An Coimisiún Pleanála

Inspector's Report

ABP-323579-25

Development	Proposed Windfarm development of 7 Turbines, 110kV substation and associated works.
Location	within the townlands of Leitrim, Lumville, Ballinla, Clarkeville, Ballyfore Big, Ballyfore Little, Ballyeakin and Ballykilleen, in (Coolestown By) Co. Offaly (www.ballinlawindfarmsid.ie)
Planning Authority	Offaly County Council
Applicant(s)	Ballinla Wind Farm Ltd.
Type of Application	Application for approval Permission under 37E of the Planning and Development Act 2000 (as amended)
Prescribed Bodies	1. Offaly County Council (OCC) 2. Developments Applications Unit (DAU) 3. Department of Defence (DOD) 4. National Environmental Health Service (HSE) 5. Transport Infrastructure Ireland (TII) 6. Uisce Eireann
Public Observers	1. Adele Kierans 2. Aidan Brereton 3. Aishling Doolan 4. Alan Hennessy

5. Alan Rowan
6. Angela Rogers
7. BallyM Charolais Herd
8. Bill Dunne
9. Bord na Mona
10. Brendan O'Neill
11. Brid Lynam
12. Carol Gowran
13. Christopher Pentony
14. Ciaran Tyrrell
15. Cllr. Claire Murray-Smale
16. Colm Quinn and Family
17. Cora McMahon
18. Damien Walsh
19. Daniel Kavanagh
20. David and Collette Staunton
21. Derek Veitch
22. Doris Kelly
23. Dr. Miriam Walsh
24. Eilish & Peter Snr Doolan
25. Elaine Rogers and Michael Collins
26. Finbarr Cullen
27. Frances Crowley
28. Gary McNamara
29. Gerard Buckley and Others
30. Gorden Kelly
31. James Lowry
32. James McKeown

33. Joan and Nicholas Gover
34. John and Caroline McLoughlin
35. John Costello
36. Keith Stafford
37. LCIEA Ltd
38. Lorcan Hickey
39. Martin Kierans
40. Matt Harris
41. Maura E Moore (John Moore)
42. Michael McNamee
43. Norah Jones Healion and Brian Healion
44. Padraic Keating and Maria Rogers
45. Patrick Evans
46. Paul and Fiona Bergin
47. Paula Lalor
48. Peter Doolan
49. Richard Mangan
50. Robert Bergin and Dr Maureen Byrne
51. Sean and Mary Bergin
52. Sergio Silva and Alan Smith
53. Teresa Cave
54. The Association of Irish Racecourses
55. Thomas and Sarah Spollen
56. Wesley Carter

Date of Site Inspection 23rd April 2026 & 6th July 2026

Inspectors Laura Finn (Lead Inspector) and Ronan O'Connor (Second Inspector)

TABLE OF CONTENTS

1.0 Introduction 6

2.0 Proposed Development 9

3.0 The Likely Significant Effects on a European Site 14

4.0 Policy Context 21

5.0 Planning Assessment 39

6.0 Environmental Impact Assessment 76

7.0 Assessment of Likely Significant Effects 86

8.0 Population and Human Health 87

9.0 Biodiversity (Excluding Birds) 94

10.0 Ornithology 108

11.0 Hydrology and Hydrogeology 135

12.0 Land and Soils 150

13.0 Noise and Vibration 161

14.0 Landscape and Visual 181

15.0 Cultural Heritage 198

16.0 Air and Climate 207

17.0 Material Assets – Built Services 213

18.0 Material Assets – Traffic and Transport 220

19.0 Shadow Flicker 227

20.0 Major Accidents and Natural Disasters (MA&ND) 230

21.0 Interactions 238

22.0 Reasoned Conclusion 238

23.0 Recommendation 239

24.0 Draft Order 239

25.0 Appendix 1: Observations 260

26.0 Appendix 2 – Appropriate Assessment Screening Determination (Stage 1) 343

27.0 Appendix 3 – Appropriate Assessment (Stage 2) 352

1.0 Introduction

1.1. Context

This is a direct application to An Coimisiún Pleanála under Section 37E of the Planning and Development Act, 2000. The application is being made by Ballinla Wind Farm Ltd. for a 10-year planning permission for wind energy development known as 'Ballinla Wind Farm' consisting of 7 no. wind turbines and related works located within the townlands of Leitrim, Lumville, Ballinla, Clarkeville, Ballyfore Big, Ballyfore Little, Ballyeakin and Ballykilleen, in (Coolestown By) Co. Offaly (www.ballinlawindfarmsid.ie).

1.2. Pre-Application SID Consultations

As provided for under Section 37B of the Planning and Development Act 2000, as amended, the applicant entered into discussions with the Board, which are detailed on File Reference ABP-318203-23. The development of a 7-turbine windfarm with an overall output of over 50MW and associated infrastructure exceeds the threshold of '*An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts*', as set out in the 7th Schedule of the Planning and Development Act 2000 (as amended).

On foot of an assessment and recommendation from the reporting inspector that the proposed development did constitute Strategic Infrastructure within the meaning of the Acts, the Board issued a direction on the 27th of November 2024 that the development as proposed constitutes Strategic Infrastructure. The current application is made on foot of this decision.

1.3. Site Location and Description

The proposed windfarm site measuring c. 42ha is located within the townland of Leitrim, c. 4km west of the Edenderry and 24km east of Tullamore in County Offaly.

The site consists of agricultural land in the north and coniferous commercial forest to the south. The site is traversed by the L5010 local road which travels in an east west direction bisecting the site. The Grand Canal is located to the north of the site. The surrounding land includes agricultural fields, forestry and cutover peatlands.

The Turbine Delivery Route (TDR) will include proposed developments at three separate TDR nodes in the townlands of Leitrim, Ballyfore Big, Ballyleakin, and Ballina (Geashill By) Co. Offaly.

I note the proposed Grid Connection Route (GCR), is not included in this planning application. The future application for the GCR will comprise an 8km linear route along the public roads from the proposed Wind Farm southeast to the existing Philipstown 110kV substation adjacent to the Edenderry Power Station.

The site is located within lands open to consideration to wind energy development under the Offaly Wind Energy Strategy (WES) which forms part of the Offaly County Development Plan 2021 – 2027 (OCDP 2021)

Table 1.1 Site Specific Description of Windfarm Infrastructure

Turbine	Existing Ground Level (mOD) +	Existing Land use*	Slope* (degrees)	Peat Depth *	Flood Zone +	Grid Co-ordinates (ITM) ^
T1	77.44	Non-irrigated arable land	N/A	No peat	B	655751 (X) 731543 (Y)
T2	78.67	Non-irrigated arable land	N/A	No peat	C	656181 (X) 731802 (Y)
T3	77.43	Non-irrigated arable land	N/A	No peat	C	656655 (X) 731460 (Y)
T4	72.72	Coniferous Forests	0.8	1.7	C	656053 (X) 729897 (Y)
T5	73.91	Coniferous Forests	0.9	2.3	C	656718 (X) 729689 (Y)
T6	74.40	Mixed Forest	2.6	3.1	C	656060 (X) 729191 (Y)
T7	69.74	Mixed Forest	0.5	2.0	C	655818 (X) 728575 (Y)
110kV Ballinla WF Substation	77.15 – 80.65	Non-irrigated arable land	N/A	No peat	A & B	656121(X) 731054(Y)

* Source Chapter 9 of EIAR, ^ Source Chapter 2 of EIAR, + Source Chapter 8 of EIAR

1.4. Planning History

1.4.1. Subject Site

No prior relevant planning history on the subject site.

