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Our ref: CNS/REN/WF/SL
Your ref: ECU00002111

2 February 2024

Dear Sir

**The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Electricity Act 1989 Section 36 and Schedule 8:
Application for Scawd Law Wind Farm**

Thank you for consulting NatureScot on the application and supporting Environmental Impact Assessment Report (EIA Report) for Scawd Law Wind Farm, Scottish Borders, and for the various time extensions.

Our advice is based on the EIA Report by Natural Power Consultants Ltd, dated November 2022, the erratum to correct its erroneous statement that the male bird of the golden eagle pair at this site was deceased, and subsequent Golden Eagle Peer Review carried out by Avian Ecology, dated 4 August 2023, and information from the South of Scotland Golden Eagle Project (SSGEP).

The Proposal

This wind farm would comprise up to 8 wind turbines up to 180 metres to blade tip, battery storage facilities and associated infrastructure, with an operational life of 35 years. The site is located to the north-east of Innerleithen, with the Proposed Development described in the EIA Report as positioned along the top of two ridges, between 500 m and 640 m above sea level; with steep slopes to the south, leading down to small water courses that drain south towards the River Tweed, some of which are located within the Proposed Development Area. Habitat is considered typical of this area, comprising a mix of heather moorland and rough, semi-improved grassland, with extensive plantation forestry situated c.1 km to the south and west. The land is currently used for sheep farming, and the estate also release game birds (pheasant and red-legged partridge).

NatureScot Position: Advice

We provide advice in relation to the key natural heritage interests associated with the proposal, including effects on the River Tweed Special Area of Conservation (SAC), Moorfoot Hills Site of Special Scientific Interest (SSSI), golden eagle and landscape and visual impacts.

We consider that the impact of this wind farm proposal on the pair of golden eagles at this site is more significant than the overall assessment in the EIA Report and Review suggests, primarily

due to the location of turbines 7 and 8 extending out from the turbine array onto an important ridge within their territory.

We also provide advice on the River Tweed SSSI, Moorfoot Hills SAC, Gladhouse Reservoir Special Protection Area (SPA) and Fala Flow SPA.

Summary of Advice

River Tweed SAC

This proposal and the associated works required to the delivery access route could be progressed without any modification. However, because it could affect internationally important natural heritage interests of the River Tweed SAC, Scottish Government, as competent authority, must establish that the proposal, as applied for, will not adversely affect the integrity of the site. We provide our appraisal below to help with this.

Moorfoot Hills SAC

In our view, there is no likely significant effect of the proposed development itself on the blanket bog or dry heath qualifying interests of this SAC, either directly or indirectly.

In addition, it is our view that there is no likely significant effect on the qualifying interests of the SAC, either directly or indirectly, from the minor road widening works which would be necessary along the delivery route to facilitate access of turbine components to the proposed site where this is within the SAC.

An appropriate assessment is therefore not required.

Gladhouse Reservoir SPA and Fala Flow SPA

In our view, there is no likely significant effect of the proposal on the non-breeding pink footed geese qualifying interests of either SPA, either directly or indirectly. An appropriate assessment is therefore not required.

River Tweed Site of Special Scientific Interest (SSSI)

Embedded mitigation measures to address potential impacts on the qualifying interests of the River Tweed SAC will also address those on the notified features of the SSSI.

Moorfoot Hills SSSI

We consider it unlikely that the proposal (the development itself and the road widening works required along the B7007 and B709) will affect the blanket bog, upland habitat assemblage, and breeding bird assemblage notified interests of this upland SSSI.

It is unclear from the information submitted whether the proposal would affect the breeding golden plover notified interest.

Golden Eagle

There is an occupied golden eagle territory at Scawd Law, established since the start of the development of this proposal by a pair of birds associated with the work of the SSGEP, whose aim is to prevent the extinction of this raptor from Southern Scotland.

This is significant in Natural Heritage Zone (NHZ) terms, considering the low numbers of breeding birds currently in NHZ 20 - Border Hills, and in Southern Scotland overall.

We strongly advise that turbines 7 and 8 are removed from the ridge to avoid displacement from an important part of the territory, and minimise potential collision risk to this significant pair of golden eagle. The risk these two turbines pose to the integrity of this territory could be significant. We advise that going ahead with the current layout and design would not be in keeping with National Planning Framework (NPF) 4 policies to improve biodiversity.

Landscape and Visual Impacts

The Proposed Development would cause a significant range of adverse landscape and visual effects as a result of its location on a ridgeline above the Tweed Valley, close to well-used hills and recreational receptors.

