

Our ref: P24-460 Mynydd Maen Assessment of Environmental Statement.docx

Your ref: DNS/3276725

25 November 2024

Elliot Smith
RES Ltd

By email only

Dear Elliot

Re: Assessment of Mynydd Maen Environmental Statement

Thank you for asking BSG Ecology to provide further information to respond to the Inspector's assessment of the submitted Environmental Statement. The required information is set out in this letter.

Paragraph 22 (and Annex 1 bullet point 7)

The Inspector notes that much survey work to support the application was completed during and prior to 2022, resulting in it being more than two years old. The Inspector requests further information as to why the results of these surveys continue to provide a robust baseline that reflects current environmental conditions.

Age of data

The Inspector is correct in his statement. Surveys were completed as follows:

- Habitat surveys in 2020 and 2022.
- Bat emergence surveys in 2021 and 2023.
- Seasonal static bat detector deployments and weather sampling in 2021
- Ground level tree inspections (to identify potential for bat roosts) in 2022.
- Close inspections of trees with potential roost features in 2023
- Dormouse survey in 2022
- Great crested newt surveys between 2021 and 2023 (with the scope evolving iteratively).
- Otter and water vole survey of the Site in 2021 and the access in 2022.
- Reptile habitat quality assessment in 2022.
- Vantage point (VP) survey to record bird flight lines 2020-2022
- Breeding raptor surveys in 2020 and 2021
- Breeding nightjar surveys in 2020 and 2021
- Breeding wader surveys in 2021

At the time of submission, in July 2024, all surveys other than the otter and water vole survey work, the static bat detector deployment and some of the bird survey had been completed within two survey years of the current survey season (i.e. the work had been done in 2022 or 2023). To refresh the work completed in 2021 would have resulted in this being ongoing at the time of submission.

Baseline conditions

Baseline conditions at the Site were consistent between the initial habitat survey in 2020 and an update survey in 2022. The Site is dominated by a mixture of dry heath and acid grassland, with bracken on

many of the surrounding slopes. Coniferous plantation is present along the western and northern edges of the Site, and there is semi-natural deciduous woodland at Cwm Lickey on the eastern Site boundary.

The condition of the habitat on the Site is gradually declining. This is due to limited management. As a result of this the common is being colonised by feral conifer trees. Cattle numbers are insufficient to prevent ongoing bracken incursion onto the flatter ground (where it is gradually replacing heath communities), and sheep tend to preferentially use some areas of the common over others, resulting in both overgrazed and extensive under grazed (rank) areas. Any local variation in habitat structure on the common between years reflects the extent to which the commoners can intervene to slow successional processes down; however their efforts are limited by resources, with very little financial support currently available to deliver management work.

Bats and hazel dormouse

In the absence of a wildfire or another unforeseen significant change in management, the potential for the value of the Site to protected species to significantly change over a few years is very limited. The Site is relatively uniform, open and exposed and lacks significant topography across the higher ground. Without more active management the value of the Site will decline over time.

Survey has not established evidence of bat roosts within or close to the Site (the only potential onsite is in a dilapidated building but successive surveys have found no evidence of use); bat activity is concentrated (at the local level) around the fringes of woodland and valleys on the edges and outside of the Site boundary, and the bat species assemblage is dominated by common species and reflects the desk study data. The dormouse survey did not record the species in the hedge network along the access route; no change in management of the hedges that might encourage the species to colonise is anticipated.

Great crested newt

Great crested newt work developed iteratively. It was informed by the position of extant ponds in relation to the emerging layout, by eDNA survey (accompanied by traditional methods) and population survey work for those ponds which returned a positive result. The ponds closest to the development have been surveyed twice in relation to the development as well as previously by the local authority. The small population of newts is well known. The ponds are relatively turbid, lack significant submergent or marginal vegetation, and the newt population consequently has very limited scope to increase (but may decline) without a change in their management or further pond creation.

