

2 EIA PROCESS AND ASSESSMENT METHODOLOGY

2.1 Introduction

2.1.1 The Proposed Development falls under Schedule 2(3(i)) of the EIA Regulations (Wales)¹, “installations for the harnessing of wind power for energy production (wind farms)” and meets the applicable thresholds and criteria given the size of the development. A Schedule 2 development constitutes EIA development if it is “likely to have significant effects on the environment by virtue of factors such as its nature, size or location”. Given the scale and location of the Proposed Development, the Applicant has undertaken an EIA to assess potentially significant environmental effects.

Commented [pa1]: can you footnote this as :
The Town and Country Planning (Environmental Impact Assessment)
(Wales) Regulations 2017 SI 2017/567

2.1.2 This EIA has been undertaken in accordance with the EIA Regulations (Wales), having regard to Schedule 4 which sets out the information for inclusion within an Environmental Statement (ES). Paragraph 5 of Schedule 4 states that the description of likely significant effects in the EIA should cover “direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development” on the environment.

2.1.3 Wardell Armstrong LLP is committed to the delivery of effective practice in EIA. As a registrant of the Institute of Environmental Management and Assessment’s (IEMA) EIA Quality Mark, Wardell Armstrong’s EIA practice is independently reviewed in accordance with best practice.

2.1.4 This Environmental Statement (ES) has been prepared with regard to the requirements of the EIA Regulations, which apply to the Proposed Development, as set out in this chapter.

2.2 Consultation

2.2.1 Informal consultation with the local community and Caerphilly County Borough Council began in June 2023. An Inception Meeting was held with PEDW on 12th

¹ The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017/SI 2017/567
BR10167
April 2024



October 2023 to discuss the Proposed Development and understand timeframes associated with the application process.

2.2.2 A Scoping Request was submitted to PEDW in November 2023. Under Regulation 33(7) of the EIA Regulations, PEDW undertook formal consultation with the following consultees:

- Caerphilly County Borough Council
- Bannau Brycheiniog National Park Authority
- Blaenau Gwent County Borough Council
- Natural Resources Wales
- Glamorgan-Gwent Archaeological Trust Ltd
- Cadw
- Department for Climate Change
- The Coal Authority
- NATS Safeguarding
- Welsh Water
- South Wales Fire and Rescue Service

2.2.3 The draft ES has been prepared on the basis of the details set out in the Scoping Request Report and upon any relevant consultee feedback. The Scoping Direction was received on 7th March 2024 and is provided at Appendix 2.2.

2.2.4 The draft ES forms part of the statutory consultation which will allow consultees to understand the likely significant effects of the Proposed Development and provide feedback where necessary and appropriate.

2.3 Scope of Assessment

2.3.1 Regulation 4(2) outlines the factors to be considered as part of the EIA process, in relation to potential direct and indirect significant effects of the Proposed Development. These environmental factors are outlined as follows along with confirmation of where these topics are considered in the Environmental Statement (ES):

- **Population:** Landscape and Visual (Chapter 7), Noise and Vibration (Chapter 8), Transport (Chapter 14), and Socio-economics (Chapter 21).
- **Human health:** Noise and Vibration (Chapter 8), Ground Conditions (Chapter 10), Transport (Chapter 14), Socio-economics (Chapter 21) and Health (Chapter 22).



- **Biodiversity:** Ecology (Chapter 11) and Ornithology (Chapter 12).
- **Land:** Ground Conditions (Chapter 10) and Soil and Agricultural Land (Chapter 13).
- **Soil:** Ground Conditions (Chapter 10) and Soil and Agricultural Land (Chapter 13).
- **Water:** Water Resources (Chapter 20).
- **Air:** Climate Change (Chapter 15).
- **Climate:** Ecology (Chapter 11), Ornithology (Chapter 12) and Climate Change (Chapter 15).
- **Material assets:** Historic Environment (Chapter 9), Ground Conditions (Chapter 10), and Socio-economics (Chapter 21).
- **Cultural heritage:** Historic Environment (Chapter 9).
- **Landscape:** Landscape and Visual (Chapter 7).
- **Major accidents and disasters:** Risks of Major Accidents and / or Disasters (Section 2.8), Ground Conditions (Chapter 10), and Climate Change (Chapter 15).