It would not cause significant adverse effects on the integrity of the Upper Tweeddale National Scenic Area (NSA).

Appraisal of the Natural Heritage Impacts of the Proposal

River Tweed SAC

The River Tweed SAC is of international interest for the qualifying interests Atlantic salmon, otter, three species of lamprey and as a water course typically supporting water crowfoot (*Ranunculus*) species. The qualifying interests are sensitive to direct and indirect effects including disturbance to the river habitat, silt and sediment entering the watercourse and smothering gravel beds, suspended solids in the water column, pollution events, and changes in water quality and in water chemistry. Further information on this is given in the SNH publication '*Guidance for Competent Authorities when dealing with proposals affecting SAC freshwater sites*'.

All watercourses within the site flow directly into the River Tweed SAC and SSSI.

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.

In reaching this view we have taken into account embedded mitigation measures proposed, including the Construction and Environmental Management Plan (CEMP) to be incorporated into the Construction Method Statement (CMS) to minimise the risk of impacts on the species and habitats for which the River Tweed SAC is designated. This will be worked up into a comprehensive CEMP with its implementation and monitoring during construction of the wind farm overseen by an Ecological Clerk of Works (ECoW).

The final CEMP should be in accordance with SEPA guidance (available on the [SEPA website](#)). It must include site specific measures to ensure there is minimal disturbance of the qualifying features, and protect against adverse indirect impacts on important ecological requirements such as on water quality, water flow and/or river channel substrate.

Please note that we do not wish to be consulted on the detailed CEMP; we are content that the planning authority ascertain that this is adequate, with advice from SEPA if necessary.

Our appraisal of the impacts of the proposal on the qualifying interests of the River Tweed SAC is set out in Appendix 1.

Moorfoot Hills SAC

We consider there is no connectivity between the wind farm site and the qualifying interests of this SAC. The boundary of this site is a fence line on the ridge between the SAC and the proposed development site. Since the built elements of the wind farm sit below this ridge line, and not within the SAC, we do not consider there to be any obvious processes or pathways by which the proposal could influence them.

However, we note at 9.8.11 in Chapter 9 Hydrology, Geology & Hydrogeology that the desk-based assessment for the access route to the site highlights a section of the delivery route falls within the Moorfoot Hills SAC/SSSI, where five Pinch Points have been identified. Sections of the B7007 and B709 are included within the boundary of the SAC/SSSI. It would only be where extensive road widening is proposed that there could be connectivity with the qualifying interests of the SAC, depending on the habitats found at that location, topography and the nature of the works. Generally, we would not be concerned about minor works that are contained within the road verges immediately alongside the carriageway.

From Figure 12.2 Proposed AIL Delivery Route we have identified the pinch points concerned as 23, 24, 25, 26 and 27, then used Appendix 12.1 Abnormal Indivisible Load Access Assessment to assess the work proposed to conclude the following:

- PP23 – SAC/SSSI bounds the east of the carriageway only; the work required is on land to the west of the carriageway, which is not within the SAC/SSSI. This area is downslope of the SAC, so no connectivity with the SAC habitats.
- PP24 – within the SAC/SSSI; the work required is within the carriageway verge, is minor and not of concern.
- PP25 - SAC/SSSI bounds the east of the carriageway only; the work required is on land to the west of the carriageway, which is not within the SAC/SSSI. The topography east of the road suggests that any work on land to the west would not affect the SAC habitats indirectly.
- PP26 - within the SAC/SSSI; no work is proposed.
- PP27 – two sections nearest PP26 are within the SAC/SSSI; results from desk-based assessment inconclusive, but likely to only require minor work within the carriageway verge, and not of concern.

Aspects of this work may need to be considered in greater detail post-consent, as per the recommendations at A12.1.6 in Appendix 12.1, and NatureScot would need to be included, given the SAC/SSSI status of the land.

We note the assessment for the Moorfoot Hills SAC presented in Chapter 7 Ecology, and agree with the conclusion given at 7.11.8 of no likely significant effect.

Gladhouse Reservoir SPA and Fala Flow SPA

Although there is potential for connectivity between the proposed wind farm site and the pink footed geese qualifying interests of these SPAs, due the distances of up to 20km that geese can fly from their winter roost to their feeding grounds, there is sufficient information available in the public domain about their movement patterns for us to advise that the development is not likely to have a significant effect on the qualifying interest of these SPAs.

Moorfoot Hills SSSI

The nationally important notified features of this extensive upland SSSI are blanket bog, upland habitat assemblage, upland breeding bird assemblage, and breeding golden plover.