The inspector has specifically stated clarification is needed with regard to the following:

“Pond Nos 16-17 shown on Figure 6.4 were not included in the Habitat Suitability Index assessment, why Pond Nos. 13-17 were not included in the eDNA survey and why Pond Nos. 16 and 17 were not included in population surveys is required.”

Taken in turn:

- Ponds 16 and 17 were not subject to HSI. Pond 17 was a muddy depression and did not hold sufficient water to be surveyed at any time during the work. Both ponds are also remote from on-Site infrastructure (Pond 16 is approximately 500 m from the Site compound area which is the closest infrastructure to it) and separated from it by a significant area of open acid grassland. Pond 17 is even more remote (in excess of 600 m) from any proposed development.
- Notwithstanding the above, Pond 16 was subject to eDNA survey in 2023, as it was holding sufficient water at the time to allow it to be sampled. It returned a negative result. Ponds 13, 14 and 17 were not subject to eDNA survey due to their distance from Site infrastructure (NB. when visited in 2022 both Ponds 13 and 14 were dry) and, in the case of Pond 17, as it did not hold sufficient water.

- Ponds 16 and 17 were not subject to population survey as Pond 16 returned a negative eDNA result and Pond 17 did not hold water at any time. It should be noted that even if Pond 16 had returned a positive eDNA result its distance and lack of connectivity to the development Site would have meant population surveys would not have been recommended.
- Pond 15 was not subject to eDNA survey as it was known to support a newt population; a six survey population class size assessment was completed.

Water vole and otter

The watercourses that rise on the edges of the Site are minor. Their potential to support otter is minimal as they are often dry / little more than flushed areas and have very little capacity to support prey. Their vegetation structure is also unsuitable for water vole.

Birds

The results of ornithological survey work were largely unsurprising, with the bird community typical of the region, and reflecting local land use and the habitats present. It is very unlikely that further work would significantly alter findings or that the assessment would change as a result of it, particularly as there has been no positive change to the management of the Site. In particular:

- Breeding waders are now largely absent from South Wales, following significant declines and range contractions (driven by aspects of land use and land management). Recolonisation by breeding waders is extremely unlikely.
- There is very little potential for nightjar and no potential for goshawk to breed on Site. Nightjar favour pre-thicket and clearfell habitats within plantation woodland habitat, and occur commonly in the commercial plantation close to but offsite. Long term monitoring at various wind farms has demonstrated no negative impacts on nightjar, so if territories were closer no change in effect would be predicted. Goshawk are limited by the availability of mature conifers to nest in; plantation to the north of the Site has been felled and only land to the west is potentially suitable (which is where goshawk were recorded behaving territorially during baseline work). The Site has limited suitable prey for them.
- There will always be a degree of change in flight activity recorded between years / seasons with regard to other species, such as red kite and kestrel, that reflect the snapshot nature of survey work, these variations are unlikely to be so extreme that the assessment would change. The habitat / prey resource for these species will be relatively consistent, and there is no potential for them to breed within the Site boundary.

Paragraph 23 (and Annex 1 bullet point 8)

The Inspector states that the Phase 1 habitat survey area does not cover the entirety of the Site boundary. The Inspector refers to Figure 6.1 which demonstrates this.

The Inspector also makes two further points on coverage:

- *“The areas for two new tracks and widening works along the Abercarn Mountain Road as shown in Figure 10.3, where hedgerow and/or tree removal may be required, does not appear to be included in the Phase 1 survey.”*
- *“Whether the Ground Level Tree Assessment and subsequent Close Inspections included in Technical Appendix 6.3 have included these areas is also unclear as tree locations are not provided.”*

Figure 6.1 does indicate the areas on the Abercarn Mountain Road were surveyed. The habitats within the areas of land where there will be land take for new tracks and widening works are shown on Figure 6.9 c.

The ground level tree assessment also covered these areas. As noted in Section 6.12.17 of the Ecology Chapter of the Environmental Statement, all trees with any potential to support roosting bats along the access route could be thoroughly inspected from ground level (no climbed assessment was required). No evidence of roosting bats was found. The trees that were subject to ground level inspection are shown on Figures 6.2a and 6.2b¹. Scrub (with no bat roost potential), and any trees outside of the footprint of the works were not inspected.

