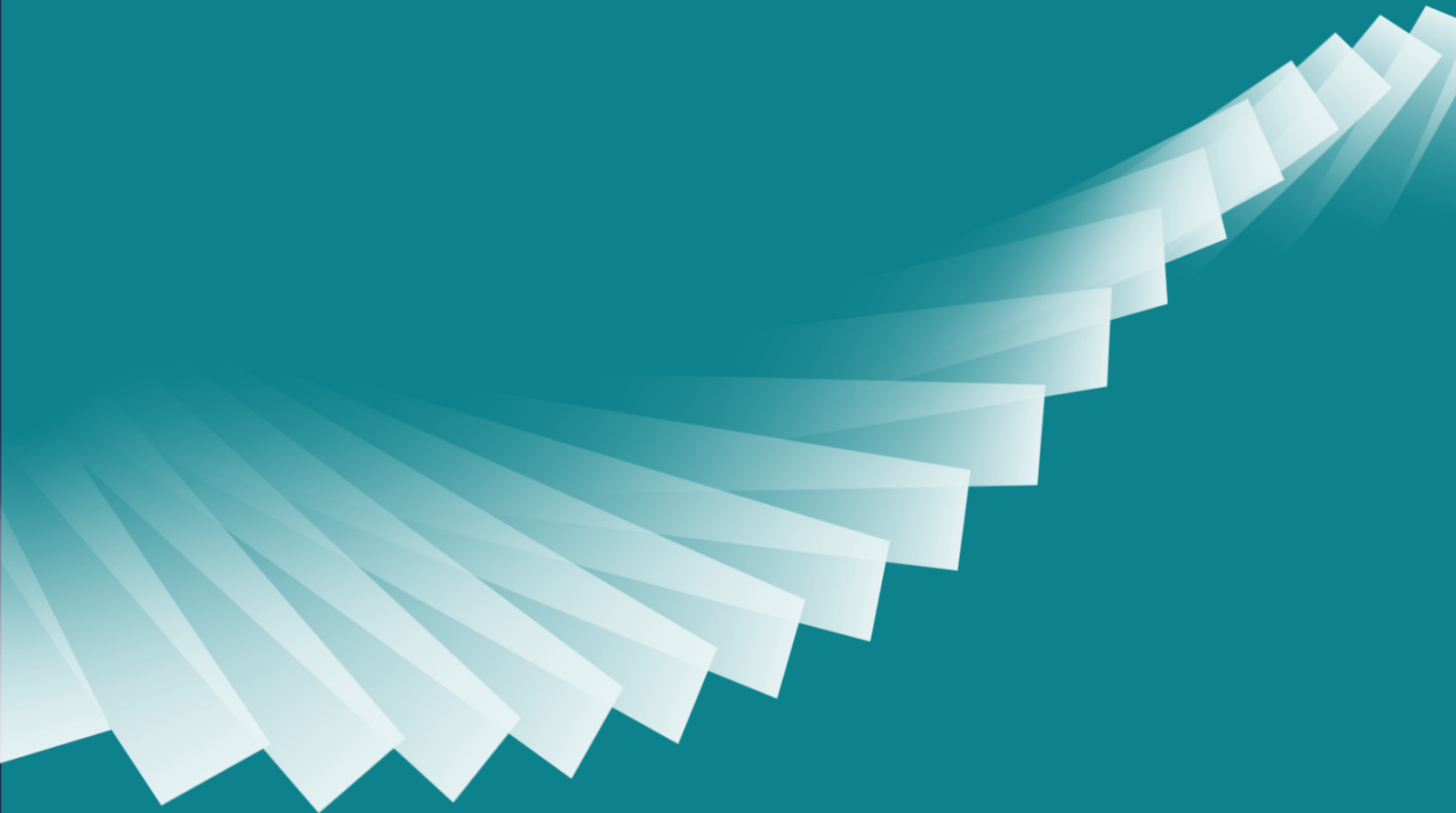




Bute Energy
Aberedw Energy Park

Appendix 2.2: **Scoping Direction**



EIA Scoping Direction

DNS CAS-03009-N5D9K8 – Aberedw Energy Park

05/04/2024

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This Scoping Direction is provided on the basis of the information submitted to Planning and Environment Decisions Wales on 07 December 2023, in addition to consultation responses received. The advice does not prejudice any recommendation made by an Inspector or any decision made by the Welsh Ministers in relation to the development, and does not preclude the Inspector from subsequently requiring further information to be submitted with the submitted DNS application under Regulation 24 of [The Town and Country Planning \(Environmental Impact Assessment\) \(Wales\) Regulations 2017](#) (as amended) (“The 2017 Regulations”).

1. Introduction

Planning and Environment Decisions Wales (PEDW) received a request under [Regulation 33](#) of the 2017 Regulations for a Scoping Direction in relation to a proposed development of an energy park, consisting of 18 turbines at 200 m tip height, with a wind generating capacity of 108 MW, including off-site highways improvement works, by Bute Energy Limited.

The request was accompanied by a Scoping Report (SR) that outlines the proposed scope of the Environmental Statement (ES) for the proposed development:

2023-12-07 - EIA Scoping Direction Request - 01 - Scoping Report and accompanying figures for chapters 1 to 12, available via the Planning Casework Portal - <https://planningcasework.service.gov.wales/> and search **CAS-03009-N5D9K8**

Planning and Environment Decisions Wales (PEDW) is authorised to issue this Scoping Direction on behalf of the Welsh Ministers.

This Direction has been prepared in accordance with the requirements of the 2017 Regulations as well as current best practice towards preparation of an ES. In accordance with the 2017 Regulations PEDW has consulted on the SR and the responses received from the consultation bodies have been duly considered in adopting this Direction.

2. Site Description

The site is located within the county of Powys, on elevated land at Aberedw Hill and Wylfre, approximately 3 km east of Builth Wells.

Further information is available in sections 3.1 to 3.9 of the SR.

3. Proposed Development

The proposal as described in the SR is for:

- 18 wind turbines, each with external transformers, wind turbine foundations, crane hardstanding and laydown/storage areas;
- An electrical substation and control building;
- Underground power cables linking the wind turbines and the onsite substation, laid in trenches alongside access tracks;
- New site access and onsite access tracks and watercourse crossings (if/where required);

- A steel tower anemometer mast(s) for monitoring wind speed and wind turbine performance;
- Borrow pit(s) (if required);
- Temporary construction and storage compounds; and
- Habitat management area(s)

Further information is available in section 3.10 of the SR.

The scope of the EIA should include all elements of the development as identified in the SR, both permanent and temporary, and this Scoping Direction is written on that basis.

In the ES, any maps, drawing and illustrations that are proposed to describe the project should be designed in such a way that they can be overlaid with drawings and illustrations produced for other sections.

In line with the requirements of [Regulation 17](#) and [Schedule 4](#) to the 2017 Regulations, any reasonable alternatives considered should be presented in the ES. The reasons behind the selection of the chosen option should also be provided in the ES, including where environmental effects have informed the choices made.

4. History

No site history is provided in the SR, although it notes the site is currently undeveloped and the majority of the proposed development is located on common land.

5. Consultation

In line with [Regulation 33\(7\)](#) of the 2017 Regulations, formal consultation was undertaken with the following bodies:

- Powys County Council (PCC)
- Cadw
- Natural Resources Wales (NRW)
- Transport Directorate, Welsh Government
- Agricultural Land Use & Soil Policy, Welsh Government (LQAS)
- National Air Traffic Services (NATS)
- Civil Aviation Authority (CAA)
- Defence Infrastructure Organisation (DIO)
- Dŵr Cymru Welsh Water (DCWW)
- Health and Safety Executive (HSE)
- Mid and West Wales Fire and Rescue Service

Responses received are included in **Appendix 1**.

6. Environmental Impact Assessment Approach

The Applicants should satisfy themselves that the ES includes all the information outlined in [Schedule 4](#) of the 2017 Regulations. In addition, the Applicant should ensure that the Non-

Technical Summary includes a summary of all the information included in Schedule 4. Consider a structure that allows the author of the ES and the appointed Inspector and Decision Maker to readily satisfy themselves that the ES contains all the information specified [Regulation 17](#) and Schedule 4 of the 2017 Regulations. Cross refer to the requirements in the relevant sections of the ES, and include a summary after the Contents page that lays out all the requirements from the Regulations and what sections of the ES they are fulfilled by.

As the assessments are made, consideration should be given to whether standalone topic chapters would be necessary for topics that are currently proposed to be considered as part of other chapters, particularly if it is apparent that there are significant effects and a large amount of information for a particular topic.

There may also be topic areas scoped out of the ES where the developer may wish to include application documents that sit outside of the ES and provide information that will support their consultation(s) and the decision-making process. The developer is encouraged to liaise with key consultees regarding non-ES application documents which are not a legislative requirement of the DNS regime. If agreement cannot be reached over non-ES application documentation, then the developer may wish to explore whether PEDW can help provide clarity via its statutory pre-application advice service.

The ES should focus on describing and quantifying significant environmental effects. Policy considerations / arguments relating to those impacts should be addressed in other documentation supporting the application (e.g. a Planning Statement), which cross references the ES where necessary. This does not imply that ES chapters should not be prepared in accordance with relevant advice in policy documents (e.g. Technical Advice Notes), rather that the ES should concentrate on identifying significant effects on the environment rather than dealing with policy arguments or exhaustively listing policies.

Rochdale Envelope: Whilst not specifically raised in the SR for this project, PEDW has previously been asked whether the '[Rochdale Envelope](#)' approach is appropriate for a DNS application for wind turbine development. Whilst this approach may be appropriate for the pre-application Environmental Impact Assessment work, it should be noted that a DNS application is an application for full planning permission under the Town and Country Planning Act 1990 (as amended). It is therefore not possible to submit a DNS application with as much uncertainty over what is proposed as is acceptable for an Outline application, or for a Development Consent Order under the Planning Act 2008. At the point of application, the following matters should be clear:

- Number of turbines
- Locations of the turbines (subject to micro-siting considerations)
- Maximum tip height
- Maximum hub height

It is open to the applicant to propose that final hub height and rotor diameter could be left to be dealt with via a written submission to the Local Planning Authority, as a pre-commencement condition (should planning permission be granted) provided the condition specifies that the hub height must not exceed (x) m and the rotor diameter shall not exceed (y) m. As with other conditions, the applicant should seek to agree a suitable form of wording with the Local Planning Authority, which can be submitted for the appointed Inspector's consideration.

The Applicant should also consider that, in some cases, different methods of construction may lead to different significant effects. This is particularly relevant in wind farm projects where different type of foundations may be required. The ES should be clear that the worst-case scenario is addressed consistently in terms of development footprint including construction areas.

Once that level of certainty is reached for the application, the ES should be reviewed and if necessary updated to ensure it properly captures the impacts of the application being submitted. If the applicant has any further queries about the scope for flexibility in the DNS application process, they should contact PEDW.

Micro-siting: PEDW accepts the principle of micro-siting in applications for wind turbines. The ES should be prepared using a clearly identified worst case scenario and final design should not lead to greater likely significant effects than identified in the ES.

Scoping Flexibility: Further to the stated position on micro-siting and the above comments on how the Rochdale Envelope is not an acceptable approach for the eventual application, PEDW is content with the ES being prepared on the basis of design parameters (e.g. dimensions of turbines and associated infrastructure), but the locations of infrastructure should be fixed (subject to micro-siting) and the ES should assess the relevant worst-case scenario for each aspect chapter. PEDW is content that the scoping is based on a maximum scale of development as a worst-case scenario, and revisions can be made to the scheme prior to submission, but the Applicant is advised to contact PEDW where substantial changes are expected, or where changes would affect the worst-case scenario.

Shadow Flicker: PEDW notes that in '[Review of Light and Shadow Effects from Wind Turbines in Scotland](#)' (L.U.C. for climateXchange, 2017) it was found that "there is a lack of evidence to support the use of ten rotor diameters as a cut off, and this is entirely down to misinterpretation of the original reference to this distance."

The ES should provide a clear rationale as to the methodology adopted, and why it is considered appropriate given the scale of turbines proposed and the requirement for more nuanced assessment suggested by the concerns raised in the above document.

6.1 Baseline

[Schedule 4](#) of the 2017 Regulations states that the 'baseline scenario' is "A description of the relevant aspects of the **current** state of the environment" (emphasis added). The baseline of the ES should reflect actual current conditions at that time.

6.2 Reasonable Alternatives

In line with the requirements of [Regulation 17](#) and [Schedule 4](#) to the 2017 Regulations, any reasonable alternatives studied by the Applicant should be presented in the ES. The reasons behind the selection of the chosen option should also be provided in the ES, including where environmental effects have informed the choices made.

It is worth bearing in mind that under the [Conservation of Habitats and Species Regulations 2017](#) ("the Habitats Regulations") unless it can be clearly shown to the Welsh Ministers that the project would have no adverse effect on the integrity of any designated sites, it would have to

be shown that there is no feasible alternative solution (see advice note from [IEMA](#)). Further advice regarding the Habitats Regulations is provided in the final chapter of this Scoping Direction.

6.3 Currency of Environmental Information

For all environmental aspects, the applicant should ensure that any survey data is as up to date as possible and clearly set out in the ES the timing and nature of the data on which the assessment has been based. Any study area applied to the assessments should be clearly defined. The impacts of construction, operation and decommissioning activities should be considered as part of the assessment where these could give rise to significant environmental effects. Consideration should be given to relevant legislation, planning policies, and applicable best practice guidance documents throughout the ES.

The ES should include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters. Where professional judgement has been applied this should be clearly stated.

The ES topic chapters should report on any data limitations, key assumptions and difficulties encountered in establishing the baseline environment and undertaking the assessment of environmental effects.

6.4 Cumulative Effects

The Planning Inspectorate's guidance for Nationally Significant Infrastructure Projects – [Advice Note 17: Cumulative Effects Assessment](#) sets out a staged process for assessing cumulative impacts which the Applicant should follow when preparing the list of projects for inclusion in the ES; the Applicant should ensure that relevant schemes identified are addressed in the ES using the tiered approach set out in Advice Note 17.

Based on the information set out in the scoping request, the approach to the assessment of cumulative impact is considered largely appropriate. Effects deemed individually not significant from the assessment, could cumulatively be significant, so inclusion criteria based on the most likely significant effects from this type of development may prove helpful when identifying what other developments should be accounted for. The criteria may vary from topic to topic.

Best practice is to include proportionate information relating to projects that are not yet consented, dependent on the level of certainty of them coming forward.

All of the other developments considered should be documented and the reasons for inclusion or exclusion should be clearly stated. Professional judgement should be used to avoid excluding other development that is close to threshold limits but has characteristics likely to give rise to a significant effect; or could give rise to a cumulative effect by virtue of its proximity to the proposed development. Similarly, professional judgement should be applied to other development that exceeds thresholds but may not give rise to discernible effects. The process of refinement should be undertaken in consultation with the LPA, NRW, Cadw and other consultees, where appropriate.

The scope of the cumulative assessment should be fully explained and justified in the ES.

6.5 Mitigation

Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured (through legal requirements or other suitably robust methods) and whether relevant consultees agree on the adequacy of the measures proposed.

6.6 Population and Human Health

The Applicant should ensure that the ES addresses any significant effects on population and human health, in light of the EIA Regulations 2017. This could be addressed under the separate topic chapters or within its own specific chapter.

6.7 Transboundary Effects

[Schedule 4 Part 5](#) of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES. The ES should address this matter as appropriate.

6.8 Topics Scoped In but not subject to a standalone chapter

For such topics it may be helpful to users of the ES if it includes a summary table that signposts the chapters where these matters are addressed.

7. Environmental Impact Assessment Aspects

This section contains PEDW's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. Environmental topics or features are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by PEDW. In accordance with Regulation 17(4)(c) the ES should be based on this Scoping Direction in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.

PEDW has set out in this Direction where it has/ has not agreed to scope out matters on the basis of the information available at this time. PEDW is content that the receipt of a Scoping Direction should not prevent the Applicant from subsequently agreeing with the relevant consultees to scope such matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.

7.1 Aspects Scoped In

Subject to the comments provided at Table 1, the following aspects are scoped into the ES:

- Decomissioning**
- Major Accidents and Disasters (not as standalone chapter)**
- Landscape and Visual Amenity**
- Ecology (Non-Avian)**
- Ornithology**
- Archaeology and Cultural Heritage**
- Water and Soil Resources**
- Peat**
- Transport and Access**
- Noise and Vibration**
- Aviation**
- Telecommunications**
- Shadow Flicker**
- Forestry and Woodlands**
- Climate Change (not as a standalone chapter)**
- Common Land**
- Material Assets and Waste (not as a standalone chapter)**

8. Table 1: Planning and Environment Decisions Wales Comments

ID	Reference in Scoping Report	Issue	Comment
General			
ID.1	3.19 – 3.21	Grid Connection	PEDW notes that grid connection will not be part of the DNS application and will be subject to a separate planning application. PEDW welcomes the SR states that in relation to proposed grid connection routing options, these will be included within the cumulative assessment and the ES will include an assessment of the likely significant effects for each relevant topic.
ID.2	2.19 / 2.20 / Table 2.3	Cumulative effects	PCC in their response confirms they are content with the windfarm developments included table 2.3 as part of the cumulative assessment. PEDW notes the SR states that schemes which are operational will be excluded from the cumulative assessment when incorporated within the baseline. PEDW advises that while developments that have already been constructed will form part of the baseline, this does not mean that they should be excluded when considering cumulative effects. Paragraph 5 of Schedule 4 of the 2017 Regulations makes it clear that consideration of cumulative effects should include existing development. As stated in Section 6.4 of this Direction, the approach set out in NSIP Advice Note 17 should be followed, and the applicant should agree the schemes to be considered with the LPA and other consultees. PEDW therefore welcomes the SR states the schedule of cumulative schemes to be included in the assessment will be finalised following consultation with relevant consultees.
ID.3	2.30 / 2.38 / Q2.2	Approach to Mitigation	In response to Question 2.2, PCC welcomes the approach to the consideration of various standard good practice measures as pre-mitigation.

ID	Reference in Scoping Report	Issue	Comment
			PEDW's position is that embedded mitigation is better addressed under the 'Reasonable alternatives considered' in the ES.
Applicant's proposed Aspects to be scoped out			
ID.4	2.12 / 3.33 - 3.34	Decommissioning	PEDW notes the SR states that decommissioning effects will be scoped out, except where it is deemed appropriate to scope in, on an individual topic basis. Powys CC accepts that decommissioning cannot be addressed with detailed surety at this stage, but the LPA would expect it to be considered in relevant chapters. The Applicant's attention is also drawn to comments from LQAS, stating the proposals should include a detailed scheme for site decommissioning. PEDW advises that the ES should be based on a worst-case scenario and as the SR states the proposed development may be decommissioned when its operational life ends (up to 40 years), decommissioning should be explored in a proportionate manner in the ES. At a minimum, the ES should clearly indicate how decommissioning of the site will take place, clearly indicate what will be left on site and what will be removed. The ES should address what the end of life cycle will be for the infrastructure on site. Therefore decommissioning is scoped into the ES in a proportionate manner. PEDW welcomes the SR states an Outline Decommissioning Plan (ODP) will be submitted with the application and recommends the ODP should be included with as a technical appendix to the ES.
ID.5	12.55 / 12.59	Socio-economics	PEDW agrees that this can be scoped out and welcomes the Applicant's intention to present socio-economic information in a stand-alone document to be submitted with the DNS application. PEDW notes the SR highlights the ES will consider aspects relevant to potential socio-economic impacts as

ID	Reference in Scoping Report	Issue	Comment
			part of other factors that are scoped in, such as Traffic and Transport, Landscape and Visual, and Noise.
ID.6	12.60	Population and Human Health	PEDW agrees that this topic should be addressed in appropriate chapters of the ES and a standalone chapter is not required, as indicated in the SR.
ID.7	12.63 – 12.64	Major Accidents and Disasters	The Applicant's attention is drawn to comments provided by the Fire and Rescue Service regarding the availability of adequate water supplies and vehicle access in case of fire. PEDW notes the SR proposes that an assessment of major accidents and disasters be scoped out of the ES. PEDW advises that the ES should ensure that risks of accidents are accounted for and mitigated against and a proportionate section on this aspect should be included in the ES. PEDW notes the SR states that consideration of flood risk and peat landslide risk will be addressed in the ES chapters on Water and Soil Resources and Peat, and relevant safety considerations informing the final Energy Park design will be described in the Development Description chapter of the ES. PEDW agrees that this topic should be addressed in appropriate chapters of the ES and Major Accidents and Disasters is therefore scoped into the ES, but not as a standalone chapter.
Landscape and Visual Amenity			
ID.8	4.92	Landscape and Visual Amenity Assessment (LVIA) methodology	PCC concurs with the proposed approach. NRW states they are generally satisfied with the methodological approach for the LVIA outlined in the SR and agrees with the approach whereby effects of 'moderate' and above will be considered significant in the context of the EIA Regulations. However, NRW highlights it is not clear in paragraph

ID	Reference in Scoping Report	Issue	Comment
			4.92, when determining overall effects, why the greater weight would be placed on the magnitude of change over sensitivity. NRW advises that all judgments should be clearly reasoned, explaining how and why the judgement was reached; PEDW concurs that this approach should be taken for the final ES.
ID.9	4.4	LVIA search area and study area	NRW states they are satisfied that the search area will initially cover 33 km from the outermost turbine. The Applicant's attention is drawn to NRW's comments highlighting that the distances provided in their Guidance Note (GN) 46 are a starting point and individual circumstances and context will influence the final extent of the study area, to be informed by LANDMAP filtering. NRW states they are satisfied with the receptors scoped in within the 28 km study area. NRW however highlights that highly sensitive receptors on iconic summits in the central beacons (e.g., Pen y Fan, Corn Du, Cribyn, Fan y Big) will be omitted from the LVIA. These summits lie within the search area, approximately 30 km from the outermost turbines and the Zone of Theoretical Visibility (ZTV) shows up to all 18 turbines would be visible at hub height from these locations. NRW therefore advises extending the study area to include a viewpoint from one of these summits. PEDW agrees and the Applicant should liaise with NRW to seek an agreed approach.
ID.10	4.6 / 4.28	Bannau Brycheiniog National Park (BBNP)	NRW advises the latest Management Plan for BBNP is Y Bannau: The Future - 2023-2028. NRW highlights that the stated special qualities of the BBNP are headlines and the assessment of the impacts on these qualities should be informed by detailed supporting evidence, including that found in the BBNP Landscape Character Assessment, August 2012, LANDMAP, and NRW evidence on Tranquillity and Place (Report No: 569) and dark skies (Report No: 514).

ID	Reference in Scoping Report	Issue	Comment
ID.11	3.11 / Table 4.14 / Q4.1	Effects on landscape character	PCC states they concur with the proposed approach but adds that they would like to see an assessment as to whether the light-grey turbine colour is appropriate in the landscape, and whether the tower should have a gradation of colour to make it less obtrusive in the landscape. PEDW recommends the Applicant liaises directly with the LPA on this matter and ensures the outcome is clearly addressed in the ES. NRW notes effects on landscape character beyond 10 km of the proposed turbines are proposed to be scoped out of the LVIA. The Applicant's attention is drawn to their comments advising that the current approach outlined in the SR does not accord with GN 46. NRW advises that, if undertaken, the filtering exercise would result in aspect areas outside of the 10 km area being identified. NRW states that using a different approach to GN 46 will result in potentially significant effects on aspect areas being missed or overlooked in the LVIA. NRW states that based on the nature of the proposal and the sensitivities of the landscape within the BBNP, they advise landscape character areas within the BBNP, and study area should be scoped in. They add that this is not least because an assessment of effects on the natural beauty and special qualities of the BBNP should be informed by an assessment of the effects on landscape character. Therefore NRW does not agree that landscape character effects beyond 10 km should be scoped out of the EIA. PEDW agrees with these comments and effects on landscape character beyond a 10 km radius cannot be entirely scoped out. The Applicant should seek an agreed position with NRW, whether it is possible to reach agreement or not, the approach adopted in the ES must include a robust rationale that addresses the concerns raised in relation to landscape impacts on the BBNP.

ID	Reference in Scoping Report	Issue	Comment
ID.12	Figure 4.14	Viewpoints	NRW notes two viewpoints (VP) within the BBNP will be included in the LVIA, but they question the inclusion of VP 17 as the ZTV indicates greater visibility on other nearby summits e.g. Cefn Llechid. NRW recommends this is checked on site and if appropriate, VP 17 should be replaced with a viewpoint from for example Cefn Llechid. NRW also highlights that the ZTV shows extensive visibility of up to all 18 turbines at hub height from the northern ridges and slopes of the central beacons (e.g. Allt Ddu, Cefn Cyff), within the study area. Further to their comments above, NRW advises that an additional viewpoint is included from one of the summits on the central ridge (e.g. Pen y Fan), which may also serve to represent the impact on receptors on these ridges and slopes, such as Allt Ddu and Cefn Cyff.
ID.13	4.105 – 4.106 / 4.111	Visualisations	NRW states they are satisfied with the approach to visualisations outlined in SR. NRW notes a night-time photomontage from within BBNP will be included. They advise that at least one night-time viewpoint should be taken from a location within the BBNP where dark skies are likely to be best experienced e.g. away from sources of light pollution such as settlements and roads.
ID.14	4.122 / 4.123 / 4.56	Mitigation	NRW notes that the SR states the key principle for mitigation will be the iterative design of the wind turbine layout and associated infrastructure. NRW draws the Applicant's attention to Designing for Renewable Energy in Wales (Design Commission for Wales – PEDW refers the Applicant to section 9.2 below) and PPW. NRW highlights that determining the appropriate turbine layout should be based on rigorous analysis, testing and response to the landscape setting. They expect the ES will explain how the findings of the LVIA have informed the design process, including the location, scale, number, siting, and layout / arrangement of the turbines.

ID	Reference in Scoping Report	Issue	Comment
			Further to the list of LVIA mitigation provided at paragraph 4.123, the Applicant's attention is drawn to comments from NRW advising of other key issues to address through design. PEDW also draws the Applicant's attention to the Approach to Mitigation section under General above.
Ecology (Non-Avian)			
ID.15	5.21/ 5.37/ Table 5.2/ 5.21	Habitat Survey / Outline Habitat Management Plan (OHMP)	In line with NRW's comments in Appendix 1, any habitat surveys should accord with the NCC Phase 1 survey guidelines (NCC (1990) Handbook for Phase 1 habitat survey. NCC, Peterborough). NRW also advise that Phase 1 surveys are undertaken and completed in the summer to ensure the best chance of identifying the habitats present and that Habitats Directive Annex 1 habitats are identified as part of the assessment. PCC highlights that the updated extended Phase 1 Habitat Survey and walkover NVC to be undertaken, will need to include assessments of habitats associated with any off-site areas that would be affected as a result of the proposed development i.e. works along the access route. PEDW considers it to be appropriate to scope priority habitats in for construction and out for operation. Following the results of the surveys, any habitats scoped out will need to be supported by robust justification in the ES. The Applicant's attention is also drawn to PCC's comments in Appendix 1 where they set out recommendations for the Green Infrastructure Assessment and OHMP.
ID.16	5.19	Protected Species	The Applicant's attention is drawn to PCC's comments in Appendix 1 regarding the reference in the SR to the Local Biodiversity Action Plan

ID	Reference in Scoping Report	Issue	Comment
			(LBAP) 2002 in par. 5.19. PPC advise that this should be amended to the Powys Natural Recovery Action Plan 2022-2023 which is an updated version of the LBAP. PCC and NRW highlight that there should be consideration for locally important species and habitats as identified within The Powys Nature Recovery Action Plan. PEDW advises the Applicant to liaise directly with PCC on this matter. The Applicant's attention is also drawn to NRW's comments in Appendix 1 regarding how the ES should address any potential impact on the protected species scoped in, including short, medium and long term impacts together with proposed mitigation and compensation measures. PCC notes that there are records of fairy shrimp within the proposed development site, and therefore recommend that consideration is given to potential for the proposed development to impact this species and the likely significance of any such impact.
ID.17	Table 5.2 / 3.22/ Q 5.2 / Q 5.3	Statutory Designated Sites	The SR proposes to scope out designated sites, with the exception of the Colwyn Brook Marshes SSSI (close to the sites northern boundary), the River Ithon SSSI and the River Wye/Afon Gwy SAC and SSSI (which overlaps the Sites boundary). PCC note that whilst the proposed scope for designated sites is generally considered appropriate in relation to the windfarm site itself, par. 3.22 of the SR identifies that the route from the port to the site has not yet been confirmed, meaning that there could be the potential for off-site works associated with the development which could be in proximity to or have potential to impact other statutory designated sites. PEDW recommends that when the access route has been confirmed, the Applicant liaises directly with NRW and the LPA on this matter. If impact on other statutory designated

ID	Reference in Scoping Report	Issue	Comment
			sites is identified, these should be scoped in and the Applicant should liaise directly with NRW and the LPA regarding the detail required for the ES. Subject to the above, in relation to Question 5.3 in the SR, PCC agree that the HRA should focus on the River Wye SAC. The Applicant's attention is drawn to Section 9.3 of this Scoping Direction. In regard to the River Wye SAC, NRW stress that consideration will need to be given to the potential impact of phosphates as a result of the proposal and the requirements if foul drainage is proposed onsite.
ID.18	Table 5.2	Non-statutory Designated Sites	The SR indicates that non-statutory sites should be scoped out of the ES as there are none within the site and they are not structurally or functionally connected to the site. PCC highlight that potential impact on non-statutory sites cannot be ruled out until the location of the proposed access route has been confirmed, as there could be potential impact as a result of proposed off-site works associated with the development. PEDW recommends that when the access route has been confirmed, the Applicant liaises directly with NRW and the LPA on this matter. If impact on non-statutory designated sites is identified, these should be scoped in and the Applicant should liaise directly with NRW and the LPA regarding the detail required for the ES.
ID.19	5.15	Bats	PCC highlight that some of the collision risks assigned in par. 5.15 of the SR do not align with the risks stated in the recognised guidelines. In Wales, Leisler's are categorised as high collision risk (stated as medium in the SR)

ID	Reference in Scoping Report	Issue	Comment
			and barbastelle are categorised as medium collision risk (stated as low in the SR). PCC note that the preliminary ground level inspections and roost assessments were taken in 2020, which concluded that no further survey effort was considered necessary as no identified features were within 300 m from the proposed turbines. The SR does not state if these surveys were proposed to be updated as part of the planned surveys for 2024 to establish if new features have developed that would be within 250 m of the proposed turbines. In line with PCC's recommendation, details with regards to a post construction monitoring scheme for bats (injuries, fatalities and activity) and contingency plans should be outlined within the ES.
ID.20	5.17	Great Crested Newt (GCN)	PCC note that ground disturbance within 250 m of GCN breeding ponds will be avoided – however, they recommend that works within 500 m of any breeding ponds should be avoided. If works cannot be avoided within 500 m from ponds used by GCN, then full surveys to establish the population concerned will need to be undertaken in accordance with recognised guidelines.
ID.21	5.18	Fish and Aquatic Species	PCC note that the SR scopes out aquatic species due to the 'habitats present and likely to be impacted', although there are a number of references to watercourse crossings associated with the proposal. PCC therefore note that further information would be required with regards to impacts to watercourses and associated flora / fauna prior to confirmation that it is appropriate to scope aquatic species out of the EIA.