As above, there are no obvious processes or pathways by which the development itself could influence the notified habitats of the SSSI. However, road widening at pinch points along the

access route to the side could result in loss of SSSI habitat alongside the minor roads within the SSSI – see above under Moorfoot Hills SAC – and we would need to be included in discussions about this post-consent.

We consider it unlikely that the proposal would affect the breeding bird assemblage feature, since the species comprising the assemblage are found throughout this extensive upland SSSI, and the wind farm site borders a relatively small proportion of it.

However, the potential effects of the proposal on the breeding golden plover interest of the SSSI is less clear and has not been assessed in the EIA Report, despite the Scoping Report indicating it would be.

Our appraisal is given in Appendix 2.

Golden Eagle

Our appraisal is given in Appendix 2.

Ornithology

Our appraisal is given in Appendix 2.

Landscape and Visual Impacts

Our appraisal is given in Appendix 3.

Ecology

The results of the habitat and species surveys carried out are as expected for this upland site under its current use and land management practices.

We support the intention to produce and implement a Construction and Environmental Management Plan (CEMP), to include relevant Species Protection Plans (SPPs) and Construction Methods Statement (CMS) together with the use of an Environmental Clerk of Works (ECoW) during enabling works and throughout the construction period of the Proposed Development.

Outline Habitat Management Plan

It is proposed that an outline Habitat Management Plan (HMP) will be provided, with its aim given in 7.7.63 as *to improve and restore areas of wet/dry modified bog and enhance riparian habitat within the Proposed Development Area*. This is to be welcomed, particularly for the bog habitats which are in a degraded state within the development site.

However, 7.7.64 goes on to say that no onsite bog habitat restoration is proposed, with local bog restoration proposals to be given financial support instead.

In our view, this restoration work should take place on-site.

The habitat enhancement and management measures presented at this outline stage are very limited in scale, nature and ambition. A grazing regime for the upland area, short sections of riparian broadleaved planting and two small areas of broadleaved planting are proposed, as shown on Figure 7.9 Proposed Habitat Management Plan.

There is potential to deliver much more for biodiversity at this site without compromising its current and future uses. We recommend that when the outline HMP is developed, it is broader and more ambitious in its aims and objectives, and includes restoration of bog habitats on-site.

We trust this response is useful.

Please contact this office should you wish to discuss our response.

This advice is provided by NatureScot, the operating name of Scottish Natural Heritage.

Yours faithfully

By e-mail

Anne Brown
National Operations Officer - South

Copy: Craig Miller, Scottish Borders Council

APPENDIX 1 TO NATURESCOT RESPONSE
SCAWD LAW WIND FARM S36 ELECTRICITY ACT APPLICATION
NATURESCOT APPRAISAL - RIVER TWEED SPECIAL AREA OF CONSERVATION

Our consideration of the three tests as defined in the Habitats Regulations is as follows:

1. Is the plan or project directly connected with or necessary to site management for nature conservation management purposes (and part of a fully assessed and agreed management programme)?

In our view, this proposed development is not necessary for conservation management purposes. Hence, further consideration is required

2. Is the plan or project likely to have a significant effect on the site?

Our advice is that this proposal is likely to have a significant effect on the qualifying interests of the River Tweed SAC. There is hydrological connectivity between the development site and the River Tweed SAC through watercourses on the site that flow directly into the River Tweed.

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. These are contained within the Conservation Advice Package.

3. Can it be ascertained that the plan or project will not adversely affect the integrity of the site?

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.

The appraisal we carried out considered the following:

- *Supporting habitat for the qualifying species:* the standard mitigation measures ensure that there will be minimal indirect disturbance of the species' supporting habitat.
- *Water quality:* the qualifying features require good water quality and the mitigation measures ensure that construction will not lead to a deterioration in water quality that would affect the qualifying features.
- *River flow:* the mitigation measures will not lead to changes in water depth or water flow that would otherwise risk adversely affecting the qualifying features.
- *Channel form and substrate:* the mitigation measures will ensure that the channel's morphological diversity and substrate composition will not be adversely affected. The natural functioning and morphology of the river channel are key elements supporting the species' habitat.

Our appraisal for each of the qualifying interests is set out below.

Atlantic salmon

- Salmonids are thought to be absent from the development site, with barriers to migration preventing their entry to the Walker Burn, Gatehopeknowe Burn and Holylee Burn.
- Atlantic salmon are sensitive to disturbance to the river habitat, including silt and sediment entering the watercourse and smothering gravel beds, suspended solids in the water column,

pollution events, and changes in water quality and in water chemistry, particularly during the construction phase of this type of development.

