

White Hill Wind Farm Electricity Substation & Electricity Line

Environmental Impact Assessment Report

Chapter 1: Introduction

White Hill Wind Limited

Galetech Energy Services

Clondargan, Stradone, Co. Cavan Ireland

Telephone +353 (0)49 555 5050

www.galetechenergyservices.com



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1.1 Introduction

This Environmental Impact Assessment Report has been prepared by Galetech Energy Services Limited (GES) on behalf of White Hill Wind Farm Limited ('the Developer') to inform the Environmental Impact Assessment to be carried out in respect of a Strategic Infrastructure Development planning application submitted directly to An Bord Pleanála pursuant to Section 182A of the Planning & Development Act 2000 (as amended) ('the Planning Act').

The project comprises a 110 kilovolt (kV) 'loop-in/loop-out' electricity substation generally comprising a compound enclosing a control building and 110kV electric plant; together with approximately 320 metres (m) of underground 110kV electricity line which will connect to the existing Kellis-Kilkenny 110kV overhead electricity transmission line. The project also comprises the installation of approximately 8.8 kilometres (km) of underground electricity line and an electrical control unit which will connect the proposed electricity substation to the permitted White Hill Wind Farm¹.

The project will be located approximately 11km northeast of Kilkenny City, c. 15km southwest of Carlow Town, c. 3km west of Muine Bheag (Bagenalstown) and c. 1km north of Paulstown; and within the townlands of Shankill and Ballygorteen, County Kilkenny; and Moanmore, Lackan and Baunreagh, County Carlow.

Off-site and secondary elements of the project which are included for assessment in this Environmental Impact Assessment Report also include works to be undertaken to the construction material delivery route.

A full description of the project is provided at **Chapter 3**.

1.1.1 What is Environmental Impact Assessment?

Environmental Impact Assessment (EIA) is a formal, statutory process required by the European Union (EU) Environmental Impact Assessment Directive 2011/92/EU, as amended by 2014/52/EU ('the EIA Directive') and transposed into Irish law by way of Part X of the Planning Act.

EIA is carried out by the relevant competent authority (in this case An Bord Pleanála) as part of the planning application (consent) process to ensure that projects, where the likelihood of significant effects on the environment cannot be excluded, are subject to a comprehensive and independent examination, analysis and evaluation of their likely significant effects on the environment prior to being granted planning permission (development consent). The process includes:-

- The submission of an Environmental Impact Assessment Report by the Developer;
- Public participation and consultation;
- An examination by the competent authority of the Environmental Impact Assessment Report, any supplementary information and any relevant information received during consultation;
- A reasoned conclusion prepared by the competent authority of the likely significant environmental effects of the project; and,
- The integration of the reasoned conclusion into the formal decision on the planning application published by the competent authority, including any conditions to avoid, prevent or reduce (mitigate) any likely significant adverse environmental effects together with, where appropriate, monitoring measures.

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¹ An Bord Pleanála Reference ABP-315365-22



EIA is therefore fully integrated into the planning application process and helps to ensure that decisions to grant or refuse planning permission are made in the full knowledge of their likely significant effects on the environment, including through consultation with the public concerned. This includes an assessment of the direct, indirect, secondary, cumulative, transboundary, short-term, medium-term, long-term, permanent, temporary, positive and negative effects of the construction, operational and, where appropriate, the decommissioning phases of the project. By doing so, EIA contributes to a high level of protection for the environment through better informed decision-making processes.

1.1.2 What is an Environmental Impact Assessment Report?

An Environmental Impact Assessment Report (EIAR) is a written statement prepared by the Developer of the significant effects, if any, which the project, if carried out, is likely to have on the environment².

The EIAR consists of a transparent, systematic and objective analysis of the project in relation to the existing baseline environment, including of its construction, operational and decommissioning phases. Key features of EIAR include screening, scoping, public participation and consultation, consideration of reasonable alternatives, establishment of the receiving (baseline) environment, assessment of likely significant environmental effects, mitigation, and monitoring.

The preparation of an EIAR is an iterative process incorporating repeated steps of design and re-design carried out throughout the full lifecycle of the project design and consenting process so as to allow for preventative and ameliorative action, as necessary, at the earliest point in time when the approximate magnitude, character, duration and significance of any likely effects become known and when, through the consideration of reasonable alternatives, changes can still be made to the project design that anticipate, avoid and mitigate any foreseen likely significant adverse effects.

The EIAR is therefore the principal document that informs the EIA process and provides relevant information which the competent authority can use, amongst other considerations (including, where appropriate, its own supplementary assessments), in independently undertaking EIA and informing its decision to grant (including subject to conditions and/or modifications) or to refuse planning permission and/or to seek further information from the Developer.

The EIAR also facilitates better public participation and consultation, and can also be used by third parties, including members of the public concerned, to evaluate the project and its likely significant environmental effects, and to inform any submissions made to the competent authority during the planning application process (see **Section 1.10**).

1.2 Consent Process

Strategic Infrastructure Development (SID) is development which is of strategic national or regional importance and where a planning application must be made directly to An Bord Pleanála.

Electricity transmission infrastructure may be considered SID should the voltage of the infrastructure be 110kV of greater. In such instances, a planning application must be

² In the EIA Directive, the person or organisation proposing to carry out a project is generally referred to as the 'Developer'. In the Planning Act, the equivalent term is the 'Applicant'.



made to An Bord Pleanála pursuant to Section 182A of the Planning Act, and not to the local planning authority via Section 34, as would be the normal course.

However, prior to submitting a SID planning application, a project must firstly be the subject of formal Pre-Application Consultation with An Bord Pleanála pursuant to Section 182E of the Planning Act to determine whether it constitutes SID, or not, pursuant to the criteria set out in Section 182A.

Accordingly, the Developer entered into Pre-Application Consultation³ with An Bord Pleanála who, subsequently, determined that, in accordance with the report of its Inspector, the project constitutes a SID and that an application for permission must be made directly to An Bord Pleanála (see also **Section 1.10** below).

1.3 Screening

The first stage of the EIA process involves deciding whether the project is of a type where an EIA needs to be undertaken or not. This ensures that EIA is only undertaken for projects where the likelihood of significant effects on the environment cannot be excluded.

In accordance with the provisions of the Planning Act, EIA is mandatory when certain prescribed classes of projects exceed specific sizes and thresholds. Planning applications for such projects must be accompanied by an EIAR.

1.3.1 EIA Classes & Thresholds

Schedule 5 of the Planning & Development Regulations 2001 (as amended) ('the Planning Regulations') specifies the classes of development which must be subject to formal EIA. Where an EIA is mandatory, an EIAR is required to be submitted with a planning application.

The project is not, of itself, a class of development listed within Schedule 5 as requiring EIA and, accordingly, there is no statutory requirement for the project to be subject to EIA.

Similarly, the project does not qualify as a change or extension to a development already authorised (i.e. the White Hill Wind Farm); pursuant to Schedule 5, Part 2, Class 13 of the Planning Regulations; as it does not engage any of the thresholds relating to installations for the harnessing of wind power for energy production (wind farms), i.e. number of turbines or megawatt output.