1.4.2. Other Relevant Planning History

The following windfarm developments in the vicinity of the overall site are noted:

- **PL19. 237263 (09/453)** – permission granted in July 2010 for the Mountlucas windfarm comprising of 30 turbines of up to 100 metre hub height and up to 112 metre rotor diameter with a total height not exceeding 156 metres. The windfarm is operational with 28 turbines.
- **19.PA0032** – permission granted in June 2014 for the Yellow River windfarm comprising of 29 turbines of up to 110m hub height and up to 113m rotor diameter with a total height not exceeding 166 metres.
- **PA0047 and 307401-20** – permission granted in May 2017 for Cloncreen windfarm comprising up to 21 no. turbines with an overall tip height of 170 metres. Subsequent alterations approved under Section 146B. This windfarm is fully operational.
- **303313-18** – alterations to the above permitted wind farm approved in April 2019 by way of section 146B to lengthen the blade of the turbines while remaining within the previously permitted tip height of 170 metres.
- **301619-18 (17/335)** – permission granted in November 2018 for Moanvane windfarm comprising of 12 turbines with an overall tip height of 169 metres.
- **306500-20 (181534)** – permission granted in 2020 for Drehid Windfarm comprising of 12 turbines with a tip height of 169 metres.
- **Reg. Ref. 19606 (ACP Reg. Ref. 306924)** - Application approved by ACP in September 2020 for 8 no. wind turbines at Ballykilleen Shean Kilcumber Cloncant & Cushaling, Edenderry.
- **Reg. Ref. 22494 -** Permitted Development at Cushaling Windfarm (Roads, underground cabling etc.) (Ballykilleen, Shean, Kilcumber, and Ballinowlart North)
- **Reg Ref ABP-306748-20** - Permitted development for 1 wind turbine generator and associated infrastructure in the townlands of Ticknevin and Carbury.
- Other Relevant Applications include:
- **ACP-323980-25** – Proposed Water Supply Project for the Eastern and Midlands Region located south of the proposed Windfarm. Currently under determination by ACP.

1.4.2.1. Planning Applications for the Purposes of Assessing Cumulative Effects

The applicant notes that there a number of other wind farm developments and grid connections that have the potential to result in cumulative impacts in combination with the proposed development. I note Chapter 2, Table 2-2, Planning Applications in the Area and Section 2.3.19.1 of the applicants EIAR which provides a relevant planning history of the site and surrounding land.

I note the Chief Executives Report submitted by the Council in Section 4.2, which provides an update on the status of planning applications in the vicinity.

The Coimisiún will note that since the submission of this current application, Application Reference 323980-25 '*Proposed Water Supply Project for the Eastern and Midland Region'* has been submitted to An Coimisiún Pleanála (submission date 19th December 2025). This proposed project is located c. 500m to the south of the application site at its closest extent. This application has not yet been decided. In relation to same, I note that this is a water pipeline project, of a very different nature to the windfarm project proposed here, and the closest extent of same is removed from the application site by 500m. I am satisfied that the impacts of this development, should it be granted permission, are unlikely to result in significant cumulative impacts with the application for a wind farm as proposed here.

Wind Farms and other planning applications within 25km of the site include the following;

- Cushaling Wind Farm (9 Turbine),
- Cloncreen Wind Farm (21 Turbine),
- Mountlucas Wind Farm (28 Turbine),
- Yellow River Wind Farm (29 Turbine),
- Moanvane Wind Farm (12 Turbine),
- Dernacart Wind Farm, Co. Laois (8 Turbine),
- Drehid Wind Farm, Co Kildare,
- Ballivor Wind Farm, Co. Meath and Co. Westmeath,
- Clonarrow Wind Farm, Co Offaly (Under FI request in planning).

The applicant notes that potential for cumulative effects are considered in the relevant chapters of the EIAR.

I am satisfied the application has provided a robust assessment of relevant planning applications for the purposes of assessing cumulative impacts, notwithstanding the subsequent submission of Application Reference 323980-26 - *'Proposed Water Supply Project for the Eastern and Midland Region'* as discussed above.

2.0 Proposed Development

2.1. Documentation

The following documents accompany the planning application;

- Cover Letter

- ABP SID Planning Application Form and Appendices
- Details of Pre-Application Consultation with ACP (ABP-318203-23)
- Application Drawings & Schedule of Drawings and Drawing Scales
- EIA Portal Confirmation Notice
- Landowner Agreement Letters
- Site Notice & Newspaper Notices
- Schedule of Prescribed Bodies and Copy of Notifications
- Planning Report
- Natura Impact Statement (NIS)
- Environmental Impact Assessment Report (EIAR)

The EIAR, which was prepared by WMP, Engineering and Environmental Consultants is presented as follows;

- Non-Technical Summary (Volume I)
- Main Environmental Impact Assessment Report (EIAR) (Volume II)
- EIAR Appendices (Volume III)
- EIAR Photomontages (Volume IV)

2.2. Development Description

The proposed Windfarm development will include the following components;

- Seven Wind Turbine Generators (WTGs) (blade tip height 185m, a hub height of 104m and a blade length of 79m).
- Seven WTG foundations and hardstand areas. Each wind turbine will have a reinforced concrete base pad foundation with a central plinth above the base, which will support the tower.
- One electrical substation (110kV) including independent power producer (IPP) substation and wind farm operations compound with associated ancillary buildings, security fencing and all associated works. The proposed 110kV substation will comprise an outdoor electrical yard and two single storey buildings (one for the system operator and one for the wind farm operator).
- One LiDAR station based on the ground.
- Two new site entrances from the L5010.
- New and upgraded internal site access tracks.
- All associated underground electrical and communications cabling connecting the proposed turbines to the proposed onsite substation. There will be no overhead power lines constructed on the site.
- The TDR including temporary works on sections of the public road network and private lands along the turbine delivery route on the L-5006 and the junction of the R-402 and R-420.
- One temporary construction site compound and additional mobile welfare unit.
- One spoil deposition area.
- Landscaping.
- Associated surface water management systems.
- Proposed 10 year permission and 35 years operational life.

I note that the project considered within the scope of the EIAR includes the underground grid connection cabling route (GCR), connecting the onsite substation to the national electricity grid via the Philipstown 110kV Substation located opposite the Edenderry Power Station, Co. Offaly. The cabling will be located within the public road corridor or existing tracks for its entire length. The total length of the proposed GCR is c. 8km, the full length of the proposed GCR is located within Co. Offaly. The applicant states the proposed GCR will be the subject of a separate future planning application.

Site access will be provided from the local public road (L5010), which links the L5006 in the east and the R400 to the west. There will be two site entrances, one each to facilitate the northern and southern sections of the site.

The proposed route to deliver wind turbine components is from the M6 via Tullamore to the site entrances.

2.3. Natural Heritage Designations

2.3.1. European Designated Sites

The closest European protected sites are described in Table 2.1 below;

Table 2.1 European Designated Sites
1. The Long Derries, Edenderry SAC [Site Code: 000925] - No hydrological link to SAC identified.
The SAC is located c. **7.6km** to the west of the Study Area. Qualifying Features include Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210]
2. Raheenmore Bog SAC [Site Code: 000582] - No hydrological link to SAC identified.
The SAC is located c. **9.8km** to the west of the Study Area. Qualifying Features include Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150].
3. River Boyne and River Blackwater SAC [Site Code: 002299] - Hydrological link to SAC identified, located 24km downstream.
The SAC is located c. **17km** northwest of the site. Qualifying Features include Alkaline fens [7230], Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)* [91E0], *Lampetra fluviatilis* (River Lamprey) [1099], *Salmo salar* (Salmon) [1106] *Lutra lutra* (Otter) [1355].
4. River Boyne and River Blackwater SPA [Site Code: 004232] - Hydrological link identified, located nearly 25 river km downstream.
The SPA is located c. **17km** northwest of the site. Qualifying Features include Kingfisher (*Alcedo atthis*) [A229]

5. River Barrow and River Nore SAC [Site Code: 002162] - Hydrological link identified (30km to SAC)
The SAC is located c. **11.2km** to the south of the Study Area. Qualifying Features include Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], European dry heaths [4030], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Petrifying springs with tufa formation (Cratoneurion) [7220], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016], Margaritifera margaritifera (Freshwater Pearl Mussel) [1029], Austropotamobius pallipes (White-clawed Crayfish) [1092], Petromyzon marinus (Sea Lamprey) [1095], Lampetra planeri (Brook Lamprey) [1096], Lampetra fluviatilis (River Lamprey) [1099], Alosa fallax fallax (Twaite Shad) [1103], Salmo salar (Salmon) [1106], Lutra lutra (Otter) [1355], Trichomanes speciosum (Killarney Fern) [1421], Margaritifera durrovensis (Nore Pearl Mussel) [1990]

2.3.2. **Natural Heritage Areas/ Proposed Natural Heritage Areas (pNHA)**

No NHA/pNHAs were identified within the site boundary. Significant NHAs/ pNHAs in proximity to the site are as follows;

- **Black Castle Bog pNHA [000570],** located c. 0.7km to the west of the Study Area. No hydrological link
- **Daingean Bog NHA [002033],** located c. 9.6km to the west of the study area. No hydrological link.
- **Carbury Bog NHA [001388]** located c. 11km to the east/northeast of the study area. No hydrological link.
- **Milltownpass Bog NHA [002323]** located c. 13km to the north / northwest of the Study Area. No hydrological link.
- **Cloncrow Bog (New Forest) NHA [000677]** located c. 15km to the north of the study area. No hydrological link
- **Grand Canal pNHA [002104]** borders the study area to the north. No hydrological link.. All land drains and watercourses within the site flow south to the Leitrim 14 [EPA code: 14L21] watercourse.
- **Ballina Bog pNHA [001012]** located c. 16km to the northeast of the study area. No hydrological link.