- There is a risk that construction-related pollution from the development could affect the SAC Atlantic salmon qualifying interest by affecting the fish themselves and also through deterioration of their supporting habitat, potentially undermining one or more of the site's conservation objectives.
- Implementation and monitoring of the Construction Environment Management Plan (CEMP) will reduce the risk of pollution and siltation impacts.
- The conservation objectives will not be undermined for salmon.

Brook lamprey, river lamprey and sea lamprey

- Lamprey are considered absent from the development site itself due to barriers to migration preventing their entry to the Walker Burn, Gatehopeknowe Burn and Holylee Burn.
- Lamprey require similar spawning gravels to salmonids and good water quality, but they also require silty areas in which to grow as juveniles.
- Given hydrological connectivity, construction-related pollution from the development could potentially affect the lamprey qualifying interests of the SAC, by affecting the fish themselves and also through deterioration of their supporting habitat. These impacts could undermine one or more of the site's conservation objectives.
- Implementation and monitoring of the CEMP will reduce the risk of pollution and siltation impacts.
- The conservation objectives will not be undermined for lamprey.

Otter

- Evidence of otter was recorded along the Gatehopeknowe Burn and River Tweed in the form of spraints. Otter are widespread in the River Tweed catchment, and so it can be expected that they forage and commute along watercourses within the site and also use nearby watercourses.
- Minor development related effects on otter could occur, but are considered unlikely to be significant with the implementation of standard mitigation measures, as given on our website.
- Implementation and monitoring of the CEMP will reduce the risk of impacts on otter.
- We conclude that conservation objectives will not be undermined for otter.

Rivers with water-crowfoot dominated floating vegetation

- This habitat was not recorded within the site boundary. Floating beds of water-crowfoot are of particular importance on the lower parts of the river.
- In theory, siltation and/or pollution arising from construction-related work could affect this habitat type but, given the probable distances between the development site and the main areas of this habitat type, significant effects are unlikely.
- Implementation and monitoring of the CEMP will reduce the risk of indirect pollution and siltation impacts.
- The conservation objectives will not be undermined for this qualifying interest.

APPENDIX 2 TO NATURESCOT RESPONSE SCAWD LAW WIND FARM S36 ELECTRICITY ACT APPLICATION ORNITHOLOGY ASSESSMENT including Golden Eagle

Background to our assessment

Our initial assessment of the EIA Report as submitted was that it is not comprehensive, leading to a request for clarification and further information from the applicant (e-mail 13 March 2023).

In particular, we requested:

- For the survey work, sight of the full ornithology survey data, including details of survey dates, times and weather conditions, as offered in paragraph 8.2.7 of Chapter 8, and which should have been supplied with the EIA Report, in line with our guidance;
- For the collision risk modelling, clarification of how the data from the two survey years collected from different VPs over different areas were combined into a single model.
- For the goshawk survey data, clarification of survey information presented where data in the tables did not match the same data presented in figures.
- For golden plover, detail of the reference(s) that dropped out in paras 8.7.68, 8.7.69, 8.7.71 and Table 8.16.

This information was readily provided, and we continued our assessment of the EIA Report.

The SSGEP had picked up an error of fact in the EIA Report which stated the male bird from the 2022 pair had died, whereas he was alive and still at the site. This resulted in the submission of an erratum letter to ECU and ourselves by Natural Power (9 March 2023).

SSGEP also reported ongoing observations from throughout February 2023 that the same pair of golden eagles that had set up a nest within the site in 2022, had again started to set up a nest. Observations are backed up by satellite tagging data. This area is now considered as an active occupied golden eagle territory.

On 30 March 2023 we were asked by Natural Power not to submit our response to ECU the following day, pending a peer review of the ornithology chapter of the EIA Report.

This was received by us and ECU on 4 August, and we re-commenced our assessment. However, staff illness meant our overall final response to ECU has been delayed until now.

Our Assessment of the EIA Report

Survey work

The detail of the baseline survey information we requested post-application has been reviewed and we are content with the details provided. However, the survey work is only borderline acceptable. The first non-breeding season data (Sept 17-Feb 18) is now over 5yrs old, and would therefore generally be considered out of date (as detailed in NatureScot survey guidance - <https://www.nature.scot/doc/recommended-bird-survey-methods-inform-impact-assessment-onshore-windfarms>). We recognise however that emerging circumstances relating to golden eagle on the development site had delayed submission of the application to ECU. The second year covered a different part of the site, but not comprehensively – the buffers for wider searches of raptors, black grouse and even breeding birds were not extended eastwards (although in Chapter 8 8.4.35 it suggests that the surveyors had no access to the buffers anyway). Unfortunately, this eastern section in particular was important because it would have better covered the Moorfoot Hills SSSI bird features which have not been assessed in the EIA Report. In

year 2, the breeding bird and raptor surveys started quite late (well into May – Appendix 8.1), and there were no black grouse surveys.