The purpose of EIA development classes and thresholds is to generally distinguish between those projects where significant effects on the environment are unlikely and those that may be likely to have significant effects. Given that the project is not a category of development that is mandatorily required to be subject to EIA, it can be generally concluded, on this basis, that it would be unlikely to have any significant effects on the environment.

However, the project will form part of an overall development that was formerly subject to EIA (i.e. the White Hill Wind Farm). Therefore, and in accordance with a judgement of the High Court⁴; which determined that a wind farm development, to which the EIA Directive applies, and its connection to the national electricity grid are considered a single indivisible project for the purpose of the EIA Directive; the

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³ An Bord Pleanála Reference ABP-319391-24

⁴ O'Grianna & Ors. v. An Bord Pleanála [2014] IEHC 632



Developer has prepared and submitted this EIAR to allow An Bord Pleanála undertake a complete in-combination EIA of the overall project.

This EIAR therefore assesses the likelihood of significant effects on the environment of the project in combination with, *inter alia*, the permitted White Hill Wind Farm and the 110kV Kellis-Kilkenny overhead electricity transmission line.

1.4 Content

In order to be relevant, complete and legally compliant, the content of this EIAR includes all of the information required by the EIA Directive and national legislation, as appropriate and necessary to the specific characteristics of the project, and includes:-

- A description of the project comprising information on the site, design, size and other relevant features of the project;
- A description of the likely significant effects of the project on the environment;
- A description of the features of the project and/or mitigation measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
- A description of the reasonable alternatives studied by the Developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;
- A non-technical summary of the information referred to above; and,
- Any additional information specified in Annex IV of the EIA Directive relevant to the specific characteristics of a particular type of project and to the environmental features likely to be affected.

1.5 Format

The EIAR is presented as two volumes, which should be read in conjunction with each other, as follows:-

- Volume I comprises the main EIAR text and follows a 'grouped format' structure whereby each environmental factor (topic) is assessed and presented as a separate chapter. The EIA Directive prescribes the range of environmental factors which should be used to organise descriptions of the environment and likely significant environmental effects and must all be addressed in an EIAR. These have been supplemented with additional environmental factors owing to the characteristics of the project under assessment, as follows:-
 - Chapter 1: Introduction;
 - Chapter 2: Assessment of Project Alternatives;
 - Chapter 3: Description of the Project;
 - Chapter 4: Population & Human Health;
 - Chapter 5: Biodiversity;
 - Chapter 6: Land & Soils;
 - o Chapter 7: Water:
 - Chapter 8: Air Quality & Climate;
 - Chapter 9: Landscape;
 - Chapter 10: Cultural Heritage;
 - Chapter 11: Noise & Vibration;
 - o Chapter 12: Material Assets; and,



- Chapter 13: Interactions of the Foregoing.
- **Volume II** comprises a range of annexes, including technical data and reports, which informed the impact assessment provided in **Volume I** so as to ensure the EIAR is transparently supported by evidence.

A **Non-Technical Summary** of the EIAR is also provided as a separate standalone volume in order to facilitate the wider public concerned in their involvement in the statutory consultation process during the EIA and planning application assessment stage (see **Section 1.14**).

1.6 Structure

In order to provide for a consistent approach and to communicate clear, concise, unambiguous information, each chapter of this EIAR is systematically organised so as to follow a similar basic structure, as follows:-

- The existing environment: A description of the context, character, significance
 and sensitivity of the receiving (baseline) environment using standard descriptive
 methods, in order to predict the likely significant effects of the project and the
 likely evolution of the environment in the absence of the project i.e. the likely
 future receiving environment;
- The likely significant impacts of the project: The aspects of the construction, existence and operation of the project that are likely to affect the existing environment including, as appropriate, predicted, potential, residual, 'do nothing' and 'worst case' effects. The likely significance of any effects is determined with reference to magnitude, intensity, integrity, duration and probability; and,
- The measures to mitigate and monitor adverse effects: The range of methods which are proposed for mitigation by avoidance, reduction and remedy of any likely significant adverse effects (including unplanned events) together with ongoing monitoring of the efficacy of mitigation measures.

The environment is a complex combination of natural and human factors, many of which are constantly changing. In accordance with the 'grouped format' structure of this EIAR, the description of the baseline environment has therefore been broken down into its constituent factors and provided in the relevant individual chapters as presented in **Section 1.5** above.

This systematic, standardised structure, which clearly separates data (descriptions of the receiving environment and of the project) from impact predictions (likely significant effects, mitigation measures and residual effects), is designed to ensure that comprehensive, reliable, replicable and accurate impact assessments are provided, based on rigorous scientific information, verifiable evidence and recognised methods, and presented and documented in a fully legible, transparent and objective manner.

This methodological structure also reduces potential for subjective information and bias, to facilitate the competent authority in its independent EIA of the project.

1.7 Guidance

There is a wide range of general statutory and non-statutory guideline documents available for the preparation of an EIAR. The guidelines emphasise the importance of the methods used in the preparation of an EIAR to ensure that the information



presented is adequate and relevant. The guidelines consulted in undertaking and preparing this EIAR include inter alia:-

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022);
- Environmental Impact Assessment of Projects: Guidance on the Preparation of the Environmental Impact Assessment Report (European Commission, 2017);
- Environmental Impact Assessment of Projects: Guidance on Screening (European Commission, 2017);
- Environmental Impact Assessment of Projects: Guidance on Scoping (European Commission, 2017);
- Interpretation of Definitions of Project Categories of Annex I and II of the EIA Directive (European Commission, 2015);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DHPCLG, 2018);
- Guidelines for Environmental Impact Assessment of Electricity Transmission Projects (EirGrid, various);
- Electricity Transmission Studies: Evidence-Based Environmental Studies (EirGrid, various);
- Wind Energy Development Guidelines for Planning Authorities (DEHLG, 2006);
- Draft Revised Wind Energy Development Guidelines (DHPLG, 2019);
- Best Practise Guidelines for the Irish Wind Energy Industry (IWEA, 2012); and,
- Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018).

The above is a general and non-exhaustive list of EIAR related guidance. Additional guidance documents, specific to each environmental topic, are also referenced in each chapter of this EIAR, as relevant.

This EIAR has also been guided by the knowledge, understanding and application of all aspects of EIA practice emerging from case law in the national and European courts together with EIARs for similar projects on similar sites.

1.8 EIAR Project Team

The EIA Directive requires that an EIAR must be prepared by a team of competent, qualified experts with an appropriate combination of experience, expertise and knowledge related to the significance, complexity and range of effects that an EIAR needs to assess, including the early anticipation of effects. In order to ensure that the information included in the EIAR is complete to a high level of objective quality, such competences include relevant prior experience and knowledge of the characteristics of the project type and sensitivities likely to be present in the receiving environment; an understanding of the legal context of the decision-making process, including relevant case law; and an appropriate range of specialist technical experts to address different environmental factors, and their interactions.

1.8.1 Project Management

GES was appointed by the Developer to manage and co-ordinate the preparation of this EIAR. GES is an Irish multi-disciplinary renewable energy consultancy that specialises in the project management of planning, environmental and technical engineering services of renewable energy developments from project feasibility through to delivery and operation. GES combines the expertise of leading experts in wind farm design, planning and environmental assessment and has extensive experience in managing and coordinating EIAR projects for wind energy and



associated electrical and substation infrastructure developments. Some examples of wind energy and ancillary EIAR projects managed by GES are provided at **Table 1.1** below.