- **The Long Derries, Edenderry pNHA [000582]** located c. 7.6km to the east / southeast of the study area. No hydrological link.
- **Raheenmore Bog pNHA [000582]** located c. 10km to the west of the study area. No hydrological link.
- **Raheen Lough pNHA [000917]** located c. 13.4km to the southwest of the study area. No hydrological link.
- **Rahugh Ridge (Kiltober Esker) [000918]** located c. 14km to the west of the study area. No hydrological link.

2.4. Environmental Impact Assessment (EIA) Screening

Schedule 5 of the Planning and Development Regulations, 2001 (as amended) transposes Annex I and II of the EIA Directive and sets out prescribed classes of development, for which EIA is required. The following classes are noted:

- Part 2 (3) Energy Industry (i) –

  Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts.

The Application is accompanied by an Environmental Impact Assessment Report (EIAR) which is examined and assessed in this report.

3.0 The Likely Significant Effects on a European Site

3.1. Introduction

In this section of my report, I carry out a Stage 1 and 2 Appropriate Assessment in relation to the proposed development. I have assessed the Applicants AA Screening and NIS. I have reviewed the Council, the DAU and the Observers to the Application documentation regarding issues relating to Appropriate Assessment and have analysed the applicants submission on the observations received, which has sought to address the various concerns raised.

I have completed my own assessment below and have provided a reasoned conclusion at the end of my assessment. An Coimisiún Pleanála is the competent authority for making the decision.

The areas addressed in this section are as follows;

- Compliance with Articles 6(3) of the EU Habitats Directive
- Appropriate Assessment Screening Determination (See Appendix 2 of this Report)
- Appropriate Assessment Screening (See Appendix 3 of this Report)
- Appropriate Assessment Conclusions

3.2. Compliance with Articles 6(3) of the EU Habitats Directive

Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European Site.

3.3. Issues Raised in relation to Appropriate Assessment (AA)

Planning Authority (PA) – The Planning Authority have queried the separation distance given between the subject site and the Charleville Wood SAC (i.e. 'nearly 10km downstream'}. The PA note that this SAC is located c. 25km ('as the crow flies'} southwest of the subject site. No other concerns in relation to AA are raised.

Prescribed Bodies – No Prescribed Bodies have raised concerns in relation to AA including Department of Housing, Local Government and Heritage Nature Conservation (DAU).

Public Submissions – An observer has raised concerns in relation to impacts on surrounding surface waters noting the linkages to the River Barrow and River Nore SAC, and potential impacts on spawning habitat for fish. I would note that observers have raised more general issues in relation to water quality, and biodiversity although not in the specific context of AA. I have considered these concerns in the relevant sections of this report.

3.4. The Natura Impact Statement (NIS)

The application was accompanied by an Appropriate Assessment (AA) Screening Report (Stage 1) and NIS (Stage 2) which was prepared by MWP, in line with current best practice and describes the proposed development, the project site and the surrounding area (Section 4.2).

The NIS contained a Stage 1 Screening Assessment which concluded that a Stage 2 Appropriate Assessment was required. It concluded in Section 4.8 as follows;

> *'The following sites have been assessed and can be screened out due to lack of credible source pathway–receptor connections, intervening distance, and absence of hydrological or ecological connectivity:*
>
> - *Long Derries, Edenderry SAC (000925).*
> - *Raheenmore Bog SAC (000582).*
> - *Lough Ennell SPA (004044).*
> - *Slieve Bloom Mountains SPA (004160).*
> - *Charleville Woods SAC (000571).*
>
> *These sites are either too distant, lack hydrological connection, or are not sensitive to the types of impacts likely to arise from the Proposed Development.*
>
> *Following an examination of the Proposed Development and the likely impacts arising from construction and operation, it has been concluded that, in the absence of mitigation, there is potential for likely significant effects, or significant effects cannot be ruled out at this stage, on the following European sites:*
>
> - *River Barrow and River Nore SAC (002162).*
> - *River Boyne and River Blackwater SPA (004232).*
> - *River Boyne and River Blackwater SAC (002299).*

Therefore, it is determined that the Proposed Development should progress to a more detailed examination of effects on the integrity of these European sites through the preparation of a NIS which is detailed in the subsequent sections of this report.'

The applicants NIS outlined the methodology used for assessing potential impacts on the habitats and species within 3 no. European Sites that have the potential to be affected by the proposed development. It predicted the potential impacts for these sites and their conservation objectives, suggested mitigation measures, assessed in-combination effects with other plans and projects and it identified any residual effects on the European sites and their conservation objectives.

The applicants NIS concludes as follows;

'This NIS has been prepared in accordance with the requirements of the Habitats Directive (92/43/EEC), the Birds Directive (2009/147/EC), the European Communities (Birds and Natural Habitats) Regulations 2011, and Part XAB of the Planning and Development Act 2000 (as amended). It reflects best scientific knowledge and current guidance, including relevant case law and ecological assessment standards.

Following Appropriate Assessment Screening, three European sites were determined to lie within the potential ZoI of the Proposed Development:

- *River Barrow and River Nore SAC (Site Code: 002162).*
- *River Boyne and River Blackwater SAC (Site Code: 002299).*
- *River Boyne and River Blackwater SPA (Site Code: 004232).*

These sites were screened in due to hydrological connectivity via the Leitrim Stream, Figile River, and Kinnafad Stream, and the presence of qualifying interests sensitive to water quality, hydrological changes, and disturbance. The qualifying interests include Atlantic salmon (Salmo salar), brook lamprey (Lampetra planeri), white-clawed crayfish (Austropotamobius pallipes), otter (Lutra lutra) and kingfisher (Alcedo atthis), all of which are vulnerable to pollution, sedimentation, and habitat fragmentation.

An AA was undertaken in accordance with Article 6(3) of the Habitats Directive. The AA identified the following potential impacts that could result in significant effects on the qualifying features and supporting habitats of these SACs/SPA:

- *Waterborne pollution during construction and operation, particularly from sediment, hydrocarbons, and concrete washout.*
- *Alteration of hydrological regimes, including changes to surface water flow, groundwater levels, and drainage patterns.*

- *Disturbance/displacement of qualifying species due to noise, vibration, lighting, and human activity during construction or impairment of water quality.*
- *Fragmentation or degradation of riparian corridors, which serve as ecological linkages for mobile aquatic species.*

These impacts were assessed in detail using the results of ecological surveys, hydrological analysis, and design documentation. Embedded and site-specific mitigation measures have been incorporated into the Proposed Development to ensure that these risks are effectively managed.

On the basis of objective information and beyond reasonable scientific doubt, with the implementation of all mitigation measures, it is concluded that the Proposed Development, either alone or in combination with other plans or projects, will not result in adverse effects on the integrity of the River Barrow and River Nore SAC, the River Boyne and River Blackwater SAC or the River Boyne and River Blackwater SPA, in view of their conservation objectives.'

3.5. AA Screening Determination (See Appendix 2 of this Report)

The applicants AA Screening included 8 no. European Sites in total. The report screened-in 3 no. European Sites for Stage 2 Appropriate Assessment, namely River Barrow and River Nore SAC [Site Code: 002162], River Boyne and River Blackwater SAC [Site Code: 002299] and River Boyne and River Blackwater SPA [Site Code: 004232].

