

Planning and Environment Decisions Wales
Welsh Government
Cathays Park
Cardiff
CF10 3NQ
FOA: Giulia Bazzoni

Our Ref: 04412-8960413
Your Ref: DNS/3276725

07 January 2025

Dear Ms. Bazzoni,

RE: DNS/3276725 Mynydd Maen Wind Farm - Request for Further Information

This submission responds to your letter of 5 November 2024 seeking further information under Regulation 24 of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended) in relation to the Mynydd Maen Wind Farm Environmental Statement (ES) that has been prepared to support an application for a Development of National Significance (DNS) which has been submitted to the Welsh Ministers for determination.

The information required to address the identified shortcomings of the Environmental Statement is set out below:

Item 1: A statement describing the expertise of those who prepared the ES as required under Regulation 17(4) of the 2017 Regulations.

Written statements of expertise have been included within Table 1.1 in Chapter 1: Introduction of the ES as required under Regulation 17(4) of the 2017 Regulations.

Item 2: Indicative Wind Turbine Piled Foundations plan to accompany Figure 3.3.

Figure 3.3b has been included to show “Typical Wind Turbine Piled Foundation” to accompany Figure 3.3a “Typical Wind Turbine Gravity Foundation”.

Item 3: A description and plans of the indicative grid connection method. The content of the ES should be updated to include an assessment of the effects.

Figure 3.6a has been updated to provide further detail of the indicative grid connection method. As stated within paragraph 3.4.24, *“The connection of wind farms to the electrical network typically follows a separate consenting process and it is normally the responsibility of the network operator to progress the relevant consent, where required. RES has received a connection offer for Mynydd Maen Wind Farm from the network operator NGED including an indicative grid connection method and location directly adjacent to the on-site substation.”*

Item 4: Amended Figures 3.6b and 3.6c to provide scaled or dimensioned substation and fencing elevation plans with details of materials and finishes. A plan to show the proposed foul drainage, Package Treatment Plant and associated soakaway locations. The content of the ES should be updated to include an assessment of the effects.

Figure 3.6: Substation Building and Compound has been updated to provide dimensions and details of materials and finishes within Figure 3.6d.

An additional figure has been provided, Figure 3.12: Substation Welfare Building Wastewater Treatment and Discharge, where a typical Package Treatment Plant with associated soakaway is shown. However, this is subject to detailed design and the foul treatment system would be constructed and located in accordance with the relevant Building Standards and agreed with the Local Authority. Additional text in Chapter 3: Proposed development within the ES has been provided to reference this.

Item 5: Details/plans to show indicative PRow diversion routes and their temporary or permanent status. The content of the ES should be updated to include an assessment of the effects.

Paragraphs 3.4.26 - 2.4.28 in Chapter 3: Proposed Development within the ES describes how RES would approach applications for rights of way diversions where necessary and states that *“Applications for rights of way diversions cannot be submitted with a DNS application and, where necessary, these applications will be submitted following determination of the DNS application.”*

It is our opinion that this matter could be controlled by a suspensive condition on any future consent requiring an Access Management Plan to be approved prior to the commencement of construction work. The Access Management Plan would detail how public access across and around the site would be managed and would, at that point be able to provide more information on the possible diversion of PRow if required.

Item 6: Details/plans to show the indicative size, location and segregation of on-site stockpile and waste storage areas during construction. The content of the ES should be updated to include an assessment of the effects.

Paragraph 5.2.2 within Technical Appendix 9.3: Soil and Peat Management Plan states *“Soil and peat storage residence times should be minimised by ensuring that the excavation and storage of soils and peat is considered at an early stage during the develop 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 states *"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.

In the event that consent for the proposed wind farm is granted it is our experience that this matter could be controlled by means of a suspensive condition requiring a detailed EMP to be submitted and approved by the relevant LPAs prior to the commencement of construction.

Item 7: An explanation of why Ecological and Ornithological Surveys now over two years old are considered to still provide robust evidence for current baseline environmental conditions. Clarification of when the Bat Activity Survey and Meteorological Data Collection was carried out and an assessment of their robustness if required. For Great Crested Newts, clarification of why 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.

BSG Ecology, who provided input on Chapter 6: Ecology and Chapter 7: Ornithology within the ES as well as supporting Technical Appendices and Figures, have provided a supplementary letter (enclosed) to address this, dated 25th November 2024.

Item 8: An explanation of why the Phase 1 Habitat Survey area, as shown in Figure 6.1, does not include all of the application site, namely the areas for two new tracks and widening works along the Abercarn Mountain Road as shown in Figure 10.3. Clarification of whether the Ground Level Tree Assessment and subsequent Close Inspections included in Technical Appendix 6.3 included these areas and justification provided if not.