Development	Planning Register Reference	Development Description	Status
Carrickallen Wind Farm, County Cavan	Cavan County Council Planning Register Reference 09/280 (An Bord Pleanála Reference PL02.235597) & various others	Wind Farm comprising 10 no. wind turbines and associated ancillary infrastructure.	Permitted & operational
Oldmill Wind Farm, County Monaghan	Monaghan County Council Planning Register Reference 10/485 & various others	Wind Farm comprising 7 no. wind turbines and associated ancillary infrastructure.	Permitted & operational
Taghart Wind Farm, County Cavan	Cavan County Council Planning Register Reference 16/74 (An Bord Pleanála Reference PL02.247401) & various others	Wind Farm comprising 7 no. wind turbines and associated ancillary infrastructure.	Permitted & operational
Taghart Wind Farm Grid Connection, County Cavan & County Meath	Cavan County Council Planning Register Reference 17/502 (An Bord Pleanála Reference ABP-301717-18) & Meath County Council Planning Register Reference KA171177 (An Bord Pleanála Reference ABP-301742-18)	Approximately 12km of underground electricity line located predominately within the carriageway of the public road network.	Permitted & operational
Cloghan Wind Farm, County Offaly	Offaly County Council Planning Register Reference 14/188 (An Bord Pleanála Reference PL19.244053) & Offaly County Council Planning Register Reference 19/404	Wind Farm comprising 9 no. wind turbines and associated ancillary infrastructure.	Permitted & operational
Cloghan Wind Farm Grid Connection, County Offaly	Offaly County Council Planning Register Reference 19/555	Approximately 8km of underground electricity line located predominately within the carriageway of the public road network.	Permitted & operational
Pinewoods Wind Farm, County Laois	Laois County Council Planning Register Reference 16/260 (An Bord Pleanála Reference PL11.248518) & Kilkenny County Council Planning	Wind Farm comprising 11 no. wind turbines and associated ancillary infrastructure.	Permitted



	Register Reference 17/62 (An Bord Pleanála Reference PL10.248392)		
Pinewoods Wind Farm Substation & Grid Connection	An Bord Pleanála Reference ABP- 308448-20	110kV electricity substation and ancillary electrical infrastructure and all associated site development works.	Permitted
Drumlins Park Wind Farm, County Monaghan	Monaghan County Council Planning Register Reference 19/486	Wind Farm comprising 8 no. wind turbines and associated ancillary infrastructure.	Operational
Drumlins Park Wind Farm Substation & Grid Connection, County Monaghan	An Bord Pleanála Reference ABP- 309119-21	110kV electricity substation and ancillary electrical infrastructure and all associated site development works.	Operational
Bracklyn Wind Farm, Substation & Grid Connection	An Bord Pleanála Reference ABP- 311565-21	Wind Farm comprising 9 no. wind turbines and associated ancillary infrastructure including a 110kV electricity substation and approximately 6km of underground electricity line.	Permitted
White Hill Wind Farm, County Carlow & County Kilkenny	An Bord Pleanála Reference ABP- 315365-22	Wind Farm comprising 7 no. wind turbines and all associated works.	Permitted
Cush Wind Farm, County Offaly	An Bord Pleanála Reference ABP- 318816-24	Wind Farm comprising 8 no. wind turbines and associated ancillary infrastructure.	Permitted
Moyvannan Electricity Substation, County Roscommon	An Bord Pleanála Reference ABP- 321238-24	110kV electricity substation and 7.5km of underground electricity line	In Planning

Table 1.1: Examples of EIAR Wind Energy (and associated) Developments managed by GES

1.8.2 Environmental Specialists

The EIAR is also critically dependent on the technical expertise, experience, independence and objectivity of environmental specialists. They characterise the existing environment, evaluate its sensitivity and the likely significant effects of the project.

The Planning Regulations require that an EIAR includes a list of names of all the experts contributing to the various environmental factors assessed in the EIAR, together with details of their competency including, as appropriate, qualifications and experience. An overview of the specialist experts involved in the preparation of each chapter of this EIAR, together with their relevant qualifications and key environmental factors covered, is provided in **Table 1.2** below. Some specialisms were provided in-house by GES expert staff while, in other cases, external specialists were appointed in order to undertake individual assessments and prepare chapters on specific environmental topics.



Each appointed specialist is a recognised expert in their field and was selected having regard to their knowledge of relevant environmental legislation; their experience and involvement in EIAR projects for wind energy (and associated) developments; familiarity with pertinent standards and criteria for the evaluation and classification of significance of effects; their ability to interpret technical documents and to work with project designers to arrive at practical and reliable measures to avoid, mitigate and monitor any likely significant adverse environmental effects; and to clearly and comprehensively present their findings in a concise and objective manner. A statement of competence for all of the specialist consultants who contributed to the preparation of this EIAR is also provided in each individual chapter of this EIAR, as appropriate.

As part of its project management role, GES was responsible for the briefing and steering of specialist consultants throughout the iterative EIAR and design process; maintaining a two-way feedback loop between specialists and project designers, with the designers continually adjusting the design in response to assessments received from the specialists, and vice versa; identifying likely interactions between different environmental factors; and in conducting overall editorial management of the EIAR to ensure consistency and cross-referencing between different chapters and volumes.

Ch.	Environmental Factor/Topic	Specialist Consultant	Personnel/Credentials
1	Introduction	GES	Dr. Gavin Daly BA Dip. MIPI MIEMA CEnv
2	Assessment of Project Alternatives, including: • Alternative Sites; and, • Alternative Substation Technologies.	GES	Simon Carleton BA MSc MIPI Steph Smart BSc MSc RTPI
3	Description of the Project, including: Substation & Electricity Line; Construction Materials & Aggregates; Earthworks; and Drainage & Surface Water Management	GES	
4	Population & Human Health, including: • Employment; • Settlement/Land use patterns; • Demographic trends; • Human Health (considered with reference to benchmark standards under other chapters such as noise, air quality, electromagnetic radiation, etc.); and, • Amenity.	GES	
5	Biodiversity, including:- Habitats Birds Bats Non-volant mammals; and, Aquatic ecology	SLR Consulting	Dr. Jonathon Dunn MA (Cantab.) MSc PhD MCIEEM Dr. Andrew Torsney BSc MRes PhD ACIEEM Others Various
6	Land & Soils, including:- • Superficial Geology;	Hydro-Environmental Services	Michael Gill