Table 7 of the applicant's NIS identifies European sites within the Potential Zone of Influence. The applicant has screened out The Long Derries, Edenderry SAC [Site Code: 000925], Raheenmore Bog SAC [Site Code: 000582], Lough Ennell SPA [Site Code:004044], Slieve Bloom Mountains SPA [Site Code: 004160] and Charleville Wood SAC [Site Code: 000571] based on lack of credible source pathway–receptor connections, intervening distance, and absence of hydrological or ecological connectivity.

Section 4.7 of the applicants NIS summarises the likely significant effects of the proposed development which includes potential impacts on water quality, habitat loss and or alteration, habitat or species fragmentation and disturbance and/or displacement of species within the SAC and SPAs that have been 'screened-in' (i.e.

River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SAC (002299) and River Boyne and River Blackwater SPA (004232).

An AA Screening and Natura Impact Statement is presented in Appendix 2 and Appendix 3 of this report respectively.

In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information, I conclude that the proposed development is likely to have a significant effect on the protected birds and habitat of the following sites 'alone' in respect of effects associated with construction and disturbance on bird species within the nearby SACs/SPAs;

- River Barrow and River Nore SAC (Site Code: 002162).
- River Boyne and River Blackwater SAC (Site Code: 002299).
- River Boyne and River Blackwater SPA (Site Code: 004232).

I do not consider that any other European sites fall within the zone of influence of the project based on a combination of factors including the nature and scale of the project, the distance from the site to European sites, and any potential pathways which may exist from the development site to a European site, aided in part by the applicant's Appropriate Assessment Screening Report and NIS for the proposed development, the conservation objectives of Natura 2000 sites, the lack of suitable habitat for qualifying interests, as well as by the information on file and I have also visited the site. Thus, having regard to the qualifying interests for which the sites were designated and in the absence of connections to and distance between the application site, it is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on the following 5 no. European Sites in view of the site(s) conservation objectives;

- Long Derries, Edenderry SAC (000925).
- Raheenmore Bog SAC (000582).
- Lough Ennell SPA (004044).
- Slieve Bloom Mountains SPA (004160).
- Charleville Woods SAC (000571).

I conclude that a Stage 2 Appropriate Assessment is not therefore required for the 5 no. sites outlined above.

To conclude, I consider that Appropriate Assessment (Stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone' for the following sites, for which the potential for significant effects could not be excluded:

- River Barrow and River Nore SAC (Site Code: 002162).
- River Boyne and River Blackwater SAC (Site Code: 002299).
- River Boyne and River Blackwater SPA (Site Code: 004232).

This conclusion is based on:

- Objective information presented in the Applicants Screening Report and NIS,
- Standard pollution controls that would be employed regardless of proximity to a European site and effectiveness of same,
- Distance from European Sites,
- The absence of meaningful pathway to any European Site,
- Impacts predicted would not affect the conservation objectives.

No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

3.6. **Appropriate Assessment Conclusion - Stage 2 (Appendix 3 of this Report)**

The proposed development has been considered under the assessment requirements of Section 177U and 177AE of the Planning and Development Act 2000 and having regard to:

- The scientific information on file in respect of the River Barrow and River Nore SAC (002162), the River Boyne and River Blackwater SAC (002299) and the River Boyne and River Blackwater SPA (004232).
- The available information as presented in the submitted documents regarding habitats, species, ground and surface water pathways between the application site and the European sites and other information available, (incl. the desktop studies and field surveys), NPWS website and aerial imagery,
- The nature and scale of the proposed development and works and the nature of potential likely significant effects,
- The separation distances and the lack of connections between the proposed development site and the European sites examined in this assessment,
- The nature of the qualifying interests, special conservation interests and conservation objectives of the European sites,

- The potential impacts and mitigation measures proposed for all phases of the proposed development.

This conclusion is based on a complete assessment of all aspects of the proposed project. I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the European sites including the River Barrow and River Nore SAC (002162), the River Boyne and River Blackwater SAC (002299) and the River Boyne and River Blackwater SPA (004232).or any other European site, in view of the site's Conservation Objectives.

3.7. Appropriate Assessment Conclusions

I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of any European sites in light of their conservation objectives (subject to the implementation of mitigation measures outlined in Appendix 3 of this Report and the applicants EIAR and NIS.

4.0 Policy Context

4.1. EU Legislation/Policy

4.1.1. Renewable Energy Directive (RED III) (EU/2023/2413)

This lays down a minimum binding target of 42.5% share of renewables by 2030 with an aspiration to reach 45%. It sets the course for a rapid acceleration of renewable energy deployment, while taking into account other policy considerations such as multiple use of land. It requires a massive scale-up of renewables projects, driving demand for inter alia wind energy.

This was transposed into Irish Legislation by way of SI No. 274 of 2025 dated the 06th August 2025.

4.1.2. European Wind Power Action Plan

The EU target of at least 42.5% of renewables by 2030 will require the installed capacity to grow from 204GW in 2022 to more than 500 GW of wind in 2030. Globally, annual wind capacity additions should reach at least 329GW per year until 2030 to achieve net-zero emissions by 2050, more than quadrupling today's deployment levels of 75GW. The plan identifies six pillars of concerted action by EC Member States and industry including acceleration of deployment through increased predictability and faster permitting, improved auction design, access to finance, creating a fair and competitive international environment, skills and industry engagement and Member State commitments.

4.1.3. REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022

This plan was prepared in response to the Russian invasion of Ukraine. It focuses on the need to end the EU's dependence on Russian fossil fuels and to tackle the climate crisis. It includes the accelerated rollout of renewable energy. It amends the Directive on the Promotion of the Use of Energy from Renewable Sources (Directive EU 2018/2001) to require that 45% of energy is from renewable sources.

4.1.4. European Green Deal 2020

The aim of this policy is to make Europe climate neutral by 2050. In 2021, the European Climate Law made greenhouse gas emission targets a legal obligation. These targets were increased from 40% to 55% by 2030.

4.1.5. Directive 2019/944 and Regulations EU 2019/941

There is an obligation on each Member State to monitor the security of electricity supply within their territory over the medium to long-term and each member state is entitled to set and monitor the level of security of supply deemed appropriate for its own needs.

4.2. National Policy and Legislation

National policy documents are relevant in respect of the proposed development and include the following:

4.2.1. Climate Action and Low Carbon Development Act 2015, as amended

The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 of the Climate Action and Low Carbon Development (Amendment) Act, 2021 amends the principal act such that Section 15(1) requires:

"(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

a) the most recent approved climate action plan,

b) the most recent approved national long term climate action strategy,

c) the most recent approved national adaptation framework and approved sectoral adaptation plans,

d) the furtherance of the national climate objective, and

e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State".

"Relevant body" means a prescribed body or a public body.

4.2.2. Climate Action Plan 2024 (CAP24) and 2025 (CAP25)

Under the Climate Action and Low Carbon Development Act, 2015, as amended, Irelands national climate objective requires the State to transition to a resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050. This national climate objective meets Irelands obligations under EU and international treaties, including the Paris Agreement (2015), the European Green Deal and the EU's objective to reduce GHG emissions by at least 51% by 2030 (compared to 2018) and achieve climate neutrality by 2050.

To meet its targets and obligations CAP 24 sets a course for Ireland to halve emissions by 2030 and reach net-zero no later than 2050. In terms of the electricity sector a 75% reduction in emissions based on 2018 levels is required by 2030 and CAP 24 provides that central to achieving this is the strategic increase in the share of renewable electricity to 80% by 2030 including ambitious targets of deploying 9GW of onshore wind, 8GW of solar power and at least 5GW from offshore wind projects.

CAP 2025 was published on 15th April 2025. It re-affirms the previous commitment to increase the share of renewable electricity generation to 50% by 2025 and 80% by 2030 including solar targets of up to 5GWs by 2025 and 8 GWs by 2030. I understand that Ireland's Climate Action Plan 2026 has been delayed by the Department of Climate, Energy and the Environment as officials await finalised carbon budgets and post-2030 targets. To support and inform the preparation of the next update to the Climate Action Plan, the department has launched a public consultation. I note the closing date of public submissions is the 17th August 2026. The Coimisiún may wish to satisfy themselves in respect of the status of the CAP 2026 prior to making a decision.