BSG Ecology, who provided input on Chapter 6: Ecology and Chapter 7: Ornithology within the ES as well as supporting Technical Appendices and Figures, have provided a supplementary letter to address this, dated 25th November 2024.

Item 9: An explanation of why the Abertillery Wind Farm has been omitted from the Landscape and Visual Impact Assessment. Additional information is required within Chapters 9 (Hydrology and Hydrogeology), 10 (Traffic, Transport and Access) and 11 (Acoustic) to detail the reasons for the cumulative search areas applied, the other developments considered (including non-wind projects) and the reasons for their inclusion/omission.

Chapter 5: Landscape & Visual within the ES has been updated to include the Abertillery Wind Farm in the assessment of cumulative effects. Scenario 3, referred to in paragraphs 5.7.328, 5.7.348-5.7.352, 5.7.376-5.7.377, and 5.7.384, includes the Scoped Abertillery Wind Farm scheme in the cumulative assessment.

In addition, Figure 5.29: Other Wind Farms within 35 km, Figure 5.30 - Other Wind Farms within 24 km, and Figures 5.37 - 5.73 (Visuals) have been updated to include the Abertillery Wind Farm scheme. Furthermore, a new figure titled “Figure 5.75: Cumulative ZTV with Scoping stage Abertillery” has been provided.

Additional information regarding the cumulative assessment in Chapter 9: Hydrology and Hydrogeology within the ES has been provided in paragraph 9.10.1 and 9.10.2, which states that *“A 10 km cumulative effects search radius has been applied as this aligns with NRW guidelines and is the commonly applied radius for cumulative impacts assessments. This distance captures the most likely zone of influence for significant cumulative effects, particularly for project of a similar scale and scope.”*. Furthermore, paragraph 9.10.3 provides additional clarification and states *“Other projects, such as smaller-scale developments, have not been considered within this cumulative effects search area due to their limited size and scope, which do not result in comparable impacts to those of a wind farm. Furthermore, a review has confirmed that no developments, other than those listed in 9.10.4, of a similar size and scope to that of a wind farm are located within 10 km of the Proposed Development.”* Further information has also been provided in paragraphs 9.10.8 and 9.10.9 to conclude that the proposed wind farm is expected to have negligible cumulative hydrological impacts.

Additional information regarding the cumulative assessment in Chapter 10: Traffic, Transport and Access within the ES has been provided in section 10.17 in that chapter, which states that *“it can be reasonably concluded that no cumulative effects would arise as a result of the proposed Mynydd Maen Wind Farm development as there are no other developments in the vicinity with the potential to significantly impact on traffic or transport.”*

Additional information to detail the reasons for the cumulative search area applied in Chapter 11: Acoustic within the ES has been provided in paragraph 11.10.2 - 11.10.4 in that chapter. It states *“These additional wind farms are within 5 km of the Proposed Development and have common neighbouring residences which could have increased operational noise as a result of their operation. Other wind farms located outside this radius would not have a significant impact on the residences considered within this Chapter and have not been considered further as a result.”*

In regards to other, non-wind farm development, paragraph 11.10.3 within Chapter 11: Acoustics states *“The ETSU-R-97 assessment methodology only accounts for noise generated by the operation of wind farms. Other existing or proposed noise generating facilities would either be considered as part of the existing baseline/background noise environment, would contribute to the ‘future baseline’ or would be subject to their own assessment criteria, such as that specified within BS 4142. Other existing or potential noise generating facilities have not been considered further here as a result.”*

Item 10: Clarification of why the construction of the Mynydd Maen Wind Farm would not be expected to overlap with Mynydd Llanhilleth Wind Farm’s construction or its access routes.

Section 10.17 within Chapter 10: Traffic, Transport and Access of the ES has been updated to provide clarification of why the construction of the proposed Mynydd Maen Wind Farm would not be expected to overlap with the construction of the Mynydd Llanhilleth Wind Farm or its access routes.

Item 11: A rationale for the methodology adopted for Chapter 12 (Shadow Flicker and Reflected Light), given the scale of turbines proposed and the requirement for more nuanced assessment suggested by the concerns raised in ‘Review of Light and Shadow Effects from Wind Turbines in Scotland’ (L.U.C. for climateXchange, 2017).

The source referenced, in Chapter 12 Shadow Flicker and Reflected Light, for use of ten rotor diameters is ‘The Update to Shadow Flicker Evidence Base’ (Department of Energy and Climate Change, 2011), published by the then Department for Energy and Climate Change (DECC), now the Department for Energy Security and Net Zero . This is different to the “original reference” referred to in ‘Review of Light and Shadow Effects from Wind Turbines in Scotland’ (L.U.C. for climateXchange, 2017) which is ‘A case of shadow flicker/flashing: assessment and solution’ (Clarke A.D, Open University, Milton Keynes, 1991).