Non-Technical Summary		GES	Steph Smart Dr. Gavin Daly Simon Carleton Steph Smart
13	Interaction of the Foregoing	GES	Dr. Gavin Daly Simon Carleton
12	Material Assets, including:- Transport & Access; Aviation; Telecommunications; and, Resources & Utility Infrastructure.	GES	Dr. Gavin Daly Simon Carleton Steph Smart
11	Noise & Vibration, including:- Daytime Noise; Night-time Noise; Vibration sources; and, Sensitive receptors.	AWN Consulting GES (noise monitoring)	Robert Holohan BA (Hons) MSc Mike Simms BE MEngSc MIOA MIET Cormac McPhillips BSc
10	 Cultural Heritage, including:- Known archaeological monuments; Areas of archaeological potential (including unknown archaeology); Architectural heritage; and, Designations or sensitivities 	Dermot Nelis Archaeology	Dermot Nelis BA ArchOxon AIFA MIAI
9	Landscape, including:- • Landscape Character; • Views & Prospects • Landscape Impact; and, • Visual Impact.	Macro Works	Richard Barker MLA MILI Cian Doughan BSLA
8	Air Quality & Climate, including:- • Air Quality; • Climate; • Dust; • Greenhouse gas emissions; and, • Contribution of the project to binding targets.	GES	Dr. Gavin Daly Simon Carleton Steph Smart
7	 Water, including:- Local & Regional Hydrology; Flood Risk; Hydrogeology; Ground/Surface physical characteristics; and, Drainage Management. 	Hydro-Environmental Services	Michael Gill David Broderick
	 Bedrock Geology; Geological Heritage & Designated Sites; and, Soil Contamination. 		P. Geo., B.A.I., MSc, Dip. Geol., MIEI David Broderick BSc, H.Dip Env Eng, MSc

Table 1.2: Specialist Consultants involved in the preparation of this EIAR



1.9 Scoping

The scoping process involves identifying the environmental factors that are both 'likely' and 'significant' during EIA and eliminates those that are not ('scoped out'). The scoping process is therefore highly interrelated with the stakeholder engagement and public consultation processes as described in **Section 1.10** below.

The prior determination of the nature and detail of the information to be contained in the EIAR, and what methods should be used to gather and assess that information, is one of the most important stages of EIA and may be conducted through a formal or informal process. Scoping helps ensure that the EIAR remains tightly focussed on factors that are environmentally based, likely to occur and may have likely significant and adverse effects. This helps improve the clarity and conciseness of the EIAR, making it easier for the public concerned to participate. It is important to note that all of the prescribed environmental factors listed in **Section 1.5** must all be addressed in an EIAR. Only sub-topics and headings related to each factor can be scoped out. In this case, however, no environmental factors specifically related to the construction, operation or decommissioning of the project were scoped out or eliminated from the EIAR.

In undertaking scoping, the statutory obligations as set out in the Planning Regulations and a range of guidance documents were consulted, including those referenced in **Section 1.7** above. A desktop analysis was undertaken of relevant data sources and precedents of EIAs carried out for similar developments, together with other relevant policy documents; such as the *Kilkenny City and County Development Plan 2021-2027* and *Carlow County Development Plan 2022-2028*; and the accompanying Strategic Environmental Assessments (SEA) prepared pursuant to the SEA Directive 2001/42/EC.

1.9.1 Scoping Report

The provision of sufficient detail at the scoping stage is the best way to facilitate useful and specific responses from consultees. As part of the scoping process, a *Preliminary Scoping Report* was prepared to provide an overview of the project context; description of the baseline environment; alternatives considered; the project; its possible likely significant environmental effects; and proposed mitigation and monitoring measures. This report was also used in the course of the consultation process, as described in **Section 1.10** below, to allow consultees to inform themselves of the scope of the project and possible likely significant environmental effects, and to invite comments on the information which should be included in the EIAR. This allowed for preliminary opinions to be shared as early as possible with the Developer and the project design team and, where possible, to allow for the modification of the project such that likely significant adverse environmental effects were avoided or minimised.

The scoping process also included an assessment of relevant 'secondary' or 'off-site' developments including:-

- Indirect impacts in respect of the importation of aggregates and materials to be used in the construction phase;
- Transport and access considerations, including the road haul route for electricity substation construction materials and components; and,
- Traffic management requirements along the underground electricity line route.

Following the completion of the preliminary environmental scoping process, a detailed *Scoping Report* (see **Annex 1.1**) was prepared which details the findings of



the scoping exercise, including an environmental constraints analysis and consultation with stakeholders, prescribed bodies and the local community. This Scoping Report was continually reviewed and updated by the EIAR Project Team throughout the preparation of this EIAR to ensure that all constraints identified therein were fully assessed and, where possible, that the project design was continuously modified to avoid or reduce likely significant adverse environmental effects. It should be noted that the layout and design of the project originally assessed in the Scoping Report differs to that described at **Chapter 3** as a consequence of design alterations implemented during the course of the scoping and project design process.

1.9.2 Formal Scoping

Section 182E(3) of the Planning Act provides for a discretionary provision whereby a prospective applicant (developer) during Pre-Application Consultation with An Bord Pleanála may formally request an opinion on the scope and level of detail to be included in the EIAR. Where such an opinion is issued, the EIAR must take account of that opinion. In this case, no formal scoping was considered necessary. In the course of Pre-Application Consultation, An Bord Pleanála gave advice to the Developer, during consultations on the considerations related to the likely significant environmental effects which may have a bearing on its decision in relation to any subsequent SID planning application (see **Section 1.10.1** below).

Informal scoping was therefore considered the most appropriate means of EIAR scoping in this case, as it was envisaged from the outset that no environmental factors would be scoped out or eliminated from the EIAR. Accordingly, no formal scoping was considered necessary and all environmental factors, as prescribed in the legislation, have been fully addressed and included in this EIAR, as described in **Section 1.4** above.

1.9.3 Ongoing Scoping

As an active, integrated and iterative process, even after the preliminary scoping stages, scoping continued throughout the preparation of the EIAR, including during the impact assessment stage. The EIAR Project Team continuously maintained a flexible view of the scope by way of open, effective and ongoing communication, and consultation with the project design team, and through the ongoing feedback received from the consultation and public participation process. The EIAR scope was therefore dynamically informed and continually reviewed and revised in light of environmental analysis and information emerging during the project design and EIAR process, and vice versa. This resulted in the effective anticipation of any likely significant environmental effects and the consequent modification of the project to avoid or reduce effects through redesign and identification of mitigation measures. This EIAR, particularly in the consideration of reasonable alternatives (**Chapter 2**), records the key outcomes of this iterative process.

1.10 Consultation & Public Participation

Good practice in EIAR preparation and compliance with the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters, involves clear and focused public participation and consultation at key stages in the assessment process. The objective is to ensure that the public concerned, together with statutory and non-statutory stakeholder consultees, are made as fully aware as possible, and as early as possible, of the likely



significant environmental effects of the project prior to a decision being made by the competent authority. This provides for a greater understanding of the project; a more focused consideration of likely significant environmental effects; an early indication of the need for specific survey work; and the early identification of opportunities to incorporate mitigation measures into the project design.

There are specific statutory procedures for public participation and consultation at various stages in the EIA and SID planning application process. Public participation is not, however, a mandatory obligation for the pre-application consultation stage. Nevertheless, it is recommended as standard per the *Draft Revised Wind Energy Development Guidelines 2019* and, in accordance with best practice, the Developer therefore undertook to facilitate the widest possible public participation at the earliest possible stage in the project design and EIAR preparation process.

1.10.1 Statutory Consultations

1.10.1.1 SID Pre-Application Consultation

As discussed at **Section 1.2** above, the project was the subject of mandatory Pre-Application Consultation with An Bord Pleanála (Reference ABP-319391-24). As prescribed by legislation, the purpose of the Pre-Application Consultation was twofold. Firstly, to determine whether the project constituted SID; and if so, secondly, to give advice to the Developer on the procedures involved in making such an application and what considerations, related to proper planning and sustainable development or the likely significant environmental effects, in the opinion of An Bord Pleanála may have a bearing decision in relation to any subsequent SID planning application.