Collision Risk Modelling

The response to our query on the single model explained the approach used, but not how the data were combined. We are not seeking further explanation.

Goshawk

Following clarification of the data and associated figures presented, we are content with the assessment of likely impact on goshawk.

Moorfoot Hills SSSI - breeding bird assemblage and breeding golden plover

The EIA Scoping Report (Section 13.4.1) had said that *the close proximity of the Moorfoot Hills SSSI (for which a breeding bird assemblage and specifically golden plover are designated features) means that any impact on this designated site shall also be assessed*. We had recognised this intention in our response to Energy Consents Unit on the Scoping Report (27 August 2020). However, it is not apparent from the EIA Report that this has been done.

Based on our knowledge of the SSSI, we consider it unlikely that the proposal would affect the breeding bird assemblage feature, since the species comprising the assemblage are found throughout this extensive upland SSSI, and the wind farm site borders a relatively small proportion of it.

However, the potential effects of the proposal on the breeding golden plover interest of the SSSI is less clear. Golden plover breed in SSSI habitat adjacent to the wind farm site boundary, and also within the wind farm site around turbines 6, 7 and 8.

This feature is currently assessed as being in unfavourable condition (assessed in 2015), because the density of breeding golden plover is below the baseline set at notification of the SSSI in 1989 of 5.4 pairs per km². Assessments since 2004 have given a density at or just above 1 pair per km².

In the 2015 condition assessment report, breeding sites identified were within or on the periphery of the SSSI, the majority on broad ridges and plateaux of blanket mire above the 450m contour. The boundary of the wind farm site abuts a short section of the south west boundary of the SSSI. Within this south western section of the SSSI, close to the wind farm site boundary, pairs were found on ground at Deaf Heights, Broomyleess Rig, Windlestraw/Redscar Law, Redscar Law, Maiden Law and Great Law.

The results of the breeding bird surveys in the EIA Report show that development site supports 2 breeding pairs of golden plover; one in suitable habitat near to the proposed location of Turbine 6 (2018 survey) and the other between T7 and T8 (2019 survey). The proximity of these turbines and their associated infrastructure to the breeding golden plover on adjacent ground within the SSSI means it is likely that the breeding birds on the proposed wind farm site are connected to the breeding golden plover notified feature of the Moorfoot Hills SSSI. The flight lines do not indicate any significant connectivity for golden plover, but we have not been provided with information on SSSI bird interest more generally in the buffer areas which may be affected by the proposal. The buffers weren't extended properly, and access was an issue (8.4.35) for which only some raptor and black grouse information could be gathered, rather than the other moorland breeding birds. Given the unfavourable condition of this feature within the SSSI, it would have been informative for an assessment of the impacts of the wind farm proposal on this feature of the SSSI to be included within the EIA Report.

As part of the review of the ornithology chapter of the EIA Report, we had anticipated this omission would be addressed, however, on receipt of the review we see it has focussed exclusively on golden eagle.

Please note we are highlighting the absence of this information, and not requesting it is provided at this stage to inform our response to the application.

Cumulative Impact Assessment

This has been done on a 10km radius from the proposed development (8.10.2) – which is contrary to our guidance which states that the NHZ (in this case Border Hills) is the correct scale (<https://www.nature.scot/doc/guidance-assessing-significance-impacts-bird-populations-onshore-wind-farms-do-not-affect-protected>).

We are not requesting further information.

Golden Eagle

Our assessment is based on the EIA Report (including Ornithology Confidential Appendix 8.2, which includes *Scawd Law Wind Farm: An analysis of potential golden eagle habitat loss using the Golden Eagle Topography (GET) Model and Satellite Tracking Data* by Alan Fielding, as referenced below), the erratum, the Scawd Law Golden Eagle Assessment – Peer Review and information from SSGEP about the pair of golden eagle at the site (observational and satellite-tag data).

There is an occupied territory on the site. This is significant in NHZ terms, considering the low numbers of breeding birds currently in Border Hills. The EIA Report concludes there will be no significant effects of the proposal for the eagle pair (Table 8.15), however we consider this does not fully take into account all the potential impacts. While we would agree that the collision impacts are not of significant concern, displacement is of concern.