4.2.3. Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions 2024

The National long-term Climate Action Strategy, entitled Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions 2024, sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The Strategy

provides a pathway to a whole-of-society transformation and serves as a vital link between shorter-term Climate Action Plans and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objective.

4.2.4. **National Climate and Energy Plan 2021-2030**

Ireland's target to reduce greenhouse gas emissions increased from 40% to 55% by 2030. It refers to reaching 70% of energy from renewables by 2030, underpinned by the Renewable Energy Support Scheme. Energy security is a key priority.

4.2.5. **The National Adaptation Framework; Planning for a Climate Resilient Ireland (June 2024)**

The most recent approved national adaptation framework, the National Adaptation Framework; Planning for a Climate Resilient Ireland June 2024 (NAF) is Ireland's second statutory National Adaptation Framework (NAF) and was published on 5th of June 2024. The NAF and its successors do not identify specific locations or propose adaptation measures or projects in individual sectors, but sets out the context to ensure local authorities, regions and key sectors can assess the key risks and vulnerabilities of climate change, implement climate resilience actions and ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making. The NAF identifies 13 (previously 12) priority sectors under 7 lead Departments that are required to prepare sectoral adaptation plans under the Climate Act in accordance with the Sectoral Planning Guidelines for Climate Change Adaptation which were published in 2018 and updated in 2024. The original 12 sectoral Plans prepared in 2019 and a new sectoral Plan for tourism are to be updated/prepared by end of Q3 2025. The following Electricity and Gas Sectoral Plan is relevant to the subject proposal.

4.2.6. **Electricity and Gas Sectoral Plan 2025**

The aim of the Plan published in November 2025 is to help Ireland's electricity and gas networks build long term resilience to climate impacts and extreme weather

events. The plan considers national scale impacts and risks for the three EGN subsectors (electricity generation, electricity networks and gas networks) rather than assessing impacts on individual EGN assets. A total of 45 climate risks for the EGN sector have been identified, as part of the climate impact screening. To address the risks posed by climate change to the EGN sector, the EGN SAP 2025 sets out a EGN SAP Vision underpinned by three goals: (i) Establish structures to strengthen and enable action across the EGN sector to increase resilience; (ii) Strengthen the capacity of the EGN sector to ensure long-term resilience and (iii) Deliver a sustainable and resilient EGN sector. These goals are supported by 7 objectives and 38 actions, ranging from enhancing existing SAP governance processes, to prioritising research, and strengthening policy integration. The Plan is viewed as a 'live' document and will be evaluated and adapt, in line with developments in climate adaptation and mitigation efforts across the EGN sector.

4.2.7. **National Biodiversity Plan 2023-2030**

Ireland's 4th NBAP sets the biodiversity agenda for the period 2023 – 2030. The NBAP has a list of Objectives which promotes biodiversity as follows; **Objective 1** Adopt a whole of government, whole of society approach to biodiversity; **Objective 2** Meet urgent conservation and restoration needs; **Objective 3** Secure nature's contribution to people; **Objective 4** Enhance the evidence base for action on biodiversity; **Objective 5** Strengthen Irelands contribution to international biodiversity initiatives. The Wildlife (Amendment) Act 2023 provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the National Biodiversity Action Plan.

4.2.8. **National Renewable Energy Action Plan (NREAP)**

- Under the first EU Directive 2009/28/EC[1] (RED) in 2009, member countries of the European Union were obliged to draft and submit to the European Commission National Renewable Action Plans (NREAPs) outlining pathway

[1] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF

which will allow them to meet their 2020 renewable energy, energy efficiency and GHG cuts targets.

- Ireland 2020 electricity target- 42.5% of electricity demand met by electricity generated from renewable energy sources.

4.2.9. **National Landscape Strategy for Ireland 2015-2025**

Ireland signed and ratified the Council of Europe's European Landscape Convention (ELC) in 2002 which came into effect on 1 March 2004. It obliges Ireland to implement policy changes and objectives concerning the management, protection and planning of the landscape. The National Landscape Strategy is intended to ensure compliance with the ELC and to establish principles for protecting and enhancing it while positively managing its change. It is a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. The objectives of this Strategy are to:

> *'establish and implement through a series of actions, policies aimed at understanding, protecting, managing and planning our landscape. It sets out specific measures to integrate and embed landscape considerations in all sectors which influence the landscape and improve and enhance the quality of decision-making by those who have an impact on it'.*

4.2.10. **The National Peatlands Strategy 2015 – 2025 (DAHG, 2015)**

The Strategy sets out principles to guide Government policy and to provide a long-term framework for the responsible management of all peatlands to optimise their social, environmental and economic contribution to the State. It proposes that the potential contribution of peatlands rehabilitation, restoration and enhancement to climate change mitigation and adaptation be fully explored, in addition to their potential to contribute to a low carbon economy through use of sites for renewable energy.

The Strategy provides a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs. It recognises that such bogs have a number of advantages over other categories of land in terms of potential windfarm development of scale.

'The appropriate development of such bogs may assist energy projects which will contribute to meeting our renewable energy targets and developing an export market for renewable electricity. Windfarms on cutaway bogs could be developed in conjunction with recreational and natural amenity' (Page 29).

It sets out a number of principles that will be used to guide sectoral policies, plans and decisions regarding the future use of peatlands:

- Ireland's peatlands will continue to be used for many purposes including agriculture, development, peat extraction, forestry, conservation and amenity (P1).
- The potential economic, environmental and social benefits and costs of peatland uses will be considered and applied to policy and land use decisions (P2).
- Semi State companies…and public authorities … discharge their functions in such a way to support the objectives of this Strategy (P5).
- Future management of these State-owned peatlands will be in keeping with the objectives of the Strategy (P12).
- Generally, Bord na Móna cutaway bogs that flood naturally will be permitted to flood unless there is a clear environmental and/or economic case to maintain pumped drainage (P16).
- In deciding on the most appropriate after-use of cutaway peatlands, consideration shall be given to encouraging, where possible, the return to a natural functioning peatland ecosystem. This will require re-wetting of the cutaway peatlands which may lead in time to the restoration of the peatland ecosystem (P17).
- Environmentally, socially and economically viable options should be analysed to plan the future of industrial cutaway peatlands, in conjunction with limiting factors as outlined in Bord na Móna's 'Strategic Framework for the Future Use of Peatlands' (P18).
- Consideration will be given to how best cutaway bogs can contribute to a low carbon economy through their use as sites for renewable energy (P21).

- Policies and decisions relating to the use of peatlands shall take full consideration of potential impacts on water quality and the attainment by the State of mandatory water quality standards (P25).

4.2.11. **National Energy Security Framework (April 2022)**

The Framework addresses Ireland's energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions. Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

- Reducing demand for fossil fuels.
- Replacing fossil fuels with renewables, including wind energy.
- Diversifying fossil fuel supplies.

Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

4.2.12. **Project Ireland 2040: National Planning Framework ("NPF"), First Revision of the NPF and the National Development Plan ("NDP 2018-2027)**

Project Ireland 2040 is the Government's long-term overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future. The NPF and the NDP combine to for Project Ireland 2040. The NPF sets out to deliver a spatial strategy through a set of National Strategic Outcomes ("NSO's"), including: 'Transition to a Low Carbon and Climate Resilient Society' which establishes a national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050. The first revision of the NPF has been approved by both Houses of the Oireachtas, following the decision of the Government to approve the final revised NPF on 8th April, 2025. The 'First Revision'

introduces regional renewable electricity capacity allocations for each of the three Regional Assemblies to be achieved by 2030 which for the Eastern and Midland Regional Area is an additional 1,966MW, for onshore wind or 25% of the National share in 2030. This is the minimum required for onshore wind to meet the 2030 emission reductions in the electricity sector. The NDP 2018-2027 sets out the investment priorities that will underpin the implementation of the National Planning Framework, through a total investment of approx. €116 billion. It recognises that Ireland's energy system requires radical transformation in order to achieve its 2030 and 2050 targets and objectives. It recognises that investment in renewable energy sources affords Ireland an opportunity to decarbonise our energy generation, but that this must be complemented by wider measures to moderate growth in energy demand, increase energy security, diversify supply sources and facilitate more variable electricity generation on the grid.