A meeting was held between the Developer and An Bord Pleanála on 27 June 2024. During this meeting, the evolution of the project design was described in detail; including the site selection process, environmental scoping and constraints analysis, and details of stakeholder consultation; while advice was given to the Developer on key factors which would be relevant as part of the EIAR for any subsequent SID planning application including:-

- Relationship of the project with the permitted White Hill Wind Farm;
- The classes of development under Part 2, Schedule 5 of the Planning Regulations (i.e. EIA) which may be of relevance to the project;
- The proposed methodology for the crossings of watercourses;
- Local planning policy provisions of the Kilkenny City & County Development Plan 2021-2027 and Carlow County Development Plan 2022-2028; and,
- The requirement to carry our robust environmental assessments.

In issuing its determination that the project constitutes SID, An Bord Pleanála advised the Applicant in relation to the planning application procedures and also provided a list of prescribed bodies which were considered relevant and to be consulted with in relation to the project. Each of these prescribed bodies have been notified by the Applicant in relation to the planning application for the project.

A copy of the meeting record was subsequently furnished to the Developer (see **Annex 1.2**, **Volume II**).



1.10.1.2 Planning Authority Consultation

As part of the Pre-Application Consultation process, An Bord Pleanála identified Kilkenny County Council and Carlow County Council as the applicable planning authorities for the project and as relevant prescribed bodies for the purposes of EIAR consultation.

A scoping request was issued to Kilkenny County Council on 25 March 2024 and included the *Preliminary Scoping Report*, described at **Section 1.9.1** above, in order to provide the Planning Authority with sufficient information on the project and its possible likely significant environmental effects. A response was received (see **Annex 1.4**, **Volume II**), dated 15 May 2024, and referred to matters including water, cultural heritage, roads, and transport.

A scoping request was also issued to Carlow County Council on 25 March 2024 and included the *Preliminary Scoping Report*. A response was received (see **Annex 1.5**, **Volume II**), dated 2 May 2024, and referred to matters including statutory planning policy; cumulative impacts; natural and built heritage; landscape and visual impact; noise, vibration and dust; residential amenity; biodiversity; water; and road safety, transport and access.

A consultation meeting with Kilkenny County Council was held (online) on 23 October 2024. During the meeting, the project was described in detail together with the relevant environmental factors; including, inter alia, biodiversity, ground conditions, water, transport, and landscape and visual amenity; to be addressed in the EIAR. Other matters discussed during the meeting included the provisions of the Kilkenny City and County Development Plan 2021-2027 and the cumulative impact assessment to be undertaken.

A consultation meeting with Carlow County Council was also held (online) on 24 October 2024. During the meeting the project was described in detail and the assessment of relevant environmental factors; including, inter alia, biodiversity, water, transport, and landscape and visual amenity; were discussed.

1.10.1.3 Stakeholder & Prescribed Body Consultations

A wide range of statutory and non-statutory organisations, including all bodies prescribed in the Planning Regulations, were contacted in writing at an early stage in the scoping process to gather their views and preliminary opinions on the scope of the EIAR and the possible likely significant environmental effects of the project.

The consultation process involved furnishing, in March 2024, each organisation with the *Preliminary Scoping Report*, described above, accompanied by a set of maps and drawings, and requesting written feedback.

Annex 1.6 (Volume II) provides a sample copy of the consultation letter issued to each organisation, while a copy of all responses received is enclosed at Annex 1.7 (Volume II). Table 1.3, below, lists all organisations which have been consulted, details whether or not a response was received and provides a summary of the content contained therein. The specific prescribed bodies identified by An Bord Pleanála as relevant and to be consulted by the Developer are also identified.

It should be noted that there is no obligation on any organisation to respond to consultation requests. Where a consultee did not respond, it has been assumed that they had no specific comment to make at this stage in relation to the project or the scope of the EIAR. While the consultation undertaken to date has allowed for any



identified concerns to be addressed within this EIAR, the statutory consultation process, to be commenced following submission of the SID planning application to An Bord Pleanála, will allow these organisations to make any further comments, as necessary.

1.10.1.4 Transboundary Consultation

The Espoo Convention on environmental impact assessment in a transboundary context places a general obligation on EU Member States and the United Kingdom to notify and consult each other on all projects that are likely to have significant adverse environmental impact across national boundaries. In this case, given the project type and geographical location, there is no likelihood of the project giving rise to significant adverse transboundary effects and, accordingly, no transboundary consultation was deemed necessary.



Consultee	Response Received	Summary of Feedback	Prescribed Body per SID Determination
An Chomhairle Ealaoín	No	-	Yes
An Garda Síochána	Yes	An Garda Síochana has no specific comment to make.	No
An Taisce	No	-	Yes
Bat Conservation Ireland	Yes	Bat Conservation Ireland does not have the capacity to advise on this project.	No
Birdwatch Ireland	No	-	No
Bord Gáis Energy	No	-	No
BT Communications Ireland	No	-	No
Carlow County Council	Yes	The Planning Authority advised that the cumulative impact of the permitted White Hill Wind Farm with the substation and grid connection must be assessed. The Planning Authority cited local planning policy requirements and noted for areas of assessment including landscape and visual impact, natural heritage features; residential amenity; noise, vibration and dust; biodiversity; water; and traffic and transportation.	Yes
Coimisiún na Meán	Yes	Coimisiún na Meán is not aware of any issues from existing substations into existing FM networks. The proposed substation is not located close to any existing or planned FM transmission sites.	No
Commission for Communications Regulation	No	-	No
Commission for Regulation of Utilities	No	-	Yes
Department of Agriculture, Food and the Marine	Yes	The Department advised that, as the project does not appear to fall within the EIA (Agriculture) Regulations, it has no comment to make. In subsequent correspondence, the Department provided details of the assessment requirements and licencing processes related to tree felling, replanting, deforestation and afforestation.	No
Department of Defence	No	-	No
Department of Environment, Climate and Communications	No	-	Yes
Department of Housing, Local Government and Heritage (c/o Development Applications Unit)	Yes	The Department recommend that an Archaeological Impact Assessment and a Cultural Heritage Impact Assessment is carried out. The Department	Yes