ID	Reference in Scoping Report	Issue	Comment
			NRW advise that the potential impact on species of principle importance listed in Section 7 of the Environment (Wales) Act 2016, such as Atlantic salmon and brown trout found in rivers and streams, have not been adequately considered. NRW add that due to the proposed watercourse crossings as part of the scheme, habitat fragmentation needs to be considered in addition to pollution impact and impact on fish should be assessed. NRW advise that a Water Framework Directive (WFD) assessment will be required to illustrate that the WFD objectives of the waterbodies concerned will not be impact, including assessment of potential impacts on the fish element of WFD classification. Due to insufficient justification and information regarding the fish species considered to be present within close proximity to the site and potential impact of the scheme, NRW do not agree that fish should be scoped out of the EIA. Potential effects on fish and Aquatic Species are therefore scoped into the EIA.
ID.22	5.40	Outline Construction Environment Management Plan (CEMP)	PEDW welcomes that the Outline CEMP will be provided with the ES. The Applicant's attention is drawn to the comments of PCC in Appendix 1, where they outline the details required to be included in the CEMP.
Ornithology			
ID.23	6.6	Ornithological Receptors	Ornithological receptors that will be considered for assessment are set out in par 6.6 of the SR. NRW state in their response in Appendix 1 that the list should also include species listed under Section 7 of the Environment Act (Wales) 2016 that may be susceptible to displacement or collision risk from wind turbines.

ID	Reference in Scoping Report	Issue	Comment
ID.24	Q.6.1	Desk and Field Surveys	In their comments, PCC state that the field studies outlined in the SR and considered to be in line with the recognised guidelines. NRW agree that the surveys undertaken to date provide a sufficient baseline to allow the assessment of effects on ornithology, however, more detail regarding the 2024 survey is required to determine that these surveys will provide an adequate update. NRW state that the surveys in 2024 should include breeding waders among target species and any desktop survey completed should also be updated. PEDW recommends the applicant liaises directly with NRW on this matter.
ID.25	Q 6.2	Assessment Method / Effects Scoped in and out	PCC state that the assessment methods identified are considered to be broadly acceptable in terms of recognised guidelines however full details of the survey results and list of species proposed to be scoped out would need to be provided before it can be agreed that it would be acceptable. PEDW advise that the applicant liaises directly with PCC to establish if certain bird species can be scoped out. Where it is agreed that species can be scoped out, this should be supported by appropriate detail and robust rational in the ES. NRW agree with the proposed assessment method and the ornithological receptors scoped in/out, although they highlight that this comment is made without prejudice to future comments once they have reviewed the full and updated survey results and collision risk modelling. The applicant should ensure appropriate detail and robust rationale is included in the ES for any species scoped out.
ID.26	Q 6.4	Proposed Mitigation	PCC state that the mitigation options identified are considered to be broadly acceptable in terms of recognised best practice techniques however full

ID	Reference in Scoping Report	Issue	Comment
			details of the survey results, species records and likely impacts would be required before this can be confirmed. NRW agree that this cannot be agreed until they are in receipt of full details. PEDW recommends the Applicant liaises directly with NRW and LPA on this, ensuring the outcome is appropriately addressed in the ES. The Applicant's attention is drawn to NRW's comments in Appendix 1 regarding mitigation measures such as a collision risk and mitigation plan.
Archaeology and Cultural Heritage			
ID.27	Q7.3	Guidance to inform assessment	The Applicant's attention is drawn to comments from Clwyd Powys Archaeological Trust (CPAT), included as part of PCC's comments at Appendix 1, highlighting a number of additional documents which should be referred to in the assessment. Cadw draws the Applicant's attention to the PCC Archaeology and Historic Environment Supplementary Planning Guidance documents. Cadw also highlights that the Historic Environment (Wales) Act 2023 will have been enacted before the EIA is completed and that many associated documents, such as TAN 24, will be updated in accordance with the Act.
ID.28	Q7.4	Approach to assessment	Cadw and CPAT consider the approach to the assessment of effects appropriate. CPAT adds that the importance of each asset which may be directly or indirectly impacted must be clearly tabulated in the report against each named asset. The Applicant's attention is also drawn to comments from Cadw and CPAT regarding the timing of the survey window for cultural heritage assessment, highlighting that a realistic time period should be set aside to complete the archaeological assessment. Attention is further drawn to comments from

ID	Reference in Scoping Report	Issue	Comment
			CPAT regarding the requirements for reporting and archiving of any archaeological reports produced for the assessment.
ID.29	7.24 – 7.25	Study area	Cadw and CPAT in their responses confirm they consider the study areas appropriate. The Applicant's attention is drawn to comments from CPAT regarding usual study areas for designated monuments and non-designated sites, in relation to the desk-based assessment and walkover survey. Cadw adds that the assessment of impact of designated heritage assets located inside the core study area and ZTV, as listed in Annex A to their response, should be carried out in accordance with the Welsh Government guidance document "The Setting of Historic Assets in Wales". Cadw would expect a stage 1 assessment to be carried out for all the listed designated heritage assets, which will determine whether stages 2 to 4 need to be carried out for specific heritage assets. The results of the stage 1 assessment should be included in the ES, possibly as an appendix.
ID.30	7.26 – 7.29	Desk Based Assessment (DBA) and field studies	CPAT states a detailed DBA and transect walkover of the whole site would be required unless otherwise agreed. The Applicant's attention is drawn to CPAT's comments, highlighting the sources that should be included in the DBA. The Applicant's attention is drawn to comments from Cadw and CPAT regarding the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) surveys in 2008 and 2012. CPAT states the upland survey extent should be clarified. Cadw highlights that the surveys were carried out before the use of Lidar and as such, these surveys need to be supplemented by information from the new National Wales 1 metre DTM and DSM Lidar datasets, with any new sites identified requiring visits to confirm

ID	Reference in Scoping Report	Issue	Comment
			them and any necessary recording carried out. Cadw and CPAT add that the areas that were not included in the RCAHMW surveys will need to be fully considered using Lidar and walkover surveys. CPAT and Cadw highlight that any new sites located on the Lidar must be verified on the ground by the archaeological team and mapped, described, photographed and interpreted with images, and an accompanying gazetteer of sites included in the report. All sites should be categorised for their importance and the significance of impact stated in the ES. PEDW recommends the Applicant liaises directly with Cadw and CPAT regarding the survey requirements, ensuring this is appropriately addressed in the ES.
ID.31	7.27	Visualisations	CPAT notes the SR states a selection of photos will be used in the report for sites identified on the walkover. However, CPAT highlights it would be preferable to have photos of all of them with a visible scale, to allow for verification of the interpretation and identification of the features.
ID.32	7.29	Geophysics and Evaluation Trenching	Cadw notes that Cadw and CPAT will be consulted regarding the need for targeted geophysical survey post scoping and adds that this consultation should follow the completion of the draft DBA and walkover survey, with these reports included in that consultation. CPAT concurs and states they can advise on the need for geophysical survey upon receipt of these reports. The Applicant's attention is drawn to both their comments regarding the triggering of the requirement for geophysical survey. Cadw and CPAT add that depending on geophysical anomalies located, additional intervention by targeted evaluation trenching may also be required

ID	Reference in Scoping Report	Issue	Comment
			within the assessment stage and in accordance with Planning Policy Wales and TAN 24. PEDW recommends the Applicant liaises directly with CPAT and Cadw on this matter.
ID.33	Figure 8.4a	Paleoenvironmental Potential	The Applicant's attention is drawn to comments from Cadw and CPAT highlighting that the impact on intact peat deposits which may contain important paleoenvironmental evidence and artefacts of prehistoric date should be assessed. CPAT notes figure 8.4a appears to indicate two peat locations, but highlights it is not clear how comprehensive the peat mapping is. Cadw and CPAT add that the turbine and infrastructure layout should seek to avoid all peat deposits, but where significant peat deposits cannot be avoided a suitable scheme of sampling, analysis, dating and reporting will need to be completed using appropriate sampling techniques advised by a paleoenvironmental / geoarchaeological specialist. PEDW recommends the Applicant liaises directly with Cadw and CPAT to ensure the impact on peat deposits and paleoenvironmental evidence is appropriately addressed in the ES.
ID.34		Written Scheme of Investigation (WSI)	CPAT advises they need to approve a WSI before any new assessment work or any additional geophysics and evaluation trenching is commenced, and the Applicant's attention is drawn to the WSI requirements outlined in their response.
ID.35	7.39 – 7.40	Approach to mitigation	CPAT states that clear and specific mitigation must be proposed for all sites directly or indirectly affected.

ID	Reference in Scoping Report	Issue	Comment
ID.36	Q7.2	Further consultees	Cadw expects CPAT to be consulted regarding non-designated historic assets. The Applicant's attention is drawn to comments from CPAT requiring further engagement in relation to the cultural heritage assessment and requesting to see copies of any reports completed. Both CPAT and Cadw recommend the Applicant consults PCC's Built Heritage Conservation Officer.
Water and Soil Resources			
ID.37	8.30	Guidance documents	The Applicant's attention is drawn to comments from LQAS highlighting documents also relevant to the proposed development.
ID.38	8.36 – 8.45	Surveys	NRW notes the intention to include a water feature survey and an assessment of private water supplies. The Applicant's attention is drawn to NRW's comments regarding the requirements for a hydrological features survey, to include springs and the locations of private water supplies. NRW adds the main water courses and associated catchment or sub-catchment boundaries should be identified.
ID.39	8.17 / 8.36 – 8.37	Flood risk	NRW confirms that the SR has correctly identified areas considered to be at risk of flooding on the Development Advice Map and the Flood Map for Planning. NRW adds that as all the identified flood risk on the site is associated with ordinary watercourses then this and any proposed works will be largely for the Lead Local Flood Authority to consider. PEDW welcomes that the SR states a Flood Consequences Assessment will be prepared and recommends this is included as an appendix to the ES.

ID	Reference in Scoping Report	Issue	Comment
ID.40	8.49	Soil compaction	The Applicant's attention is drawn to comments from NRW regarding intensive vehicular activity at the site contributing to soil compaction, affecting permeability, resulting in an increase in surface runoff, which may increase soil erosion and the risk of flooding. NRW therefore recommends a number of techniques to minimise soil compaction. PEDW notes the SR states the construction of the proposed development will be managed by use of the Construction Environmental Management Plan (CEMP) and recommends this matter is addressed as part of the CEMP, to be included as a technical appendix to the ES.
ID.41	8.38 – 8.39 8.53 – 8.54	Drainage	The Applicant's attention is drawn to comments from NRW highlighting the hydrology for surface and subsurface water could be permanently altered during the construction phase. NRW states that interception of subsurface drainage by trenches dug for cables and pipelines should be avoided. They add that unmitigated trench construction, backfill and gravel packing around cables / pipes or formal land drainage systems in sensitive areas may result in damaging flow paths developing during storms and prevention measures should be installed. NRW states that the requirement and impact of permanent or temporary land drainage systems during construction must be clearly assessed and procedures must be included to ensure removal of any temporary works at the end of that phase. NRW also states a field survey should be undertaken to identify existing track crossings, adding that road layouts should avoid unnecessary interception and rerouting of surface water flows through road drainage systems, and any crossings should be minimised. The Applicant's attention

ID	Reference in Scoping Report	Issue	Comment
			is drawn to NRW's comments regarding the possible impacts of road construction and requirements in relation to culverts. The Applicant's attention is further drawn to NRW's comments on information to be provided on any change to the existing surface water drainage that any component of the scheme may have, to ensure there is no increase in flood risk downstream of the development areas. PEDW recommends the Applicant liaises directly with NRW on these matters, ensuring they are proportionately addressed in the ES. PEDW also notes the SR states an Outline Sustainable Drainage Strategy will be prepared and recommends this is included as a technical appendix to the ES.
ID.42	8.23 – 8.24	Private Water Supplies	NRW states the risk to disruption of sub-surface flow in the context of spring flow for private water supply should be assessed and suitable mitigation should be proposed. NRW adds that spring protection zones should be implemented to lower the risk of disruption, and site infrastructure should be placed away from any water features.
ID.43		Drinking Water Catchment	The Applicant's attention is drawn to comments from DCWW highlighting the proposed development falls within the DCWW Drinking Water Catchment known as Wye at Llyswen. DCWW requests further information to assess the impact of the proposed development on drinking water quality. PEDW recommends the Applicant liaises directly with DCWW to provide the required detail, ensuring this is proportionately addressed in the ES.
ID.44	8.52 / Table 8.4 8.68 – 8.69	Hydrology	In their comments NRW states they do not agree that hydrology for the construction phase can be scoped out and also advises decommissioning is scoped in. The Applicant's attention is drawn to comments from NRW stating

ID	Reference in Scoping Report	Issue	Comment
			the construction, operation and decommissioning phases should be considered independently, adding that it is often within the construction and decommissioning phases that the potential for unwanted environmental effects is the largest. NRW highlights that one of the key principles for development should be to protect site hydrology, especially through maintenance of existing surface water features and the hydrological regime. NRW also adds that the potential effects on the water environment during short, medium and longer timescales should be assessed. Given these comments, including those highlighted above regarding construction effects on soil and drainage and the need to assess the impacts on water supplies, PEDW does not agree hydrology can be scoped out for construction and decommissioning phases and this is therefore scoped in to the ES.
ID.45	8.38 – 8.39 / 8.46	Hydraulic linkages	The Applicant's attention is drawn to comments from NRW highlighting the site is intersected / interacted by numerous water features, as well as the potential for hydraulic connectivity between the site and the locally designated features such as Colwyn Brook Marshes SSSI. NRW adds that site hydrodynamics which include baseline drainage pathways must not be altered during the construction and operational phase to the detriment of features and receptors that currently rely on those baseline drainage pathways. NRW states that the Outline Drainage Strategy must have a particular focus on how the current baseline drainage hydrodynamics may be interacted with / altered by the operating windfarm structure, the potential for which has not been reflected within the Outline Drainage Strategy sections of SR.

ID	Reference in Scoping Report	Issue	Comment
			NRW highlights the need to include models of the groundwater environment and source-pathway-receptor, to illustrate the nature of the hydraulic linkages between site features / receptors such as watercourse, springs, private water supplies and designated areas / National Vegetation Classifications and the degree to which these linkages are interacted by construction and operation of windfarm infrastructure.
ID.46	Q8.3	Colwyn Brook Marshes SSSI	Regarding potential for infrastructure / tracks impacting on hydrological inputs to the bog and fen on the site Colwyn Brook Marshes SSSI, further to their hydrological comments above, NRW add that the current hydrological inputs from the Aberedw Energy Park direction should be surveyed and appropriate measures taken to not alter hydrological inputs to the SSSI.
ID.47	8.15 / Table 2.3	River Wye SAC	NRW highlights that the site has multiple watercourses, that if altered, have the potential to impact the features of the River Wye SAC and advises on regulations to be considered in respect of the SAC. The Applicant's attention is also drawn to NRW's comments in relation to the SAC in the Ecology section above. NRW also adds that regarding cumulative assessment and the information in table 2.3, should several of the developments and a grid connection project happen at similar times there may be increased in combination risks if pollution control measures are not managed effectively. NRW states that evidence of risks and effective management will need to be considered to ensure safeguards to the water environment are effective in relation to the River Wye SAC.
ID.48	8.40	Hydromorphology	The Applicant's attention is drawn to comments from NRW regarding the potentially large impact of the proposed development on the hydromorphology of local watercourses, given the abundance of

ID	Reference in Scoping Report	Issue	Comment
			watercourses on site and the potential for multiple stream crossings (with a knock-on effect to downstream waterbodies such as the Wye SAC). NRW advises the assessment of potential impacts is considered early to enable Water Framework Directive compliance in the later stages of the development. PEDW recommends the Applicant liaises directly with NRW on this matter. If assessment finds impact of the proposed on the hydromorphology of local watercourses, then this should be scoped into the ES and the Applicant should liaise directly with NRW regarding the detail required for the ES.
ID.49	8.55 / 8.65	Hydrogeology, including Groundwater Dependant Terrestrial Ecosystems (GWDTE) and water abstractions	NRW agrees with the intention to scope in effects of the development on hydrogeology, GWDTE and water abstractions.
ID.50	8.50 – 8.51 8.62 – 8.63 8.68 – 8.69	Pollution prevention	NRW states that potential for incidences of turbine leakage and loss of turbine related chemicals such as hydraulic oils to ground / groundwater should be considered within pollution prevention plans. PEDW notes the SR states good practice standard mitigation measures within the Outline CEMP will minimise as far as reasonably practical the risk of pollution to hydrology, hydrogeology and land drainage receptors. PEDW also notes a decommissioning phase CEMP would be implemented. PEDW recommends the points raised by NRW are addressed as part of these documents, drafts of which should be included as an appendix to the ES.
ID.51	8.6 – 8.13	Agricultural Land Classification (ALC)	LQAS states that according to the Predictive ALC Map for Wales, the site is considered mainly Grade 4 and 5 with some small areas of Subgrade 3b and

ID	Reference in Scoping Report	Issue	Comment
			that a detailed ALC field survey is not recommended. LQAS adds it does not consider Best and Most Versatile agricultural land to be present on this site.
ID.52	8.43	Soil Management Plan	LQAS welcomes that it is intended to produce a Soil Management Plan to support the ES. They add this should include a clear scheme setting out how all soils and their function will be used, conserved, reinstated and restored. LQAS in their response provide further detail on the requirement for the scheme.
ID.53	8.61 / Table 8.4	Contaminated land	PEDW notes the SR states contaminated land including landfills is proposed to be scoped out, as there are no recorded landfills present and the site has remained in greenfield / agricultural use throughout its history, although this will be considered in further detail within the desk study. The Applicant's attention is drawn to comments from PCC's Contaminated Land Officer, included as part of PCC's main response, highlighting that the plans show a very large area that is very likely to include land potentially affected by contamination. They therefore recommend that a detailed phase 1 contaminated land assessment is undertaken. PEDW recommends the Applicant liaises directly with PCC's Contaminated Land Officer on this matter and ensures this is appropriately addressed in the ES. Given these comments, it is not currently possible to scope out Contaminated Land and this must be scoped into the ES in a proportionate manner. Should following the assessment it be agreed that Contaminated Land can be scoped out, a robust rationale for this should be provided in the ES.

ID	Reference in Scoping Report	Issue	Comment
ID.54	Q8.1	Mineral Resources	PCC refers the Applicant to the Minerals section in the Powys Local Development plan for further detail regarding mineral resources safeguarding.
ID.55	3.26	Borrow Pits	PEDW notes the SR states borrow pits may be required. The Applicant's attention is drawn to comments from LQAS stating that if borrow pits are proposed, then more detailed information is required on the size, extent, location and after-use of the borrow pits. PEDW recommends the Applicant liaises directly with LQAS to ensure the required detail is provided in the ES. The Applicant's attention is also drawn to comments from NRW regarding dewatering requirements should borrow pits be used, in which case consideration should be given to the effects of dewatering on controlled waters identified in the water feature survey. If borrow pits are to be included as part of the development, they must be scoped into the ES in a proportionate manner.
Peat			
ID.56	9.1	Definition of peat	LQAS welcomes the Soil Survey of England and Wales (1980) definition of peat has been used and adds the assessment must also include any transitioning shallow peaty soils integral to the hydrological functioning of wider peat bodies, either on-site or adjoining.
ID.57	9.5 / Q9.1	Surveys	LQAS welcomes that an initial Phase I peat survey (100 m grid) has been undertaken and that further interim survey (25 m grid) will be undertaken on proposed infrastructure locations (to confirm presence or absence of peat).

ID	Reference in Scoping Report	Issue	Comment
			Regarding Q9.1 in the SR and the requirements for a Phase 2 peat survey, NRW advises that as at the site peat does not underpin a Special Site of Scientific Interest or Special area of Conservation, NRW will not be providing specialist advice on the impacts to peat. PEDW advises the Applicant may wish to continue liaising directly with LQAS on this matter.
ID.58	9.9 / Q9.2	Peat landslide assessment	Regarding Q9.2 in the SR on the requirement for the peat landslide risk assessment, NRW advises that as at the site peat does not underpin a Special Site of Scientific Interest or Special area of Conservation, NRW will not be providing specialist advice on the impacts to peat. PEDW advises the Applicant may wish to continue liaising directly with LQAS on this matter.
ID.59	9.10 / Q9.2	Peat Management Plan	Regarding Q9.2 in the SR on the requirement for a Peat Management Plan, NRW advises that as at the site peat does not underpin a Special Site of Scientific Interest or Special area of Conservation, NRW will not be providing specialist advice on the impacts to peat. PEDW advises the Applicant may wish to continue liaising directly with LQAS on this matter.
ID.60	9.15 / Table 9.4	Effects on peat	PEDW assumes that at Table 9.4 against Peat Stability, it is intended to include construction effects to be scoped in and operational effects to be scoped out (rather than listing construction effects twice). PEDW notes that the SR states that should further peat probing identify that both direct and indirect effects on peat soils can be avoided, and by implication effects on peatland habitats and peat hydrology, the assessment of effects upon peat will be scoped out with supporting justification provided in the ES. PEDW recommends that following the outcome of the further peat probing, the Applicant liaises directly with LQAS on this matter. If it is agreed effects on peat can be scoped out, a robust rationale for this should be provided in the ES.

ID	Reference in Scoping Report	Issue	Comment
Transport and Access			
ID.61	3.7	Public Rights of Way (PRoW)	The Applicant's attention is drawn to PCC's comments where they highlight that the proposed development will have both and indirect and direct impact on PRoW, common land and access land. As stated in the SR, consideration of these impacts should form part of the EIA. PCC have identified 21 PRoW within the proposed redline boundary details of these can be found in their comments in Appendix 1. PCC note that a number of the PRoWs on site are within topple zones of turbines. If turbines remain to be proposed in these locations then permanent legal diversions will be required, before any construction effecting the PRoW can commence. The applicant is encouraged to liaise with PCC's Countryside Access and Recreation team regarding impacts on PRoWs and the consenting strategy. PEDW recommends upon determining the final size and location of the turbines, the Applicant should review the topple distance to PRoW and liaise directly with PCC on this matter. The Applicant's attention is drawn to the comments from PCC in relation to PRoW and the measures that should be taken if any work is proposed that might affect PRoW including access tracks, borrow pits, temporary closures. In certain circumstances details may need to be agreed with the Countryside Access and Recreation team before work commences. Further attention is drawn to PCC's comments in Appendix 1 in regards to mitigation sought in regards to PRoW. PEDW recommend that the Applicant liaises directly with PCC to discuss these matters.

ID	Reference in Scoping Report	Issue	Comment
			Whilst not necessarily relevant to the Scope of the ES, the applicant should note that if they choose to pursue Secondary Consents in relation to permanent stopping-up or diversion of Highways, they should contact the Orders Branch of Welsh Government's Transport Directorate (TransportOrdersBranch@gov.wales) to begin liaising over draft Orders, as any draft Order and supporting application documents would need to be included in the statutory pre-application publicity and engagement materials for the DNS process.
ID.62	12.54	Open Access Land	As acknowledged in the SR, PCC highlight that the development also takes in a significant area of designated open access land where the public has a right of access on foot for recreation, part of which is registered common land (RCL046 – Aberedw Hill common). The Applicant's attention is also drawn to the Common Land section below.
ID.63	10.6 – 10.15	Assessment methodology / Study Area	PEDW recommends that the Applicant liaises directly with PCC's highways department on this matter.
ID.64	10.5 / 10.16	Trunk Road Network Impact	In their comments in Appendix 1, Transport Directorate, Welsh Government (the Directorate) state that the scope of the Transport Assessments should cover the general construction phase vehicle movements to the site and the delivery of the wind turbine components as Abnormal Indivisible Loads (AILs). The Directorate note the potential adverse impact on the trunk road network due to the larger new generation wind turbines. A guidance document for AIL is included in Appendix 1. PEDW welcomes the SR states a Construction Traffic Management Plan (CTMP) will be produced and recommends a draft CTMP is included as a technical appendix to the ES. The Applicant's attention is drawn to the Directorate's response, outlining information to be included in the CTMP. Further attention is drawn to the Directorate's guidance document included

ID	Reference in Scoping Report	Issue	Comment
			at Appendix 1: 'Pulling Together' - Best Practice for Transporting Abnormal Loads in Wales.
Noise and Vibration			
ID.65	Q 11.1 / Q 11.2	Assessment Approach / Effects scoped in and out	In their comments in Appendix 1, PCC state that they are satisfied in respect of noise that the Applicant has identified the correct guidance in ETSU-R-97 and the IOA guidance as stated in the SR. They have no further comments to make prior to receiving more detail following the assessment. PEDW welcomes the approach as set out in the SR.
Other issues			
ID.66	3.30 / 12.22 / 12.25	Aviation	The Applicant's attention is drawn to comments from NATS highlighting the proposed development conflicts with their safeguarding criteria. NATS provides details of a predicted impact on Clee Hill RADAR as well as in relation to Swanwick Air Traffic Control and Western RADAR. PEDW welcomes the SR states the Applicant is in discussion with NATS En Route Ltd in relation to mitigation options and any mitigation measures will be reported in the ES. The Applicant's attention is also drawn to comments from DIO expressing concerns with the proposal, due to the potential to create a physical obstruction to air traffic movements. To address this impact, DIO would require the fitting of aviation safety lighting and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction. PEDW welcomes the SR notes the lighting requirements and recommends the Applicant liaises directly with DIO to ensure their concerns regarding

ID	Reference in Scoping Report	Issue	Comment
			safety lighting and data submission are addressed and appropriately reported in the ES.
ID.67	12.34	Telecommunications and Utilities	PEDW welcomes that the SR states an assessment of effects on telecommunication infrastructure has been scoped in and that the results will be reported in a technical appendix to the ES. Subject to further investigation as outlined in the SR, PEDW agrees utilities can be scoped out and should be supported by a robust rationale in the ES.
ID.68	12.39	Shadow Flicker	The SR refers to shadow flicker only being likely to occur in a building located within ten times the rotor diameter of a wind turbine. As outlined in section 6 above, PEDW notes that in Review of Light and Shadow Effects from Wind Turbines in Scotland (climatexchange.org.uk) (L.U.C. for climateXchange, 2017) it was found that “there is a lack of evidence to support the use of ten rotor diameters as a cut off, and this is entirely down to misinterpretation of the original reference to this distance.” Whilst the approach set out in the SR is acknowledged, the ES should provide a clear rationale as to the methodology adopted, and why it is considered appropriate given the scale of turbine proposed and the requirement for more nuanced assessment suggested by the concerns raised in the above document. As a technical assessment would determine whether there will be any significant effects, Shadow Flicker is scoped into the ES in a proportionate manner. Further to the outcome of the assessment, should Shadow Flicker be scoped out, a robust rationale for this should be provided in the ES.
ID.69	12.48 / Q12.3	Forestry and Woodland	PEDW welcomes that the SR states a Forestry Assessment will be undertaken, to be submitted as a technical appendix to the ES. PEDW

ID	Reference in Scoping Report	Issue	Comment
			recommends the Applicant liaises directly with NRW regarding the requirements for the assessment, ensuring this is appropriately addressed as part of the ES.
ID.70	12.53	Climate Change	PEDW notes the SR states the impacts of climate change on the proposed development will be addressed in relevant chapters of the ES. PEDW agrees that this topic should be addressed in appropriate chapters of the ES and a standalone chapter is not required. Climate Change is therefore scoped into the ES, but not as a standalone chapter.
ID.71	1.7 / 12.54	Common Land	PEDW notes the SR states the majority of the site located on Common Land and that the DNS application will be accompanied by the requisite secondary consent applications to authorise the proposed works on Common Land and for consent to deregister and exchange Common Land. PEDW welcomes the SR states that the ES will assess the impacts of the proposed development on Common Land where relevant.
Other considerations			
ID.72	8.49	Material Assets and Waste	It will be necessary to address Material Assets and Waste in a proportionate manner in relevant chapters, especially given the requirement to address the decommissioning phase in the ES. The draft CEMP should be also be included as a technical appendix to the ES. Material Assets and Waste is therefore scoped into the ES, although not necessarily as a standalone chapter.