However the Inspector is correct that the red line boundary extends outside the survey area, principally in three locations on the western edge of the Site (to the south of the compound marked on Figure 6.1), along the western edge of Mynydd Maen Common, where the land slopes away, and land at the top of Cwm Lickey on the north-eastern boundary. None of these areas are proposed for development or are likely to be impacted by the wind farm.

This lack of complete coverage of the red line area reflects a relatively late partial redesign in response to comments concerning peat. The following is relevant:

- The western area of land around Ordnance Survey Grid Reference (OSGR) ST 2367 9760 is an area of sheep-grazed acid grassland with fragments of heavily grazed dry heath and larger bracken patches. This represents a continuation of the habitat to the east of it (which was subject to botanical survey), with no barriers to animal movement. Aerial imagery and surveyor knowledge of this area indicate no features of ecological note and that the habitat present is of the same type and quality to areas we have formally surveyed with regard to the application. No development is planned for the area and no impacts on the vegetation are anticipated.
- The western edge of Mynydd Maen Common around OSGR ST 2548 9724 comprises gently sloping ground characterised by a mixture of dry heath and acid grassland identical to that within the adjacent survey area. Further west, beyond the Site boundary the angle of slope increases and bracken patches and broadleaved scrub are present on the valley sides. The watercourses that rise on the edge of the common and pass through the area are generally dry, only channelling water after rain events, when flows can be rapid. The area was walked over during water vole and otter survey, and has no features that are likely to support protected species. No development is planned for the area and no impacts on the vegetation are anticipated.
- The area of land at the top of Cwm Lickey comprises dry heath that becomes a mosaic of scattered trees, bare rocky ground, patches of heather and bilberry and extensive bracken stands as the gradient increases. The trees in the area were thoroughly surveyed for bats. It has no significant potential to support other protected species that are likely to be impacted by the development, and no impacts on the vegetation are anticipated. Tree height does not rise above the level of the adjacent common.

Other Points with Ecological Implications

Blasting

With regard to blasting the Inspector notes:

“Chapter 3 states that approximately 65,000m³ of stone is estimated to be required from the borrow pits and that, although not anticipated to be necessary, blasting may be required 2-5 times a week during the first three months of construction. Different methods of winning construction material will clearly have

¹ On these figures only trees with low or greater bat roost potential are numbered. Other trees assessed but which had no potential are denoted by green squares with no associated number.

different environmental impact and worst case scenario for each relevant technical aspect should be considered in the ES.”

Any blasting activity, if required, will be localized within the Site.

Raptor species using the airspace above the Site breed outside it, and if disturbed by the activity are likely to be locally displaced (within the airspace over the Site) for its duration. It is unlikely that this impact will be significant at any geographical level.

Bird species breeding within the Site include red grouse, the distribution of which reflects the heathery areas of moorland. During any blasting (and wider construction) works short-term displacement of a small number of red grouse to other areas of suitable habitat within the site may occur. This may affect productivity in the short-term (if the habitat they are displaced to is less suitable than that from which they were displaced or if it is already occupied by other grouse). The ornithology chapter of the Environmental Statement concluded a displacement impact that will be significant at the Site level will occur as a result of wind farm construction. This conclusion will not change if blasting is one of the construction techniques employed.

Disturbance sensitive faunal species are not a feature of the Site, and no change to the conclusions in the ecology chapter are likely in the event blasting is required. Measures to prevent incidental killing and injury will be identified through the Construction Environmental Management Plan to achieve legislative compliance through all construction processes.

Piling

With regard to piling the Inspector identifies that Chapter 3 of the ES states that there may be a requirement to use piled foundations where ground conditions dictate, but that this is not fully assessed in the technical chapters of the ES.

With regard to ecology and ornithology it is considered unlikely that conclusions will change from those drawn with regard to construction phase impacts and that the commentary above (with regard to blasting) applies.