	1	identified 1 no. recorded monument adjacent to the site and the presence of	<u> </u>
		recorded monuments in the environs of the project site.	
Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media	Yes	Recommended that the Department of Housing, Local Government and Heritage are consulted.	No
Department of Transport	No	-	No
Eir	No	-	No
EirGrid	No	-	Yes
Enet Telecommunications Networks Limited	No	-	No
Environmental Protection Agency	No	-	No
ESB Networks	No	-	Yes
Fáilte Ireland	Yes	Fáilte Ireland provided a copy of its Guidelines for the Treatment of Tourism in an EIA for use in assessing the potential for adverse effects on tourism from the project.	Yes
Gas Networks Ireland	Yes	Gas Networks Ireland advised that the electricity substation is in close proximity to a high pressure gas pipeline; while the underground electricity line will cross the pipeline. Further consultation with Gas Networks Ireland was undertaken regarding the precise design of the project.	No
Geological Survey Ireland	Yes	Geological Survey Ireland recommended and encouraged the use of its publicly available data and mapping database for the assessment of the likely effects of the project; particularly in respect of geoheritage, groundwater, geological mapping, geohazards, natural resources, and geochemistry.	No
Health and Safety Authority	Yes	The Health and Safety Authority advised that, as the project is outside the scope of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015), it has no observations on the project.	No
Health Service Executive – Environmental Health Department	Yes	The Department offered guidance on what should be contained within the EIAR, specifically in relation to guidance documentation, public consultation, construction activities, noise and vibration, air quality, water, and cumulative effects.	No
larnród Éireann	No	-	No
Imagine Group	No	-	No
Inland Fisheries Ireland	Yes	Inland Fisheries Ireland identified the surface water bodies with which the project interacts with and stated their hydrological connection to the River Barrow and River Nore SAC. Inland Fisheries Ireland noted that there should be	Yes



		no deterioration in the ecological status of surface water bodies. Article 28 (2) also was outlined, which states that a surface water body whose status is determined to be less than 'Good' shall be restored to at least 'Good' status. Inland Fisheries Ireland outlined that surveys to be undertaken must demonstrate how the project would cause no deterioration to the water bodies and requested the inclusion of mitigation measures where necessary.	
Irish Aviation Authority	No	-	No
Irish Peatland Conservation Council	No	-	No
Irish Raptor Study Group	No	-	No
Irish Wildlife Trust	Yes	The Irish Wildlife Trust advised that it does not have the resources to respond to the scoping request.	No
Kilkenny County Council	Yes	Kilkenny County Council provided a list of consultees to be consulted with and referred to matters including water, cultural heritage, roads, and transport.	Yes
Magnet Plus	No	-	No
National Ambulance Service	No	-	No
National Federation of Group Water Schemes	No	-	No
National Parks & Wildlife Service	No	-	No
Office of Public Works	Yes	The Office of Public Works advised that any work to an existing or if proposing a new bridge, consent must be sought from the Commissioners of Public Works under Section 50 of the Arterial Drainage Act 1945 (S.I. 122 of 2010). Damming of a watercourse may also be subject to consent under Section 47 of the Arterial Drainage Act 1945, and the temporary pipes, culverts and/or bridges required to cross or divert a watercourse during the construction phase will also require Section 50 consent.	No
Open Eir	No	-	No
Radio Services and Buildings Ltd	No	-	No
Southern Regional Assembly	No	-	No
Sport Ireland Outdoors	No	-	No
Sustainable Energy Authority of Ireland	No	-	No
Tetra Ireland Communications Ltd.	Yes	Tetra Ireland anticipates no impact from the project as proposed.	No
The Heritage Council	No	-	Yes
Three (3) Ireland	Yes	Three advised that the project will not affect its network.	No



Towercom	Yes	Towercom advised that the project will not affect its network.	No
Transport Infrastructure Ireland	Yes	Transport Infrastructure Ireland raised matters regarding inter alia proximity of the electricity substation to the M9 motorway, consultation with local authorities, the assessment of effects on national and non-national roads, visual effects, road schemes, adherence to TII guidance publications, the requirement for a Traffic & Transport Assessment, the requirement for a Road Safety Audit, the identification and assessment of haul routes, the classification of loads (i.e. 'abnormal-length' or 'abnormal-length'), the selection of electricity line route, and maintaining the capacity of the existing national road network.	Yes
Údarás na Gaeltachta	No	-	No
Uisce Éireann	Yes	Uisce Éireann identified a privately owned water feature and an Uisce Éireann abstraction point located within proximity to the electricity line and that the EIAR must consider the effects of the project on the abstraction point. Uisce Éireann also advised on matters to be considered in the EIAR including effects on drinking water sources and appropriate measures to mitigate the effects on same, effects on the capacity of water services, the management of foul waste, and the management of surface water.	Yes
Virgin Media Ireland	Yes	Virgin Media advised that the project will not affect its network.	No
Viatel Ireland Ltd	No	-	No
Vodafone Ireland Ltd	No	-	No
Waterways Ireland	No	-	No
2rn (RTE Transmission Network Ltd)	Yes	2rn advised that the project does not pose a risk to its fixed link network; and that there is a low risk of interference with broadcast services.	No

Table 1.3: Summary of Written Consultations



1.10.2 Public Participation

1.10.2.1 Non-Statutory Consultation

The Developer carried out extensive public consultation throughout the project design and EIAR process. In August and September 2024, door-to-door visits were undertaken with local residents together with leaflet drops. In addition, a public information event was held on 28 and 29 August 2024 at the Lord Bagenal Inn, Leighlinbridge, County Carlow where members of the public and community groups were afforded the opportunity to discuss the project directly with the project team.

The public consultation was managed by a dedicated Community Liaison Officer and structured and managed to ensure clarity and consistency, and to maintain an objective and factual approach. A website was also established where members of the public concerned could view details of the project, receive updates on public consultation and to contact the Developer via email or a freephone number (www.whitehillwindfarm.ie).

A full report on the public consultation process undertaken by the Developer is presented at **Annex 1.8** (**Volume II**).

1.10.2.2 Statutory Consultation

Once the SID planning application and EIAR is formally submitted for consideration; the Developer, An Bord Pleanála, Kilkenny County Council and Carlow County Council will make arrangements for public access to, and dissemination of, the information contained in the EIAR in accordance with the procedures contained in the Planning Act and Planning Regulations, and all members of the public and statutory consultees will be entitled to make further submissions, as further described in **Section 1.15** below.

1.11 Cumulative Impact Assessment

This EIAR assesses the likelihood of the project; in its totality and including secondary and off-site developments; acting in combination with other existing, permitted and proposed developments in the wider vicinity of the project; to result in effects on the environment which, when combined, may result in effects which are cumulatively significant.

To undertake a cumulative impact assessment, in the first instance, a desktop review of available data sources (e.g. satellite imagery) was undertaken to identify existing developments in the local area. Secondly, the EIA Portal⁵ was consulted to assess for the presence of proximate developments which have been subject to EIA. Finally, the online planning portals for Kilkenny County Council⁶ and Carlow County Council⁷ were examined to assess for extant planning permissions which had not yet been commenced. Developments warranting a cumulative impact assessment range from one-off rural dwellings to large scale intensive agricultural units, commercial forestry plantations, quarrying activities and other wind energy developments. **Table 1.4** below provides a list of developments which have been considered in the cumulative impact assessment of this EIAR.