The ‘Update to Shadow Flicker Evidence Base’ (Department of Energy and Climate Change, 2011) considers multiple sources and studies, not just ‘A case of shadow flicker/flashing: assessment and solution’ (Clarke A.D, Open University, Milton Keynes, 1991). The Clarke Report does not form the sole basis of industry acceptance of the ten rotor diameter (RD) distance for shadow flicker assessment.

The ‘Update to Shadow Flicker Evidence Base’ (Department of Energy and Climate Change, 2011) is based on much greater experience than ‘A case of shadow flicker/flashing: assessment and solution’ (Clarke A.D, Open University, Milton Keynes, 1991), the years of writing being 2011 and 1991 respectively. One example of this is that the Clarke Report was written at a time when turbine rotor diameters were far smaller. This meant that 10RD was a much smaller absolute distance. This is relevant as shadows become increasingly diffuse with distance. It is possible that the distance of 10RD is more conservative as turbines increase in size, not less.

‘Review of Light and Shadow Effects from Wind Turbines in Scotland’ (L.U.C. for climateXchange, 2017) does not detail what methodology should be applied in determining assessment distance. Nor does it give justification, beyond misinterpretation of the Clarke 1991 report, as to why assessment distance should be greater than 10RD.

The 10RD assessment distance is an industry standard that has been commonly in use for over a decade. This method has the advantage that assessment distance scales with turbine size, dealing inherently with the increase in turbine sizes with time.

Item 12: Maps/details and updated Figures to pinpoint the exact locations and directions of view for the Landscape and Visual Impact Assessment viewpoints and an assessment of cumulative effects for each viewpoint within Technical Appendix 5.5.

An additional technical appendix titled “Technical Appendix 5.7: Detailed Viewpoint Location Plans” has been provided to include further detail of the exact locations and directions of view for the Landscape and Visual Impact Assessment viewpoints.

A further assessment of the cumulative effects for each viewpoint has been provided within Technical Appendix 5.5: Viewpoint Assessment.

Item 13: Additional information to detail the consideration of noise impacts upon PRow users, including the sensitivity of such receptors, the magnitude and significance of effects upon them and how this would vary according to distance from the turbines along relevant PRow. Additional explanation of why the noise effects of blasting cannot be predicted upon neighbouring residents if applying a worst case scenario.

The impacts of noise generated by the proposed wind farm upon people using the various public rights of way crossing the development site in terms of operational noise impacts has been considered in paragraphs 11.4.2 - 11.4.4 in Chapter 11: Acoustic of the ES. Paragraph 11.4.4 states that *“a low sensitivity is attached to users of the rights of way, the magnitude of impact is considered low (provided that suitable mitigation measures are put in place) and considering that the works are temporary, the overall impact is considered not significant.”*

Paragraph 11.7.9 provides additional explanation of why the noise effects of blasting cannot be predicted upon neighbouring residents. It states *“There are no specific noise limits for blasting activities and no means of predicting the potential level of sound from a particular blast, regardless of the charge size, is provided within BS 5228-1. However, the intermittent noise generated may well be audible and alarming/starling to residents, pets and local wildlife. As a result, whilst noise from blasting is not considered to be injurious to humans at typical setback distances, as is the case here, the adoption of good practice to minimise the inherent impulsive noise from each blast and to inform residents as to when these activities will occur is vital. Whilst the sound may be audible, the level of noise, overpressure and vibration generated by each blast will be well below levels that would be expected to cause damage to the nearest housing and/or structures.”*

Item 14: Consideration of the environmental effects of blasting within borrow pits, piled foundations and the indicative method of grid connection across relevant assessment chapters.

An Outline Borrow Pit Management Plan has been included within the ES as Technical Appendix 3.4. This document provides a description of the proposals for blasting within the proposed borrow pit search areas. Chapter 3: Proposed Development within the ES has been updated to include a reference to the new Technical Appendix in paragraph 3.8.27.

A suspensive condition can be used to require approval by the local planning authority of a Borrow Pit Management Plan prior to the commencement of construction work. Suggested wording below:

“No blasting shall take place until a scheme specifying blasting monitoring locations is submitted to and approved in writing by the Planning Authority.

Unless otherwise approved in writing in advance by the Planning Authority, blasting shall only take place between the hours of 08:00 - 18:00 on Mondays-Fridays or between the hours of 08:00 - 13:00 on Saturdays, with no blasting taking place on a Sunday or on a Public Holiday.”

