water quality surveys. The Applicant commissioned the Tweed Foundation to undertake surveys and **New Technical Appendix 8.6** contains a report of the surveys. This additional information describes current conditions with respect to fish, fish habitat and water quality at the Proposed Development site. The survey provided data for watercourses which could be impacted by the Proposed Development, and a control site. The information provided by the survey is assessed to determine how freshwater fish populations may be impacted, including cumulative effects, and recommends mitigation and monitoring.

6.10 During wind farm construction and operation, management of factors that could influence the fish populations or their habitats will be required, and these are summarised in the Tweed Foundation's report, and comprise of:

- Obstruction to fish migration
- Elevated levels of suspended silt
- Excessive erosion

- Water pollution
- Instream and riparian habitat loss
- Maintenance of crossing points
- Forest harvesting

6.11 The combination of electro-fishing and macro-invertebrate monitoring sites with a walkover habitat survey provided a comprehensive assessment of the local fish populations and the quality of the local environment for fish production.

6.12 Standard guidelines for construction work will minimise any damage to the local river environment. Fisheries related mitigation is provided below:

- Given that all fish are migratory to varying degrees, it is of particular importance that any new road culverts are properly designed to allow the free passage of fish.
- To ensure the free passage of fish at river crossings, the River Crossings and Migratory Fish: Design Guidance (2012) must be adhered to. During the construction phase, it must be ensured that no hanging culverts are installed and that fish passes which are passable to parr, are installed where necessary. The Salmon (Fish Passes and Screens) (Scotland) Regulations 1994 must be adhered to.
- Heavy machinery should not, if at all possible, enter or damage instream habitats, as it may cause compaction of substrates, mortality of fish and degradation of the banksides and riparian habitat.
- It is essential to ensure that crossing points once constructed are carefully monitored and remedial works undertaken if necessary. Potential areas of concern include blocking of culverts by debris, excessive erosion around the crossing point structures and silt entering from roadside drainage channels.

6.13 With the adoption of this mitigation and monitoring impacts will be minimised. Should construction go ahead, the collected data will form the basis of a baseline monitoring scheme.

6.14 The habitat survey also provided some interesting insights into potential habitat improvement through riparian tree planting. At present, forestry managers are planting broadleaf trees well away from the bankside to minimise the risk of tree loss from floods. Tree planting along the riverbank is the primary management tool to help reduce increased summer water temperatures by shading the river. Riparian planting is proposed in the OBE-HMP, **Updated Technical Appendix 8.5, FEI Report**.

Additional Site Access Surveys

6.15 Given the need to consider alternative site access options to avoid direct impacts on the Martinlee Sike Scheduled Monument, additional protected species and habitat surveys were undertaken to understand the baseline conditions and ensure the realigned site access would not result in significant effects. The **Annex to Technical Appendix 8.1 and 8.2, FEI Report** provide a report of the surveys and findings. The baseline data were reviewed and a suitable site access alignment was chosen. **New Figure 8.1, FEI Report**, shows the NVC habitats overlaid by the new Site Access alignment. Potential impacts on GWDTE are assessed in **Chapter 4, Geology, Hydrogeology, Hydrology and Peat,**

FEI Report. The new site access alignment itself would result in direct loss of approximately 0.2ha (including an area of commercial plantation) of habitat.

6.16 No mitigation is required for the proposed design changes beyond that already recommended in the EIA.

6.17 Construction good practice is embedded in the project and has been demonstrated at other developments of a similar nature to limit the potential for ecological effects.

Effects on ecological receptor associated with the proposed design changes are considered not to be significant.

Conclusion

6.18 All design changes (including the re-positioning of wind turbines discussed in **Chapter 1, FEI Report**) have been reviewed and are not considered likely to result in significant effects on important ecological features. While the changes to the Site Access alignment will result in additional direct impacts on habitats (an area covering 0.2ha, including a section of commercial plantation) as shown in **New Figure 8.1, FEI Report**, it is considered that impacts are not significant which remains unchanged from what was reported in the EIA. The other design changes would be within the commercial forestry so it is considered the assessment reported in the EIA Report, and associated mitigation measures, remain valid.