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⁵ http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1

⁶ https://www.eplanning.ie/KilkennyCC/searchtypes

⁷ https://www.eplanning.ie/CarlowCC/searchtypes



Development	Planning Register Reference	Development Description	Status
White Hill Wind Farm	An Bord Pleanála References ABP-315365-22 and ABP- 319903-24	Development of a 7 no. turbine wind farm and associated ancillary infrastructure	Permitted
Kellis-Kilkenny 110kV Overhead Electricity Line	N/A	Overhead Electricity Transmission Line	Existing
Gortahile Wind Farm	04/935, 09/237, 09/618, and 10/7 [County Laois]	8 no. wind turbines and all associated infrastructure	Existing
Bilboa Wind Farm	11/154 (An Bord Pleanála Reference PL01.240245), 21/15 and 22/340 (An Bord Pleanála Reference PL01.318295) [County Carlow]	5 no. wind turbines and all associated infrastructure	Permitted
Bilboa Wind Farm Grid Connection	20/180 [County Carlow] & 20/281 [County Laois]	Approximately 6.6km of underground electricity cables	Permitted
Pinewoods Wind Farm	16/260 (An Bord Pleanála Reference PL11.248518) & 22/507 (An Bord Pleanála Reference ABP-316305-23) [County Laois]; and 17/62 (An Bord Pleanála Reference PL10.248392) [County Kilkenny]	11 no. wind turbines and all associated infrastructure	Permitted
Pinewoods Wind Farm Grid Connection	An Bord Pleanála Reference ABP-308448-20 [County Laois]	110kV electricity substation and all associated infrastructure	Permitted
Seskin Wind Farm & Grid Connection	24/60122 (An Bord Pleanála Reference ABP-320354-24) [County Carlow]	7 no. wind turbines and all associated infrastructure	Proposed
Seskin Wind Farm Grid Connection	24/60210 [County Kilkenny]	Approximately 20km of underground electricity cables and ancillary works	Proposed
Freneystown Wind Farm	An Bord Pleanála Reference ABP-317589-23 [County Kilkenny]	Up to 8 no. wind turbines and all associated infrastructure	Proposed
Ballynalacken Wind Farm	An Bord Pleanála Reference ABP-312016-21 [County Kilkenny]	11 no. wind turbines and all associated infrastructure	Proposed
Single Wind Turbine	13/322 (An Bord Pleanála Reference PL01.243964), 19/463, and 20/46 [County Carlow]	1 no. wind turbine, electrical substation, access track and all ancillary works.	Existing
Single Wind Turbine	21/254 (An Bord Pleanála Reference PL01.314517) [County Carlow]	1 no. wind turbine, electrical substation, access track and all ancillary works.	Permitted
Firtree Developments Industrial Buildings	19/313 [County Carlow]	4 No. industrial buildings	Existing
Kellymount Quarry (Kilkenny Limestone)	05/1927, 12/248, and 12/285 [County Kilkenny]	Quarry and all associated quarrying plant and machinery	Existing
Milford Quarries	Carlow County Council Planning Register Reference and 23/60042 (ABP-319198-	Development of a quarry on a c. 9.34 hectare site and associated operations	Proposed



	24) and 23/60263 (An Bord Pleanála Reference ABP- 320180-24) [County Carlow]		
Kilkenny Limestone Quarry (Oldleighlin)	An Bord Pleanála Reference PL01.SU0024 and 15/239. [County Kilkenny]	Quarry and all associated quarrying plant and machinery	Existing
Holdensrath Quarry Limited	19/519 and 20/190 [County Kilkenny]	Quarry and all associated quarrying plant and machinery	Existing
McKeon Stone Threecastles Quarry	96/538, 04/1867, 15/673, 16/474 and 23/60097 [County Kilkenny]	Quarry and all associated quarrying plant and machinery	Existing
Kilcarrig Quarries Limited	96/78, 96/319, 01/300, 07/354, 07/554, 07/556, 07/835, 08/502, 10/202, 10/282,11/206, 12/199, 13/92, 13/187, 14/67, 15/121, 16/180, 17/308, 18/395, 20/423, and 22/143 [County Carlow]	Quarry and all associated quarrying plant and machinery	Existing
Oldleighlin Quarry	15/239, 17/64 and 18/450, [County Carlow]	Quarry and all associated quarrying plant and machinery	Existing
Dan Morrissey & Company	92/137, 04/299, 07/769, 07/976, 10/130, 11/301, and 12/240 [County Carlow]	Quarry and all associated quarrying plant and machinery	Existing
Agricultural Developments	Various	Various	Existing, Permitted and Proposed
Residential Dwellings	Various	Various	Existing, Permitted and Proposed
Commercial Forestry Plantations	-	-	Existing

Table 1.4: Developments addressed in cumulative impact assessment

1.12 Impact Assessment

This EIAR focuses on describing environmental effects that are both likely and significant by reference to the individual environmental factors described in **Section 1.5** and their sensitivities. In order to provide for clarity of method, language and meaning, and to accurately explain the full range of effects, the impact classification and sensitivity terminology described in the *Guidelines on the information to be contained in Environmental Impact Assessment Reports* (EPA, 2022) is used in this EIAR. This ensures that all likely significant effects are adequately considered and clearly and transparently communicated. Further specific guidance, legislation and technical standards for describing environmental effects, and pertinent to particular environmental factors, are also described in each individual chapter of this EIAR, as necessary.

Within this EIAR, a distinction is drawn between 'impacts' and 'effects'. In accordance with the *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2018), an 'impact' is an action resulting in changes to the environment (e.g. the construction activities of a development removing a hedgerow). An 'effect' is the outcome on the environment from an 'impact' (e.g. the effects on the local



dormouse rodent population from the loss of hedgerow). The effect arising from an impact may, or may not, be likely to be significant. As the purpose of this EIAR is to provide a report of the significant effects, if any, which the project would be likely to have on the environment, the term 'effects' is used generally throughout this EIAR.

Significance is a concept related to the weight that should be attached to effects when decisions are made. A significant effect is an effect that is sufficiently likely and important to require assessment and reporting so that the competent authority is adequately informed of the environmental effects of permitting a project.

Magnitude	Sensitivity of Receptor						
	Very High	High	Medium	Low	Negligible		
Very High	Profound	Profound- Substantial	Substantial	Moderate	Slight		
High	Profound- Substantial	Substantial	Substantial - moderate	Moderate- slight	Not Significant		
Medium	Substantial	Substantial moderate	Moderate	Slight	Imperceptible		
Low	Moderate	Moderate- slight	Slight	Not Significant	Imperceptible		
Negligible	Slight	Not Significant	Imperceptible	Imperceptible	Imperceptible		

Table 1.5: Impact Significance Matrix

Source: Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022)

*Categories with dark grey shading are considered to equate with 'significant' impacts/effects
**The significance matrix provides an indicative framework from which the significance of impact is
derived.

1.13 Mitigation & Monitoring Measures

Each chapter of the EIAR includes a description of the measures proposed to avoid, prevent, reduce or offset, as appropriate, any likely significant adverse effects on the environment together with any proposed monitoring measures in respect of both construction and operational phases.

Anticipation of effects is the most effective means of avoiding likely significant adverse effects and this is principally achieved through the consideration of reasonable alternatives. Many mitigation measures have therefore already been incorporated into the project design at an early stage, through the iterative scoping and impact assessment processes and adoption of good practices to avoid any likely significant adverse environmental effects i.e. 'mitigation by design' or 'embedded mitigation'. Monitoring measures have also been proposed, where appropriate, to demonstrate compliance with, and efficacy of, the mitigation measures proposed.

In order to ensure clarity of the mitigation and monitoring measures proposed, all such measures are included in a compendium as a separate, standalone annex to this EIAR (see **Annex 1.9**, **Volume II**). In the event of a grant of planning permission, the Developer will be required to fully implement all mitigation and monitoring measures by way of condition of consent.