2.3.2 Information relating to the scope of each of the technical chapters of the ES, covering the environmental topics listed in Section 2.2.1, together with a summary of baseline information and an assessment of the significant effects related to each of these aspects, is provided in **Chapters 7 to 22** of this ES. Details relating to the non-technical chapters, and the technical aspects to be ‘scoped out’ of the ES, are provided in this chapter.

2.3.3 A Non-Technical Summary (NTS) of the ES accompanies the application as a separate standalone document.

2.4 Approach to EIA

Spatial Scope

2.4.1 The study area for each topic is set out within the respective technical chapters of the ES (Chapters 7-22).

Baseline Conditions

- 2.4.2 Baseline conditions are determined using the results of Site surveys and investigations or desk-based data searches, or a combination of these, as appropriate. The baseline date for the Proposed Development is 2023 unless otherwise stated.

Evaluation of Significant Effects

- 2.4.3 The ES sets out the assessment methodologies relevant to each environmental topic, based on recognised guidance and good practice. Each technical assessment considers potential effects of the Proposed Development and evaluates the significance of these effects.
- 2.4.4 To evaluate the significance of effects, consideration of the sensitivity of a receptor, and the magnitude of change that could affect that receptor, is required.

Receptor Sensitivity

- 2.4.5 The sensitivity or value of a receptor may be classified by its proximity to the Proposed Development, its use, or its importance, as informed by legislation, policy, and guidance, and qualified by professional judgement.

Magnitude of Change

- 2.4.6 The magnitude of change that could affect a receptor as a result of the Proposed Development is identified on a scale of change from minor alterations to major change or loss of a receptor. For some environmental topics, guidance on levels of acceptability means such change is based on quantitative parameters whilst for other topics this can be informed by professional judgement using qualitative parameters.

Determining Significance

- 2.4.7 Significance is determined with reference to the sensitivity of receptors that could be affected, together with the magnitude of change likely to occur. This is often determined across the environmental topics through a significance evaluation matrix.
- 2.4.8 For some environmental topics e.g., Ecology, Ornithology and Landscape and Visual, variations in this approach may be applicable and where relevant will be detailed in the assessment methodology section of each ES chapter.
- 2.4.9 Definitions for the categories used within the matrix are derived for each environmental topic and outlined in each ES chapter, along with descriptions of receptor sensitivity, magnitude of change and levels of significant effect.

2.4.10 Table 2-1 outlines the overall significance matrix that is used for the EIA. Effects can be beneficial or adverse.

Table 2-1 Matrix for Evaluating Significance						
		Magnitude of Change				
		Very Low	Low	Medium	High	Very High
Sensitivity	Very Low	Negligible	Negligible	Negligible	Minor	Minor
	Low	Negligible	Negligible	Minor	Moderate	Moderate
	Medium	Negligible	Minor	Moderate	Major	Major
	High	Minor	Moderate	Major	Major	Major
	Very High	Minor	Moderate	Major	Major	Major

2.4.11 Major effects, where accepted limits or standards are exceeded will be determined as significant in EIA terms.

2.4.12 Moderate effects, within accepted limits or standards, but close to reaching the relevant threshold may be determined as significant, although there may be scenarios where such effects are considered not significant based on the specific circumstances being considered and professional judgement.

2.4.13 Minor effects, well within accepted limits or standards, or negligible effects, will be determined as not significant.

Assessment Scenarios

2.4.14 The EIA considers the likely significant effects of the Proposed Development during construction and upon completion / operation of the development, assuming a likely 'worst case' scenario for the purposes of assessment.