9. Other Matters

This section does not constitute part of the Scoping Direction, but addresses other issues related to the proposal.

9.1 Changes to PPW

On 11 October 2023 the Welsh Government introduced changes to Chapter 6 of PPW relating to:

- Green Infrastructure,
- Net Benefit for Biodiversity and the Step-wise Approach,
- Protection for Sites of Special Scientific Interest, and
- Trees and Woodlands.

Details are available in the relevant 'Dear Chief Planning Officer' letter:

<https://www.gov.wales/addressing-nature-emergency-through-planning-system-update-chapter-6-planning-policy-wales>

These changes have now been consolidated into a new edition of PPW (ed. 12), published on 07 February 2024: <https://www.gov.wales/planning-policy-wales>

9.2 Updated Guidance from the Design Commission for Wales

On 23 November 2023 the Design Commission for Wales published their updated guidance "Designing for Renewable Energy in Wales". The guidance is available online:

<https://dcfw.org/designing-for-renewable-energy-in-wales/>

9.3 Habitats Regulation Assessment

[The Conservation of Habitats and Species Regulations 2017](#) require competent authorities, before granting consent for a plan or project, to carry out an appropriate assessment (AA) in circumstances where the plan or project is likely to have a significant effect on a European site (either alone or in combination with other plans or projects). The competent authority in respect of a DNS application is the relevant Welsh Minister who makes the final decision. It is the Applicant's responsibility to provide sufficient information to the competent authority to enable them to carry out an AA or determine whether an AA is required.

When considering whether or not significant effects are likely, applicants should ensure that their rationale is consistent with the [CJEU finding](#) that mitigation measures (referred to in the judgment as measures which are intended to avoid or reduce effects) should be assessed within the framework of an AA and that it is not permissible to take account of measures intended to avoid or reduce the harmful effects of the plan or project on a European site when determining whether an AA is required ('screening'). The screening stage must be undertaken on a precautionary basis without regard to any proposed integrated or additional avoidance or reduction measures. Where the likelihood of significant effects cannot be excluded, on the basis of objective information the competent authority must proceed to carry out an AA to establish whether the plan or project will affect the integrity of the European site, which can include at that stage consideration of the effectiveness of the proposed avoidance or reduction measures.

Where it is effective to cross refer to sections of the ES in the HRA, a clear and consistent approach should be adopted.

The Planning Inspectorate's guidance for Nationally Significant Infrastructure Projects – [Advice Note 10: Habitat Regulations Assessment relevant to Nationally Significant Infrastructure Projects](#) may prove useful when considering what information to provide to allow the Welsh Ministers to undertake AA.

9.4 SuDS Consent

Whilst a separate legislative requirement from planning permission, the Applicant's attention is drawn to the statutory SuDS regime that came into force in Wales in January 2019. The requirement to obtain SuDS consent prior to construction may require iterative design changes that influence the scheme that is to be assessed within the ES and taken through to application. As such, it is recommended that the applicant contact the local SuDS Approval Body early on.

Appendix 1: Consultation Responses

**DELEGATED DECISION****Powys County Council Constitution Schedule 13 Responsibility for Functions****Application Number:** 23/1923/PRL**Grid Ref:** E: 309506
N: 248753**Community Council:** Aberedw Community**Valid Date:** 15.12.2023**Case Officer:** Lorraine Jenkin**Applicant:** G Peters**Location:** Aberedw Energy Park, Aberedw Hill, 3km East Of Builth Wells, Powys,**Proposal:** Potentential DNS application - CAS-03009-N5D9K8 refers**Application Type:** Preliminary enquiry**Consultee Responses**

Consultee	Received
Clwyd Powys Archaeological Trust	25 th January, 2024
Powys County Council Environmental Protection	6 th February, 2024
Powys County Council Countryside Services	23 rd January, 2024
Powys County Council Contaminated Land Officer	6 th March, 2024
PCC Ecologist	19 th February, 2024

Please see attachments for full consultation responses.

Introduction

Planning and Environment Decisions Wales (PEDW) consulted Powys County Council local planning authority (the LPA) requesting the LPA's advice on the scope of the proposed EIA and the proposed methodologies outlined in the Scoping Report, in respect of the above proposed development. Aberedw Energy Park is sited on Aberedw Hill, some 3km east of the town of Builth Wells.

The proposal for the Aberedw Energy Park is for 18 turbines at 200m tip height with a wind generating capacity of around 108MW with all associated infrastructure – access tracks and cabling. The proposal will be a DNS as it will have a combined installed capacity greater than 10 MW.

The LPA have considered the Scoping Request and offer the following comments.

- *Planning Constraints*

The interactive Constraints Map available at the following web link: [Cyngor Sir Powys County Council – Local Plan: Powys LPA Constraints Map \(opus4.co.uk\)](http://opus4.co.uk) may be useful in identifying any key policy and designated site constraints. Please note that this data should NOT be relied on for legal purposes and may not be fully up to date with changes made to the constraints data in the County. The Council can accept no responsibility for any error or inaccuracy which may arise.

- *Local Planning Policy*

The adopted Powys Local Development Plan and associated suite of Supplementary Planning Guidance can be found at the following weblink:
<https://en.powys.gov.uk/article/4898/Adopted-LDP-2011---2026>.

Clwyd Powys Archaeological Trust have referred to inclusion of the Historic Environment SPG and other relevant policy/guidance within the EIA and the other SPG's (e.g. Renewable Energy, Landscape, Biodiversity and Geodiversity) will be relevant the project. The link for those documents is [LDP Supplementary Planning Guidance \(SPG\) and Supporting Policy - Powys County Council](#) .

- *Proposed EIA Scope*

Questions for Chapter 2 – the EIA Process and Assessment Methodology

2.1 – LPA concurs with Table 2.3.

2.2 – the LPA welcomes this pre-mitigation good practice.

2.3 – See detail above for local planning policies. See national planning policy framework.

Questions for Chapter 3 – Project Description

3.1 – the LPA accepts that decommissioning cannot be dealt with detailed surety at this stage, however would expect it to be considered in relevant chapters.

Questions for Chapter 4 – Landscape and Visual Amenity

4.1 - the LPA concurs with your proposed approach, however I would like to see an assessment as to whether the colour of light-grey is the appropriate colour in such a landscape, and whether the tower should have a gradation of colour to make it less obtrusive in the landscape.

4.2 - the LPA concurs with your proposed approach.

4.3 - the LPA concurs with your proposed approach.

4.4 the LPA concurs with your proposed approach.

4.5 the LPA concurs with your proposed approach.

4.6 - the LPA concurs with your proposed approach.

4.7- the LPA concurs with your proposed approach.

4.8 - the LPA concurs with your proposed approach.

4.9 – the LPA is not aware of any other relevant parties.

Questions for Chapter 5 – Ecology (non avian)

Please see PCC Ecologist's comments in full.

In addition, consideration of species and habitats identified within the PNRAP would ensure locally important species and habitats can be appropriately accounted for and for net biodiversity loss of these species and habitats to be avoided, The Powys Nature Recovery Action Plan is available at the following link:

<https://en.powys.gov.uk/article/2573/Powys-Nature-Recovery-Action-Plan>

Questions for Chapter 6 – Ornithology

Please see PCC Ecologist's comments in full.

Questions for Chapter 7 – Archaeology and Cultural Heritage

Please see Clwyd Powys Archaeological Trust's full comments.

Questions for Chapter 8 – Water and Soil Resources

8.1 – Please see the Minerals Section in the Powys LDP.

8.2 – this information is not available to the LPA.

8.3 – no comment.

Questions for Chapter 9 – Peat

The LPA has no comments to make in response to Q 9.1 / 9.2.

Questions for Chapter 10 – Transport and Access

The LPA has no comments to make in response to Q 11.1 – 11.5 (sic).

Please see PCC Countryside Services comments in relation to public rights of way.

Questions for Chapter 11 – Noise and Vibration

Please see the comments received from PCC Environmental Protection. Otherwise PCC has no further comments in respect of Q11.1 and Q11.2.

Questions for Chapter 12 – Other Issues

The LPA has no further comments to make in response to Q 12.1 – 12.4.

Please see Consultee comments also submitted.

Powys County Council Consultee Responses to DNS CAS-03009-N5D9K8 - Aberedw Energy Park

PCC Ecologist – 19th February 2024

Please find below comments regarding ecology matters in relation to the Aberedw Energy Park EIA Scoping Direction Consultation (PEDW Reference CAS-03009-N5D9K8) – If you have any queries or require any further information please let me know.

Chapter 5 - Ecology (Non-Avian)

Question 5.1: Is the scope considered appropriate?

The following comments are provided with regards to the Ecology (Non-Avian) scope set out in Table 5.2 of the Scoping Report:

Potential effect on Designated Sites

Whilst the proposal to scope out designated sites other than the Colwyn Brook Marsh North and South SSSI, River Ithon SSSI and River Wye SAC is generally considered appropriate in relation to the windfarm site itself, it is noted that Section 3.22 of the Scoping Report identifies that *'The route from the port to Site is likely to be via the A44, but this will be identified as part of the EIA process and assessed accordingly within the ES and an abnormal load assessment will accompany the application'* as the route to the site has not yet been confirmed it is not clear whether there will be any requirements for off-site works associated with the development i.e. highways improvements along the access route, and whether any such improvements would be in proximity to or have potential to impact designated sites.

Therefore, consideration will also need to be given to the potential for impacts to designated sites to occur as a result of any proposed off-site work prior to confirmation that it would be appropriate to screen designated sites (other than the Colwyn Brook Marsh North and South SSSI, River Ithon SSSI and River Wye SAC) out of the EIA.

Potential effect on Priority habitats/ habitats of principal importance including ancient woodlands

The Scoping Report identifies that an initial Phase 1 Habitat survey and a Phase 2 NVC was carried out in Sept/Oct 2020. Section 5.21 identifies that updated extended Phase 1 Habitat Survey and walkover NVC will be undertaken in spring/summer 2024 – these surveys will need to include assessments of habitats associated with any off-

site areas that would be affected as a result of the proposed development i.e. as a result of proposed highways improvements along the access route.

Section 5.19 makes reference to the Powys County Council Local Biodiversity Action Plan (LBAP) 2002, this should be amended to The Powys Nature Recovery Action Plan 2022-2032 which is the update version of the Powys LBAP – consideration of species and habitats identified in the PNRAP would ensure locally important species and habitats can be appropriately accounted for and assessed in accordance with the Step-Wise approach set out in Planning Policy Wales and considered when identifying opportunities to deliver net benefits to biodiversity. Further information and associated Habitat and Species Action Plans can be found at <https://en.powys.gov.uk/article/2573/Powys-Nature-Recovery-Action-Plan>

Section 5.37 of the Scoping Report states '*A Green Infrastructure Assessment will be produced, accompanied by an outline Habitat Management Plan (HMP) which will identify measures to secure a net benefit for biodiversity. The HMP will set out the immediate and on-going management of the Site, future monitoring arrangements for all secured measures and identify funding mechanisms to meet management plan objectives.*'

The Green Infrastructure Assessment and outline Habitat Management should clearly set out how the proposed development will contribute to maintaining and enhancing biodiversity and deliver net benefits for biodiversity and improve the resilience of ecosystems including those included in the PNRAP.

It is recommended that the OHMP include specification regarding an appropriate Ecological Compliance Audit, this should detail:

- Key performance indicators for each identified ecological feature
- Persons responsible for commissioning and undertaking the audit
- The duration and frequency of audits
- Dissemination of audits to relevant regulatory bodies

When developing the OHMP consideration should be given to the principles set out in the CIEEM publication 'Good practice guidance for ecological restoration - January 2024' which can be found at <https://cieem.net/wp-content/uploads/2024/01/Good-Practice-Principles-V4.pdf>

The Green Infrastructure Statement should include the following:

- An outline and plan of the existing green infrastructure and connectivity on and adjacent to the site.
- Describe how green infrastructure has been incorporated into the proposal and demonstrate that there is no impact or no net loss.
- Provide a plan to show the proposed green infrastructure for the site and identify where opportunities for connectivity have been enhanced/created/restored.

- Include planting specifications.
- Provide details of long-term management set out the immediate and on-going management of the site, future monitoring arrangements for all secured measures and it should clearly identify the funding mechanisms in place to meet the management plan objectives.

PPW makes reference to the Building with Nature Standards Framework <https://www.buildingwithnature.org.uk/standards-form>, the framework provides useful guidance regarding 'good green infrastructure' and identifies a key set of principles that provide a useful guide for applicants to consider when producing a GIS. The key principles are as follows:

- **Multifunctional** - individual features in combination contribute to a network of multiple benefits.
- **Connected** – provides or fills a missing natural link in the landscape for the benefit of nature and people.
- **Sympathetically placed** – reflects and/or creates a sense of place, considerate to the context and character of the local environment and priorities of its people and wildlife.
- **Resilient** – responds to the climate emergency in a positive, contributory way.
- **Responsibly managed** – has a sustainable mechanism to support its life-long function and benefits.
- **Environmentally sensitive** – mitigates its own local impact and improves the quality of the immediate natural environment.

Potential effects on Protected Species: bats; birds; great crested newt; badger; otter.

It is noted that bat surveys were undertaken in 2020 and that update surveys are identified as being undertaken in autumn 2023 and spring & summer 2024.

Section 5.15 provides brief details of survey results undertaken in 2020, this includes a categorisation of the species recorded in terms of collision risk. The collision risks assigned in Section 5.15 of the EIA scoping Report for some of the species recorded during these surveys does not align with the risks stated in the recognised guidelines i.e. Scottish Natural Heritage (August 2021) Bats and Onshore Wind Turbines: Survey Assessment and Mitigation. In Wales Leisler's are categorised as high collision risk (not medium as stated in the Scoping Report) and barbastelle are categorised as medium collision risk (not low risk as stated in the Scoping Report).

The Scoping Report identifies that the preliminary ground level inspections and Preliminary roost assessments were undertaken in 2020, whilst 19 features with potential to support bats were identified these were all over 300m from proposed turbine locations so no further survey effort was considered necessary. It is unclear from the Scoping Report as to whether these surveys are proposed to be updated as part of the planned surveys in 2024 to establish whether new features have developed that would be within 250m of the proposed turbine locations.

Section 5.5 of the Scoping Report identifies that with regards to protected/priority species data, only records from within the last 10 years have been considered.

It is recommended that details with regards to a post construction monitoring scheme for bats (injuries, fatalities and activity) and contingency plans e.g. curtailment are outlined within the ES.

The Scoping Report identifies that HSI surveys of 53 ponds within the site were undertaken in 2023 and 14 of these were then subject to eDNA survey – population assessments were conducted on 2 waterbodies confirmed as supporting great crested newts within 250m of proposed turbine locations. In addition, it is noted that the Scoping Report states that ground disturbance within 250m of breeding ponds will be avoided – it is recommended that works within 500m of any breeding ponds should be avoided. If works associated with the proposed development cannot be avoided within 500m of ponds used by great crested newt, then full surveys to establish the population concerned will need to be undertaken in accordance with recognised guidelines i.e. Natural England - Great Crested Newt Mitigation Guidelines (2001).

The Scoping Report identifies that surveys are due to be undertaken for badger and otter in 2024. The survey effort and methodologies identified are considered to be in line with current guidelines.

Potential effects on Protected Species: water vole; reptiles; red squirrel; pine marten; fish and aquatic species

Fish and aquatic species have been identified as being scoped out of the EIA, whilst it is noted that Section 5.18 of the Scoping Report states ‘Given the habitats present and likely to be impacted, no specific aquatic surveys have been undertaken or are being proposed’, it is noted that a number of references to watercourse crossings associated with the proposed development are made throughout the Scoping Report – therefore further information would be required with regards to impacts to watercourses and associated flora/fauna prior to confirmation that it would be appropriate to screen fish and aquatic species out of the EIA. It should be noted that the area surrounding the proposed windfarm is known to be of importance for white clawed crayfish (a Wildlife & Countryside Act Schedule 5 species and a Conservation & Habitats Regulations (2017 as amended) Annex II species that are a primary reason for selection feature of the River Wye SAC).

Section 5.5 of the Scoping Report identifies that with regards to protected/priority species data, only records from within the last 10 years have been considered.

CIEEM Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition (2020) advise that '*There is no definable cut off date for determining that desk study records of a certain age are no longer valid. Each record will need to be considered on its own merits. Where there is strong evidence to suggest that a species is no longer present despite the data search identifying a record, this should be explained clearly in any report. In the absence of such evidence the record should be considered to be relevant. In addition, historical data can be useful in identifying trends.*'

Having reviewed records for the site it is noted that several records which would fall outside of this date range considered may provide relevant information to the scope of surveys required:

- Record of fairy shrimp (*Chirocephalus diaphanous*) within the proposed development site - Wildlife & Countryside Act Schedule 5 species (fully protected) and listed as Vulnerable in the Red Data Book

It is therefore advised that consideration is given to potential for the proposed development to impact this species (directly or indirectly) and the likely significance of any such impacts.

Non-statutory sites

Further information regarding the proposed access route would be required prior to confirmation that non-statutory sites could be scoped out. As identified above an assessment of any proposed off-site works associated with the development i.e. highways improvements along the access route will need to consider potential impacts to non-statutory sites.

It is noted that Table 5.1 of the EIA Scoping Report states that the reasons for designation are unknown for Hendre RVNR, for completeness the following clarifies the reason for designation for this site:

- **Hendre RVNR** – Site status: Category 3 - supports a diverse range of vascular plants indicative of a 'good quality' verge in Powys

Question 5.2: Do you agree that, with the exception of Colwyn Brook Marsh North and South SSSI, River Ithon SSSI and the River Wye SAC and SSSI, designated sites can be scoped out?

As identified above consideration will also need to be given to the potential for impacts to designated sites (statutory and non-statutory) to occur as a result of any proposed off-site works associated with the development i.e. highways improvements along the

access route prior to confirmation that it would be appropriate to screen designated sites other than the Colwyn Brook Marsh North and South SSSI, River Ithon SSSI and River Wye SAC out of the EIA.

Question 5.3: Do you agree that the HRA should focus on the River Wye/Afon Gwy SAC only?

Subject to confirmation that no impacts to other National Site Network Sites would occur as a result of associated off-site works it is agreed that the HRA should focus on the River Wye SAC.

In addition to potential pollution events and sedimentation impacts to the River Wye SAC it is advised consideration will need to be given to the potential for the proposed development to contribute additional phosphates to the River Wye SAC Catchment. on the 21st January 2021 NRW issued a planning position statement regarding the deterioration in the condition of riverine SACs due to the potential to increase phosphate levels. NRW have identified in the associated guidance that in their opinion, any new development which is likely to increase the concentration of organic materials discharged directly or indirectly into the River Wye catchment has the potential to increase phosphate levels causing further deterioration of the special features that the SAC is designated for. As a result, new and development proposals must be able to demonstrate phosphate neutrality or betterment.

Consideration will need to be given to the potential for introduction of foul drainage at the site in relation to both the construction, operational and decommissioning phases of the proposed development including temporary welfare arrangements during the construction/decommissioning phase and longer-term welfare facilities required during the operation of the development.

Chapter 6 - Ornithology

Question 6.1: Do consultees agree that the desk and field surveys undertaken, plus those proposed in 2024, provide a sufficient baseline to allow the assessment of effects on ornithology?

The desk and field studies outlined in the Scoping Report are considered to be in line with the recognised guidelines.

Question 6.2: Do consultees agree with the assessment method (including scoped in/scoped out effects)?

The assessment methods identified are considered to be broadly acceptable in terms of recognised guidelines however full details of the survey results and list of species

proposed to be scoped out would need to be provided before it can be agreed that these would be acceptable.

Section 6.12 makes reference to the Powys County Council Local Biodiversity Action Plan (LBAP) 2002, this should be amended to The Powys Nature Recovery Action Plan 2022-2032 which is the update version of the Powys LBAP – consideration of species and habitats identified in the PNRAP would ensure locally important species and habitats can be appropriately accounted for and assessed in accordance with the Step-Wise approach set out in Planning Policy Wales and considered when identifying opportunities to deliver net benefits to biodiversity. Further information and associated Habitat and Species Action Plans can be found at <https://en.powys.gov.uk/article/2573/Powys-Nature-Recovery-Action-Plan>

Question 6.3: Do consultees hold any data sets that could be made available to inform the assessment?

No

Question 6.4: Do consultees agree that the proposed mitigation options provide suitable methods to offset any identified significant effects?

The mitigation options identified are considered to be broadly acceptable in terms of recognised best practice techniques however full details of the survey results, species records and likely impacts in relation to the proposed development would need to be provided before it can be confirmed that these measures would be appropriate and/or sufficient for the proposed development.

Other Comments

It is noted that the Scoping Report confirms that an Outline CEMP will be provided within the ES, it recommended that with regards to ecology matters the CEMP includes details regarding the following

Details of any pre-commencement surveys identified as required;

Risk assessment of potentially damaging construction activities;

Measures to mitigate any environmental impact associated with the planned movement of Abnormal Indivisible Loads (AILs);

Identification of "biodiversity protection zones;

Details of activities where specialist ecologists need to be present on site to oversee works;

Responsible persons and lines of communication;

Use of protective fences, exclusion barriers and warning signs;
A Biosecurity Risk Assessment, and Method Statement
Pollution Prevention Plan and pollution incident response plan;
Monitoring and contingency proposals for implementation; and
Details of construction lighting use to minimise impacts to local wildlife

Contaminated Land Officer – 6th March, 2024

In respect of this application I have noted that the plans show a very large area that is very likely to include land potentially affected by contamination. Therefore, I recommend that a detailed phase 1 contaminated land assessment is undertaken to progress matters.

Clwyd Powys Archaeological Trust

25th Jan 2024

Thank you for the pre-application consultation on this proposed windfarm.

We note the red boundary of the intended windfarm the current 18 turbine proposals and can confirm that this development would require a detailed archaeological assessment to inform an Environmental Statement as part of an EIA. The development boundary and surrounding Core and Wider Study areas include a large number of non-designated and designated heritage assets which will need to be assessed for both direct and indirect (setting) impacts. We assume the applicant has engaged, or will engage, an archaeological consultant/contractor to complete the archaeological assessment and we would need close liaison with the archaeological consultants throughout the design stage of the application leading up to application submission.

In terms of our specific interests, we would be commenting on impacts to the non-designated heritage. Cadw (via cadwplanning@gov.wales) will comment on Scheduled Monuments and their settings, Registered Parks and Gardens and their settings, Battlefields, Registered Historic Landscapes and World Heritage Sites. The Powys CC Built Heritage Conservation Officer will comment on Listed Buildings and their settings and Conservation Areas and their settings.

Policy and Guidance

In addition to the Powys CC guidance already stated in the applicants documents the following should be referred to in the assessment:

The Historic Environment (Wales) Act 2023 which can be viewed here:

<https://www.legislation.gov.uk/asc/2023/3/contents/enacted>

Planning Policy Wales Edition 11, February 2021 (PPW) (Welsh Government, 2021).

Technical Advice Note 24: The Historic Environment (May 2017) (Welsh Government, 2017).

Cadw guidance documents: Heritage Impact Assessment in Wales (May 2017) (Cadw, 2017a) and the Setting of Historic Assets in Wales (Cadw, 2017b).

Cadw Conservation Principles (March 2011) (Cadw, 2011).

Principles of Cultural Heritage Impact Assessment in the UK (IEMA, IHBC, ClfA 2021)

Natural Resources Wales (NRW) Guide to using the Register of Landscapes of Historic Interest (NRW, 2007).

CIFA Standard and Guidance for Historic Environment Desk-Based Assessment (Chartered Institute for Archaeologists (ClfA, 2020).

CIFA Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (ClfA 2020).

CIFA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA June 2020)

CIFA Standard and universal guidance for field evaluation (ClfA Dec 2023)

DBA and Walkover Survey

A detailed desk-based assessment and transect walkover of the whole Site red boundary area would be required unless otherwise agreed. Normally the study area will extend to 5 and 10 km (occasionally 20km) radii from the red boundary area for designated monuments (to be agreed with Cadw and the Powys CC Built Heritage Conservation Officer) and out to 2km from the red boundary for non-designated sites in terms of indirect (setting) impacts.

The DBA and walkover should be supplemented by information from the new National Wales 1 metre DTM and DSM Lidar datasets from NRW here <https://datamap.gov.wales/maps/lidar-viewer/view#/> where first clicking on the WG Lidar 2020-22 tile index in the left menu and then zooming in on the map will present the relevant area tiles. These tiles can be clicked on to get links to the DTM and DSM tiles for processing and visualisation. Any new sites located on the lidar must be verified on the ground by the

archaeological team and mapped, described, photographed and interpreted with images and an accompanying gazetteer of sites included in the report. All sites should be categorized for their importance and the significance of impact stated.

In addition the DBA should include the following sources as a minimum:

Designated asset data from Cadw (<http://historicwales.gov.uk>)

Archaeological records held by the National Monuments record RCAHMW including information on historic place names <https://rcahmw.gov.uk/discover/list-of-historic-place-names/>

Archaeological records held by Clwyd-Powys Archaeological Trust HER (via direct consultation with the HER team her@cpat.org.uk and not just relying on Archwilio data)

Conservation Area details from Powys County Council.

LANDMAP datasets from NRW for Cultural Landscape and Historic Landscape aspect areas and associated character areas with the significance of impact to be quantified.

Maps, plans and documents held in the Powys Archives.

Maps, plans and documentary sources held at National Library of Wales including the Tithe Maps of Wales <https://places.library.wales/home>

Aerial photos held by the Central Register for Aerial Photography Wales

(CRAPW) <http://aerialphotos.wales.gov.uk/> and the National Monuments Record RCAHMW

Readily available and relevant primary and secondary published sources and unpublished

archaeological reports.

ZTV / cumulative ZTV from blade tip to determine those heritage assets which will be affected visually for subsequent setting impact assessments.

Findings of other environmental topics (landscape, peat, water, soils, noise, & vibration).

Geophysics and Evaluation Trenching

During the iterative design process, and depending on the feedback from the DBA and walkover surveys, there may be a requirement to gather more information on the sub-surface archaeological potential of the development area, which will not normally be apparent from a desk based and walkover study alone. This requirement would be triggered by clusters of surface monuments suggesting high levels of nearby activity, typically prehistoric funerary and ritual monuments, for which associated sub-surface archaeology may be present, but cannot be properly quantified and located. It may also be triggered where prior surveys cannot accurately define the nature of a surface or sub-surface features without retrieving more information. CPAT would advise on the need for geophysical survey after the DBA and walkover survey reports have been presented to them for comment. If geophysical anomalies are located but are not diagnostic enough to allow informed opinions on dating, function, level of preservation and importance then additional intervention by targeted evaluation trenching may also be required within the assessment stage and in accordance with Planning Policy Wales and TAN24.