In discussing the Fielding report (Appendix 8.2) in the EIA Report (sections from 8.7.53), there is only consideration of habitat loss. As it is, the range is large and of high quality, the predicted range habitat loss from the GET model is 4.4% (which is slightly below the 5% threshold). The collision risk (albeit based on only 4 months of VP data) is relatively low. However there is not, as the Fielding report also highlights (Section 4, around Figs 6&7) consideration of the proposal ‘in relation to the surrounding landscape and golden eagle movement patterns’.

Chapter 8 of the EIAR cites Fielding et al. (2021) to support statements on rarity of collision and high rates of avoidance for Golden Eagle. However, this paper also shows that the balance between avoidance and collision risk is complex and these impacts are not mutually exclusive, that certain turbines pose a higher collision risks, particularly those in single rows, and that an eagle’s proximity to a turbine depends on the habitat attractiveness at that location and it’s connectivity to surrounding habitat (with less displacement in/near preferred habitat). Notably, Appendix 8.2 also describes the importance of movement patterns not considered in the EIAR –

‘Golden eagles have clear movement patterns along extensive contiguous GET 6+ areas, essentially following ridge lines and the intensity of that movement is, to some extent, determined by the extent and connectivity of any good eagle habitat (Figs. 6, 7 & 8). Connectivity can be disrupted by wind farms resulting in a larger loss of habitat than that within the turbine exclusion area.’ and ‘The lower five turbines do not appear to present much of a problem for the pair but the two more northern ones (turbines 7 & 8), particularly turbine 8, the most northern, have the potential to create more significant movement barriers’.

Therefore, the impact of this proposal may be more serious than the overall assessment suggests, because of the location of turbines 7 and 8 extending out from the array onto the ridge.

Following consideration of the Review, we again highlight the importance of this pair of golden eagles, with displacement as the main impact of concern (because of turbines 7 and 8). Whilst we do not agree with everything in the review (including the interpretation of the NHZ 10 eagles), our advice below is focussed on potential displacement as the issue of concern:

- The site is located in NHZ 20 (Border Hills); the application alternatively looks at the Southern Scotland population as a unit of assessment which is fine. As per Fielding & Haworth (2014), Southern Scotland could support 14-16 pairs of golden eagles, with the Moorfoot Hills (where the proposed development is located) thought to be able to support one pair. At the time of the report, the Moorfoot Hills had lost 16% of ridge habitat to woodland and wind farms, with persecution also a major negative pressure. Currently in Southern Scotland there are just 3 established pairs, with one in NHZ 20. Importantly, with the progress of the South Scotland Golden Eagle Project, some of the released birds are now starting to pair up – and this site marks the first of former territories being reoccupied. Whilst the overall population prospects are therefore positive, the reestablishment of these birds is still at an early and uncertain stage, they are facing additional pressures and as it stands, the NHZ and overall populations are unfavourable. The pair at this site is therefore really significant.
- The Review largely endorses the findings of the EIA Report. The only additional information included is an assessment of potential impacts of habitat loss beyond the wind farm area through interrupted flight patterns, which was previously missing and was therefore welcome. In the Review, the argument put forward is that as the range is of very high quality habitat so movement patterns are less restricted, the corridor between the two core areas of use is fairly wide, flights are not restricted to ridge lines and other main movements are not restricted by the development area. The review concludes that *'severance of all possible movement corridors around the range and between preferred areas of range use by the currently proposed turbine layout is therefore very unlikely'* and so a larger area of habitat loss would therefore not occur. We do not agree with this assessment.
 - The review argues that the data indicate movements are not restricted to ridgelines, which we do not think supports the review conclusion. Firstly, a point made earlier in the review that absolute movement patterns cannot be illustrated is true. Secondly, it is well known that topography is key to large raptors such as golden eagles in providing vertical lift – indeed the GET model is based on well-supported findings from satellite-tagged golden eagles that show preference for higher, sloped topography close to ridges (Fielding et al. 2019). Whilst the data available in this case may not show a restriction to ridgelines, the main areas of activity are close to these and in locations of higher topography generally.
 - A *'severance of all possible movement corridors'* is not necessary to compromise the range, and whilst turbines 7 and 8 do not affect all movements, they do intrude significantly into the corridor between the two main areas of use.
 - The argument that there is still space to the north east in this corridor to go around these turbines, does not reduce the risk to the birds that wish to fly through this part of the corridor. As cited before, the applicant's own assessment (Appendix 8.2) supports this *"The lower five turbines do not appear*

to present much of a problem for the pair but the two more northern ones (turbines 7 & 8), particularly turbine 8, the most northern, have the potential to create more significant movement barriers’.