Operational Phase Lighting

The Inspector notes that Chapter 13 (Aviation and Electromagnetic Interference) refers to a Radar Mitigation Scheme. The Inspector also states that “*Should visible lighting be included, this would need to be considered across relevant assessment chapters such as landscape, ecology and ornithology.*”

There is no consideration of operational phase lighting in the ecology or ornithology ES chapters.

It is understood that there may be a need for operational lighting of the Control Building and Substation Compound. In the event this was needed, there is a commitment in Chapter 3 of the Environmental Statement to design any lighting in accordance with industry standard guidance. Guidance referred to would include that produced by the Institute of Lighting Engineers and Bat Conservation Trust (2023) relating to bats. This will require careful consideration of the location, orientation, intensity and type of lighting and the overall design of the lighting scheme to minimise the potential for impacts on bats.

This lighting may result in localised displacement of bat species that favour foraging in low light conditions, but survey work found the bat community to predominantly comprise species that are not particularly sensitive to light, and for bat activity to be concentrated on the edges of the Site. It follows that impacts are unlikely to be significant at any geographical level.

If there is a need to include visible lighting on the turbines, there is no indication from desk study, local knowledge of bird movements or published data to suggest an impact is likely to occur. NatureScot

(2020)² undertook a desk-based review of potential impacts of lighting of wind turbines on birds, drawing information from studies on communications towers and meteorological masts in the absence of wind farm specific studies. The extent to which these towers and masts are comparable to turbines is questionable, as they are frequently guyed (and it has been established that guy lines do cause bird fatality).

It is possible that some species of nocturnal migrant passerines could be attracted to the turbines if they are lit, but these species are likely to move on broad fronts and population level impacts at any geographical level are unlikely. Studies quoted by NatureScot (2020) have recorded very few taxonomic groups other than passerines colliding. Rates of fatality recorded during North American studies have ranged from less than one fatality to approximately seven fatalities per year. Passerines are often multi-brooded and / or rear large numbers of young, making populations more resilient to fatality than e.g. larger species with slow reproductive rates. Any impacts are therefore likely to be negligible.

Conclusions regarding bats and lit turbines largely follow those for birds. Large scale at height migration of bats across the UK has not been recorded to date. Some immigration is known, particularly of species such as Nathusius' pipistrelle, and there is seasonal dispersal within the landscape of other species. However, the latter is not known to be (and seems inherently unlikely to be) at height. Mitigation to curtail generation at low wind speed, and feathering at idle, when locally occurring bats are more likely to forage at height is part of the designed in mitigation package associated with the scheme. It follows that impacts from lighting wind turbines on bats is unlikely to be significant at any geographical level.

Stockpiles and Waste Storage Areas

The Inspector notes that, *"The effects of the production and storage of waste material and stockpiled material during construction has not been considered consistently across the assessment chapters."*

RES have confirmed that, *"soil and peat storage residence times will be minimised by ensuring that the excavation and storage of soils and peat is considered at an early stage during the development of the construction programme. To ensure that the storage locations are suitable in terms of environment, construction practicality and safety, the precise location of temporary soil and peat stockpiles should be determined at a Site level following consideration and assessment of suitable areas by the ECoW, geotechnical engineer and contractor."*

Paragraph 5.2.3 of the Environmental Statement notes *"Any peat soils to be removed during construction would require a temporary storage area near to the construction works/area of re-use. Where peat cannot be transferred immediately to an appropriate restoration area, short term storage will be required."* In this case, good practice is also provided within this paragraph. This matter can be controlled by means of a suspensive condition that requests for a detailed EMP."

Impacts on Site features including valuable habitats and protected species can therefore be avoided through careful selection of storage areas. Particular consideration will be given to great crested newt in this, as animals may seek to shelter in stockpiled materials (making them more vulnerable to killing and injury).

Yours sincerely

Owain Gabb

Director

For and on behalf of BSG Ecology

² NatureScot (2020). Information note - The Effect of Aviation Obstruction Lighting on Birds at Wind Turbines, Communication Towers and Other Structures. Published online.