Paleoenvironmental Potential

The impact on intact peat deposits which may contain important paleoenvironmental evidence and artefacts of prehistoric date should be assessed. There may be some surface exposures of peat, boggy areas and pools within the development area which may indicate the sub-surface presence of peat deposits. Figure 8.4a Superficial Geology seems to indicate two locations of peat on the top of the hills but it is not clear how comprehensive this peat mapping is. Normally the peat deposit depths and extent will be mapped as part of the NRW Peat Management Plan requirements and in archaeological terms we would generally be interested in any peat deposits deeper than 0.40 m although shallow deposits can also be archaeologically significant. The turbine and infrastructure layout should seek to avoid all peat deposits. Where significant peat deposits cannot be avoided a suitable scheme of sampling, analysis, dating and reporting will need to be completed using appropriate sampling techniques advised by a paleoenvironmental/geoarchaeological

specialist.

Timing of the EIA Survey Window for Cultural Heritage Assessment

A realistic time period should be set aside to complete the archaeological assessment, reporting and mitigation discussion before the application is formally submitted for examination and in accordance with guidance on pre-determination archaeological evaluation set out in Technical Advice Note 24 (May 2017): Paragraph 4.7 and Planning Policy Wales (Feb 2021): Paragraph 6.1.26 Failure to complete the appropriate surveys may result in delays at the examination stage if we have to ask for additional information to be supplied. The applicant should therefore adjust their application submission dates if necessary to ensure these surveys are fully completed.

Project Design Approval, Archiving and Reporting of Archaeological Assessments

With regard to reporting and archiving of any archaeological reports produced by the archaeological consultants/contractors for this assessment it should be noted that a high resolution digital pdf will be required by the CPAT Historic Environment Record to be sent via HEDDOS <https://cpat.org.uk/heddos.html> in accordance with the Welsh Archaeological Trusts HER submission guidelines here <https://cpat.org.uk/curatorial-services/historic-environment-record/#page-content> and the full digital archive will need to be forwarded to the National Monuments Record, RCAHMW, Aberystwyth and/or the Archaeology Data Service in accordance with their submission guidelines.

We will need to approve a Written Scheme of Investigation (WSI) document (sometimes called a project design) before any new assessment work commences and WSI's will be required for any additional geophysics and evaluation trenching also. All WSI's and resulting final reports must include a Data Management Plan (updated for final report), Archive Selection Strategy, Archive Content List and Archive Deposition Location Statement

Further Consultation & Communication

We would welcome further direct correspondence and communication with the archaeological consultants/contractor who are engaged to complete the cultural heritage assessment as part of an iterative design process, and we would also wish to see copies of any cultural heritage assessment reports completed as the design process moves forward. We would expect to be consulted on the draft final ES cultural heritage chapter before it is submitted for examination.

Questions for Consultees

Question 7.1: Do consultees consider the study areas appropriate? Chapter 7 Archaeology

We consider the study areas appropriate.

Question 7.2: Are there any other relevant consultees who should be consulted about this topic?

Cadw cadwplanning@gov.wales

Powys CC Built Heritage Conservation Officer [REDACTED]

Question 7.3: Are consultees aware of any other supplementary guidance of relevance to assessment of effects to historic assets?

The Historic Environment (Wales) Act 2023 which can be viewed here: <https://www.legislation.gov.uk/asc/2023/3/contents/enacted>

Powys CC Archaeology and Historic Environment Supplementary Planning Guidance documents here <https://en.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG-and-Supporting-Policy>

Also see sources listed in DBA and Walkover section above

Question 7.4: Is the approach to the assessment of effects, including those effects scoped in and out and the cumulative assessment, appropriate?

Yes.

The 'importance' of each asset (High to Low) which may be impacted by any part of the scheme directly or indirectly, must be clearly tabulated in the report against each named asset (with PRN or other identifier).

Clear and specific mitigation must be proposed in the ES and report for all sites affected directly or indirectly by the proposed development.

Question 7.5: Is the approach to field survey considered appropriate?

Yes, but in relation to 7.27 the former RCAHMW upland survey extent should be clarified and all areas within the Site red boundary that were not covered by 30m walkover transects should be assessed in this way to identify potentially unrecorded sites that may be affected directly or indirectly (setting).

7.27 Mentions only a selection of photos in the report for sites identified on the walkover but it would be preferable to have photos of all of them with a visible scale (maybe in an appendix) so that we can verify the interpretation and identification of the features for ourselves.

See comments in Paleoenvironmental Potential above - the potential for peat deposits of paleoenvironmental value which may be impacted at the construction stage should be assessed.

See comments in DBA and Walkover section above.

Question 7.6: Are consultees content with the proposed approach to scope out 'Likely Effects Scoped Out' from the ES?

Yes

Question 7.7: Are consultees aware of any non-statutory stakeholders that should be consulted?

No

PCC Environmental Protection

6th Feb 2024

I have had a look at the EIA scoping report and I am satisfied in respect of noise that they have identified the correct guidance in ETSU -R-97 and the IOA guidance and they are intending to use.

Naturally we will be more interested in the detail proposal for assessment at the appropriate time, however at this stage I have no further comments to make

PCC-Outdoor Leisure & Recreation
(South)

23rd Jan 2024

With regards to the planning application Ref: 23/1923/PRL, Aberedw Energy Park, Aberedw Hill, Builth Wells

Powys County Council's, Countryside & Outdoor Recreation Service would be interested if there are any Section 106 contributions that were to be made available from the proposed development in Aberedw.

Any contributions received would be allocated to our various parks and fixed Children's playgrounds that are sited within the Builth Wells area.

PCC Ecologist

Scoping response Aberedw Hill CAS-03009-N5D9K8 – public rights of way, common land and access land, 27th March 2024:

The proposals at Aberedw Hill will have both direct and indirect impacts on public rights of way, common land and access land as set out below. Consideration of these impacts should form part of the Environmental Impact Assessment.

1. There are 21 public rights of way within the proposed red line development area; 16 footpaths and 5 bridleways. Those which are directly affected by the information supplied in the EIA scoping request are listed below, once further information on track layouts and borrow pits is submitted it is likely this will increase:

Path Number	Path Status	Notes
102/2090	Footpath	
102/2091	Footpath	In T13 topple zone
102/2092	Footpath	In T7, T8, T9, T10, T11 & T12 topple zone
102/2093	Footpath	In T2 & T4 topple zone
102/2094	Footpath	In T5 topple zone
102/2095	Footpath	In T4 topple zone
102/2096	Footpath	
102/2097	Footpath	
102/2098	Footpath	
102/2099	Footpath	
102/2101	Footpath	In T7 & T8 topple zone
102/2102	Footpath	
102/2108	Footpath	
113/1755	Footpath	
113/1758	Bridleway	In T15 & T16 topple zone
113/1759	Bridleway	
113/1761	Bridleway	In T17 & T18 topple zone
139/1722	Footpath	In T5 & T6 topple zone
139/1726	Footpath	
139/1736	Bridleway	
139/1737	Bridleway	

Mapping to show the paths can be found and the digital data downloaded free of charge at: <https://en.powys.gov.uk/article/13184/Public-Rights-of-Way-Map>

2. The development also takes in a significant area of designated open access land, where the public has a right of access on foot for recreation. As the developer acknowledges, part of this is registered common land, being RCL046 (known as Aberedw Hill common.) Common land does benefit from a high degree of legal protection. Under section 38 of the Commons Act 2006, it is unlawful for 'restricted works' to take place on common land without prior consent. The developer will need to obtain common land consent as a secondary consent for any changes to the access track, new access tracks, fences, ditches, embankments or other work on the common.
3. Off site works, can have the potential to directly affect public rights of way, such as temporary road works to accommodate abnormal loads. All have the potential to

have a direct impact on public rights of way, but there is insufficient information to comment at this time.

4. Several bridleways cross the site; the British Horse Society's (BHS) guidance is that there be a minimum separation distance of 200m or three times blade tip height (whichever is greater) between turbines and the nearest bridleway. However, the need to assess individual sites is recognised, so it is recommended that the developer consults with the BHS directly via access@bhs.org.uk. The developer should give consideration to provision of alternative routes for the lifetime of the development, with particular reference to the needs of equestrians.
5. There are a number of public rights of way within topple zones of turbines and micro-siting of turbines may increase this. If turbines are located on the public rights of way, or the public rights of way are within topple zones, then a permanent legal diversion will be required, as a secondary consent, before any construction affecting the line of the public right of way can commence. This has been raised during the Inception Meeting (2nd Oct 2023) and shown in the included meeting notes; that the developer indicates that they may be seeking a secondary consent under s247 TCPA 1990. Details of any proposed diversion route must be agreed with the Countryside Access and Recreation team beforehand, to ensure that the diversion route is appropriately located for accessibility, maintenance and connections with the surrounding network.
6. New access tracks constructed for the wind farm can adversely affect the public rights of way due to changes of level and surfacing, new drainage ditches, culverts and fencing. These details must be agreed with the Countryside Access and Recreation team in advance, at all locations where an access track will cross or coincide with the line of a public right of way. Conversely, new access tracks may provide useful permissive routes for the public, for the lifetime of the development and this should be considered in an access strategy for the site.
7. If borrow pits are to be used for quarrying stone for the access tracks, the locations need to be sited away from the public rights of way to ensure that gradients and surface levels are not changed. Transportation of material from the borrow pits to the turbine tracks should be managed to minimise disturbance to the public rights of way.
8. Temporary closures of public rights of way may be required during construction. Details of the phasing and timing of these closures and any alternative routes must be agreed with the Countryside Access and Recreation team before work commences. The developer must also note that there is a lead time of up to 10 weeks to implement a new temporary closure and must plan their activities and liaise with the Countryside Access and Recreation and Streetworks teams accordingly.
9. Temporary site compounds, cables and substations and environmental measures such as new fencing and watercourses or ponds may also impact on public rights of way. These features must be located to avoid public rights of way.
10. The proposed Traffic Management Plan must consider the impact of both construction and maintenance traffic and associated works on all public highways, including public rights of way and open access land. This will allow for appropriate mitigation to be considered from the outset in consultation with the Countryside Access and Recreation Team.

11. The proposals will impact on outdoor recreation opportunities within the site, which is within 5km of Builth Wells, Aberedw & Franksbridge. The importance of public rights of way and other outdoor recreation opportunities for our residents and visitors are highlighted in the Council's Rights of Way Improvement Plan 2018-28, which can be found at: <https://en.powys.gov.uk/article/2439/Rights-of-Way-Improvement-Plan>

The Rights of Way Improvement Plan sets out the Council's strategic aspirations in terms of maintaining and enhancing the public rights of way network. Open, waymarked and easy to use paths are key to realising the benefits of public rights of way for health and wellbeing and for their economic benefits.

12. We note that the developer acknowledges the need to explore mitigation in relation to impacts on public rights of way and access to the countryside. The Countryside Access and Recreation team seek the following mitigation:
- a. That the developer ensures that the public paths within the site are fully open for use and where appropriate, seeks to enhance the paths e.g. via replacement of stiles with gates and improved drainage and surfacing.
 - b. Section 106 funds to enhance off-site public rights of way and open access land, payable on commencement of development.

The developer can contact the Countryside Access and Recreation team via rights.of.way@powys.gov.uk to discuss the points above.

Ein cyf/Our ref: CAS-245038-R2M8
Eich cyf/Your ref: CAS-03009-N5D9K8

Planning & Environment Decisions Wales (PEDW)
Crown Buildings
Cathays Park
Cardiff
CF10 3NQ

Dyddiad/Date: 25 January 2024

Annwyl Syr/Madam/Dear Sir/Madam,

**TOWN AND COUNTRY PLANNING ACT 1990
THE DEVELOPMENTS OF NATIONAL SIGNIFICANCE (PROCEDURE) (WALES)
ORDER 2016
TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT)
(WALES) REGULATIONS 2017**

BWRIAD/PROPOSAL: Aberedw Energy Park: The proposed development will include the construction of an energy park, consisting of 18 turbines at 200m tip height, with a wind generating capacity of 108 MW. The development will also include off-site highways improvement works.

LLEOLIAD/LOCATION: Aberedw Hill, 3 km east of Builth Wells, Powys (Grid Ref: SO 09599 48767)

Thank you for referring the above proposal for a scoping opinion, which we received on 15th December 2023. Natural Resources Wales (NRW) has reviewed the following information:

- Aberedw Energy Park – Scoping Report – Prepared by LUC dated December 2023
- Scoping figures Chapter 1-3
- Scoping Figures Chapter 4
- Scoping Figures Chapter 5-12

Please note that our comments are without prejudice to any comments we may wish to make when consulted on any subsequent planning applications or on the submission of a more detailed scoping report or the full Environmental Statement (ES). At the time of any planning application there may be new information available which we will need to consider in making a formal response.

These comments include those matters NRW consider will need to be taken into consideration and applied to the Environment Impact Assessment (EIA) and the resulting ES. Our comments are set out below following the chapter order in the Scoping Report and we have provided advice where relevant to matters that fall under our remit.

Protected Sites

River Wye Phosphorus Sensitive Catchment

We note the application site is within the catchment of the River Wye Special Area of Conservation (SAC). As you are aware, on the 21st January 2021, we published an evidence package outlining phosphorus levels for all river SACs across Wales. In line with our [Planning Advice](#) (August 2023), under the Habitats Regulations, Planning Authorities must consider the phosphorus impact of proposed developments on water quality within SAC river catchments. We therefore advise you to consider whether the proposals, as submitted, would increase the volume of foul discharge from the site in planning terms.

Whilst upon reviewing the scoping report, it is not clear whether any permanent foul drainage facilities will be located on the site. However, we note that paragraph 8.49 of the Scoping Report states that the Outline CEMP will include measures such as '*provision of Site-Worker accommodation and sanitation facilities*'. We assume that this maybe portaloo's managed by a licensed waste carrier. We advise that any application made is accompanied by the relevant information as set out below.

If the foul water is to be transported and treated (in accordance with the appropriate regulations) at a suitable Wastewater Treatment Works (WwTW) outside of a Phosphorus Sensitive Catchment with the relevant Environmental Permits in place, then we are satisfied that the increase in discharge is unlikely to have an adverse effect on site integrity.

Should the waste carrier dispose of the foul water to a WwTW within a Phosphorus Sensitive catchment, then our Planning Advice (August 2023) for '*proposals involving connection to public wastewater treatment works*' should be followed.

This states that a conclusion of no likely significant effects can be reached if:

- *the environmental permit for the associated wastewater treatment works has been reviewed against revised conservation objectives for water quality.*
- *there is capacity in place to accommodate the additional wastewater in compliance with revised permit limits.*
- *the sewer network and associated WwTW has the hydraulic capacity for new connections without leading to an increase in the environmental impact of storm overflows.*

The relevant sewerage undertaker, as a statutory consultee, on the potential for a development to connect to a public sewer, would need to confirm:

- *there is capacity to treat additional wastewater from the proposed development within revised environmental permit limits, or*
- *the necessary treatment capacity to remain within revised environmental permit limits will be delivered within the agreed Asset Management Plan (AMP) and that when implemented the treatment capacity will ensure that additional wastewater generated in consequence of proposed development will remain within the revised permit limits and*
- *that the sewer network and associated WwTW has the hydraulic capacity to accommodate additional wastewater without contributing to an increase in frequency or duration of storm overflows.*

Hydrology and the River Wye SAC

As the site has multiple watercourses, that if altered, has the potential to impact the features of the River Wye SAC (please refer to Ecology/Fish and also Water and Soil/Hydrology sections of this letter for further details), we advise that the following regulations should be considered in respect of the River Wye SAC.

- As noted within 5.30 of the scoping report: The Conservation of Habitats and Species Regulations 2017 (as amended), and also
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017

Question 2.1: Are there other wind farm proposals or other developments that should be considered in the cumulative assessment?

In respect of information within table 2.3. Should several of the developments and a grid connection project happen at similar times there may be increased in combination risks if pollution control measures are not managed effectively. Evidence of risks and effective management will need to be considered to ensure safeguards to water environment are effective in relation to the River Wye SAC.

Colwyn Brook Marshes Site of Special Scientific Interest (SSSI)

Question 8.3: Please can NRW comment on the Proposed Development in relation to potential interaction with the Colwyn Brook Marshes SSSI. Particularly in relation to its geomorphological habitats including quaking bogs, transition mires and flood plains. In addition, what actions are required to maintain a favourable condition?

Please see Hydrology Advice (within Water and Soil Resources section below).

Landscape

Our landscape planning advice relates to the landscape character and visual amenity of the Bannau Brycheiniog National Park (BBNP) and its setting, and the statutory purpose of the designation to conserve and enhance its natural beauty.

Our advice is based on the Aberedw Energy Park Scoping Report, December 2023 prepared by LUC (Scoping Report). In particular:

- Chapter 4: Landscape and Visual Amenity
- Figures 4.1 – 4.16 which include Zone of Theoretical Visibility (ZTV) Analysis (Figures 4.12 – 4.15).

The main component of the proposed development is 18 wind turbines with a maximum blade tip height of 200m. The closest turbine is located approximately 14km north of the BBNP. The proposed turbines are located outside of a Pre-Assessed Area (PAA) for Wind Energy in Future Wales: The National Plan 2040 (FW). In line with FW Policy 18, the proposals should not have an unacceptable adverse impact on the surrounding landscape, particularly on the setting of the BBNP, and cumulative impacts must also be considered.

Our advice below addresses the questions on pages 82 and 83 of the Scoping Report relevant to our remit on designated landscapes.

LVIA Search Area and Scope

Section 4.4 states the LVIA 'Search Area' will initially cover 33km from the outermost turbine. We are satisfied with this distance and note it was derived from NRW Guidance Note (GN) 46. Search Areas are used to identify the extent of the LVIA 'Study Area' – the geographical area in which landscape and visual receptors are assessed.

GN 46 provides approximate Study Area distances based on different height ranges for vertical structures. These distances are a starting point for discussion and not necessarily definitive. The individual circumstances and context will influence the final extent of the Study Area and GN 46 advises for this to be informed by LANDMAP filtering.

As a starting point for discussions, GN46 advises 26-28km is an approximate 'Study Area' for turbines between 176-225m tall. A 28km study area is proposed to be used in the LVIA. Within the 28km study area, the following will be scoped in to the LVIA:

- landscape effects on special qualities of the BBNP and Dark Sky Reserve
- visual effects on visitors to the BBNP.

We are satisfied with these receptors but advise highly sensitive receptors on iconic summits in the central beacons (e.g., Pen y Fan, Corn Du, Cribyn, Fan y Big) will be omitted from the LVIA. These summits lie within the Search Area, approximately 30km from the outermost turbines. The ZTV shows up to all 18 turbines would be visible at hub height from these locations (Figure 4.14). **We advise extending the study area to include a viewpoint from one of these summits.**

Effects on landscape character beyond 10km of the proposed turbines are proposed to be scoped out of the LVIA (Table 4.14). We advise the current approach outlined in the Scoping Report does not accord with GN 46 because:

- LANDMAP aspect areas within the search area have not been identified (only those in the 10km area) and
- filtering has not been undertaken to demonstrate that a 10km area is appropriate.

GN 46 advises the retention of all filter 3 aspect areas that are within the study area plus those aspect areas outside the study area that might contain highly sensitive visual receptors within the search area. We advise that, if undertaken, the filtering exercise would result in aspect areas outside of the 10km area being identified. Using a different approach to GN 46 will result in potentially significant effects on aspect areas being missed or overlooked in the LVIA.

We understand landscape reporting units in the LVIA will be local landscape character areas not LANDMAP aspect areas, however the same principles outlined in GN 46 apply regarding the need to identify the extent of landscape which the development may influence in a significant manner. Based on the nature of the proposal and the sensitivities of the landscape within the BBNP, we advise landscape character areas within the BBNP, and study area should be scoped in. Not least because an assessment of effects on the natural beauty and special qualities of the BBNP should be informed by an assessment of the effects on landscape character.

Therefore, we do not agree that landscape character effects beyond 10km should be scoped out of the EIA.

Viewpoints and Visualisations

Two viewpoints (VP) within the BBNP will be included in the LVIA. These are VP 16 (Hay Bluff) and VP 17 (Twyn y Gaer) which are based on Key Views 25 and 14 identified in the NRW dataset on Visible settings of Designated Landscapes and Key Views.

We are satisfied with the inclusion of VP 16 from Hay Bluff but question the inclusion of VP 17. Whilst we understand the reasoning for its selection, the ZTV (Figure 4.14) indicates greater visibility on other nearby summits e.g. Cefn Llechid. **We recommend this is checked on site and if appropriate, VP 17 should be replaced with a viewpoint from e.g., Cefn Llechid.**

The ZTV shows extensive visibility of up to all 18 turbines at hub height from the northern ridges and slopes of the central beacons e.g., Allt Ddu, Cefn Cyff, within the study area (Figure 4.14). No viewpoint is included from this area, and we consider this to be an omission. **As outlined above, we advise that an additional viewpoint is included from one of the summits on the central ridge (e.g. Pen y Fan). This additional viewpoint may also serve to represent the impact on receptors on these ridges and slopes e.g., Allt Ddu, Cefn Cyff.**

We are satisfied with the approach to visualisations on Pages 74 and 75 of the Scoping Report. Photomontages and cumulative wirelines will be prepared from all viewpoints and in accordance with Landscape Institute Technical Guidance Note 06/19 (2019) Visual Representation of Development Proposals, and Scottish Natural Heritage (2017) Visual Representation of Wind Farms Guidance. Version 2.2.

We note the LVIA will include a night-time photomontage from within BBNP (para 4.111). **We advise at least one night-time viewpoint should be taken from a location within the BBNP where dark skies are likely to be best experienced e.g. away from sources of light pollution such as settlements and roads.**

Methodology

We are generally satisfied with the methodological approach for the LVIA outlined in the Scoping Report and agree with the approach whereby effects of 'moderate' and above will be considered significant in the context of the EIA Regulations.

In the example given at Para 4.92, when determining overall effects, it is not clear why the LVIA methodology would place greater weight on the magnitude of change over sensitivity, even if only slightly. We advise that all judgments should be clearly reasoned, explaining how and why the judgement was reached.

We are satisfied with the proposed approach to cumulative LVIA set out on Page 72 of Scoping Report.

Approach to Mitigation

With reference to Paragraphs 4.6, 4.25, and Footnote 16, we advise the latest Management Plan for Bannau Brycheiniog National Park is *Y Bannau: The Future - 2023-2028*. Stated Special Qualities of the BBNP are headlines and any assessment of the impacts on these qualities should be informed by detailed supporting evidence, including that found in e.g., the Brecon Beacons National Park Landscape Character Assessment, August 2012, LANDMAP, and NRW evidence on Tranquillity and Place (Report No: 569) and dark skies (Report No: 514).

With reference to Paragraph 4.56, we advise design guidance to support Future Wales Policies 17 and 18 has now been published (*Designing for Renewable Energy in Wales, Design Commission for Wales, November 2023*). This guidance recognises the importance of landscape informing the design of large-scale renewables, and states '*Landscape should be the leading consideration in this process and not merely follow on in the form of 'landscape mitigation' of a predetermined engineering proposal and technical appraisal*' (page 19). As also set out in Planning Policy Wales (5.9.21), '*low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures*' which we advise include the number, siting, and layout/arrangement of turbines.

The Scoping Report states that '*the key principle for the mitigation of landscape and visual effects of the Proposed Development will be the iterative design of the wind turbine layout and associated infrastructure*' (Para 4.122). Determining the appropriate turbine layout should be based on rigorous analysis, testing and response to the landscape setting. We expect the ES will explain how the findings of the LVIA have informed the design process, including the location, scale, number, siting, and layout/arrangement of the turbines.

Regarding the list of LVIA mitigation at Para 4.123, we advise other key issues to address through design include (inter alia):

- Avoiding uneven visual densities, outlier / isolated turbines or separate groups which result in unbalanced appearance or additional effects.
- Avoiding appearance of stacking / overlapping turbines as far as possible from key viewpoints e.g., within the BBNP.
- Siting and designing turbines to avoid or respond to skylines experienced from key viewpoints e.g., within BBNP.

Ecology

In general the EIA for this development should include sufficient information to enable the local planning authorities to determine the extent of any environmental impacts arising from the proposed scheme on legally protected species, including those which may also comprise notified features of designated sites affected by the proposals.

Evaluation of the impacts of the scheme should include: direct and indirect; secondary; cumulative; short, medium and long term; permanent and temporary; positive and negative, and construction, operation and decommissioning phase and long-term site security impacts on the nature conservation resource, landscape and public access.

Description of the Project

Within the EIA, the proposed scheme should be described in detail in its entirety. This description should cover construction, operation and decommissioning phases as appropriate and include detailed, scaled maps and drawings as appropriate.

Illustrations within the Environmental Statement

Any maps, drawings and illustrations that are produced to describe the project should be designed in such a way that they can be overlaid with drawings and illustrations produced for other sections of the EIA such as biodiversity.

Description of Biodiversity

The EIA must include a description of all the existing natural resources and wildlife interests within and in the vicinity of the proposed development, together with a detailed assessment of the likely impacts and significance of those impacts.

Significance and Favourable Conservation Status

We advise that EIA considers significance (both alone and in combination) and where applicable conservation status. In respect of conservation status, we advise consideration to be given to current conservation status (CCS), and demonstration of no likely detriment to maintenance of favourable conservation status (FCS) during construction operation and decommissioning phases of the scheme. Reference to CCS and FCS in accordance with [EC Guidance](#)¹ is advocated.

Key Habitats

Any habitat surveys should accord with the NCC Phase 1 survey guidelines (NCC (1990) Handbook for Phase 1 habitat survey. NCC, Peterborough). We advise that Phase 1 surveys are undertaken and completed during the summer to ensure the best chance of identifying the habitats present. We also advise that Habitats Directive Annex 1 habitats are identified as part of this assessment.

Protected Species

We advise the site is subject to assessment to determine the likelihood of protected species and that targeted species surveys are undertaken for all species scoped in. These should comply with current best practice guidelines and if the surveys deviate or there are good reasons for deviation that full justification for this is included within the EIA.

Should protected species be found during the surveys, information must be provided identifying the species-specific impacts in the short, medium, and long term together with any mitigation and compensation measures proposed to offset the impacts identified. We advise that the EIA sets out how the long-term site security of any mitigation or compensation will be assured, including management and monitoring information and long term financial, tenure, and management responsibility. Where the potential for significant impacts on protected species is identified, we advocate that a Conservation Plan is prepared for the relevant species and included as an Annex to the EA. In respect of European protected species, we advise consideration of Section 3.3.2 of [Guidance on the strict protection of animal species of Community interest under the Habitats Directive](#)

Where a European Protected Species is identified and the development proposal is predicted to likely contravene the legal protection they are afforded, a licence should be sought from NRW. The EIA must include consideration of the requirements for a licence and set out how the works will satisfy each of the three requirements as set out in the Conservation of Habitats and Species Regulations 2017 (as amended).

Where a European Protected Species is present and a development proposal is likely to contravene the legal protection they are afforded, the development may only proceed under licence issued by Natural Resources Wales, having satisfied the three requirements set out in the legislation. A licence may only be authorised if:

- (a) It satisfies an appropriate derogation or licencing purposes, which in the case of development is most likely to be preserving public health or safety, or for other imperative reasons of overriding public interest, including those of a social or

¹ [EUR-Lex - C\(2021\)7301 - EN - EUR-Lex \(europa.eu\)](#). See section 3.2.3.b) re conservation status

economic nature and beneficial consequences of primary importance for the environment;

(b) There is no satisfactory alternative and

(c) The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in its natural range.

These requirements are translated into planning policy through [Planning Policy Wales \(PPW\) Edition 11](#) dated February 2021, sections 6.4.22 and 6.4.23 and Technical Advice Note (TAN) 5, Nature Conservation and Planning (September 2009). The planning authority should take them into account when considering development proposals where a European Protected Species is present and *avoid developments with planning permission subsequently not being granted derogations in relation to European protected species, planning authorities must take the above three requirements for derogation into account when considering development proposals where a European protected species is present*

Local Biodiversity Interests

We recommend that the developer consults the local authority Ecologists on the scope of the work to ensure that regional and local biodiversity issues are adequately considered, particularly those habitats and species listed in the relevant Local Biodiversity Action Plan, and areas that are considered important for the conservation of biological diversity in Wales.

NRW would expect the developer to contact other relevant people/organisations for biological information/records relevant to the site and its surrounds. These include the relevant Local Records Centre and any local ecological interest groups (E.g. bat groups, mammal groups).

Legislation and Policy Compliance Review

We advise that provisions of the EIA audit compliance in respect of relevant nature conservation legislation (UK and Wales) together with relevant local and national policies including BS 42020:2013.

Fish

Rivers and streams are included in the Section 7 list of habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales under the Environment (Wales) Act 2016. Atlantic salmon, brown trout and other species are included in the Section 7 list of species of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales under the Environment (Wales) Act 2016. We advise that the potential impacts on these species and habitats have not been adequately considered, i.e. what fish species are considered to be present within and in close proximity to the site.