4.2.13. **Relevant National Policy Objectives (NPO) include:**

- **NPO 69** - Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.
- **NPO 70** - Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050.
- **NPO 71-** Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.
- **NPO 72 -** Support an all-island approach to the delivery of renewable electricity through interconnection of the transmission grid.
- **NPO 73 -** Support the co-location of renewable technologies with other supporting technologies and complementary land uses, including agriculture, amenity, forestry and opportunities to enhance biodiversity and promote heritage assets, at appropriate locations which are determined based upon the best available scientific evidence in line with EU and national legislative frameworks.
- **NPO 74 -** Each Regional Assembly must plan, through their Regional Spatial and Economic Strategy, for the delivery of the regional renewable electricity capacity allocations indicated for onshore wind and solar reflected in Table 9.1,

and identify allocations for each of the local authorities, based on the best available scientific evidence and in accordance with legislative requirements, in order to meet the overall national target.

- **Table 9.1 -** Additional Renewable Power Capacity Allocations for the Eastern and Midland Region is 1,966 MW for onshore wind by 2030. The total national share for the region in 2030 is 25% of onshore wind.
- **NPO 75** - Local Authorities shall plan for the delivery of Target Power Capacity (MW) allocations consistent with the relevant Regional Spatial and Economic Strategy, through their City and County Development Plans and Regional Policy.

4.2.14. **Eastern and Midland Regional Spatial and Economic Strategy 2019- 2031 (RSES)**

The RSES transposes the policies and objectives of the NPF to a regional level. There are 16 no. Regional Strategic Outcomes (RSO's). RSO 8 is to build climate resilience. RSO 9 is to support the transition to low carbon and clean energy. The RSES notes in Section 4.8 that '*Energy production, including renewable energy in the form of wind, solar and biomass have to date largely been provided in rural areas and the location of future renewable energy production is likely to be met in rural areas'*. RPO 4.79 and 4.84 support renewable energy developments in rural areas.

Section 10.3 Energy states '*In the context of a move towards a more energy efficient society and an increase in renewable sources of energy, there is a need to set a policy approach which will address an increased demand for indigenous resources and increased security of supply. To meet our energy targets, we need to better leverage natural resources to increase our share of renewable energy. There is an established tradition of energy production in the Midland counties by state agencies, however national environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants in these counties.'*

- RPOs 10.20 and 10.22 are also particularly relevant in relation to their support for the development of enhanced electricity supplies across the island.

4.3. **Ministerial Guidelines Relating to Wind Energy and Other Relevant Guidance**

4.3.1. **The Wind Energy Development Guidelines, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government (June 2006) (WEDG, 2006)**

The Guidelines advise that a reasonable balance must be achieved between meeting Government Policy on renewable energy and the proper planning and sustainable development of an area, and it provides advice in relation to the information that should be submitted with planning applications. The impacts on residential amenity, the environment, nature conservation, birds and the landscape should be addressed. It states that particular landscapes of very high sensitivity may not be appropriate for wind energy development.

4.3.2. Draft Wind Energy Development Guidelines 2019

In December 2013, the Minister for Housing and Planning announced a public consultation process with respect to a focused review of the 2006 Guidelines and a 'preferred draft approach' to the review was announced in June 2017.

Consultation on the draft Guidelines ended in February 2020. The draft guidelines identify Specific Planning Policy Requirements (SPPR), and subject to formal adoption of the Guidelines, it is intended that these SPPRs would be applied by planning authorities and An Bord Pleanála in the performance of their functions, as well as having regard to additional matters for consideration in assessing wind energy developments. Notable changes in the draft guidelines when compared with the 2006 wind energy guidelines are summarised as follows:

4.3.2.1. Noise

Section 5.7.4 - The "preferred draft approach", proposes noise restriction limits consistent with World Health Organisation Guidelines, proposing a relative rated noise limit of 5dB(A) above existing background noise within the range of 35 to 43dB(A), with 43dB(A) being the maximum noise limit permitted, day or night. The noise limits will apply to outdoor locations at any residential or noise sensitive properties.

4.3.2.2. Shadow Flicker

Section 5.8.1 - The relevant planning authority or An Bord Pleanála should require that the Applicant shall provide evidence as part of the planning application that shadow flicker control mechanisms will be in place for the operational duration of the wind energy development project.

4.3.2.3. **Community Investment**

Section 5.10 - The Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement issued by the Department of Communications, Climate Action and Environment (December 2016) sets out to ensure that wind energy development in Ireland is undertaken in observance with the best industry practices, and with the full engagement of communities around the country. Community dividend – measures to ensure enduring economic benefit to the community.

4.3.2.4. **Visual Impact**

Section 6.4 - Siting of wind energy projects.

4.3.2.5. **Set back**

Section 6.18.1 Appropriate setback distance to apply - The potential for visual disturbance can be considered as dependent on the scale of the proposed turbine and the associated distance. Thus, a setback which is the function of size of the turbine should be key to setting the appropriate setback. Taking account of the various factors outlined above, a setback distance for visual amenity purposes of 4 times the tip height should apply between a wind turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development, subject to a mandatory minimum setback of 500 metres. Policy SPPR 2 – Set back.

Section 6.18.2 Exceptions to the mandatory minimum setbacks - An exception may be provided for a lower setback requirement from existing or permitted dwellings or other sensitive properties to new turbines where the owner(s) and occupier(s) of the relevant property or properties are agreeable to same, but the noise requirements of these Guidelines must be capable of being complied with in all cases.

4.3.2.6. **Grid connections**

Underground to be the standard approach.

4.3.3. **Other Relevant Guidance**

- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR) (EPA 2022)

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Housing, Planning, Community and Local Government (2018)
- Guidelines for Landscape and Visual Impact Assessment (3rd Edition) Landscape Institute and Institute of Environmental Management & Assessment 2013 (IEMA)
- Guidelines for Ecological Impact Assessment 2018 Chartered Institute of Ecology and Environmental Management (ICEEM)
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009)
- Scottish Natural Heritage (SNH) Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation 2019
- Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012).

4.4. Local Policy

The relevant development plan to this assessment is the Offaly County Development Plan 2021 − 2027 (as Varied). (OCDP 2021)

4.4.1. Offaly County Development Plan 2021-2027 (OCDP 2021) (As Varied)

The Coimisiún will note that Variation No. 1 of the OCDP 2021 was adopted on 20th July 2026. This provides for a number of amendments to the originally adopted Plan and, of relevance to this application, is the update to the previous existing provisions relating to '*Wilderness Corridors'*, by way of amendments to Objective BLO-28, Policy CAEP-38 and other associated text changes, including amendments to the Wind Energy Strategy (WES), in conjunction with additional mapping to give effect to '*Peatland and Nature Corridors'* within the County.

The Coimisiún will also note that Variation No. 1 was adopted after the submission of this current application[2].

Relevant development plan policies relevant to the site and wind farm developments in general include:

4.4.2. Climate and Wind Energy Policy

- **Climate Action Plan** - Seeks to align all OCDP 2021 policies with Government policy objections on climate resilience and creating a carbon neutral economy.
- **Section 3.8 of OCDP 2021** - Sets out policies on Climate Action and Energy –

[2] This application was submitted to An Coimisiún Pleanála on 5th September 2025.