In regard to ecology and ornithology (Chapters 6 and 7 within the ES), BSG Ecology have provided a supplementary letter to address the potential impacts of blasting, as well as piled foundations. The letter states *“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.” Furthermore, it is considered unlikely that conclusions in relation to piled foundations will change from those drawn with regard to construction phase impacts. This item is further addressed in the supplementary letter provided to RES by BSG Ecology on 25th November 2024.

Paragraph 3.4.24 in Chapter 3: Proposed development within the ES has been updated to refer to Figure 3.6: Substation Building and Compound, which provides clarity on the indicative grid connection method, and states that *“The connection of wind farms to the electrical network typically follows a separate consenting process and it is normally the responsibility of the network operator to progress the relevant consent, where required. RES has received a connection offer for Mynydd Maen Wind Farm from the network operator NGED including an indicative grid connection method and location directly adjacent to the on-site substation.”*

Paragraph 9.4.4 within Chapter 9: Hydrology and Hydrogeology has also been updated to clarify that the environmental effects of blasting within borrow pits, piled foundations and the indicative method of grid connection are not anticipated to have a significant impact on the receptors considered within the chapter.

Item 15: Details of the expected type and quantity of construction waste. Consideration of the effects of the production and storage of waste material and stockpiled material during construction across relevant assessment chapters.

The number of skip lorry journeys shown in Table 10.4: Traffic Movements During Construction Phase of the Wind Farm within Chapter 10: Traffic, Transport and Access has been updated. The type and quantity of construction waste anticipated is shown in the table below:

| Deliveries | Number | Frequency | Total |
|---------------------------|--------|--------------|------------|
| General waste | 2 | Per Month | 30 |
| Timber (turbine) | 4 | Per Turbine | 52 |
| Timber (civil/elec phase) | 3 | Per Phase | 6 |
| Metal | 2 | Per Turbine | 26 |
| Sewage | 1 | Per Month | 15 |
| | | Total | 129 |

No waste material will be stored on site during construction. Stockpiled material is considered within Technical Appendix 9.3: Soil and Peat Management Plan, as detailed under Item 6 of this covering letter.

Item 16: A draft CEMP, EMP, HMP, CTMP and RMS or an explanation of why any of these documents cannot be provided at this stage.

An Outline Construction Environmental Management Plan (OCEMP) is provided as Technical Appendix 3.3: Outline Construction Environmental Management Plan. Chapter 3: Proposed Development within the ES has been updated to include a reference to the new Technical Appendix in paragraph 3.8.26.

An outline EMP and HMP has been combined and included under Technical Appendix 6.6: Outline Habitat & Environmental Management Plan.

An Outline Traffic Management Plan (OTMP) is provided as Technical Appendix 10.1: Outline Traffic Management Plan within the ES. Chapter 3: Proposed Development within the ES has been updated to include a reference to the new Technical Appendix in paragraph 3.8.24.

A supplementary letter has been provided which includes an explanation as to why a detailed Radar Mitigation Scheme would not be appropriate at this stage (document titled “Mynydd Maen Wind Farm Letter of Address RE Radar Mitigation Scheme”). Confirmation from Cardiff Airport of agreement with the contents of the letter is also provided (document titled “Cardiff Airport response RE Mynydd Maen Wind Farm DNS application - radar mitigation planning condition”). We expect to receive a similar response from Bristol Airport soon and will submit this to PEDW as soon as possible.

Item 17: Further explanation of specific curtailment measures in response to the cumulative effects of noise and their deliverability.

Technical Appendix 11.6: Curtailment Strategies outlines indicative operational curtailment measures for the Proposed Development and Paragraph 11.9.2 in Chapter 11: Acoustic in the ES states “*The actual curtailment strategy would depend on the actual turbine to be procured and installed at the site should planning consent be granted.*”

Paragraph 11.10.4 states that the cumulative assessment incorporates “*...a list of suggested planning condition limits which may be applied to each wind farm site respectively to ensure the overall requirements of ETSU-R-97 would be met. However, the specific means of potential curtailment of certain turbines would be the responsibility of the eventual site operators and will depend on the specific turbine models to be installed at each of the potential developments.*”

Item 18: A new NTS to reflect the changes in the ES.

Volume 1 of the ES, Non-Technical Summary, has been updated to refer to additional documents including Technical Appendix 3.3, 3.4, 6.7 and 10.1.

Additional Information

Details in Tables 10.5 and 10.6 within Chapter 10: Traffic, Transport and Access of the ES have been updated to align with the correct coordinates along the access route. The descriptions of the modifications proposed have not changed significantly.

To reflect the changes described in this letter, updated versions of the Table of Figures, Table of Appendices, Mynydd Maen Design & Access Statement, and a Complete List of Submission Documents, are also provided.

Sincerely,

Elliot Smith

Development Project Manager