Habitat fragmentation caused by watercourse crossings needs to be considered. Pollution impacts on watercourses within the site should also be considered. Death, injury and or disturbance to fish should be assessed.

A Water Framework Directive (WFD) assessment will be required to illustrate that the WFD objectives of the waterbodies concerned will not be impacted. This should include assessment of potential impacts on the fish element of WFD classification.

Table 5.2

We do not agree that potential effects on fish should be scoped out. There is insufficient justification for this currently, with no details of potential impacts on fish through construction of watercourse crossings etc.

Response to consultee questions

Question 5.1 – No: with regards to (Fish only), please see advice above.

Question 5.2 – No comment, Please see advice above.

Question 5.3 – No comment, Please see advice above.

In addition to the above we advise that the applicant should have regard to the differentiation of current conservation status (CCS) and favourable conservation status (FCS) at various spatial scales. Reference to [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C\(2021\)7301](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C(2021)7301) is advocated; the need to differentiate between significance from an EIA perspective and demonstration of no detriment to maintenance of FCS for each local population of EPS; and the need to consider monitoring and prevention of “incidental” injury to EPS during the construction phase of the proposals.

Ornithology

Ornithological receptors 6.6 (page 106) – this should also include species listed under Section 7 of the Environment Act (Wales) 2016 that may be susceptible to displacement or collision risk from wind turbines.

Question 6.1: Do consultees agree that the desk and field surveys undertaken provide a sufficient baseline to allow the assessment of effects on ornithology?

Yes, the surveys to date. More detail regarding the surveys in 2024 is needed for NRW to determine with any confidence that these surveys will provide an adequate update. The surveys in 2024 should, however, include breeding waders among the target species. Any desktop survey completed should also be updated.

Question 6.2: Do consultees agree with the assessment method (including scoped in/scoped out effects)?

We agree with the assessment method proposed. At this stage the ornithological receptors scoped in/out appear appropriate. This comment is made without prejudice to future comments we may make in relation to ornithological receptors scoped in/out once we have had the opportunity to review the full and updated survey results and collision risk modelling.

Question 6.3: Do consultees hold any data sets that could be made available to inform the assessment?

We are currently in the process of compiling records in relation to priority species (e.g. curlew) which we may be able to share in the future depending on data sharing agreements with data owners.

Question 6.4: Do consultees agree that the proposed mitigation options provide suitable methods to offset any identified significant effects?

Broadly the options listed within “Approach to Mitigation” (page 117) have the potential to offset impacts arising from development of this nature. However, NRW will comment further any proposed mitigation once in receipt of full details, including the results of surveys.

We would also expect the development and provision of a collision risk and mitigation plan, which should include details of post construction monitoring for collision risk (including carcass searches) and steps that would be taken if collision mortality is significantly higher than predicted by the collision risk models.

In addition, we recommend that the applicant refers to the Wales Action Plan for the Recovery of Curlew, see [Conservation Partnership | Curlew Wales](#). This is particularly important if the application site abuts/ is close by an Important Curlew Area (ICA) ICA 11 - Ireland Moor. Therefore, at this stage impacts on curlew cannot be discounted – as we have not seen the full results of the surveys nor the desktop. We are aware of the breeding curlew within general area and are currently working on approaches to data sharing with the data owners. Dependent on the impacts on curlew, we would need to consider both within and off-site approaches to mitigation.

Water and Soil Resources

Hydrology

The three distinct phases of this project – Construction, Operation, and Decommission, should be considered independently within the EIA. It is often within the Construction and Decommission phases however that the potential for unwanted environmental effects is the largest.

We do not agree that hydrology for the construction phase can be scoped out.

We advise decommissioning should also be scoped in.

Any intensive vehicular activity at the site will contribute to soil compaction and an increase in impermeable (or slowly permeable) surfaces. The subsequent increase in surface runoff may then increase soil erosion and the risk of flooding. Access roads are often located on steep slopes leading up to the windfarm, which can compound these effects. The use of techniques to minimise soil compaction is therefore recommended. If necessary, soil should be carefully removed and stored for subsequent reinstatement. Restricting access during wet conditions and using protective boarding and low ground pressure machinery can lessen these effects.

The development should avoid interception of subsurface drainage by trenches dug for cables (and pipelines where relevant). Unmitigated trench construction; backfill and gravel packing around cables/pipes or formal land drainage systems in sensitive areas may result in damaging flow paths developing during storms. Where a risk is identified, measures should be installed to prevent development of these preferential flow paths. For example, inclusion of impermeable bunds within trenches and use of backfill material with low permeability will help prevent possible wash-out along these trench lines. The requirement and impact of permanent or temporary land drainage systems during construction must be clearly assessed. Procedures must be included to ensure removal of any temporary works at the end of that phase.

A field survey should be undertaken to identify existing track crossings. Road layouts should avoid unnecessary interception and rerouting of surface water flows through road drainage

systems, and any crossings should be minimised. Like the concerns over interception of sub-surface flow, road construction may block the route of overland flow or run-off, therefore care should be taken where fill is laid. Cuts and associated drainage system can intercept and convey water to an alternative point of discharge. Access roads should avoid riparian zones. Interception and conveyance of sub-surface flow to an alternative point of discharge may increase drainage, leading to localised drying out of habitats. The hydrology for surface and subsurface water can be permanently altered during the construction phase.

A hydrological features survey will be required, extending to 500m beyond the site boundary. This should include springs, and the locations of private water supplies. The EIA should assess the risk to disruption of sub-surface flow in the context of spring flow for private water supply, and suitable mitigation should be proposed. Action plans to supply water to any affected property should be created as part of this mitigation proposal. Spring protection zones should be implemented to lower the risk of disruption, and site infrastructure should be placed away from any water features.

The report should also identify the main water courses and associated catchment or sub-catchment boundaries. One of the key principles for development should be to protect site hydrology, especially through maintenance of existing surface water features and the hydrological regime.

Where a surface water feature (e.g. stream, spring or depression that would discharge storm run-off) has been identified in the route of the road, an appropriately sized culvert should be used. This will then allow the existing water source to flow unimpeded along its natural course. An Ordinary Watercourse Consent will be required from the Local Authority for new surface water culverts, or alterations to existing structures along a minor watercourse. For main watercourses, a Flood Risk Activity Permit will be required from Natural Resources Wales before any works can start.

The developer should provide information describing any change to the existing surface water drainage that any component of the scheme may have. Greenfield run-off rates may need to be determined and suitable flow attenuation facilities (eg ponds or swales) installed within the drainage system. This is to ensure there is no increase in flood risk downstream of the development areas. All calculations or assumptions should be included in the report for subsequent verification by the Local Planning Authority Drainage Engineer.

Hydrogeology/Geomorphology: Groundwater Quality and Quantity

The site is intersected/interacted with several watercourses, springs, at least 4 known private water supplies on or within 50m of the site, superficial deposits with groundwater levels at less than 3m below surface and GWDTEs/6 NVCs and the additional potential for some degree of hydraulic connectivity between the site and the locally designated features such as Colwyn Brook Marshes SSSI.

Additionally, site hydrodynamics which include baseline drainage (includes Shallow groundwater flows) pathways must not be altered during the construction and operational phase to the detriment of features and receptors that currently rely upon those baseline drainage pathways. The Outline Drainage Strategy must therefore have a particular focus on how the current baseline drainage hydrodynamics may be interacted with/altered by the operating windfarm structure. The potential for this has not been reflected within the Outline Drainage Strategy sections of the report.

The EIA must include models of the groundwater environment and source-pathway-receptor to illustrate the nature of the Hydraulic linkages between site features/receptors such as watercourse, springs, private water supplies and designated areas/NVCs and the degree to which these linkages are interacted by construction and operation of windfarm infrastructure,

both individual infrastructure items and items in combination such as the operating access roads and drainage network.

The EIA should assess potential effects on the water environment during short, medium and longer timescales.

We agree with the intention to scope in effects of the development on hydrogeology, GWDTEs and water abstractions. We note the intention to include a water feature survey and an assessment of private water supplies in the location.

Land Contamination

Potential for incidences of turbine leakage and loss of turbine related chemicals such as hydraulic oils to ground/groundwater should be considered within pollution prevention plans.

Borrow Pits

It is unknown at this stage whether borrow pits are required. If borrow pits are to be used and dewatering is required, consideration should be given to the effects of dewatering on controlled waters identified in the water feature survey. Dewatering of foundations and borrow pits may lower groundwater levels locally and may derogate nearby domestic and licensed groundwater sources. If dewatering is proposed as part of these works an abstraction licence from NRW may be required. The granting of planning permission does not guarantee an abstraction licence under the Water Resources Act 1991.

Hydromorphology

With the abundance of watercourses onsite and potential for multiple stream crossings expected from this development may have a large impact on the hydromorphology of local watercourses, depending on the method of crossing (with a knock-on effect to the downstream waterbodies, such as the Wye SAC). We advise the assessment of potential impacts be considered early in the process to enable WFD compliance in the later stages of the development.

Flood Risk

The Scoping Report has correctly identified areas considered to be at risk of flooding on the Development Advice Map (DAM) and the Flood Map for Planning (FMFP).

As all the identified flood risk on the site is associated with ordinary watercourses then this will be largely for the Lead Local Flood Authority (LLFA) to consider under their remit for local flood risk. Any proposed works Ordinary Watercourses and the Flood Banks will require consultation with the LLFA in terms of the regulatory requirements under the Land Drainage Act 1991 (Ordinary Watercourse Consent).

Question 8.2 – The Local Authority are best placed to answer queries regarding Private Water Supplies.

Question 8.3: Please can NRW comment on the Proposed Development in relation to potential interaction with the Colwyn Brook Marshes SSSI. Particularly in relation to its geomorphological habitats including quaking bogs, transition mires and flood plains. In addition, what actions are required to maintain a favourable condition?

Please see hydrology advice above. Regarding potential for infrastructure/tracks impacting on hydrological inputs to the bog and fen on the site *Colwyn Brook Marshes SSSI*, the

current hydrological inputs from the Aberedw Energy Park direction should be surveyed and appropriate measures taken to not alter hydrological inputs to the SSSI.

Peat

Questions 9.1 to 9.2

We advise that as peat does not underpin a Special Site of Scientific Interest (SSSI) or Special area of Conservation (SAC) at the proposed application site we will not be providing specialist advice on the impacts to peat.

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully

Debra Renshaw

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning
Cyfoeth Naturiol Cymru/Natural Resources Wales

E-bost/E-mail: MidPlanning@cyfoethnaturiolcymru.gov.uk

Ffôn/Phone: [REDACTED]

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.

PEDW

Eich cyfeirnod
Your reference

CAS-03009-N5D9K8

Sent by email:

Ein cyfeirnod
Our referencePEDW.Infrastructure@gov.walesDyddiad
Date

17 January 2024

Llinell uniongyrchol
Direct lineEbost
Email:Cadwplanning@gov.wales

Dear Sir / Madam,

Aberedw Energy Park – Scoping Opinion

Thank you for your letter asking for Cadw's view on the above.

Cadw, as the Welsh Government's historic environment service, has assessed the characteristics of this proposed development and its location within the historic environment. In particular, the likely impact on designated or registered historic assets of national importance. In assessing if the likely impact of the development is significant Cadw has considered the extent to which the proposals affect those nationally important historic assets that form the historic environment, including scheduled ancient monuments, listed buildings, registered historic parks, gardens and landscapes.

These views are provided without prejudice to the Welsh Government's consideration of the matter, should it come before it formally for determination.

Advice

This advice is given in response to scoping opinion as to the contents of an Environmental Impact Assessment (EIA) that will be submitted in support of an application for Aberedw Energy Park.

The scoping request is accompanied by a scoping report prepared by LUC, which includes chapter 7 Archaeology and Cultural Heritage that outlines the proposed methodologies that will be used to compile this section of the EIA. It concludes with a request for answers to seven questions.

The answers to these are below:

Question 7.1: Do consultees consider the study areas appropriate?

Yes. We have identified the designated historic assets listed on Annex A as being inside the Core Study Area and within the applicant's ZTV. We expect that the impact of the proposed windfarm on all of these designated historic assets will be assessed in accordance with the Welsh Government guidance given in the document "The Setting of Historic Assets in Wales". We would expect a stage 1 assessment to be carried out for all of the above designated historic assets, which will determine the need, if necessary, for stages 2 to 4 to be carried out for specific historic assets. The results of the stage 1 assessment should be included in the EIA, possibly as an appendix.

Question 7.2: Are there any other relevant consultees who should be consulted about this topic?

We would expect the Clwyd-Powys Archaeological Trust (CPAT) to be consulted in regard to non-designated historic assets and the Powys County Council's Conservation Officer should be consulted in regard to listed buildings and their settings.

Question 7.3: Are consultees aware of any other supplementary guidance of relevance to assessment of effects to historic assets?

The Powys CC Archaeology and Historic Environment SPG documents available here <https://en.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG-and-Supporting-Policy>

It should be noted that the Historic Environment (Wales) Act 2023 will have been enacted before the EIA is completed and that many associated documents, such as TAN 24, will be updated in accordance with the Act.

Question 7.4: Is the approach to the assessment of effects, including those effects scoped in and out and the cumulative assessment, appropriate?

Yes.

Question 7.5: Is the approach to field survey considered appropriate?

The detailed archaeological survey undertaken on behalf of the Royal Commission on the Ancient and Historic Monument Wales (RCAHMW) in 2008 and 2012 were carried out before the use of Lidar to assist walkover surveys became available. As such, there is a need for these surveys to be supplemented by information from the new National Wales 1 metre DTM and DSM Lidar datasets, with any new sites identified requiring visits to confirm them and any necessary recording carried out.

The areas that were not included in the RCAHMW surveys will need to be fully considered by the use of Lidar and walkover surveys. Any new sites located on the Lidar must be verified on the ground by the archaeological team and mapped, described, photographed and interpreted with images and an accompanying gazetteer of sites included in the report. All sites should be categorized for their importance and the significance of impact stated in the EIA.

Section 7.29 of the scoping report states that Cadw and CPAT will be consulted in regard to the need for targeted geophysical survey post scoping. This consultation should follow the completion of the draft desk-based assessment and walkover survey and these reports should be included in this consultation. The requirement for geophysical survey would be triggered by clusters of surface monuments suggesting high levels of nearby activity, typically prehistoric funerary and ritual monuments, for which associated sub-surface archaeology may be present, but cannot be properly quantified and located. It may also be triggered where prior surveys cannot accurately define the nature of surface or sub-surface features without retrieving more information. If geophysical anomalies are located but are not diagnostic enough to allow informed opinions on dating, function, level of preservation and importance then additional intervention by targeted evaluation trenching may also be required within the pre-determination assessment stage and in accordance with Planning Policy Wales and TAN24.

The impact on intact peat deposits which may contain important paleoenvironmental evidence and artefacts of prehistoric date should be assessed. There may be some surface exposures of peat, boggy areas and pools within the development area which may indicate the sub-surface presence of peat deposits. Normally the peat deposit depths and extent will be mapped as part of the NRW Peat Management Plan requirements and in archaeological terms we would generally be interested in any peat deposits deeper than 0.4m although shallow deposits can also be archaeologically significant. The turbine and infrastructure layout should seek to avoid all peat deposits. Where significant peat deposits cannot be avoided a suitable scheme of sampling, analysis, dating and reporting will need to be completed using appropriate sampling techniques advised by a paleoenvironmental/geoarchaeological specialist.

A realistic time period should be set aside to complete the archaeological assessment, reporting and mitigation discussion before the application is formally submitted for examination and in accordance with guidance on pre-determination archaeological evaluation set out in Technical Advice Note 24 (May 2017): Paragraph 4.7 and Planning Policy Wales (Feb 2021): Paragraph 6.1.26. Failure to complete the appropriate surveys may result in delays at the examination stage if additional information is required. The applicant should therefore adjust their application submission dates if necessary to ensure these surveys are fully completed.

Question 7.6: Are consultees content with the proposed approach to scope out 'Likely Effects Scoped Out' from the ES?

Yes

Question 7.7: Are consultees aware of any non-statutory stakeholders that should be consulted?

No.

Yours sincerely

Nichola Smith
Historic Environment Branch

Annex A

Scheduled Monuments

Within the application area:

RD074 Aberedw Hill Round Barrows
RD166 Aberedw Hill Deserted Rural Settlement
RD169 Cwmblaenerw Enclosed Long Hut
RD170 Cwmblaenerw House Platforms

Within a 5km developer ZTV to blade tip:

BR031 Builth Castle
BR093 Caer Beris
BR168 Gwenddwr Deserted Village
BR206 Banc y Celyn Stone Circle
BR280 Cwmhindda Deserted Rural Settlement
BR281 Hendy Long Hut
BR399 Coed Chwefri Vickers Machine Gun Emplacement
RD014 Caer Einon Camp
RD035 Colwyn Castle
RD036 The Mount Mound & Bailey Castle, Hundred House
RD075 Fforest Wood Mound & Bailey Castle
RD076 Penarth Mount Castle Mound
RD117 Aberedw Castle Mound
RD121 Castell Cae-Maerdy Castle Mound
RD122 Carneddau Round Cairn
RD123 Cwm Berwyn Camp
RD130 Wern Camp
RD149 Castle Bank Hillfort
RD158 Pant y Rhiw Medieval Settlement
RD164 Caer Fawr Medieval Settlement
RD175 Upper House Platform House
RD177 Cefn Wylfre Stone Circle and Round Barrow
RD178 Cefn Wylfre Round Barrows
RD179 Cefn Wylfre Platform House
RD182 Llanbedr Hill Cist Cairn
RD183 Red Hill Cross Ridge Dyke
RD184 Garnfawr Deserted Rural Settlement
RD186 Cefn Wylfre Deserted Rural Settlement
RD188 Cwm-piban Platform House
RD217 Blaenhenllan round cairn
RD218 Giant's Grave round cairn
RD219 Carneddau, standing stone to SSW of
RD220 Carneddau, round cairn on N end of
RD221 Carneddau, cairn on N end of

RD222 Cwm-berwyn round cairn
RD223 Upper House round cairns
RD224 Court stone row
RD226 Cilberllan ring cairn
RD227 Gwernfach round cairn
RD228 Castle Bank ring cairn
RD229 Cwm standing stone
RD230 Hundred House round barrow
RD235 Carneddau round cairns
RD236 Bryntwppa stone row
RD237 The Gaer hillfort
RD243 Llwyn-y-wrach standing stone

Registered Parks and Gardens

PGW(Po)19(POW) Pencerrig

Listed Buildings/ Conservation Areas:

Within a 5km developer ZTV to blade tip:

6704	Church of St Maritius	II
6710	Aberduhonw	II*
6711	Barn and attached ranges at Aberduhonw	II*
7417	Wye Bridge	II
7418	The Fountain Hotel	II
7419	Lion Hotel	II
7420	NO.4 BROAD STREET,,,,,POWYS,	II
7421	NO.6 BROAD STREET,,,,,POWYS,,7421	II
7422	NO.8 BROAD STREET,,,,,POWYS,,7422	II
7423	NO.10 BROAD STREET,,,,,POWYS,	II
7424	Wyeside Arts Centre	II
7425	Telephone Call-box	II
7426	Pillar Box	II
7427	The White House	II
7428	Horeb Congregational Church	II
7429	Parish church of St Mary	II
7430	The White Horse PH	II
7431	Roy Brown's Coaches	II
7432	Cosy Corner Tea Rooms	II
7433	T.J. Morgan	II
7434	Former Confectioner's Shop	II
7435	Hughes Outfitters	II
7436	Drovers Tea Rooms & Restaurant	II
7437	Bristol House occupied by Davies Bros. Grocers	II
7438	Pen Graig Barn	II
7439	Swan Hotel	II
7440	The Plough Inn P.H.	II
7441	Bank House	II
7442	Llanfair Guest House	II
7443	War Memorial	II
7444	Alpha Presbyterian Church	II
7445	Post Office	II

7446	Barley Mow P.H.	II
7447	Premises now occupied by National Westminster Bank	II
7448	Premises now occupied by J.K.Evans	II
7449	Pillar Box	II
7450	Peterwell	II
7451	Memorial Baptist Chapel	II
7452	Vaynor House	II
7453	Clifton House	II
7454	Oakfield	II
7455	Hafod	II
7456	The Old Hall	II
7457	The Old Hall	II
7458	The Old Hall	II
7470	Pump Room at Park Wells	II
7471	Spring House at Park Wells	II
7497	Builth Golf Club House	II
7522	Old Pendre	II
8780	Church of St David	I
8781	The Yat	II
8802	Wye Bridge (partly in Builth Wells)	II
8804	Gwern Hwsmon	II
8805	Church of St David	II*
8808	Cefndyrys	II*
8809	Stable block at Cefndyrys	II
8810	Old house at Gelli Cadwgan Farm	II
8811	The Old Mill	II*
8812	Fforest Farmhouse	II
9367	Telephone Call-box at road junction in centre of Glascwm	II
23025	Cregina Free Mission with gates and railings	II
23028	Hope Chapel, attached house and vestry	II
23522	Church of St David	II
23660	Old Rectory, including forecourt walls, gate, and railings	II
23956	Cwm-Berllan	II
24480	Milestone NW of Caepandy Farm	II
24485	Caerberis Manor Hotel	II
24486	Caerberis Lodge	II
24815	Outbuilding to rear of house at Aberduhonw	II
24816	Barn to rear of farm court at Aberduhonw	II
24817	Outbuilding on W side of farmyard at Aberduhonw	II
24818	Milestone at Henallt	II
24819	Milestone near Glanwye Lodge	II
24821	Sign Post at The Rocks	II
24823	Abercynithon	II
25654	Weale Memorial in churchyard of Church of St Maritus	II
25670	Tregare	II
25671	Barn and stable ranges at Tregare	II
83136	Church of St David	II
	Hergest Bridge	
83139	(partly in Glascwm Community)	II
83142	Pantau	II
83143	Barn at Pen-castell	II

83349	Milestone on A483	II
83485	Barn and stable at Carneddau	II
83486	Brookside	II
83487	Carneddau, including attached cow house Hergest Bridge	II
83488	(partly in Aberedw Community)	II
83489	Road bridge E of Crossway	II
83490	Tynycoed, including attached farm range	II
83491	Upper Llaneon, including attached former cow house	II
83709	Bwlch y Trawspen	II
83710	Cefndyrys Farmhouse, including attached farm ranges	II
83712	Church of St Matthew	II
83716	Milestone on A470	II
83717	Milestone on A481	II
83719	Milestone on A483	II
83721	Multi-purpose farm ranges at Cefndyrys Farm	II
83723	Pencerrig Gardens Hotel	II
	Walls, revetment and steps to terrace on S side of	
83725	Cefndyrys	II
84995	Pen-castell	II



Ref: DNS CAS-03009-N5D9K8

Georgia Peters
Planning and Environment Decisions Wales
Crown Buildings
Cathays Park
Cardiff
CF10 3NQ

Via Email: PEDW.Infrastructure@gov.wales

29th January 2024.

Dear Georgia Peters,

Re: Scoping Direction Consultation Response – DNS CAS-03009-N5D9K8, Aberedw Energy Park.

In reference to the recent e-mail from PEDW consulting the Department on the above Scoping Direction request, the Department offers the following response for your consideration regarding agricultural land quality, the use of soil resources.

For the Department, the main issues likely to be significantly affected by the development are:

- Maintaining soil services and functions;
- Protection of the peat resource:
- Beneficial restoration and after use of site;

1. Policy Context:

The Department has examined the Scoping Direction Request Report and consider the policies and guidance below are also applicable to this development: -

- Policy 18(11) of NDF Future Wales¹ – sets out the need for acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

¹ <https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf>

Borrow Pits are proposed (if feasible) as part of the development; therefore the following will also apply:

- Schedule 5 of Town and Country Planning Act 1990² (as amended)
- Minerals Technical Advice Note³ (MTAN) 1 – Chapter D sets out detailed advice on the mechanisms for delivering a high standard of restoration, aftercare and provide for a beneficial after-use.
- Paragraph 5.14.34 of PPW 11 - *“Borrow pits must be restored to the high standard expected of other forms of mineral development.”*

2. Borrow pits:

The proposals note that stone from on-site borrow pits will be sourced where feasible. If borrow pits are proposed, then information must be provided on the size, extent and location of the borrow pits, to inform the EIA assessment process for the development (i.e. scoped in).

If borrow pits are included, the proposal must address Paragraph 5.14.34 of Planning Policy Wales; *“Borrow pits must be restored to the high standard expected of other forms of mineral development.”*

For all borrow pits, the proposals will also need to specify the afteruse in accordance with Schedule 5, paragraph 2(1) of the 1990 Act. The agreed afteruse will inform the standard of restoration, the scheme and aftercare proposals. The proposals must demonstrate that the borrow pits can be reclaimed to an acceptable standard and after-use through a detailed scheme that is achievable and to be able to condition against. The scheme must be presented at application, and in sufficient detail for the determining authority and statutory consultees to form a judgement as to its feasibility (as per MTAN1, paragraph 106). If there is significant doubt as to whether satisfactory reclamation can be achieved at the site, and as such, planning permission should be refused (MTAN1, paragraph 97).

3. Soil Management Plan (SMP):

It is noted that the applicant intend to produce a Soil Management Plan (Chapter 8) to support the ES and application. This is welcome and should cover **all** soils (peat, organo-mineral and mineral).

The plan should include a clear scheme and programme setting out how **all** soils and their function will be used, conserved, reinstated and restored. The Scheme should be presented in sufficient detail for the determining authority and statutory consultees to form a judgement as to its feasibility and to condition against. The scheme should include: -

- Soil stripping programme - volumes and types of soils affected;
- Soil handling techniques and procedure;
- Size, location, construction, management and period of soil storage dumps;

² <https://www.legislation.gov.uk/ukpga/1990/8/schedule/5>

³ <https://gov.wales/sites/default/files/publications/2018-09/mtan1-aggregates.pdf>

- Proposed decommissioning, after use and restoration programme, including techniques and aftercare programme.

The plan and detailed scheme will support the ES process in considering: -

- Potential impacts of the development and demonstrate how the proposal will not have an unacceptable adverse impact on the environment;
- The feasibility and how effective restoration and beneficial after use can be achieved;
- How the proposal will maintain the resilience and avoid the loss of function and services provided by the soils.

4. Peat:

It is welcome that the SSEW⁴ definition of peat has been used by the applicant. It should be noted that this must also include in the assessment any transitioning shallow peaty soils integral to the hydrological functioning of wider peat bodies – either on-site or adjoining.

It is also welcome that an initial Phase I peat survey (100m grid) has been undertaken of the site (Figure 9.2) and that further interim survey (25m grid) will be undertaken on proposed infrastructure locations (to confirm presence or absence of peat). In response to the questions at 9.1 and 9.2 of the scoping report, the Department would encourage the applicant to discuss the results of the proposed interim survey results with NRW at the earliest opportunity, for a technical view if further detailed survey work is required. The results of this survey and discussion with NRW will inform if a peat management plan and peat landslide risk assessment can be scoped out or not.

5. Agricultural Land Classification (ALC): Information and advice:

The Department does not hold any information on detailed ALC field surveys for the site. According to the Predictive ALC Map for Wales, the site is considered mainly Grade 4 and 5 with some small areas of Subgrade 3b.

A detailed ALC field survey is not recommended for the site. The Department does not consider Best and Most Versatile (BMV) agricultural land to be present on this site and therefore Planning Policy Wales (PPW) 11, paragraphs 3.58 and 3.59 would not apply.

6. Decommissioning:

The proposals should include a detailed scheme for site decommissioning that can be confidently conditioned against. This is essential to meet the requirements of Policy 18(11) of Future Wales in terms of acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

⁴ Soil Survey of England and Wales (1980). Soil Survey Technical Monograph No. 14: Soil Classification for England and Wales [Higher Categories]. B.W. Avery. 1980.

I trust the above comments are clear and unambiguous. The advice expressed does not bind any other part of Welsh Government commenting on the proposal.

Yours sincerely

Arwel Williams
Soil, Peatland & Agricultural Land Use Planning
Welsh Government
Department for Climate Change
Landscapes, Nature & Forestry Division
LQAS@gov.wales

PEDW
Crown Buildings,
Cathays Park,
Cardiff,
CF10 3NQ

Date: 12/01/2024
Our Ref: PPA0008489

Dear Sir/Madam,

Grid Ref: 308879 250138

Site Address: Aberedw Hill, 3 km east of Builth Wells, Powys,

Development: The proposed development will include the construction of an energy park, consisting of 18 turbines at 200m tip height, with a wind generating capacity of 108 MW. The development will also include off-site highways improvement works.

I refer to your pre-planning enquiry received relating to the above site, seeking our views on the capacity of our network of assets and infrastructure to accommodate your proposed development. Having reviewed the details submitted I can provide the following comments which should be taken into account within any future planning application for the development.