2.4.15 The EIA considers the Proposed Development as a whole (both outline and detailed elements).

2.4.16 A baseline scenario of 2023 has been considered, with work anticipated to commence in 2025.

2.4.17 In order to assess likely significant effects arising during construction, a peak construction year has been defined based on peak construction traffic movements and activity in order to assess a worst-case scenario.

Cumulative Effects Assessment

2.4.18 In accordance with Schedule 4 of the EIA (Wales) Regulations, the ES considers potential significant effects arising from the cumulation of effects with other existing and / or approved projects. The ES considers the schemes set out within Table 2-2, within the assessment of Cumulative Effects (Chapter 24).

2.4.19 Within the assessment of cumulative impacts, there are two aspects to consider:

- Intra-cumulative effects (i.e. those occurring as a result of the Proposed Development in isolation); and
- Inter-cumulative effects (i.e. those occurring as a result of the Proposed Development in combination with other development).

2.4.20 A review of Development of National Significance applications within 25 km of the Site, along with planning applications submitted to Caerphilly County Borough Council and the neighbouring Merthyr County Borough Council and Blaenau Gwent County Borough Council, as well as the nearby Torfaen County Borough Council has been undertaken to identify potential development schemes that could give rise to in-combination effects with the Proposed Development.

Intra-cumulative Effects

2.4.21 The EIA has considered where a significant residual cumulative impact is expected to occur on a particular receptor as a consequence of collective actions, aspects or effects of the Proposed Development. Chapter 23 summarises the residual impacts likely to be experienced for each type of receptor and assesses the significance of these cumulative effects.

Mitigation

2.4.22 Mitigation measures to avoid, reduce or offset the consequences of the Proposed Development have been embedded within its design wherever possible, whilst others require adherence to particular constraints on construction methodology or mode of operation. The assessment of significance takes into account the mitigation measures and constraints that have been incorporated into the Proposed Development (Residual Effects – Chapter 23).

2.5 Aspects to be scoped out of the EIA

2.5.1 Specific chapters / assessments will not be included for the following topics, as it is considered that these are addressed sufficiently elsewhere within the ES or



standalone reports, and / or the Proposed Development is unlikely to result in significant environmental effects relevant to these topics:

- Invertebrate and Amphibian Surveys
- Fish Surveys
- Passerine Bird Species Surveys
- Further Terrestrial Mammal Surveys
- Further Bat Surveys
- Targeted Surveys for Nightjar and Black Grouse
- Migratory Waterfowl Surveys

2.6 Risks of Major Accidents and / or Disasters

- 2.6.1 The EIA (Wales) Regulations state that an EIA should consider the vulnerability of the development to risks of major accidents and / or disasters, relevant to the project concerned.
- 2.6.2 'Risk' can be defined as 'the likelihood of an impact occurring, combined with effect or consequence(s) of the impact on a receptor, if it does occur'; a 'Major Accident' can be defined as 'events that threaten immediate or delayed serious damage to human health, welfare and / or the environment'; and a 'Disaster' can be defined as 'naturally occurring extreme weather events (e.g. storm, flood, temperature) or ground-related hazard events (e.g. subsidence, landslide, earthquake) with the potential to cause an event or situation'. Disaster and natural disaster are often used interchangeably.
- 2.6.3 Owing to the nature of the Proposed Development, it is considered that the likelihood of it resulting in / causing an event to occur that threatens (either immediate or delayed) serious damage to human health, welfare and / or the environment is low.
- 2.6.4 During construction measures will be implemented to ensure safe working practices in the vicinity of any utilities.
- 2.6.5 The design of the Proposed Development also incorporates measures to reduce the vulnerability of the development to naturally occurring extreme weather events (i.e., flooding, storms and extreme temperatures) and / or ground related hazard events (e.g., subsidence, earthquakes). Such scenarios are considered across the relevant environmental topics of the ES, for example the Ground Conditions, Climate Change and Health chapters. It is therefore considered that the topic of major accidents and /



or is considered sufficiently elsewhere within the ES and a standalone chapter is not required.

DRAFT