- **Wind Energy Strategy (WES)**
- **Map 10 of the WES** - Illustrates that the application site is deemed '*Open for Consideration for Wind Energy Development'*. Notwithstanding, Section 11 of the WES identifies key areas within the county that are 'Open for Consideration for Wind Energy Developments' with the exception of lands within the Peatland and Nature Corridors as identified by BLO-28.
- **Objective BLO-28** - In summary, seeks to protect the County's 'Peatland and Nature Corridors' as shown in Figure 4.9(b) of the OCDP 2021 and to strictly direct large scale energy production projects, most particularly wind farms, onto areas that are located outside of the 'Peatland and Nature Corridors.
- **Fig. 4.9(b) of the OCDP 2021** - Identifies Peatland and Nature Corridors. It is likely an area to the south of the application site now lies within a Peatland and Nature Corridor, and it is likely that proposed Turbines T4, T5, T6 and T7 fall now within this designation,
- As such, by virtue of this designation, this area of the site is not supported by the WES for wind energy development noting that Objective BLO-28 directs wind farms to areas that are outside those areas designated '*Peatland and Nature Corridors'*.
- The remainder of the site remains unaffected by the Peatland and Nature Corridors designation.[3]
- **Section 3.2.6 CDP** - emphasises site suitability criteria.
- **CAEP-15 -** It is Council policy to support the enhancement of carbon sinks such as peatlands, forestry, and permanent grasslands, with consideration of in conjunction with other climate mitigation actions such as the re-wetting and restoration of cut away peatlands, where appropriate.
- **CAEP-19** - It is Council policy that planning applications for development on or immediately adjacent to peatlands shall be accompanied by assessments considering the following issues where relevant; peatland stability, hydrology, carbon emissions balance and ecological impact assessment.
- **CAEP-25** - It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations.
- **CAEP-26** - It is Council policy to encourage developers of proposed large scale renewable energy projects to carry out community consultation in accordance with best practice and to commence the consultation at the commencement of project planning.
- **CAEP-27** - It is Council policy to ensure that whenever possible, community benefits are derived from all renewable energy development in the county such as near-neighbour benefit funds and general community benefit funds, which may take the form of contributions in kind to local projects, assets and facilities such as public amenities on the renewable energy site, measures to promote energy efficiency or a local energy discount scheme.
- **CAEP-37** - It is Council policy to recognise the importance of wind energy as a renewable energy source which can play a vital role in achieving national

[3] I refer the Coimisiún to the detailed discussion of the Wind Energy Strategy, and other related Development Plan objectives and policies in Section 5 below.

targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions.

- **CAEP-38** - It is Council policy that in assessing planning applications for wind farms, the Council shall:
    - have regard to the provisions of the Wind Energy Development Guidelines 2006, and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future;
    - have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy Designations Map from the County Wind Energy Strategy;
    - stringently assess the impact of the proposed wind farm development on the 'Peatland and Nature Corridors' as detailed in Objective BLO-28 of Chapter 4;
    - have regard to Development Management Standard 109 on wind farms contained in Chapter 13 of this Plan; and
    - have regard to existing and future international, European, national and regional policy, directives and legislation
- **CAEO-03** - It is an objective of the Council to achieve a reasonable balance between responding to government policy on renewable energy and in enabling the wind energy resources of the county to be harnessed in an environmentally sustainable manner.
- **CAEO-04** - It is an objective of the Council to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the County in a manner that is consistent with proper planning and sustainable development of the area.
- **CAEO-05** - It is an objective of the Council to implement the Council's Wind Energy Strategy as follows:
- In 'Areas Deemed Open for Consideration for Wind Energy Development' as identified in Map No. 10 'Wind Energy Strategy Designations', the development of windfarms and smaller wind energy projects will be considered….
- **CAEO-07** - It is an objective of the Council to ensure that renewable energy projects located on peatlands or in close proximity to peatlands do not negatively impact on any rehabilitation measures including enhanced rehabilitation measures (i.e. drain blocking and rewetting).

4.4.3. **Biodiversity and Landscape Policy (Chapter 4)**

- **BLP 02-04 and 14 Policy** - to protect, conserve and enhance biodiversity and ecological connectivity, with particular reference to designated habitats and peatlands.
- **BLP 20 and 23** - Policy to preserve riparian buffer strips and to protect the recreational potential of waterways.
- **BLP 27 – 30 Policies in relation to green infrastructure.**
- **BLP 38 - 41 -** Policy to protect and enhance the county's landscape and to ensure a full assessment of larger developments.
- **BLO-01 (Natural Capital)** - Policy objective to ensure that development occurs within environmental limits.

- **BLO-10** - It is an objective of the Council to require the preparation and submission of a Hydrological Report/Assessment for significant developments within and in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems.
- **BLO-25** - It is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.
- **BLO-28** - It is an objective of the Council to protect the County's 'Peatland and Nature Corridors' as shown in Figure 4.9(b) in such a manner that any future development therein is of an appropriate scale and design that does not give rise to significant adverse impacts on the environment, biodiversity & habitats, landscape character, or visual amenity and can integrate effectively into its surroundings; to strictly direct large scale energy production projects, most particularly wind farms, onto areas that are located outside of the 'Peatland and Nature Corridors', and to integrate routes identified in the *Midlands Cycling Destination - Offaly Network Map* and the National Cycle Network within the corridors.
- **Section 4.14.2** Key Scenic Views, Prospects and Key Amenity Routes
- **Section 4.22** Key Amenity Routes in Offaly
- **Figure 4.22** Landscape Classification Areas in County Offaly
- The proposed development is located predominantly within a 'Low' sensitivity area except two turbines to the south which are located within a 'Moderate' sensitivity area due to its proximity to peatland and peatland fringe woodland scrub.
- The nearest area of 'High' sensitivity in the surrounding area is a narrow strip associated with Grand Canal c. 500m north of the nearest turbine.
- **Table 4.18 on 'low sensitivity areas'** - Low sensitivity areas are robust landscapes which are tolerant to change, such as the county's main urban and farming areas, which have the ability to accommodate development.
- **Table 4.19 on 'moderate sensitivity areas'** - 'Moderate sensitivity areas can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change.'
- **BLP 38 - 41 -** Policy to protect and enhance the county's landscape and to ensure a full assessment of larger developments.

4.4.4. **Transport**

- **Section 8.8 (SMAP 24; 28; 31)** - Policy to maintain and protect the safety and capacity of the national road network and to ensure a TTA is carried out as appropriate.

4.4.5. **Heritage**

- **Section 10.11** – Built Heritage Policy to discourage development that would cause a loss of character to country houses, gardens and demesnes.

4.4.6. **Development Management Standards (Chapter 13)**

4.4.6.1. **Section 13.9.13 Energy and Communications.**

- **DMS-97** - Requirement for safe design of accesses onto the national road network.
- **DMS-106 - Flood Risk Assessments** - Sets out policy requirements to follow the 2009 Flood Risk Management Guidelines in all relevant developments.
- **DMS-108 - Peatlands** –
- In the consideration of development on or adjacent to peatland areas, the following guiding principles should apply:
    - Consideration of the potential contribution of peatlands to climate change mitigation and adaptation including renewable energy production;
    - Consideration of habitats and species of environmental significance;
    - Consideration of the potential contribution of peatlands to an existing or proposed greenway / blueway / peatway network;
    - Consideration of the ecosystem services and tourism potential provided by peatlands;
    - Development of peatlands shall ensure that there are no negative impacts on water quality and hydrology;
    - consideration of existing and future rehabilitation measures including enhanced rehabilitation measures (i.e. drain blocking and rewetting);
    - Consideration of peatland stability;
    - Achieving of a carbon emissions balance; and
    - Incorporation of fire mitigation measures such as fire breaks or ensuring access points and routes are suitable for travel by emergency services.

4.4.7. **DMS 109 Wind Farms**

When assessing planning applications for wind energy developments the Council will have regard to;

- The Wind Energy Development Guidelines for Planning Authorities, DoEHLG, (2006) and any amendments to the Guidelines which may be made;
- the Wind Energy Strategy Designations Map from the County Wind Energy Strategy showing areas identified as ‘Areas Open for Consideration for Wind Energy Developments’ and ‘Areas not deemed suitable for Wind Energy Developments’, and specific policy and objective BLO-28 for wind development in these areas as outlined in Section 8 of the County Wind Energy Strategy;

In addition to the above, the following local considerations will be taken into account by the Council in relation to any planning application;

- Impact on the visual amenities of the area;
- Impact on the residential amenities of the area;
- Scale and layout of the project, any cumulative effects due to other projects and the extent to which the impacts are visible across the local landscape;
- Visual and cumulative impact of the proposal with respect to protected views, scenic routes and designated scenic landscapes and ‘Peatland and Nature Corridors’ as detailed in Chapter 4 of this Plan;

- Impact on the ‘Peatland and Nature Corridors’ (Objective BLO-28) in terms of tranquillity, landscape, options for amenity and tourism development, biodiversity protection and enhancement, and carbon sequestration
- Impact on nature conservation, ecology, soil, hydrology, groundwater, archaeology, built heritage and public rights of way;
- Impact on ground conditions and geology;
- Consideration of falling distance plus an additional flashover distance from wind turbines to overhead transmission lines;
- Impact of development on the road network in the area;
- Impact of the development on radio observatories and broadcast communications in the area; and
- Impact on human health in relation to noise disturbance (including consistency with the World Health Organisation’s 2018 Environmental Noise Guidelines for the European Region), shadow flicker and air quality.