1.14 Non-Technical Summary

A non-technical summary of the EIAR is an important means specifically required by the EIA Directive in explaining the content of the EIAR to the wider public.

A short and accessible non-technical summary has therefore also been prepared as a separate and self-contained document which can be distributed to the public concerned and who may be likely to be affected by the project.

The non-technical summary is laid out in a similar, but condensed, format to the main EIAR i.e. describing the project, existing environment, effects, and mitigation and monitoring measures; but presented in a manner that avoids technical language, such that it is easily understandable and accessible to a layperson.

The purpose of the non-technical summary is to transparently facilitate the full public access and participation of the public concerned in the statutory consultation process following the submission of the SID planning application to An Bord Pleanála.

1.15 Public Access

Compliance with the Aarhus Convention and the EIA Directive requires that arrangements for public access facilitate the convenient dissemination of the information contained in the EIAR in a timely and fully transparent manner, and in a format that is clear, concise and accessible to the greatest number of people as possible.

Prior to the submission of the SID planning application, public newspaper notices, in a national and local newspaper, will be published and site notices erected in accordance with the legislative requirements set out in the Planning Act and Planning Regulations, and any further directions provided by An Bord Pleanála. Full information will also be made available in the published public notices on how the public concerned can access the SID planning application documentation and this EIAR, and to involve themselves in the decision-making process, including through making written submissions.

An Bord Pleanála, Kilkenny County Council and Carlow County Council will also make arrangement for public access and dissemination of this EIAR and other SID planning application documentation in accordance with the procedures prescribed by legislation. This will include making all documents available to view and purchase at the following offices:-

- An Bord Pleanála, 64 Marlborough Street, Dublin 1, D01 V902;
- Kilkenny County Counti, County Hall, John Street, Kilkenny, County Kilkenny, R95 A39T; and,
- Carlow County Council, County Buildings, Athy Road, Carlow, County Carlow, R93 E7R7.

Once the SID application is registered by An Bord Pleanála, it will be given a reference number and hyperlinks to all documents, including this EIAR, will also be available on the website of An Bord Pleanála.

The centralised EIA Portal, managed by the Department of Housing, Local Government and Heritage, is a publicly accessible map-based database which provides users with access to all applications for development consent which have been accompanied by an EIAR since May 2017. Following the submission of the planning application to An Bord Pleanála, the public concerned will also be able to access this EIAR via the EIA portal website. The EIAR shall be submitted in a format



searchable by electronic means, in so far as practicable.

Finally, in accordance with the legislative requirements, the Developer is also required to provide a dedicated website containing all of the SID planning application documentation and this EIAR. The address of this website (www.whitehillwindfarmsubstation.ie) is included in the public notices described above.

1.16 Habitats Directive – Appropriate Assessment

In addition to EIA, an assessment of the likelihood of significant effects on European nature conservation sites (Natura 2000) designated under the EU Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) is also required to be undertaken by the competent authority through a statutory process known as Appropriate Assessment (AA). This is formally a separate assessment process, with discrete reporting requirements, but is highly interrelated with EIA. Only projects where it can be determined, beyond reasonable scientific doubt, will not adversely affect the integrity of any Natura 2000 site, either directly or indirectly having regard to their conservation objectives, can be granted development consent.

1.16.1 AA Screening (Stage 1)

The first stage of this assessment requires what is known as an AA Screening Report (Stage 1) to assesses whether formal AA is required. If AA is required, then the Developer is required to submit a report (Stage 2) known as a Natura Impact Statement (NIS) to inform an AA to be undertaken by the competent authority.

The Developer has prepared a Screening for Appropriate Assessment which concluded that, based on objective evidence and in view of best scientific knowledge available, the potential for likely significant effects on the River Barrow & River Nore candidate Special Area of Conservation (cSAC) could not be excluded.

As a result, it was concluded that the project should be subject to an AA and that a NIS should be prepared and submitted with the planning application alongside this EIAR.

1.16.2 Natura Impact Statement (Stage 2)

The NIS prepared by the Developer is presented and submitted as a separate standalone document and accompanies the SID planning application and this EIAR. The NIS includes both an AA Screening Report (Stage 1) and an Appropriate Assessment (Stage 2). The NIS concludes, beyond all reasonable scientific doubt, that the project, either alone or in combination with other plans or projects, will not undermine the conservation objectives of, or have an adverse effect on the integrity of, any Natura 2000 site.

The Biodiversity chapter of this EIAR (**Chapter 5**) does not repeat the detailed assessment included in the NIS but cross refers to the findings of this separate assessment, as necessary. This approach is in accordance with the EPA guidance (2022) which states that the "biodiversity section of an EIAR, for example, should not repeat the detailed assessment of potential effects on European sites contained in documentation prepared as part of the Appropriate Assessment process" but should "refer to the findings of that separate assessment in the context of likely significant effects on the environment".



1.17 Water Framework Directive – Article 4 Assessment

In accordance with the requirements of the Water Framework Directive (WFD), a project which has the potential to have an effect on WFD water bodies must be assessed to determine whether it could cause deterioration in the ecological status or potential of a water body. It is, therefore, necessary to consider the possible changes associated with the proposed project.

A WFD assessment has been prepared and is enclosed at **Annex 7.3**. It is assessed that there will be no change in groundwater body or surface water body status in the underlying groundwater bodies or downstream surface water bodies arising from the project. There will be no change in quantitative (volume) or qualitative (chemical) status, and the underlying groundwater bodies or downstream surface water bodies are protected from any likely deterioration.

As such, it is assessed that the project will not impact upon any surface water or groundwater body as it will not cause a deterioration of the status of the body and/or it will not jeopardise the attainment of good status.

1.18 Limitations and Difficulties Encountered in Compiling the EIAR

No general difficulties or limitations, including technical deficiencies or lack of knowledge, were encountered in compiling the information required to be provided in this EIAR. Where specific difficulties or limitations were encountered in relation to specific environmental factors, they are reported in the individual chapters of this EIAR, as appropriate.

1.19 Note on Quotations

It is important to acknowledge that statutory EIAR requirements call for a comprehensive description of the existing environment as well as all likely significant impacts and effects. The EIAR therefore necessarily contains statements describing the positive and negative aspects of the project. Selective quotation, out of context, may not be representative of the overall findings of the EIAR and, therefore, any quotations should always be provided in their proper context.

1.20 Definition of the Project

For the purposes of the EIA Directive, the term 'project' is used in to encompass all of the various forms of development, works and activity, including processes, development and operations, which are subject to EIA requirements as set out in the Planning Act and Planning Regulations, and as understood by the EIA Directive. A description of the project is presented in **Chapter 3**.

Within this EIAR, the terms 'project', 'development', 'project site', 'development site', and any variation thereof, may be used interchangeably and encompass and refer to the entire project being assessed, including electricity substation, electricity line, electrical control unit and all associated secondary and off-site developments. Specific components of the project; for example, 'electricity substation', 'underground electricity line' or 'electrical control unit'; may be explicitly referenced, where relevant.

It should be noted that, in order to ensure assessment of any likely significant indirect, secondary or cumulative environmental effects, this EIAR must be read in conjunction with the applicable plans and particulars submitted with the relevant planning application (see **Section 1.15**).