We refer to your consultation documents received in accordance with Article 9(3) of the Development of National Significance (Procedure) (Wales) Order 2016. We note that the consultation relates to Aberedw Hill,, Wind Farm which refers to the “construction of an energy park, consisting of 18 turbines. At Aberedw Hill 3 km east of Builth Wells, Powys. We welcome the opportunity to comment on the proposal and would offer the following standing advice which should be taken into account within any future application:

SEWERAGE

It appears the application does not propose to connect to the public sewerage system, and therefore Dwr Cymru Welsh Water has no objections in principle. However, should circumstances change and a connection to the public sewerage system/public sewage treatment works is preferred we must be re-consulted on this application.

It is also advised that some public sewers and lateral drains may not be recorded on our maps of public sewers because they were originally privately owned and were transferred into public ownership by nature of the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011. The presence of such assets may affect the proposal. In order to assist us in dealing with the proposal the applicant may contact Dwr Cymru Welsh Water to establish the location and status of the apparatus. Under the Water Industry Act 1991 Dwr Cymru Welsh Water has rights of access to its apparatus at all times.

Turning to surface water, as of 7th January 2019, this proposed development is subject to Schedule 3 of the Flood and Water Management Act 2010. The development therefore requires approval of Sustainable Drainage Systems (SuDS) features, in accordance with the 'Statutory standards for sustainable drainage systems – designing, constructing, operating and maintaining surface water drainage systems'. It is therefore recommended that the developer engage in consultation with Blaenau Gwent County Borough Council, as the determining SuDS Approval Body (SAB), in relation to their proposals for SuDS features. Please note, Dwr Cymru Welsh Water is a statutory consultee to the SAB application process and will provide comments to any SuDS proposals by response to SAB consultation.

CATCHMENT

This application falls within a Drinking Water Protected Area under article 7 of the Water Framework Directive. This article requires the UK to take action to protect drinking water sources. Section 7.3 states that the aim is 'to avoid deterioration in water quality where this may lead to additional purification treatment being required'.

The proposed development falls within the DCWW Drinking Water Catchment known as Wye at Llyswen. The site is less than 1km from the nearest water course Milo Brook and approximately 17km from Llyswen River Wye Intake.

DCWW would like to request further information from the applicant to assess the impact of the proposed development on drinking water quality:

- We will need a copy of the full Environmental Impact Assessment, mitigation plans to review as part as a DCWW response.
- Please may we have further detail around any natural buffer zones, and what distance would these be allocated from the watercourse?

I trust the above information is helpful and will assist you in forming water and drainage strategies that should accompany any future planning application. I also attach copies of our water and sewer extract plans for the area, and a copy of our Planning Guidance Note which provides further information on our approach to the planning process, making connections to our systems and ensuring any existing public assets or infrastructure located within new development sites are protected.



Welsh Water is owned by Glas Cymru – a not-for-profit company.
Mae Dŵr Cymru yn eiddo i Glas Cymru – cwmni nid-er-elw.

We welcome correspondence in
Welsh and English

Dŵr Cymru Cyf, a limited company registered in
Wales no 2366777. Registered office: Pentwyn Road,
Nelson, Treharris, Mid Glamorgan CF46 6LY

Rydym yn croesawu gohebiaeth yn y
Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi i gofrestru yng
Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn
Nelson, Treharris, Morgannwg Ganol CF46 6LY.

Please note that our response is based on the information provided in your enquiry and should the information change we reserve the right to make a new representation. Should you have any queries or wish to discuss any aspect of our response please do not hesitate to contact our dedicated team of planning officers, either on 0800 917 2652 or via email at developer.services@dwrcymru.com

Please quote our reference number in all communications and correspondence.

Yours faithfully,



Owain George
Planning Liaison Manager
Developer Services

Please Note that demands upon the water and sewerage systems change continually; consequently the information given above should be regarded as reliable for a maximum period of 12 months from the date of this letter.

Technical and Operational Assessment (TOPA)

For Aberedw Energy Park
Wind Farm Development

NATS ref: SG36655

Welsh Government ref: CAS-03009-N5D9K8

Issue 1

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Publication History

Issue	Month/Year	Change Requests and summary
1	January 2024	Planning Application

Document Use

External use: Yes

Referenced Documents

1. Background

1.1. En-route Consultation

NATS en-route plc is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of RADAR's, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility NATS is a statutory consultee for all wind farm applications, and as such assesses the potential impact of every proposed development in the UK.

The technical assessment sections of this document define the assessments carried out against the development proposed in section 3.

2. Scope

This report provides NATS En-Route plc's view on the proposed application in respect of the impact upon its own operations and in respect of the application details contained within this report.

Where an impact is also anticipated on users of a shared asset (e.g. a NATS RADAR used by airports or other customers), additional relevant information may be included for information only. While an endeavour is made to give an insight in respect of any impact on other aviation stakeholders, it should be noted that this is outside of NATS' statutory obligations and that any engagement in respect of planning objections or mitigation should be had with the relevant stakeholder, although NATS as the asset owner may assist where possible.

3. Application Details

Welsh Government submitted a request for a NATS technical and operational assessment (TOPA) for the development at Aberedw Energy Park Wind Farm. It will comprise turbines as detailed in Table 1 and contained within an area as shown in the diagrams contained in Appendix B.

Turbine	Lat	Long	East	North	Tip Height (m)
1	52.1421	-3.3334	308846	250156	200
2	52.1443	-3.3400	308401	250401	200
3	52.6633	-3.3595	308150	308150	200
4	52.1512	-3.3342	308814	251167	200
5	52.1528	-3.3414	308325	251350	200
6	52.1573	-3.3400	308430	251852	200
7	52.1418	-3.3156	310065	250097	200
8	52.1466	-3.3148	310130	250630	200
9	52.1508	-3.3160	310053	251093	200
10	52.1554	-3.3155	310100	251608	200
11	52.1573	-3.3225	309624	251831	200
12	52.1605	-3.3304	309090	252195	200
13	52.1618	-3.3208	309749	252329	200
14	52.1617	-3.3107	310439	252304	200
15	52.1589	-3.3059	310766	251987	200
16	52.1651	-3.3012	311099	252672	200
17	52.1628	-3.2954	311488	252407	200
18	52.1586	-3.2948	311519	251935	200

Table 1 – Turbine Details

4. Assessments Required

The proposed development falls within the assessment area of the following systems:

En-route Surv	Lat	Long	nm	km	Az (deg)	Type
Burrington Radar (cmb)	50.9343	-3.9854	76.6	141.8	18.2	CMB
Claxby Radar	53.4501	-0.3083	120.1	222.5	236.5	CMB
Clee Hill Radar	52.3983	-2.5975	29.4	54.4	244.7	CMB
Debden Radar	51.9902	0.2638	132.1	244.7	276.4	CMB
Great Dun Fell Radar	54.6841	-2.4509	125.7	232.8	192.1	CMB
Pease Pottage Radar	51.0834	-0.2143	132.0	244.5	300.8	CMB
Manchester Radar (Tall building)	53.3407	-2.2827	56.4	104.4	209.2	CMB
En-route Nav	Lat	Long	nm	km	Az (deg)	Type
None						
En-route AGA	Lat	Long	nm	km	Az (deg)	Type
None						

Table 2 – Impacted Infrastructure

4.1. En-route RADAR Technical Assessment

4.1.1. Predicted Impact on Clee Hill RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the terrain screening available will not adequately attenuate the signal, and therefore this development is likely to cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated.

4.1.2. En-route operational assessment of RADAR impact

Where an assessment reveals a technical impact on a specific NATS' RADAR, the users of that RADAR are consulted to ascertain whether the anticipated impact is acceptable to their operations or not.

Unit or role	Comment
Swanwick ATC	Unacceptable
Western RADAR	Unacceptable
Military ATC	Acceptable

Note: The technical impact, as detailed above, has also been passed to non-NATS users of the affected RADAR, this may have included other planning consultees such as the MOD or other airports. Should these users consider the impact to be unacceptable it is expected that they will contact the planning authority directly to raise their concerns.

4.2. En-route Navigational Aid Assessment

4.2.1. Predicted Impact on Navigation Aids

No impact is anticipated on NATS' navigation aids.

4.3. En-route Radio Communication Assessment

4.3.1. Predicted Impact on the Radio Communications Infrastructure

No impact is anticipated on NATS' radio communications infrastructure.

5. Conclusions

5.1. En-route Consultation

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, this has been deemed to be unacceptable.

Appendix A – Background RADAR Theory

Primary RADAR False Plots

When RADAR transmits a pulse of energy with a power of P_t the power density, P , at a range of r is given by the equation:

$$P = \frac{G_t P_t}{4\pi r^2}$$

Where G_t is the gain of the RADAR's antenna in the direction in question.

If an object at this point in space has a RADAR cross section of σ , this can be treated as if the object re-radiates the pulse with a gain of σ and therefore the power density of the reflected signal at the RADAR is given by the equation:

$$P_a = \frac{\sigma P}{4\pi r^2} = \frac{\sigma G_t P_t}{(4\pi)^2 r^4}$$

The RADAR's ability to collect this power and feed it to its receiver is a function of its antenna's effective area, A_e , and is given by the equation:

$$P_r = P_a A_e = \frac{P_a G_r \lambda^2}{4\pi} = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4}$$

Where G_r is the RADAR antenna's receive gain in the direction of the object and λ is the RADAR's wavelength.

In a real world environment this equation must be augmented to include losses due to a variety of factors both internal to the RADAR system as well as external losses due to terrain and atmospheric absorption.

For simplicity these losses are generally combined in a single variable L

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4 L}$$

Secondary RADAR Reflections

When modelling the impact on SSR the probability that an indirect signal reflected from a wind turbine has the signal strength to be confused for a real interrogation or reply can be determined from a similar equation:

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r_t^2 r_r^2 L}$$

Where r_t and r_r are the range from RADAR-to-turbine and turbine-to-aircraft respectively. This equation can be rearranged to give the radius from the turbine within which an aircraft must be for reflections to become a problem.

$$r_r = \sqrt{\frac{\lambda^2}{(4\pi)^3}} \sqrt{\frac{\sigma G_t G_r P_t}{r_t^2 P_r L}}$$

Shadowing

When turbines lie directly between a RADAR and an aircraft not only do they have the potential to absorb or deflect, enough power such that the signal is of insufficient level to be detected on arrival.

It is also possible that azimuth determination, whether this done via sliding window or monopulse, can be distorted giving rise to inaccurate position reporting.

Terrain and Propagation Modelling

All terrain and propagation modelling is carried out by a software tool called ICS Telecom (version 11.1.7). All calculations of propagation losses are carried out with ICS Telecom configured to use the ITU-R 526 propagation model.

Appendix B – Diagrams

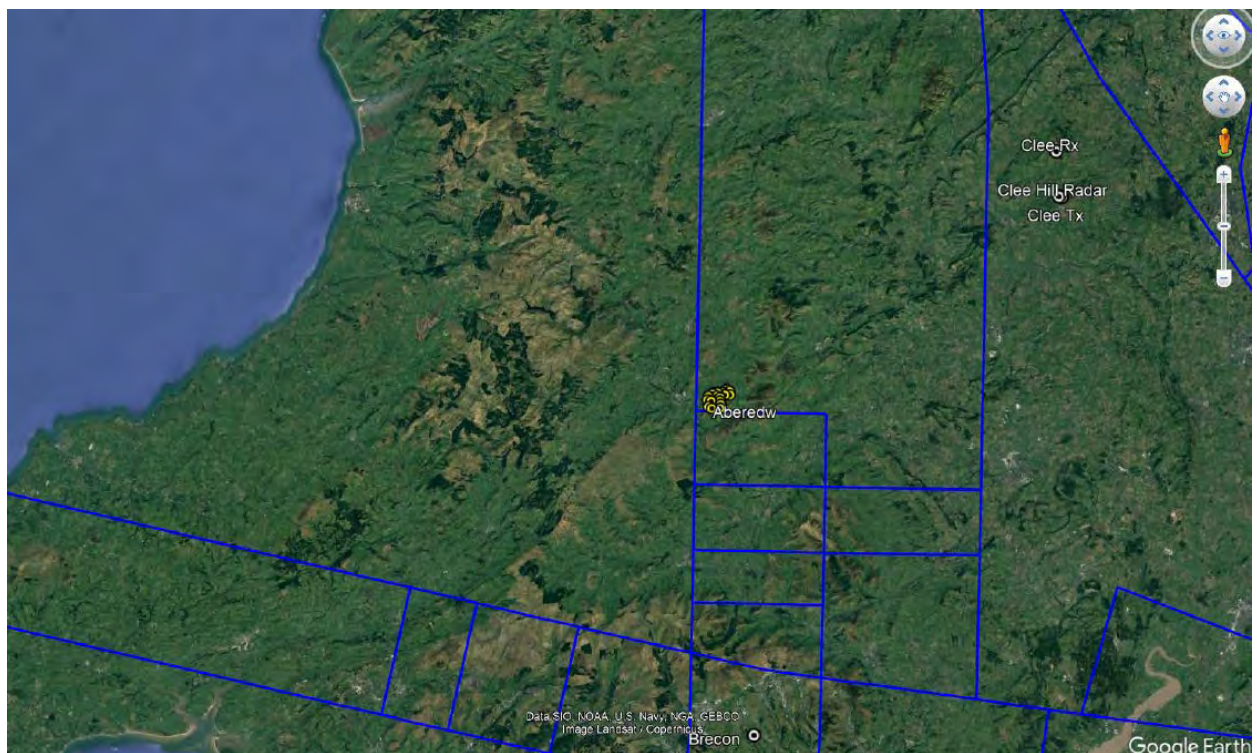


Figure 1: Proposed development location shown on an airways chart

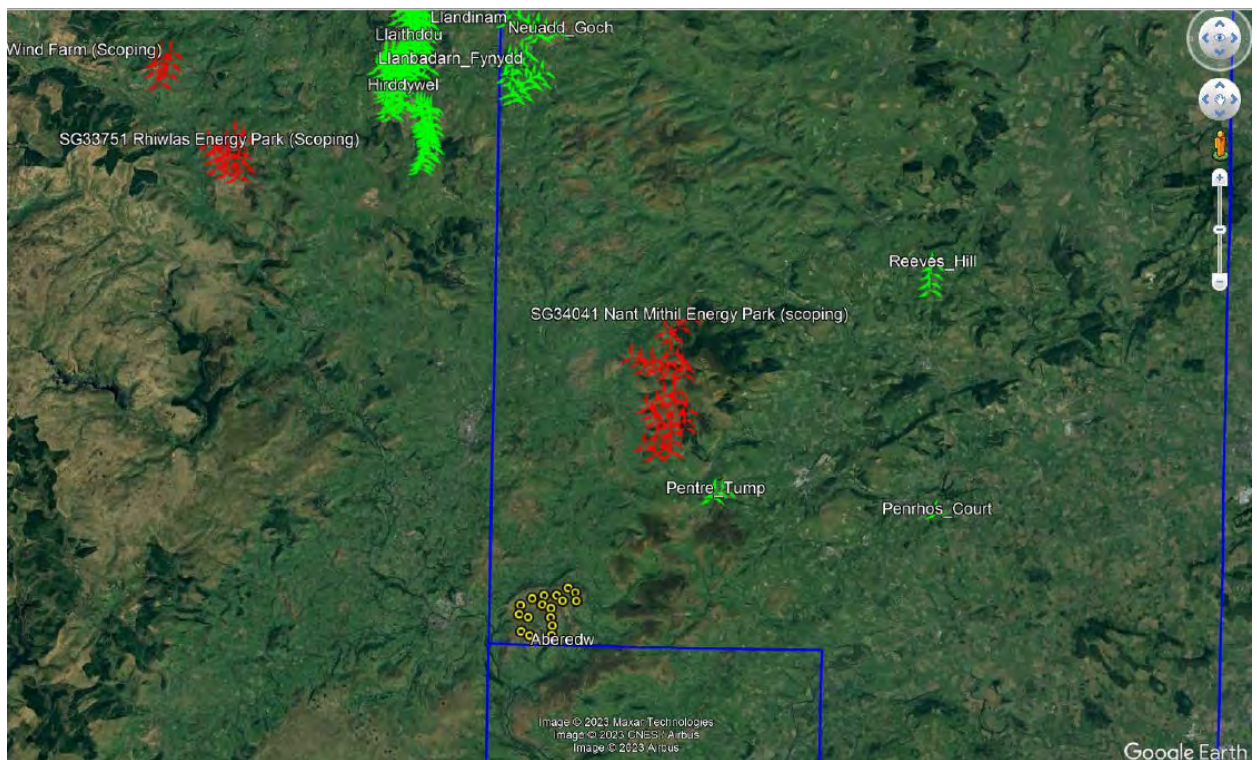


Figure 2: Proposed development shown alongside other recently assessed applications

■ consented/built	■ impact -accepted	■ impact -objection	■ mitigated
■ mitigation -proposed	□ no impact	□ refused/withdrawn	

From: NSIP Applications <NSIP.Applications@hse.gov.uk>
Sent: Tuesday, April 2, 2024 10:22 AM
To: PEDW – Seilwaith / Infrastructure <PEDW.Infrastructure@gov.wales>
Cc: NSIP Applications <NSIP.Applications@hse.gov.uk>
Subject: FW: DNS EIA Scoping Consultation (x2) - Aberedw - 4.2.1.7176. - revised HSE advice

Good afternoon

Thank you for your email dated 26 March 2024 consulting HSE on the EIA Scoping Consultation for the proposed Aberedw Energy Park development of National Significance (DNS).
Please find HSE's advice below.

HSE Planning Inspectorate contribution to consultation:

1. With reference to the redlined **Site Boundary**, shown on **Figure 1.2: Site Layout** found in **[2023-12-07 - EIA Scoping Direction Request - Scoping Figures - Chapter 1-3]**, the proposed project does not fall within the consultation distances of any Major Hazard Installation(s) or Major Accident Hazard Pipeline(s).
2. Please note if at any time a new Major Accident Hazard Pipeline is introduced or existing Pipeline modified prior to the determination of a future application, then the HSE reserves the right to revise its advice.
3. Likewise, if prior to the determination of a future application, a Hazardous Substances Consent is granted for a new Major Hazard Installation or a Hazardous Substances Consent is varied for an existing Major Hazard Installation in the vicinity of the proposed development, again the HSE reserves the right to revise its advice.

Would Hazardous Substances Consent be needed?

4. The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) may require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others, for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) (Wales) Regulations 2015.
5. Hazardous Substances Consent would be required if the proposed development site is intending to store or use any of the Named Hazardous Substances or Categories of Substances and Preparations at or above the controlled quantities set out in schedule 1 of these Regulations.
6. Further information on HSC should be sought from the relevant Hazardous Substances Authority.

HSE Explosive Advice:

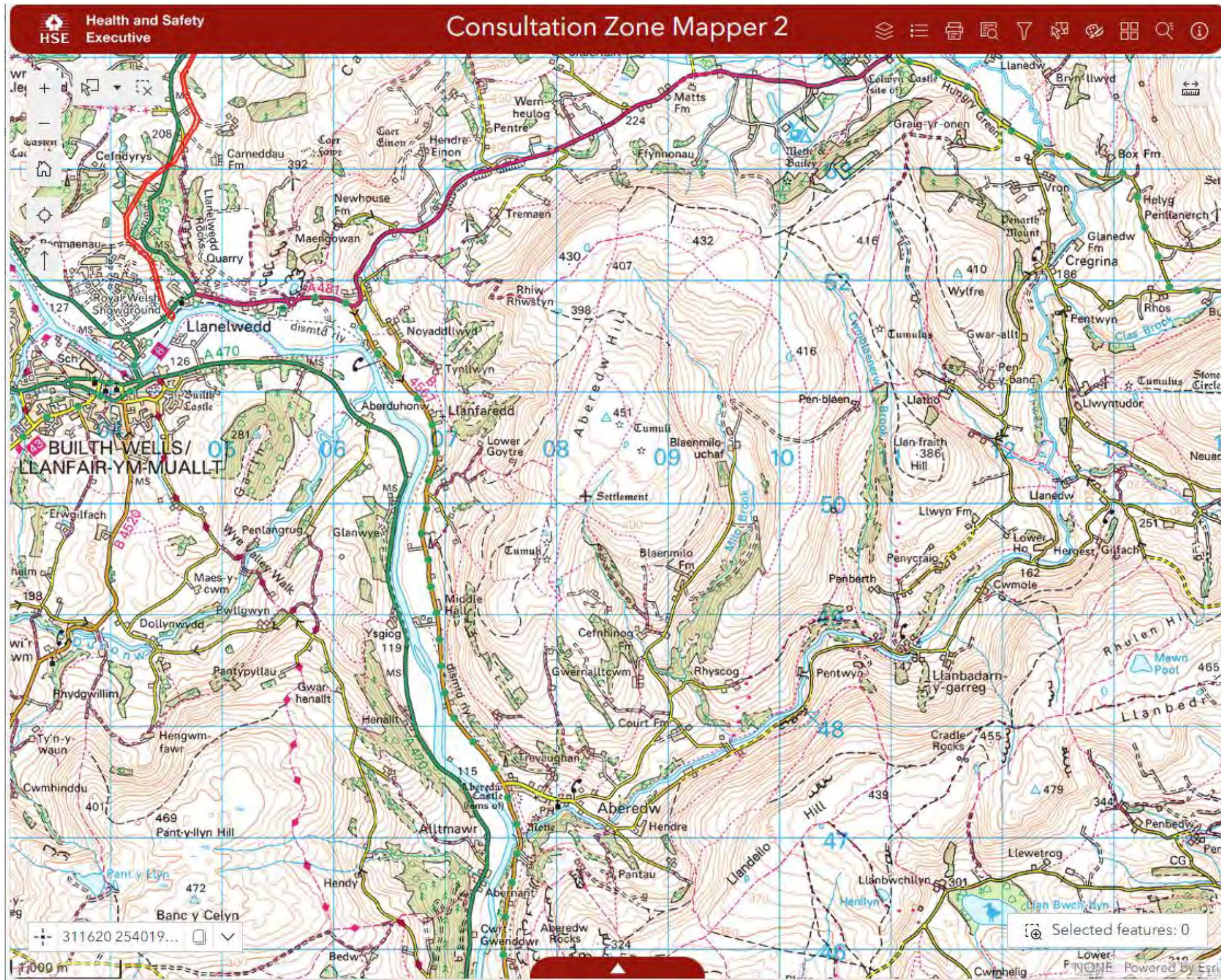
HSE has no comment to make on the proposed development.

Please send any future correspondence to nsip.applications@hse.gov.uk

Kind regards,
NSIP Team



NSIP Team | Land Use Planning Team | Redgrave Court, Merton Road, Bootle, Merseyside, L20 7HS.





Defence Infrastructure Organisation

Kaye Noble
Assistant Safeguarding Manager
Ministry of Defence
Safeguarding Department
St George's House
DIO Headquarters
DMS Whittington
Lichfield
Staffordshire
WS14 9PY

Telephone [MOD]: [REDACTED]

E-mail: dio-safeguarding-wind@mod.gov.uk

Your Reference: CAS-03009-N5D9K8

Our Reference: DIO 10061109

Georgia Peters
Welsh Government
Cathays Park
Cardiff
CF10 3NQ

31 January 2024

By email only

Dear Georgia,

Application reference: CAS-03009-N5D9K8

Site Name: Aberedw Energy Park

Proposal: The proposed development will include the construction of an energy park, consisting of 18 turbines at 200m tip height, with a wind generating capacity of 108 MW. The development will also include off-site highways improvement works.

Site address: Aberedw Hill, 3 km east of Builth Wells, Powys

Thank you for consulting the Ministry of Defence (MOD) on the above proposed development. The consultation correspondence was received by this office on 15 December 2023.

The Defence Infrastructure Organisation (DIO) Safeguarding Team represents the MOD as a consultee in UK planning and energy consenting systems to ensure that development does not compromise or degrade the operation of defence sites such as aerodromes, explosives storage sites, air weapon ranges, and technical sites or training resources such as the Military Low Flying System.

I am writing to advise you that the MOD has concerns with the proposal.

The proposal concerns a development of 18 turbines with maximum blade tip heights of 200 metres above ground level. The proposed development has been assessed using the location data (Grid References) below provided in the "Scoping Report" dated December 2023.

Turbine no.	Easting	Northing	Turbine no.	Easting	Northing
1	308846	250156	10	310100	251608
2	308401	250401	11	309624	251831
3	308150	250783	12	309090	252195
4	308814	251167	13	309749	252329
5	308325	251350	14	310439	252304
6	308430	251852	15	310766	251987

7	310065	250097	16	311099	252672
8	310130	250630	17	311488	252407
9	310053	251093	18	311519	251935

The principal safeguarding concerns of the MOD with respect to this development of wind turbines relates to their potential to create a physical obstruction to air traffic movements.

Physical Obstruction

In this case the development falls within Low Flying Area 7 (LFA 7), an area within which fixed wing aircraft may operate as low as 250 feet or 76.2 metres above ground level to conduct low level flight training. The addition of turbines in this location has the potential to introduce a physical obstruction to low flying aircraft operating in the area.

To address the impact up on low flying given the location and scale of the development, the MOD would require that conditions are added to any consent issued requiring that the development is fitted with aviation safety lighting and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction.

As a minimum the MOD would require that the development be fitted with MOD accredited aviation safety lighting in accordance with the Air Navigation Order 2016. It is likely that the CAA specified lighting will exceed that required by the MOD but to ensure the safeguarding of any low flying/rotary military aircraft, the MOD would request the wind farm is lit with no less than 25cd or Infra-Red (IR) lighting on perimeter turbines.

Summary

The MOD has concerns with this proposal for the following reason:

- The potential to create a physical obstruction to air traffic movements.

The MOD must emphasise that the advice provided within this letter is in response to the data and information detailed in the developer's document titled "Scoping Report" dated December 2023. Any variation of the parameters (which include the location, dimensions, form, and finishing materials) detailed may significantly alter how the development relates to MOD safeguarding requirements and cause adverse impacts to safeguarded defence assets or capabilities. In the event that any amendment, whether considered material or not by the determining authority, is submitted for approval, the MOD should be consulted and provided with adequate time to carry out assessments and provide a formal response.

I hope this adequately explains our position on the matter. If you require further information or would like to discuss this matter further, please do not hesitate to contact me.

Further information about the effects of wind turbines on MOD interests can be obtained from the following websites:

MOD: <https://www.gov.uk/government/publications/wind-farms-ministry-of-defence-safeguarding>

Yours sincerely



Kaye Noble
Assistant Safeguarding Manager
DIO Safeguarding



PEDW.Infrastructure.gov.wales

**Adeilad y Goron, Parc Cathays, Caerdydd,
CF10 3NQ Crown Buildings, Cathays
Park, Cardiff, CF10 3NQ**

Eich cyf / Your ref CAS-03009-N5D9K8

Ein cyf / Our ref 23/NM-6193

02 February 2024

Dear Sir/Madam,

**TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (WALES)
ORDER 2012:**

Aberedw Hill, 3 km east of Builth Wells, Powys

The proposed development will include the construction of an energy park, consisting of 18 turbines at 200m tip height, with a wind generating capacity of 108 MW. The development will also include off-site highways improvement works.

I refer to your consultation of 15th December 2023 regarding the above application and advise that Welsh Government as highway authority for the A470 and A483 trunk roads in the area of the proposal agrees that its interests in the Strategic Road Network should be scoped in to mitigate and address concerns over the development's impact on the trunk road network. This should cover the general construction phase vehicular movements to site and the delivery of the wind turbine components as Abnormal Indivisible Loads (AIL's) that could affect the wider trunk road network. Paying particular attention to the component lengths for these large new generation wind turbines with a 200m+ blade tip height and individual blade lengths of 70m+. These large size components are a big increase on previous wind farm AIL delivery sizes and have the potential to adversely impact the trunk road network and its traffic. These concerns should be covered in an approved fully developed Construction Traffic Management Plan (CTMP) for the scheme.

The scope should include the following information :

1. Proposals for transporting Abnormal Indivisible Loads (AILs) from their point of entry to the Welsh trunk road network to the site that minimise any impact on the safety and free flow of trunk road traffic. Consider the need for a trial run of the largest components, given their increased size over previous wind farm deliveries on this part of the network.