- The higher impact of outer turbines (particularly in preferred habitat) on both collision and displacement, and therefore the disproportionate impacts of turbines in single rows (as turbines 7 and 8 are) is confirmed in the scientific literature (Fielding et al. 2021a). Research also suggests that golden eagles do not habituate to turbines (Fielding et al. 2021b).

Given the importance of this pair, we strongly recommend that turbines 7 and 8 are removed if they cannot be relocated into the cluster. This would lessen impacts of displacement and collision, and potentially also benefit the breeding birds and breeding golden plover features of the SSSI. The risk these two turbines pose to the integrity of this territory could be significant, and going ahead with this current design would not be in keeping with NPF4 policies to improve biodiversity.

References

Fielding, A.H. & Haworth, P.F. (2014). Golden eagles in the south of Scotland: an overview. Scottish Natural Heritage Commissioned Report No. 626

<https://www.nature.scot/doc/naturescot-commissioned-report-626-golden-eagles-south-scotland-overview>

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APPENDIX 3 TO NATURESCOT RESPONSE

SCAWD LAW WIND FARM S36 ELECTRICITY ACT APPLICATION

LANDSCAPE AND VISUAL EFFECTS

1.0 The Proposal

The proposed Development Scawd Law Wind Farm is located within the Tweed Valley area of the Scottish Borders Council area. It is located approximately 4.1km north-east of Innerleithen, 2.6 km to the east of the B709 road and 3.1 km north of the A72 road in Scottish Borders. The Proposed Development Area covers approximately 1,975 ha and is situated entirely within the Dissected Plateau Moorland (LCT 90) on the southern side of the Moorfoot Plateau Unit of the LCT. The proposal consists of:

- 8 Turbines up to 180m with aviation lighting installed on the hubs
- Battery and Energy Storage Infrastructure
- Access Tracks
- Other ancillary infrastructure as described in Chapter 4 of the EIA Report.

2.0 Structure of advice

In line with the NatureScot service level statement, we have primarily focused our advice on whether there would be a significant effect upon the Special Qualities of the Upper Tweeddale National Scenic Areas. The remainder of the advice focuses on the potential for significant effects on landscape, visual and cumulative effects more widely.

3.0 Summary of significant landscape, visual and cumulative effects

3.1 Summary of effects upon the Special Qualities of the Upper Tweeddale NSA

The assessment finds a moderate adverse but not significant effect on the 'Expansive, open hills with panoramic views' special quality. We agree with this assessment. The views of the proposed Development tend to be from the peripheral eastern edge where views are looking outside the NSA. There is a band of visibility from Pykestone Hill in the south of the area in a north-easterly direction towards Kirkton Manor and across toward Torbank Hill (see Fig. 6.7). Effects on these panoramic views would largely be mitigated by distance, although the development would form a noticeably larger or more prominent feature than the existing windfarms present in the baseline in views looking eastward from within the NSA.

3.2 Summary of potential significant landscape and visual effects

A comparison of the blade tip and hub height ZTVs (Fig. 6.2 and 6.3) alongside the viewpoint visualisation shows that from valley views, from for example within the Upper Tweed Valley, the height of the landform and the steepness of the topography and natural screening through landform and tree cover reduces the visibility of the proposal, with very limited views of the proposed Development from the A72, the main arterial route through the valley, – though a significant visual impact would be experienced from VP 10 – East of Holylee, (representative of west facing views from the A72). The same is true for the minor roads to the south of the Tweed (B7062/B709) where these roads follow the path of the Tweed, with representative views at the Peel (VP 14) showing a visible blade with forestry screening the two other blade tips from view, and from the Batta (VP 12), where the greatest view appears possible with the entire number of turbines and hubs would be visible, though with turbines 6 and 7 more clearly visible due to forestry and landform screening the remainder of the turbines. The section around viewpoint 12

would see the greatest amount of the proposed development within these lower level Tweed Valley views for around 5km.

The views from higher locations, - surrounding hill tops, and along the B709 looking northward from where the road turns southward following the Quair water would see far larger extents of the development. Taking the lower level views at representative viewpoints 13 and 16, the full height and scale of the turbines would be visible at the head of this valley on the containing landform. The Scawd law turbines would be the first wind turbines visible from this location.