2. Number and size of AILs, including loaded dimensions and weights
3. Number and composition of AIL convoys, including anticipated escort arrangements to any works that are carried out to enable AIL movements
4. Methodology for managing trunk road traffic during AIL deliveries, including identification of passing places and holding areas as necessary
5. Convoy contingency plans in the event of incidents or emergencies
6. Estimated convoy journey durations and timings along the route, including release of forecast traffic queues
7. Swept path analysis modelling the movement of the worst case AILs at horizontal and vertical constraints along the access route where appropriate, at the discretion of the Highway Authority
8. Proposals for the temporary or permanent modification of any affected street furniture along the access route and details of how this would be managed
9. Plans for the reinstatement of any temporary works after completion of the construction phase
10. Proposals to liaise with all relevant stakeholders and members of the public regarding construction traffic and AIL movements.
11. Details of temporary signage. The above information is required to maintain the safety and free flow of trunk road traffic.
- 12 The need for any formal Temporary Traffic Regulation Orders (TTRO's) that could be required to facilitate the AIL convoys. Also to consider the timescale for processing and approving such statutory Orders.
13. The applicant should be advised that they will be required to enter into an Agreement with the Welsh Ministers under Section 278 of the Highways Act 1980 to enable the Applicant to undertake any improvement works which may be required on the trunk road. This Agreement will contain details of the improvement works, construction conditions and financial arrangements under which agreed measures can be put in place, including indemnifying the Welsh Ministers against third party claims. Without such an agreement in place, any consent that may be granted by the Planning Authority cannot be implemented.

If you have any further queries, please forward to the following Welsh Government Mailbox
NorthandMidWalesDevelopmentControlMailbox@gov.wales

Yours faithfully

Kevin Price



Sarn Mynach
Cyffordd Llandudno
LL31 9RZ

Sarn Mynach
Llandudno Junction
LL31 9RZ

Ebost/Email: NorthandMidWalesDevelopmentControlMailbox@gov.wales



Welsh Government Motorway and Trunk Road Network

‘Pulling Together’ Best Practice for Transporting Abnormal Loads in Wales

Instructions for use:

This guidance document is intended for use by hauliers and developers planning to generate abnormal load movements on Trunk Roads and Motorways in Wales.

It outlines the statutory process for planning and conducting safe and effective abnormal load movements in agreement with all relevant authorities and organisations.

This document supersedes any previous advice issued by the Welsh Government regarding this process.

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1 INTRODUCTION

1.1 Document purpose

Our highways are, in the most part, built to accommodate a certain maximum vehicle size and weight. These vehicle limits are defined and upheld by UK law and most daily movements can be completed within them. However, some particular vehicle types and indivisible freight loads fall outside these limits and so are known as 'abnormal loads'. These typically include:

- Vehicle carrying an oversize or overweight load
- Mobile cranes
- Engineering plant
- Road recovery vehicles



The movement of these types of loads by road is essential for supporting the UK economy, but it is also essential that the movements are carefully planned and executed to ensure they can be safely accommodated by the highway network. Movements of abnormal loads on the Welsh trunk road network (see Figure 1) can include vehicles as large as 8m wide, 55m long and 135te, while many thousand abnormal load movements take place in Wales every year. The consequences of these types of journeys being unplanned or poorly executed can therefore be significant, and include:

- Damage to the network when abnormally wide or heavy loads travel over weak structures or along narrow roads
- Delay to all road users if movement timing or route is poorly planned
- Harm to wider public if mismanaged movement results in an accident

- Delays and cost implications to industry when vehicles unable to complete journey on time

Figure 1 Trunk Road Network Wales (Traffic Wales, 2015)¹



¹ <https://traffic.wales/sites/default/files/2018-10/151021-wales-trunk-roads-map-en.pdf>

To avoid such impacts and their potential legal consequences, those responsible for transporting abnormal loads by road in the UK are required by law to plan and execute each movement in agreement with relevant authorities to ensure the incident-free passage of every load from origin to destination.

Welsh Government is the devolved government for Wales. The Welsh Ministers are the Highway Authority for trunk roads and motorways in Wales under the Highways Act 1980. They are supported by civil servant officials who work across devolved areas that include key areas of public life, including transport and the management of trunk roads and motorways.

This document therefore comprises a Welsh Government Procedure and Advice Guidance (PAG) document which aims to summarise the legal process which must be followed in the planning and execution of all abnormal load movements on trunk roads within Wales and to clarify the roles and responsibilities of the various parties involved.

By pulling together, we make roads in Wales safer and more effective.

1.2 Document structure

The document is structured as follows:

- The legal definition of an abnormal load is discussed in Section 2
- Guidance on vehicle preparation is provided in Section 3
- Guidance on journey preparation is provided in Section 4
- Planning for abnormal loads through the development control process is outlined in Section 5
- A summary of roles and responsibilities is presented in Section 6, and
- A list of useful contacts is provided in Section 7

1.3 Intended audience

This document is primarily addressed at the party responsible for conducting an abnormal load movement on Welsh trunk roads (most commonly the haulier), but is relevant to all parties involved in its safe planning and execution, as follows:

- Consigners/agents
- Hauliers
- Attendants
- Escorting services

- Police
- DVSA
- Highway Authorities and other bridge owners
- Planning authorities
- Developers / agents or consultants
- Statutory utilities

1.4 List of abbreviations

The following abbreviations are used throughout this document:

- AIL – Abnormal Indivisible Load
- ALO – Abnormal Loads Officer
- AWR – Road Vehicles (Authorised Weight) Regulations 1998
- STGO – The Road Vehicles (Authorisation of Special Types) (General) Order 2003
- C&U – The Road Vehicles (Construction and Use) Regulations 1986
- DBFO – Design, Build, Finance, Operate companies
- DMRB – Design Manual for Roads and Bridges
- HA&BO – Highway Authorities and other Bridge Owners
- NH – National Highways (*previously Highways England*)
- DVSA – Driver and Vehicle Standards Agency
- LA – Local Authority
- NMWTRA – North and Mid Wales Trunk Road Agent
- SWTRA – South Wales Trunk Road Agent
- TAA – Technical Approval Authority
- TMP – Traffic Management Plan
- TTRO – Temporary Traffic Regulation Order
- WG – Welsh Government

2 CATEGORIES OF ABNORMAL LOAD

Abnormal loads, and the obligations of those moving them, are defined in the UK by legislation. This section provides a summary of the different legal categories of abnormal load and their implications.

2.1 Normal vehicle definition

The maximum size and weight of vehicles which can use the UK road network without journey notification having to be provided to relevant authorities is defined by the following regulations:

- The Road Vehicles (Construction and Use) Regulations 1986 – “C&U”
- Road Vehicles (Authorised Weight) Regulations 1998 – “AWR”

These permit a vehicle and its load to use UK roads without notification as long as the combination falls within the following maximum size and weight limits:

- Rigid length: up to 18.65m
- Width: up to 2.9m
- Weight: up to 44,000kg
- Axle load: up to 10,000kg (or 11,500kg for single driving axle)

If a vehicle and its load lie outside any of these limits, it is referred to as an abnormal load.

There is no legal height limit for vehicles but, wherever possible, the overall height of a vehicle and load should not exceed 4.95m so that the maximum use can be made of the motorway and trunk road network. This will ensure that loads are less than 5.03m in height, which is the minimum maintained headroom requirement on UK highways.

2.2 Categories of abnormal loads

Legal categories of abnormal load vary to cover different combinations of vehicle size and weight. This is because different types of abnormal load have implications for both:

- Vehicle choice, and
- Route choice

The implications in each case are considered in the following subsections.

2.2.1 Abnormal loads and vehicle choice

The size of an abnormal load has implications for the size of the transporting vehicle, with larger loads generally requiring larger vehicles.

In addition, heavier loads put greater demands on a vehicle's chassis, suspension, tyres, brakes and engine, so heavier abnormal loads also require a higher specification of vehicle.

These distinctions between the impacts of size and weight result in the following abnormal load vehicle legal categories:

- C&U/AWR compliant vehicles are permitted within that legislation to carry oversized abnormal indivisible loads up to a limit, but not overweight loads
- Overweight loads, and those beyond C&U size limits, can be carried by three categories of higher specification vehicles designed to standards prescribed by The Road Vehicles (Authorisation of Special Types) (General) Order 2003 ("STGO") and are subject to lower speed limits depending on load weight
- Loads heavier and/or larger than those permitted by STGO require Special Order approval by the UK Secretary of State under Section 44 of the UK Road Traffic Act 1988

The application of these categories to abnormal load sizes and weights is summarised in the following table.

Table 1 Abnormal load legal category by size/weight combination

Gross weight	Axle weight	Load Dimensions				
		W ≤2.9m L ≤18.65m	W >2.9m L >18.65m	W >4.3m L >27.4m	W >5m L >27.4m	W >6.1m L >30m
≤44,000kg	≤11,500kg	C&U	C&U	STGO Category 1	STGO Category 1	Special Order
>44,000kg	≤11,500kg	STGO Category 1	STGO Category 1	STGO Category 1	STGO Category 1	Special Order
>50,000kg	>11,500	STGO Category 2	STGO Category 2	STGO Category 2	STGO Category 2	Special Order
>80,000kg	>12,500	STGO Category 3	STGO Category 3	STGO Category 3	STGO Category 3	Special Order
>150,000kg	>16,500kg	Special Order	Special Order	Special Order	Special Order	Special Order

Key: = Abnormal load legislation

This table highlights that:

- C&U vehicles are limited to carrying abnormal loads which are oversized but not overweight
- STGO categories increase with abnormal load weight up to 150,000kg
- Special Order vehicles are for extra heavy and/or very large abnormal loads

2.2.2 Abnormal loads and route choice

As well as vehicle type implications, abnormal loads also present route choice implications, as follows:

- The wider and longer a load, the greater the potential for conflict with other road users and roadside furniture / structures
- The heavier a load, the greater the potential for damage to underlying infrastructure and for delays to other road users due to slower speeds

The transporting of abnormal loads therefore presents increased road safety, infrastructure damage and traffic management risks to the network which need careful management and mitigation in liaison with relevant authorities. This is required by legislation covering abnormal load movements and the following table summarises:

- The organisations requiring pre-trip notification of the abnormal load journey details, and
- The minimum notification period in each case, where 'd' refers to working days (excluding Sundays and Bank Holidays) and 'w' refers to weeks

Table 2 Pre-journey notification requirements by abnormal load category

Gross weight	Axle weight	Load Dimensions				
		W ≤2.9m L ≤18.65m	W >2.9m L >18.65m	W >4.3m L >27.4m	W >5m L >27.4m	W >6.1m L >30m
≤44,000kg	≤11,500kg	N/A	Police – 2d			
>44,000kg	≤11,500kg	HA&BO – 2d	Police – 2d HA&BO – 2d		Police – 2d HA&BO – 2d NH – 2w	
>50,000kg	>11,500					
>80,000kg	>12,500		Police – 2d HA&BO – 5d		Police – 2d HA&BO – 5d NH – 2w	
>150,000kg	>16,500kg					Police – 5d HA&BO – 5d NH – 10w

Key:  = Abnormal Load legislation  = VR1 form notice  = C&U
 = STGO C1  = STGO C2  = STGO C3  = Special Order

HA&BO = Highway Authority and other Bridge Owners NH = National Highways

This table highlights that:

- Where just load size increases, only the Police require notification, until the size reaches such that HA&BOs and National Highways require notifying also
- Conversely, where just load weight increases, HA&BOs require notification, until the weight reaches such that the Police and National Highways require notifying also
- For combinations of size and weight increases, both the Police and HA&BOs need notifying, together with National Highways for the largest/heaviest loads
- In all cases, the minimum notification period increases with load size and weight
- For loads over 5m wide, UK Secretary of State approval must be sought through submission of a VR1 form²

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/471962/VR1_form.pdf

- For loads over 6.1m wide, UK Secretary of State approval must be sought through submission of a Special Order form³

The approval of VR1 and Special Order forms has not been devolved by the UK Government to Welsh Government and so currently remains the responsibility of National Highways. However, for Special Order movements which will result in trips on the Welsh trunk road network, and for any other abnormal load movement deemed applicable, Welsh Government may require a Traffic Management Plan (TMP) to be submitted for approval before the proposed journey date. TMP requirements are defined in Section 4.1 below.

VR1 and Special Order load movements should also be planned with due cognisance of Highway England's 'Water preferred policy guidelines'⁴ which require such journeys to be completed as far as possible by either inland or coastal waters wherever it is practical, economic and environmentally desirable to do so.

2.3 Summary

UK law defines abnormal load categories based on the degree of vehicle and route preparation required in each case to ensure a smooth and safe movement, with preparation requirements increasing with load size and weight.

Further guidance on vehicle and route preparation is provided in the following two sections.

³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/503102/BE16_form_revised_Sept_15.pdf

⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799833/WPP_guidelines_2019_DfT_consultation_revision.pdf

3 VEHICLE PREPARATION

Ensuring that an abnormal load vehicle meets legal requirements and is fit-for-purpose is essential for ensuring safe and reliable journeys. This short section is not intended to cover all legal matters relating to abnormal load vehicle preparation but summarises key requirements that contribute to safe movements through Wales.

3.1 Vehicle choice

Where the carrying of a load causes the vehicle and load to lie outside of normal C&U/AWR size and/or weight limits, the party responsible for its transportation is legally required to divide the load into smaller components wherever possible, except where this would involve undue expense or risk of damage.

Assuming the load cannot be further subdivided and so is considered an abnormal indivisible load, the selected vehicle must comply with the legislation applicable to the dimensions and weight of the combination, as set out in Table 1 above.

3.2 Signage, markings and lighting

It is both a legal requirement and best practice to clearly sign, mark and light an abnormal load vehicle to ensure the visibility of vehicle size and extremities for other road users. For a summary of requirements and best practice, refer to the following documents:

- 'Special types enforcement guide', by Gov.UK⁵
- 'Lighting and marking for abnormal loads vehicles code of practice', by National Highways⁶

3.3 Attendants

Both C&U and STGO legislation require that an attendant travel with the vehicle where:

- The overall width of the vehicle together with the width of any lateral projection or projections of any load carried on it is 3m or less but the length of any lateral projection of a load carried on it exceeds 305mm.

⁵ <https://www.gov.uk/government/publications/lighting-and-marking-for-abnormal-loads-vehicles-code-of-practice>

⁶ <https://www.gov.uk/government/publications/special-types-enforcement-guide/special-types-enforcement-guide#abnormal-loads>

- The overall width of the vehicle together with the width of any lateral projection or projections of any load carried on it exceeds 3.5m where a rigid unit and any projection of the load exceeds 18.75m in length.
- Special types combination exceeds 25.9m, the length of any forward projection of the load exceeds 2m, the length of any rearward projection of the load exceeds 3.05m.

Where attendants are required on special types vehicles and three or more vehicles are involved travelling in convoy, attendants need only be carried in the first and last vehicles of that convoy.

The attendant's duty is to warn the driver or any other person of any danger likely to be caused by the presence of the vehicle or vehicles on the road and to ensure road signs and notices are complied with.

3.4 Documentation

If UK Secretary of State approval is required and obtained for the journey via either a VR1 or Special Order form, the approval documents must be carried in the vehicle during the approved journey as the means of demonstrating authorised exemption from C&U/AWR regulations.



4 JOURNEY PREPARATION

The key to an effective and safe abnormal load journey is good preparation in liaison with relevant authorities, as required by legislation and by this document. This section provides guidance on the journey planning and notification process.

4.1 Notification requirements

4.1.1 Authorities to be notified

As summarised in Table 2 above, the relevant authorities who require notification of abnormal load movements may include:

- Police
- Highway authorities and other bridge owners
- National Highways

In Wales, highway authorities comprise:

- Local authorities for non-trunk roads, and
- Welsh Government for trunk roads (with functions delegated to NMWTRA/SWTRA and DBFO companies)

Bridge authorities/owners most commonly comprise:

- Local authorities for non-trunk road structures
- Welsh Government for trunk road structures (with functions delegated to NMWTRA/SWTRA and DBFO companies)
- Network Rail for rail bridges
- Canal and River Trust for canal bridges

4.1.2 Notice periods

Notification to relevant authorities must be provided before any abnormal load journeys take place. The minimum notification periods for each authority are summarised by abnormal load category in Table 2 above. Depending on the type of abnormal load, this shows that:

- Each Police force area traversed by the route must be given at least 2 to 5 days' notice

- Each HA&BO area traversed by the route must be given at least 2 to 5 days' notice
- If VR1 form approval is required, National Highways must be given at least 2 weeks' notice
- If Special Order approval is required, National Highways must be given at least 10 weeks' notice

Where a Temporary Traffic Regulation Order is required, it should be noted that this can also take up to 12 weeks to process (see Section 4.3.1.3 below for more information).

The reason for requiring minimum notification periods is to allow due time for notified authorities to assess the proposed journey and for applicants to satisfactorily address any issues raised before the journey takes place. More information on the notification assessment process is provided in Section 4.3 below, but it should be noted that notified journeys can only legally take place:

- If all relevant authorities are notified with sufficient notice period and either no response is received before the journey date or any response received before the journey date is addressed by the applicant to the satisfaction of the responding authority, and
- In the case of VR1 or Special Order movements, explicit written approval is received

In addition, where a TMP has been requested by Welsh Government, Welsh Police forces can request evidence of TMP approval before providing escort support services.

It is important to note that notifications which do not satisfy the legal minimum notice periods will generally not be accepted by authorities unless a movement is required as part of a genuine emergency and the notification is accompanied by a telephone call. Equally, notifications can be submitted earlier than the minimum notice period, while pre-notifications and consultations with authorities are also encouraged where there is uncertainty about whether a journey notification would be accepted.

4.1.3 Information required

4.1.3.1 Statutory notification requirements

The level of notification information required depends on the category of abnormal load being moved, with information requirements increasing with movement size and/or weight. A summary of requirements per movement category is provided in the following table.

Table 3 Information required by notification type

Information	C&U	STGO	VR1	Special Order
List of authorities notified	☒	☒	☒	☒
Operator details	☒	☒	☒	☒
Movement route, time and date	☒	☒	☒	☒
Description of load	☒	☒	☒	☒
Vehicle type and registration	☒	☒	☒	☒
Vehicle dimensions and laden weight	☒	☒	☒	☒
Axle weights and spacing		☒		☒
Proof of current indemnity to HW&BO		☒		
More detailed journey information			☒	
More detailed vehicle and load information				☒

4.1.3.2 Traffic Management Plan requirements

Where a TMP is required to be submitted to Welsh Government (see sections 2.2.2 and 4.1.2), the following journey details should be provided:

1. Proposals for transporting AILs from their point of entry to the Welsh trunk road network to the site that minimise any impact on the safety and free flow of trunk road traffic
2. Loaded dimension and weight of AIL
3. Anticipated escort arrangements
4. Methodology for managing trunk road traffic during journey, including identification of passing places and holding areas as necessary
5. Journey contingency plans in the event of incidents or emergencies
6. Estimated journey duration and timings along the route
7. Evidence of trial run that mimics the movement of the AIL along the access route where appropriate, at the discretion of the Highway Authority
8. Swept path analysis modelling at all potential horizontal and vertical constraints along the access route where appropriate, at the discretion of the Highway Authority
9. Proposals for the temporary or permanent modification of any affected street furniture along the access route and details of how this would be managed and reinstated

4.1.4 Notification submission

All relevant notification and indemnity forms can be found on the Gov.UK website⁷ which can be emailed, faxed or posted to relevant authorities.

However, it is recommended that an online notification portal is used to submit C&U and STGO abnormal load notifications. The standard UK system is ESDAL⁸, maintained by National Highways, which allows users to:



- Plan an appropriate route according to vehicle size and weight
- Notify all relevant Police, highway authorities and other bridge owners of the planned journey
- Get advance notice of any possible route problems
- Save vehicle details and routes for future use

Subject to the preferences of individual authorities and Police forces, other online notification portals can also be used, but the applicant should satisfy themselves that any system employed satisfies all legal requirements for making abnormal load journey notifications.

The TMP, if required, should be submitted to the Welsh Government ALO, as detailed in Table 7 below.

4.1.5 Notification dispensations

Dispensations may be issued by Police to hauliers to move abnormal loads through their area without prior notification if they satisfy the following requirements:

- Abnormal loads no wider than 3.5m
- Multiple loads of a like nature on a regular basis
- Routes limited to motorways and selected A roads only

The granting of a dispensation has the potential to significantly reduce the number of notifications hauliers will have to submit. However, the dispensation should reference specific vehicles in the fleet and so are not transferable without prior notice to the Police. Drivers should also carry a copy of the dispensation and present it to an officer on request. Dispensations must be renewed annually on application and are not automatically renewed.

⁷ <https://www.gov.uk/government/publications/abnormal-load-movements-application-and-notification-forms>

⁸ <https://www.gov.uk/esdal-abnormal-load-notification>

Any dispensation granted will not take account of any roadworks commencing during the dispensation period or ongoing at the point of issue and hauliers will still be expected to check their route.

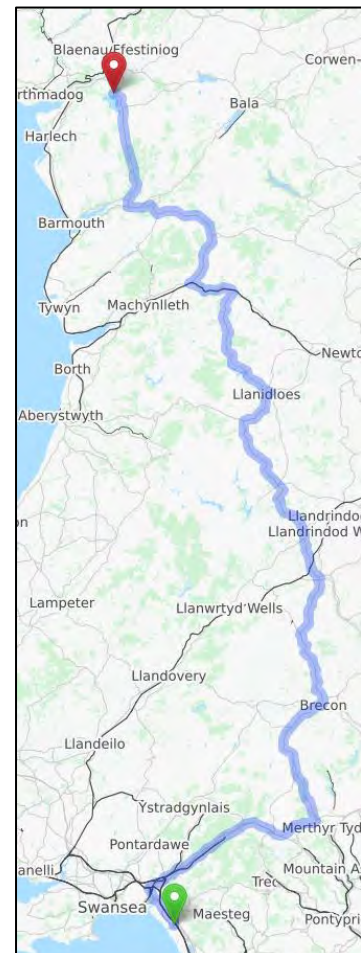
4.2 Route planning guidance

4.2.1 General principles

It is ultimately the haulier's responsibility to identify a route and execute a journey which ensures the legal, safe and least disruptive passage of an abnormal load from trip origin to trip destination. Relevant authorities will provide guidance and, where necessary, require journey amendments, but the legal responsibility and liability for the safe completion of each journey lies with the haulier.

In selecting an appropriate route for inclusion in an abnormal load journey notification, the following general principles should be followed:

- Routing preference should always be given to using the highest classification roads, with as much of the journey as possible being routed along motorways, trunk roads and A-roads. These routes are best equipped to carry large and heavy loads, and are least likely to present size and weight restrictions (the busiest abnormal load routes on the Welsh trunk road network typically include the A55, A494 dual carriageway, A483 dual carriageway and the A5 near Chirk)
- Routes should also avoid passing through population centres wherever possible to minimise conflict with both infrastructure constraints and other road users
- Routes must avoid roads presenting size and/or weight restrictions which fall within the parameters of the vehicle/load combination being transported
- One key advantage of using online journey notification systems like ESDAL is that it allows users to plot a route based on vehicle size and weight based on mapping which contains information on network size and weight restrictions.



Potential applicants should also be aware of Ordnance Survey 'Mastermap Highways Network' products which allow point-to-point route planning and contains a comprehensive and continuously updated national database of:

- Road classification and name
- Height, weight, width and length restrictions
- Turn restrictions
- Access restrictions
- Locations of bollards and traffic calming
- Narrow roads and pinch points
- Maintenance responsibility

In addition, it is recommended that applicants consider potential planned roadworks at the route planning stage using the online resources detailed in Section 4.4.1 below.

In combination with online notification portals, hauliers therefore now have access to route planning tools which maximise the chances of both successful abnormal load notifications and successful abnormal load journeys.

4.2.2 Other considerations

4.2.2.1 Travel timing

In planning an abnormal load route, the following timing related factors should also be considered:

- Journey times which exceed statutory driver working time limits will require a stopping place to be identified along the route which can accommodate abnormal load vehicles
- Journey distances which require vehicle refuelling will require a fuel station to be identified along the route which can accommodate abnormal load vehicles
- During hours of darkness, most Police forces only allow abnormal load movements to take place on motorways and on some lit dual carriageways. Journeys on all other road types which cannot be completed during daylight hours will therefore need to be routed via an abnormal load layby where layover can take place
- Some authorities will not allow abnormal load movements through their area or parts of their area during peak traffic hours. This can affect both route choice and journey timing

For planning stops and/or refuelling, National Highways publish on the Gov.uk website a list⁹ and map¹⁰ of laybys and motorway service stations which can accommodate abnormal loads.

In calculating journey times, typical congestion on the planned day of travel should be taken into account, as well as the speed limit applicable to the abnormal load vehicle type. STGO loads are speed limited by category and road type. The most common categories are limited as follows:

Table 4 STGO speed limits by category and road type

STGO category	Speed limit		
	Motorway	Dual carriageway	Other roads
Category 1 (width ≤ 4.3m)	60mph	50mph	40mph
Category 1 (width > 4.3m) & Categories 2 & 3	40mph	35mph	30mph
Special Order ¹¹	20mph	20mph	20mph

Source: Special Types Enforcement Guide

4.2.2.2 Escort considerations

Consideration should also be given during route planning as to whether either a private or Police escort is required to accompany the abnormal load movement.

There is no legal requirement for a vehicle moving under STGO or a Special Order to be accompanied by an escort vehicle, but National Highways advises that the following dimensions may be applied to decide if the movement of an abnormal load requires an escort:

Table 5 National Highways guidelines on escort requirements

Abnormal load measurement	Motorway	Other
Width	>4.6m	>4.1m
Length	-	>30.5m
Weight	130t	100t

Source: Lighting and marking COP for abnormal load self escorting vehicles, National Highways

The above measures are for guidance and may differ between individual Police forces who may wish to vary these requirements. The final decision rests with the Police (see Section 4.3.1.2 below).

See the full National Highways Code of Practice¹² for further details on escorting abnormal load movements.

⁹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/494606/Location_of_Abnormal_Load_Laybys_-_1143.pdf

¹⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/494607/Lay-by_and_MSA_Map_-_1143.pdf

¹¹For girder frame trailers over 150 tonnes and draw-bar trailers over 250 tonnes, the limit is 12mph

¹²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/503105/Lighting_and_marking_COP_for_abnormal_load_self_escorting_vehicles_HE_rebranding_v1.pdf

4.3 Notification processing

4.3.1 Police notification assessment process

4.3.1.1 Public Safety Risk Assessment

In processing an abnormal load journey notification, the primary concern of the Police is to assess the potential impact of the journey on public safety. The relevant duty officer within the Police will therefore check the notification and carry out a risk assessment based on the agreed 'risk category' levels set out below:

- Low risk notifications – no necessity for further action. General advice provided to the haulier and information on control measures if necessary.
- Medium risk notifications – the Police will check the movement complies with relevant legislation and inform the haulier if the notification is rejected. A decision on the necessity of a Police escort or further traffic management measures will be considered for all notifications considered medium risk.
- High risk notifications – the Police will check the movement complies with relevant legislation and inform the haulier if the notification is rejected. A decision on the necessity of a Police escort or further traffic management measures will be considered for all notifications considered high risk.

Based on this risk assessment, the Police forces may reject or amend any time, date or route that they consider may have an impact on public safety. If a route is deemed unsuitable, the haulier will be notified and will then be responsible for identifying an alternative route or additional traffic management measures sought from local authorities, National Highways or the Police.

4.3.1.2 Escort requirements

If the risk assessment determines that the safety of road users may be compromised to an unacceptable extent, an escort may be specified regardless of the vehicle dimensions specified in Table 5 above. The haulier will therefore be responsible for provision of an escort vehicle which conforms to the type specified by National Highways.

As per ACPO guidance, Police escorts will only be provided if specifically requested by a haulier or if the risk assessment identifies the need for temporary road closures to ensure safe passage of the load through restricted sections of the route. A minimum of 8 days notice will be required for a Police escort. If necessary, charges for Police escorts will be incurred by the haulier at 'Special Policing



Services' rates. For journeys where a TMP has been requested by Welsh Government, Welsh Police forces can request evidence of TMP approval before providing escort support services.

4.3.1.3 Temporary Traffic Regulation Order

If the risk assessment identifies the need for a temporary road closure on any section of the route, the haulier will be required to apply for a Temporary Traffic Regulation Order (TTRO) under the Road Traffic Regulation Act 1984 to allow officers and other Accredited Persons¹³ to stop and direct moving traffic or to suspend on-street parking. Applications for TTROs on the non-trunk road network should be made through the relevant local authority, and through NMWTRA/SWTRA for trunk road applications.

Hauliers should be advised that TTROs can take up to 12 weeks to process.

4.3.2 HA&BO notification assessment process

In processing an abnormal load journey notifications, the primary concern of highway authorities and other bridge owners is to assess the potential impact of the journey on highway structures.

4.3.2.1 Check for height and width restrictions

On receipt of a notification or notification enquiry, the Abnormal Loads Officer (ALO) for each of the affected HA&BOs will use details of the vehicle configuration to undertake audit checks of known height and width restrictions at structures along the route, and any other known structural constraints (temporary or permanent). Alternative routes or configurations may be suggested to avoid any identified structural constraints.

The ALO may request the haulier or enquiring party provides horizontal and/or vertical swept path analysis as necessary, based on topographical survey data. If the submitted swept path analysis is considered inadequate, the ALO may request the haulier or enquiring party undertakes a trial run to mimic the movement of the abnormal load vehicle through the constraint. The trial run vehicle should demonstrate the extent of the load envelope in terms of width and height in a clearly visible manner using a collapsible template. It should be noted that this may require a Police escort.

If the ALO is not satisfied that the constraint can be negotiated by the load, the HA&BO shall inform the haulier or enquiring party, as well as other relevant authorities as appropriate, that the load cannot be moved. WG can also implement Permanent or Temporary Traffic Regulation Orders under the Road Traffic Regulation Act 1984 to limit the maximum gross vehicle weight on a structure if required.

¹³ The Police Reform Act allows DVSA and other agencies to use Policing Powers to be able to replace officers at planned events, under the provisions of the Community Safety Accreditation Scheme (CSAS), as long as they are "employed" by the Accredited Agency to do so.

4.3.2.2 Check for structural capacity

On receipt of a notification or notification enquiry, the ALO will undertake checks referring to existing structural certification along the notified route, in consultation with the HA&BO's structures team if necessary, based on the loading and vehicle configuration.

If checks identify structures which may not be able to carry the load, the haulier may suggest an alternative route which will then need to be submitted to the relevant HA&BO for approval.

Further checks will be undertaken if an alternative route cannot be found. This will be undertaken by the ALO or a structural engineer. If these checks identify structures which would not be able to carry the load, the haulier may propose alternative vehicle configurations until a suitable configuration is found.

If neither a suitable route nor suitable vehicle configuration can be found and the HA&BO rejects the proposal to move on this basis, then the haulier may commission the assessment of route structures by a suitably qualified and experienced consultant at their own expense. All load assessments require Technical Approval according to BD2, 'Technical Approval Of Highway Structures'¹⁴. WG are the Technical Approval Authority (TAA) for Trunk Roads in Wales.



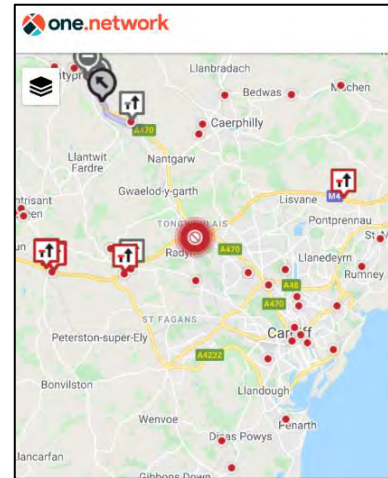
¹⁴ <https://www.croftse.co.uk/wp-content/uploads/2018/04/BD2-12-Highways-Structures-Approval.pdf>

4.4 Post-notification considerations

4.4.1 Roadworks and disruptions

The haulier should check for roadworks and disruptions along the route on the day of travel before commencing an agreed journey. Roadworks can particularly affect the passage of wide loads, and national details of live roadworks can be checked at <https://one.network/> or at <https://traffic.wales/> (also see Section 7 for Traffic Wales' contact details).

The haulier should consult in advance with the relevant ALO and the party responsible for the works if there is any doubt about whether the works affect the agreed route for the journey.



In the event where roadworks make the agreed route impassable, an agreement should be reached with the party responsible for the works to make passage possible at an agreed time, if feasible.

If not feasible, or if an unforeseen disruption makes a section of the agreed route impassable, the haulier is expected to assess where it is most appropriate and safe to park up and to contact the Police. If there are no safe areas then traffic management may be required to safely control traffic around the abnormal load vehicle. In addition to Police contact details, all hauliers are also recommended to carry contact details of the relevant local highway authorities and national traffic management firms to aid swift action in case of such an event.

4.4.2 Enforcement considerations

Once in transit, abnormal load vehicles can be subject to enforcement checks by either Police or DVSA officers. The vehicle may be escorted to a safe stopping place if any of the following conditions are met:

- Police have not received notification of movement
- Notification of movement is invalid due to inaccuracies
- Movement is not taking place in accordance with approved notification or authorised amendments
- Abnormal Indivisible Load vehicle or load is incorrectly marked or lit
- Abnormal Indivisible Load vehicle does not have the required attendant

- Abnormal Indivisible Load vehicle does not have the escort vehicle required by Police
- Driver is currently committing a 'driving hours' offence under tachograph regulations or will have committed an offence before reaching next stopping point
- Driver is currently committing an 'insufficient rest' offence under tachograph regulations
- Any C&U offences not exempted by STGO 2003 are evident

Where non-compliance is evident, the driver and operator are liable to prosecution under C&U regulations. Penalties for non-compliance can range from a fine¹⁵ to the temporary restriction or suspension of the haulier's operating licence by the Traffic Commissioner for Wales¹⁶. Officers might also prevent onward travel of the vehicle until any areas of non-compliance are adequately addressed.

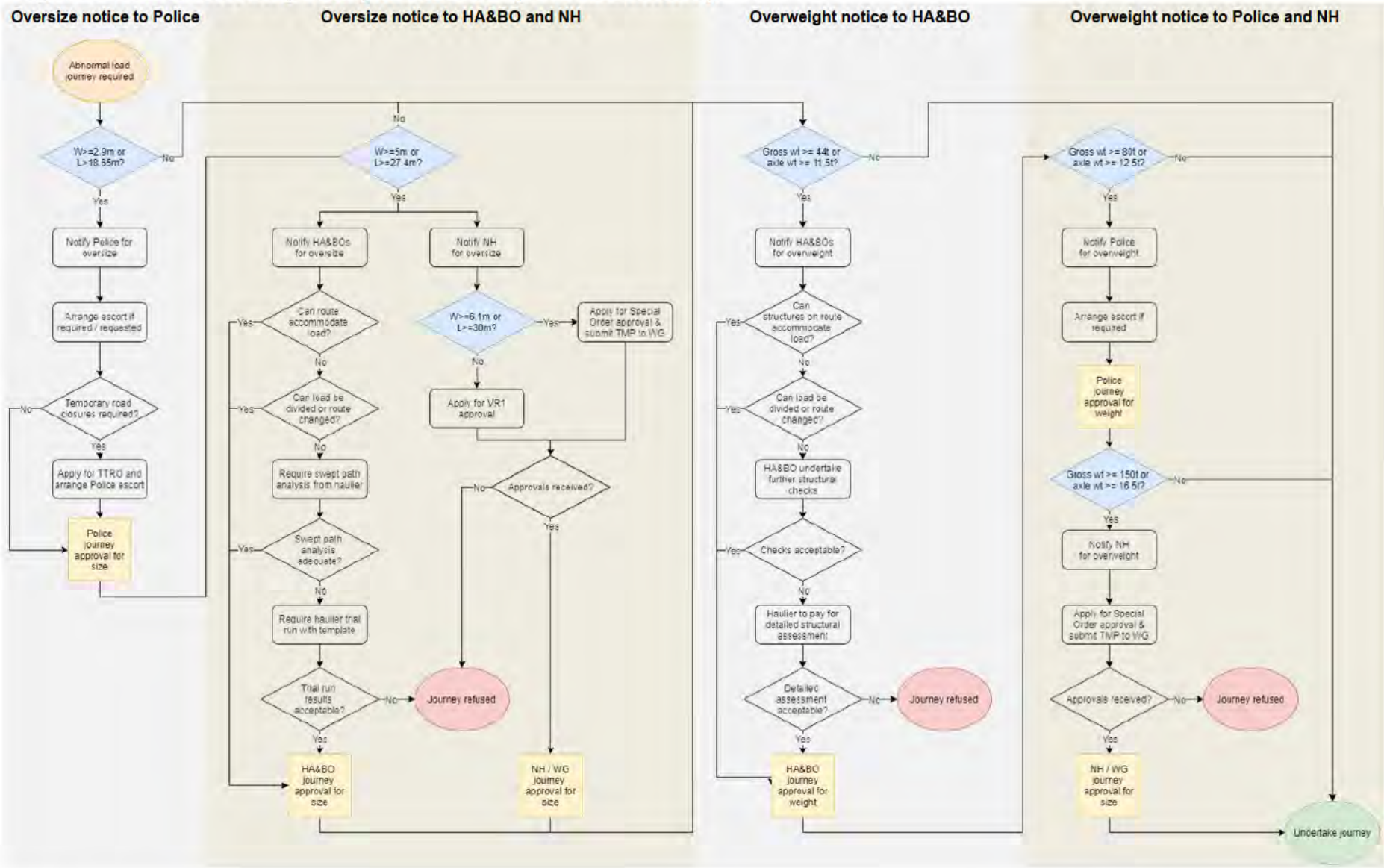
4.5 Process summary

A summary of the main steps in the legally required notification process is shown in the following figure.

¹⁵ <https://www.gov.uk/government/publications/guide-to-graduated-fixed-penalties-financial-deposits/dvsa-roadside-checks-fines-and-financial-deposits>

¹⁶ <https://www.gov.uk/traffic-commissioner/decision-and-penalties>

Figure 2 Abnormal load journey notification process summary



5 ABNORMAL LOADS AND DEVELOPMENT CONTROL

5.1 Planning applications

Planning applications for developments which are likely to generate abnormal load movements, either during construction or operation, may be required to be submitted with a Transport Assessment in accordance with Welsh Government Planning Policy Technical Advice Note 18: Transport¹⁷ Regarding abnormal load movements, the Transport Assessment should identify:

- Estimated movement volumes of abnormal loads to and from the site
- The most appropriate abnormal load routes to and from the site
- Mitigation proposals where necessary for route to safely accommodate load

Failure to demonstrate that the site can be safely accessed by the loads it will generate can be grounds for refusal of planning permission.



5.2 Planning conditions

Where planning permission is granted for a development which will generate abnormal load movements on the Welsh trunk road network, the following planning conditions will be attached.

¹⁷ <https://gov.wales/sites/default/files/publications/2018-09/tan18-transport.pdf>

5.2.1 Structural assessment

No on-site development works shall be undertaken until:

- a. an assessment of the capacity and impact on all structures along those parts of the highway network which shall be utilised during the construction of the development including bridges, culverts, retaining walls, embankments, and
- b. details of any improvement works required to such structures as a result of construction of the development

have been submitted to and approved by the local planning authority following consultation with the Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate). The required improvement works identified in the assessment shall be completed prior to the commencement of any Abnormal Indivisible Load (AIL) deliveries to the development site.

5.2.2 Condition surveys

Condition surveys of all highway features along those parts of the highway network which shall be utilised during the construction of the development shall be undertaken prior to, during and on completion of the construction phase of the development. The survey reports shall be submitted to and approved by the local planning authority following consultation with the Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate) within 28 days of the surveys.

5.2.3 Liability for incidental damage

Prior to the commencement of development works, a scheme to provide for the remediation of any incidental damage directly attributable to the development to the parts of the highway network which will be utilised during the construction of the development including street furniture, structures, highway verge and carriageway surfaces shall be submitted to and approved by the local planning authority following consultation with the Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate). The scheme shall be implemented as approved throughout the construction phase of the development.

5.2.4 Traffic Management Plan

AILs associated with the development shall be delivered strictly in accordance with a Traffic Management Plan (TMP) as shall be agreed with the relevant highway authority. In this respect, the TMP shall be submitted to and approved in writing by Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate) prior to the commencement of any works. The TMP shall include:

- a. proposals for transporting AILs from their point of entry to the Welsh trunk road network to the site that minimise any impact on the safety and free flow of trunk road traffic
- b. evidence of trial runs that mimic the movement of the worst case AILs along the access route where appropriate, at the discretion of the Highway Authority
- c. number and size of AILs, including loaded dimensions and weights
- d. number and composition of AIL convoys, including anticipated escort arrangements
- e. methodology for managing trunk road traffic during AIL deliveries, including identification of passing places and holding areas as necessary
- f. convoy contingency plans in the event of incidents or emergencies
- g. estimated convoy journey durations and timings along the route, including release of forecast traffic queues
- h. swept path analysis modelling the movement of the worst case AILs at all potential horizontal and vertical constraints along the access route where appropriate, at the discretion of the Highway Authority
- i. proposals for the temporary or permanent modification of any affected street furniture along the access route and details of how this would be managed
- j. plans for the reinstatement of any temporary works after completion of the construction phase
- k. land ownership must be clarified on all drawings showing proposed highway modifications. The developer shall be responsible for the acquisition and reinstatement of all third party land including re-instatement of boundary features
- l. proposals to liaise with all relevant stakeholders and members of the public regarding construction traffic and AIL movements
- m. consideration of the cumulative impact of other abnormal load generating schemes proposing to use all or part of the same access route

AILs associated with the maintenance and decommissioning of the development shall leave the site strictly in accordance with a TMP as shall be agreed with the relevant highway authority. In this respect, the TMP shall be submitted to and approved in writing by Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate) prior to the commencement of any removal, replacement of decommissioning works.

5.2.5 Highway works

No development works shall be undertaken until full details of any highway works associated with the construction of layover areas, passing places and highway improvements as agreed with each relevant highway authority including:

- a. the detailed design of any works
- b. geometric layout
- c. construction methods
- d. drainage, and
- e. street lighting

have been submitted to and approved in writing by the local planning authority following consultation with the Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate). The highway works shall be completed in accordance with the approved details prior to the commencement of any AIL deliveries to the development site.

No development works shall be undertaken until the developer demonstrates rights of access to all proposed works that are not part of the highway network to the satisfaction of the local planning authority.

5.2.6 Road Safety Audit

The applicant shall undertake a Road Safety Audit of the scheme (Stages 1 – 4) in accordance with the Design Manual for Roads and Bridges GG 119¹⁸. The applicant shall agree the required measures with the Welsh Government as Welsh trunk road highway authority or other relevant highway authority (as appropriate) prior to the commencement of works on site.

5.2.7 Section 278 Agreement

The applicant shall enter into an Agreement with the Welsh Ministers under Section 278 of the Highways Act 1980 to enable the Applicant to undertake agreed improvement works on the trunk road. This Agreement will contain details of the improvement works, construction conditions and financial arrangements under which agreed measures can be put in place, including indemnifying the Welsh Ministers against third party claims. Without such an

¹⁸ <http://bailey.persona-pi.com/Public-Inquiries/M4-Newport/C%20-%20Core%20Documents/6.%20Transport%20and%20Engineering/DMRB/vol5/section2/hd1915.pdf>

agreement in place, any consent that may be granted cannot be implemented.

For further information on this matter please refer to Welsh Government Procedure & Advice Guidance PAG 109/18: Section 38, 184, and 278 Agreements under the Highways Act 1980¹⁹.

5.2.8 Access onto the trunk road

Full details of the highway works associated with the proposed new access onto the trunk road shall be submitted by the applicant to WG, as the Welsh trunk road highway authority, prior to the commencement of any works on the development site. Details of proposed highway works should be as indicated on the submitted plans including the detailed design, geometric layout, construction and drainage.

The visibility splays shown on the submitted plans of the proposed new access onto the trunk shall at all times be kept free of any planting, tree or shrub growth, or any other obstruction in excess of 1.05m above the adjoining carriageway.

All highways works shall achieve full compliance with DMRB.



¹⁹ <https://gov.wales/sites/default/files/publications/2018-04/109-18-section-38-184-and-278-agreements-under-the-highways-act-1980.pdf>

6 SUMMARY OF ROLES AND RESPONSIBILITIES

The roles and responsibilities for each party set out in this document are summarised in the following table.

Table 6 Summary of roles and responsibilities of parties involved in abnormal load movements

Party	Role	Responsibilities
Consigners/agents	Generating/commissioning abnormal load movement	Commissioning of fully compliant haulier for planning and executing abnormal load movements. Preference should be given to hauliers with FORS accreditation (see https://www.fors-online.org.uk/cms/)
Haulier	Preparing and executing abnormal load movement	- Planning subdivision of loads wherever possible to avoid need for abnormal load movements (see Section 3.1) - Ensuring selected vehicle complies with the legislation applicable to the dimensions and weight of the combination (see Table 1) - Ensure vehicle and load is clearly signed, marked and lit according to regulations (see Section 3.2) - Ensure attendants accompany vehicle if required (see Section 3.3) - Carry VR1 or Special Order documents in vehicle where applicable (see Section 3.4) - Notify relevant authorities of abnormal load journey with sufficient notice period, including a Traffic Management Plan if required (see Section 4.1.2) - Address and, if necessary, pay for any requirements emerging from notification assessment process (see Section 4.3) - Undertake/procure structural assessment if required (see Section 4.3.2.2) - Accommodate for roadworks and disruptions on day of travel (see Section 4.4.1) - Execute journey according to approved notification (see Section 4.4.2) and, where applicable, to approved Traffic Management Plan (see Section 2.2.2)
Abnormal load attendant	Accompanying abnormal load on journey where required	- Accompany abnormal load vehicle for full journey where legislation requires - Warn the driver or any other person of any danger likely to be caused by the presence of the vehicle or vehicles on the road (see Section 3.3)
Abnormal load escort	Escorting abnormal load on journey where required	- Comply with National Highways guidance in vehicle preparation and abnormal load escort protocol (see Section 4.2.2.2) - Comply with any specific instructions provided by Police (see Section 4.3.1.2)
Police	Assessing public safety impacts of abnormal load notifications, escorting where required and enforcing regulations in transit	- Undertake public safety risk assessment for all abnormal load notifications (see Section 4.3.1.1) - Advise haulier with sufficient notice if any amendments required to notified journey or if notification refused (see Section 4.3.1.1) - Advise haulier with sufficient notice if private or Police escort required and if TTRO required (see Section 4.3.1.2 and 4.3.1.3) - Resource the Police escort, as required (see Section 4.3.1.2) - Enforce abnormal load regulations in transit for public safety (see Section 4.4.2)
DVSA	Vehicle standards, licencing and enforcement	Enforce abnormal load regulations in transit for public safety (see Section 4.4.2)
HB&BOs	Assessing infrastructure impacts of abnormal load notifications	- Assess relevant journey notifications in terms of capacity of route infrastructure to accommodate proposed abnormal load dimensions and weight (see Section 4.3.2) - Advise haulier if journey notification is rejected or approved (see Section 4.3.2Error! Reference source not found.).
Planning authorities	Determining planning applications for abnormal load generating developments	- Ensure planning applications consider abnormal load trip generation and demonstrate suitable routeing and, where necessary, mitigation (see Section 5.1) - Apply planning conditions where necessary to ensure abnormal load routes are fully planned and approved and that all journeys are undertaken according to an approved Traffic Management Plan (see Section 5.2)
Developers	Seeking planning consent for abnormal load generating developments	- Submit Transport Assessment with planning application to identify abnormal load trip generation, suitable routeing and, where necessary, mitigation (see Section 5.1) - Discharge planning conditions, where applicable, by ensuring abnormal load routes are fully planned and approved and by committing to all journeys being undertaken according to an approved Traffic Management Plan (see Section 5.2)

7 USEFUL CONTACTS

The process outlined in the above sections requires input from and contact with a number of organisations in order to ensure all relevant authorities are notified, and that abnormal load movements occur safely and without causing disruption to the network.

The following table provides a list of key contacts and contact details for queries associated with the movement of abnormal loads in Wales.

Table 7 Useful contacts for abnormal load related queries

Organisation	Contact details
Welsh Government ALO	Tel: 02920 629465 Email: AbnormalLoads@gov.wales
Dyfed-Powys Police	Tel: 01267 226011 Email: AbnormalLoads@dyfed-powys.pnn.Police.uk
Gwent Police	Tel: 01633 642470 Email: abnormal-loads@gwent.pnn.Police.uk
North Wales Police	Tel: 01492 805407 Email: abloadnotify@nthwales.pnn.Police.uk
South Wales Police	Tel: 01656 655555 Email: Special-Movements@south-wales.pnn.Police.uk
NMWTRA	Tel: 01545 571960 Email: abnormalloads@nmwtra.org.uk
SWTRA	Tel: 01792325965 Email: abnormalloads@southwales-tra.gov.uk
Traffic Wales	Tel: 0300 123 1213
National Highways Abnormal Loads Team	Tel: 0300 4703004 Email: abnormal.loads@highwaysengland.co.uk
Network Rail Abnormal Loads Team	Tel: 01908 783 140 Email: abnormalloadsenquiries@networkrail.co.uk
Blaenau Gwent County Borough Council	Tel: 01633 644716 Email: AbnormalLoads@monmouthshire.gov.uk
Bridgend County Borough Council	Tel: 01656 642857 Email: abloads@bridgend.gov.uk
Caerphilly County Borough Council	Tel: 01633 644716 Email: AbnormalLoads@monmouthshire.gov.uk
Cardiff City & County Council	Tel: 02922 330966 Email: abnormal.loads@cardiff.gov.uk
Carmarthenshire County Council	Tel: 01267 228307 Email: abnormalloads@carmarthenshire.gov.uk
Ceredigion County Council	Tel: 0154 5572430 Email: technical.services@ceredigion.gov.uk
Conwy County Borough Council	Tel: 01492 575365 Email: abnormalloads@conwy.gov.uk
Denbighshire County Council	Tel: 01824 706884 Email: abnormal.loads@denbighshire.gov.uk
Flintshire County Council	Tel: 01352 704810 Email: abnormalloads@flintshire.gov.uk
Gwynedd County Council	Tel: 01286 679306 Email: LlwythAbnormal@gwynedd.llyw.cymru
Isle of Anglesey County Council	Tel: 01248 752312

Organisation	Contact details
Merthyr Tydfil County and Borough Council	Tel: 01685 726241 Email: [REDACTED]
Monmouthshire Council	Tel: 01633 644716 Email: AbnormalLoads@monmouthshire.gov.uk
Neath Port Talbot County Borough Council	Tel: 01639 686492 Email: abloads@npt.gov.uk
Newport City Council	Tel: 02920 803500 Email: Loads.Abnormal@capita.co.uk
Pembrokeshire County Council	Tel: 01437 776153 Email: abloads@pembrokeshire.gov.uk
Powys County Council	Tel: 01597 826619 Email: highways.management@powys.gov.uk
Rhondda Cynon Taf County Borough Council	Tel: 01443494706 Email: highwaysabnormalloads@rctcbc.gov.uk
Swansea Council	Tel: 01792 636182 Email: Abnormal.Loads@swansea.gov.uk
Torfaen County and Borough Council	Tel: 01633 644716 Email: AbnormalLoads@monmouthshire.gov.uk
Vale of Glamorgan Council	Tel: 02920 673106
Wrexham County Borough Council	Tel: 01978 729723 Email: abnormal_loads@wrexham.gov.uk



Gwasanaeth Tân ac Achub
Canolbarth a Gorllewin Cymru
Mid and West Wales
Fire and Rescue Service

Prif Swyddog Tân | Chief Fire Officer

Roger Thomas BA(Hons), MSc

tancgc.gov.uk
mawwfire.gov.uk

Crown Buildings
Cathays Park
Cardiff
CF10 3NQ

*Gofynner am/
Please ask for:*

Watch Manager Adrian Hall

*Rhif Est/Extn.
No.*

E-bost/E-mail:

*Fy Nghyf/My
Ref:*

AJH/CW/00350030

Dyddiad/Date:

01 February 2024

Dear Sir/Madam,

**THE TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE)
(WALES) ORDER 2012**

THE DEVELOPMENTS OF NATIONAL SIGNIFICANCE (PROCEDURE) (WALES) ORDER 2016

**DEVELOPMENT PROCEDURE (CONSULTEES) (WALES) (MISCELLANEOUS AMANDMENTS)
ORDER 2021 – FIRE AND RESCUE AUTHORITIES**

RE: Aberedw Energy Park

APPLICATION NUMBER: CAS-03009-N5D9K8

I acknowledge receipt of the notification to the Mid and West Wales Fire and Rescue Authority in relation to the above application.

The site plan/s of the above proposal has been examined and the Fire and Rescue Authority would wish the following comments to be brought to the attention of the planning committee/applicant. It is important that these matters are dealt with early on in any proposed development :

- The Fire Authority has no comment to make on access for fire appliances or water supplies.
- The Fire Authority has no objection to the proposed development and refers the Local Planning Authority to any current standing advice by the Fire Authority about the consultation.

The developer should consider the need to provide adequate water supplies and vehicle access for firefighting purposes on the site and general guidance on this matter is given in the attached Appendix and the following links: <https://www.water.org.uk/guidance/national-guidance-document-on-the-provision-of-water-for-firefighting-3rd-edition-jan-2007/>

<https://www.ukfrs.com/index.php/promos/16847>

Y Pencadlys, Heol Llwyn Pisgwydd, Caerfyrddin, Sir Gâr, SA31 1SP
Headquarters, Lime Grove Avenue, Carmarthen, Carmarthenshire, SA31 1SP

post@tancgc.gov.uk
mail@mawwfire.gov.uk

0370 60 60 699

Furthermore, the applicant should be advised to contact the Local Authority Building Control Department, which is the responsible authority, when determining issues concerning means of warning and escape, internal fire spread (linings and structure), external fire spread, access and facilities for the Fire and Rescue Service, in accordance with the 2007 version of Approved Document B (Wales).

The plan/s has been retained for record purposes.

Yours faithfully



Watch Manager A Hall
Authorised Fire Safety Regulator
On behalf of the Mid and West Wales Fire and Rescue Authority

Encs.

MID AND WEST WALES FIRE AND RESCUE SERVICE

Advice on Water Supplies

1. WATER SUPPLIES FOR FIREFIGHTING

The existing output of the statutory water supply network may need to be upgraded in certain parts of the local plan area to care for firefighting needs of new developments. It is recommended that this provision be a condition of planning consent.

Reference to the National Guidance Document on the Provision of Water for Fire Fighting 2007.

Access to Open Water Supplies

Where development of water-front sites takes place, the need for permanent and unobstructed access for firefighting appliances to the water should be made a condition of any planning consent.

Consultation must take place with the Fire and Rescue Authority during the earliest planning stages of any development to ensure access for fire pumping appliances is satisfactory.

1.1. HOUSING

Minimum main size 100 millimetres. Housing developments of units of detached or semi-detached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any hydrant on the development.

The Fire and Rescue Authority should be consulted at the outline planning stage of any proposed projects to ascertain the exact requirements.

1.2. TRANSPORTATION

Lorry/Coach Parks - Multi-Storey Car Parks-Service Stations

Minimum main size 100 millimetres. All of these amenities should have a water supply capable of delivering a minimum of 25 litres per second through any hydrant on the development or within a vehicular distance of 90 metres from the complex.

1.3. INDUSTRY

In order that an adequate supply of water is available for use by the Fire and Rescue Authority in case of fire, it is recommended that the water supply infrastructure to any commercial industrial estate is as follows:

Light Industrial/Commercial

Up to one hectare, 20 litres per second - Minimum Main Size 100 millimetres

Up to two hectares, 35 litres per second - Minimum Main Size 150 millimetres

High Risk Industrial

Up to three hectares 50 litres per second - Minimum Main Size 150 millimetres

Over three hectares, 75 litres per second - Minimum Main Size 150 millimetres

In rural areas it may not be possible to provide sufficient mains water. To overcome this, static or river supplies would be considered on site if they are capable of supplying the above flow rates for at least one hour.

The Fire and Rescue Authority should be consulted at the outline planning stage of any proposed projects to ascertain the exact requirements, as high-risk premises may require a greater flow.

1.4. SHOPPING, OFFICES, RECREATION AND TOURISM

Commercial developments of this type should have a water supply capable of delivering a minimum of 20 to 75 litres per second to the development site. The Fire and Rescue Authority should be consulted at the outline planning stage of any proposed projects to ascertain the exact requirements.

1.5. EDUCATION, HEALTH AND COMMUNITY FACILITIES

Village Halls

Should have a water supply capable of delivering a minimum of 15 litres per second through any hydrant on the development or within a vehicular distance of 100 metres from the complex.

Primary Schools and Single Storey Health Centres

Should have a water supply capable of delivering a minimum of 20 litres per second through any hydrant on the development or within a vehicular distance of 70 metres from the complex.

Secondary Schools, Colleges, Large Health and Community Facilities

Should have a water supply capable of delivering a minimum of 35 litres per second through any hydrant on the development or within a vehicular distance of 70 metres from the complex.

1.6. DISTANCES BETWEEN FIRE HYDRANTS

The distance between fire hydrants should not exceed the following:

Residential areas	-	200 metres
Industrial Estates	-	150 metres
Town Centre Areas	-	90 metres
Commercial (Offices & Shops)	-	100 metres
Residential Hostels	-	Adjacent to access
Hotels	-	Adjacent to access
Institutional (Hospitals & Old Persons Home)	-	Adjacent to access
Old Persons Home	-	Adjacent to access
Educational (Schools & Colleges)	-	Adjacent to access

1.7. CONCLUSION

Developers should hold joint discussions with the relevant Water Authority or the Environmental Agency and the Fire and Rescue Authority to ensure that adequate water supplies are available in case of fire.

The Fire and Rescue Authority reserve the right to ask for static water supplies for firefighting on site, as a condition of planning consent, if the supply infrastructure is inadequate for any given risk.