In more elevated views, in views from the west, (Representative VP 4 The Meldons, VP 6 The Sware and VP 9 Bonnington Road Peebles, the entire development would be visible on the top of the ridge. In the view from The Sware at a promoted viewpoint, the entire proposal would be visible along the skyline, though noting the presence of the scoping Leithenwater Proposal that would be closer and of a greater scale and prominence. From Lee Pen (VP 8) we agree with the assessment that finds a major and significant visual effect, due to the proposal's scale, prominence and proximity.

In elevated views from the south the proposal appears to be fairly prominent, with the entire proposal visible at a larger scale (in terms of turbine height and perceived scale), of particular relevance are views from Priesthope Hill (VP5) and Cairn hill Cairn (VP22), where, proximity, scale and prominence mean that receptors are judged to receive major adverse significant visual effects within the EIA Report.

In elevated views from the west for example viewpoint 2, Lauder Common and Scroof Hill (VP 3) where the assessment judges a major adverse visual effect, the proposal is prominently located with the entire proposal visible on the skyline. The wider pattern of wind development would be appreciated from these more elevated views but with the proposed Development being the most prominent in terms of the existing development, though the proposed Greystone Knowe Wind Farm would be equally if not more prominently located in the view from Lauder Common, and would be more complex in form given the greater number of turbines proposed.

The assessment finds that of the 23 representative viewpoints assessed there were predicted to be significant daytime effects on 15 viewpoints, with four of these effects found to be major and adverse effects. We agree with this assessment.

The EIA Report assess that there would be significant daytime effects on 3 out of the 6 Landscape Character Types(LCTs) assessed within the LVIA study area, these are:

LCT 90: *Dissected Plateau Moorland*

LCT 93: *Southern Uplands with Scattered Forest – Borders*

LCT 116: *Upland Valley with Woodland.*

These landscape character areas are located within the following special landscape areas (SLAs), also predicted to receive significant effects;

Tweedsmuir Uplands SLA

Tweed Valley SLA

Tweed, Ettrick and Yarrow Confluences SLA.

We agree with this assessment of significant effects.

3.3 *Night Time Effects*

As the assessment highlights, the development is located within a LCT – Dissected Plateau Moorland, the Moorfoots Plateau Unit that falls within the darkest categories of night-time lighting. Light pollution is limited to around the periphery of the unit associated with nearby settlements and roads located to the east and the Tweed Valley to the south. This area, therefore, has a high susceptibility to the introduction of lighting.

Each wind turbine would be fitted with a steady red light at the nacelle. The assessment finds that the ‘worst’ effects of the lighting would likely be appreciated in higher elevation relatively close too views where higher intensity lighting would be seen, these viewpoints are, - VP 17 (SUW, Minch Moor) and VP 23 (Blake Muir). The assessment considers that effects to be lessened from lower elevation views where angle and distance that the lights would be seen at, for example at VP 16 (SUW/B709 near Kirkhouse) and VP 2 (Lauder Common), while we broadly agree with this, as the landscape or baseline that the proposal would be viewed in and from are substantially dark we consider that this could still lead to a significant effect in some conditions.

3.4 *Summary of cumulative landscape and visual effects*

We agree with the assessment that finds that the introduction of the proposed development would not lead to a change in scenario 1 effects, and we agree that the proposed Greystone Knowe wind farm (included in Scenario 3) would be the key cumulative interaction. In particular with the increased level of effect on the Dissected Plateau Moorland.

4.0 *Comments on ancillary infrastructure and the supporting visualisations*

We were disappointed to note that ancillary infrastructure, and in particular the access tracks and the battery energy storage system (BESS), do not appear to have been illustrated in either the wirelines or photomontages. This is a particular concern in close-up elevated views where we believe that these elements would be highly visible, for example from VP 22 Cairn Hill Cairn, where both the BESS and access track would be visible at distances of around 2km.

In relation to the BESS the location of this large industrial structure, (proposed indicative dimensions 200m x80m x4.5m), on a skylined ridge line could mean additional significant visual effects. We would advise that to minimise or reduce this effect, consideration is given to the location of this structure to lessen this effect.

5.0 *Conclusion*

We have largely agreed with the assessment of effects as set out within Chapter 6 the LVIA of the EIA Report. We find the proportion of major and significant effects point to the location of the development on a prominent ridgeline, within an area that is well used for recreation, particularly walking, as well as the number of protected landscapes close to the proposed development, noting that we do not find a significant effect on the integrity of the Upper Tweeddale NSA.

NatureScot – February 2024