This list is not exhaustive and the Council may consider other requirements contained in the chapter on a case-by-case basis with planning applications should the need arise. Where impacts are predicted to arise as a result of the development proposed, suitably detailed mitigation measures shall be proposed.

5.0 Planning Assessment

I have read the entire contents of the file, visited the site and surroundings, and have had particular regard to national and local policy in respect of wind farm development. I have also had regard to the submissions contained on file including the submissions of the various observers, prescribed bodies and the submission from Offaly County Council.

All three sections of this report (Planning Assessment, EIAR Assessment and the Appropriate Assessment) should be read in conjunction so as to avoid unnecessary repetition under each of the sections.

I consider that the key issues that arise for consideration by the Coimisiún under this section of the report relate to the following:

- Section 15 of the Climate Action & Low Carbon Development Act 2015, as amended
- Compliance with Renewable Energy Policy (European, National, Regional and Local)
- Principle of Development and Planning Policy
- Material Contravention
- Wind Take/Impact on Development Potential of Adjoining Lands
- Potential Amenity Trails
- Oral Hearing
- Comments on Conditions

These issues will be dealt with under separate headings below.

5.1. Section 15 of the Climate Action & Low Carbon Development Act 2015, as amended

Section 15(1) of the Act, as amended states:

> *'A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—*
>
> *(a) the most recent approved climate action plan,*
>
> *(b) the most recent approved national long term climate action strategy,*
>
> *(c) the most recent approved national adaptation framework and approved sectoral adaptation plans,*

(d) the furtherance of the national climate objective, and

(e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.'

As the relevant body, An Coimisiún Pleanála is required to exercise its function in a manner consistent with the applicable climate objectives, in so far as is practicable, and I have set out the following consideration to enable the Coimisiún make their decision within that framework.

As outlined in Section 4.0 above relating to policy, CAP 2025 was published on 15th April 2025 and re-affirms the previous commitment in CAP 2024 to increase the share of renewable electricity generation to 50% by 2025 and 80% by 2030 including onshore wind targets of up to 6 GW by 2025 and 9 GW by 2030. There is clear support for the development of wind energy within this context.

Ireland's long-term Climate Action Strategy, entitled '*Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions, 2024'*, sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The Strategy provides a pathway to a whole-of-society transformation and serves as a vital link between shorter-term Climate Action Plans (CAPs) and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objectives.

The most recently approved National Adaptation Framework (NAF), the *'National Adaptation Framework; Planning for a Climate Resilient Ireland, June 2024'* is Ireland's second statutory NAF and was published on 5th of June 2024.

The NAF sets out the context to ensure local authorities, regions and key sectors can assess the key risks and vulnerabilities of climate change, implement climate resilience actions and ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making.

The NAF identifies 13 no. (previously 12 no.) priority sectors under 7 no. lead Departments that are required to prepare sectoral adaptation plans under the Climate Act in accordance with the Sectoral Planning Guidelines for Climate Change Adaptation, which were published in 2018 and updated in 2024. There were 13 no. sectoral Plans prepared in 2025 including an Electricity and Gas Sectoral Plan (EGN SAP, 2025).

It is noted that the furtherance of the national climate objective is a central tenet of the above referenced plans and strategies, as is the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State. I will address the local policy context in the following section of my report.

5.2. Renewable Energy Policy

In terms of tackling climate change, reducing dependency on fossil fuels in energy production and achieving reduced greenhouse gas emissions, there is clear policy support at International, National and Local level for renewable energy development.

The proposed windfarm is compatible with European and National climate change and renewable energy policy and legislation (including the Climate Action and Low Carbon Development Act, 2015 (as amended)), as outlined in Section 4.0 above.

The proposed windfarm would contribute to the achievement of European and National renewable energy targets and in particular with the objectives of the Climate Action Plan 2024 (CAP 24) and the Climate Action Plan 2025 (CAP 25), which has set targets for wind energy of:

I. achieving **9 GW of onshore wind**, 8 GW of solar power, and at least 5 GW from offshore wind projects by 2030; and

II. achieving an 80% share of renewable electricity by 2030.

The plan also identifies a range of measures to deliver targets for a reduction in greenhouse gas emissions including the better management of peatlands. Compliance with issues related to environmental management are addressed in the relevant sections of the EIA chapter of this report.

The proposed windfarm would be compatible with national planning policy as set out in the National Planning Framework Plan, 2018-2040, which recognises the need to move towards a low carbon and climate resilient society with a sustainable renewable energy supply.

The WEDG 2006 (and DWEDG 2019 amendments) advise that a reasonable balance must be achieved between meeting national policy on renewable energy and the proper planning and sustainable development of an area. The Guidelines also state that projects should not adversely affect any European sites, have an adverse impact

on birds, give rise to peat instability or adversely affect drainage patterns, cultural heritage, sensitive landscapes, the local road network or residential amenity.

The proposed windfarm is compatible with regional planning policy as set out in the current Eastern and Midland Regional Spatial and Economic Strategy 2019-2031 (RSES), which supports the transition to low carbon and clean energy (RSO 9) and to build climate resilience (RSO 8). RPO 4.79 and 4.84 supports renewable energy developments in rural areas and RPOs 10.20 and 10.22 support the development of enhanced electricity supplies across the island. The strategy acknowledges the need to set a policy approach which will address an increased demand for indigenous resources and increased security of supply.

5.3. Local Renewable Energy Policy - OCDP 2021 (as Varied)

The proposed windfarm is compatible with the general climate change and renewable energy aspirations contained in the OCDP 2021. In this regard, I note the following;

- **Policy CAEP-25** seeks to encourage and facilitate the production of energy from renewable sources including wind energy, subject to proper planning and environmental considerations.
- **Policy CAEP-37** recognises the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions.
- **Objective CAEO-03** seeks to achieve a reasonable balance between responding to government policy on renewable energy and in enabling the wind energy resources of the county to be harnessed in an environmentally sustainable manner, and
- **Objective CAEO-04** seeks to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the County in a manner that is consistent with proper planning and sustainable development of the area.

- **Policy CAEP-38** sets out a number of considerations the Council will take into account when assessing planning applications for windfarms, and I have considered these below. (See Table 5.1 of this report)
- Similarly, **Policy DMS-109** sets out a number of criteria to be considered when assessing planning applications for wind farms, and I have also considered these below. (See Table 5.2 of this report)

5.3.1. Compliance with Policy CAEP-38 of the OCDP 2021

Policy CAEP-38 sets out a number of considerations when assessing applications for windfarms, and I have considered compliance, or otherwise, in Table 5.1 below:

Table 5.1 Assessment against Policy CAEP-38

Policy CAEP-38 **It is Council Policy that in assessing planning applications for wind farms, the Council shall:**	**Comment**
Have regard to the provisions of the Wind Energy Development Guidelines 2006, and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future;	**Wind Energy Development Guidelines 2006** Where relevant, I have had regard to the provisions of the WEDG, 2006 (For example within Sections 13 (Noise and Vibration) and Section 14 (Landscape and Visual). **Draft Revised Wind Energy Guidelines 2019** With regard to the DWEDG 2019, I note that that at the time of writing, updated guidelines have yet to be published. Until that time, the existing WEDG 2006 guidelines remain in force.
Have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy Designations Map from the County Wind Energy Strategy.	The Wind Energy Strategy (WES), as part of the OCDP 2021 indicates the subject lands are deemed to be '*Open for Consideration'* for wind energy developments (Refer to Map 10 of the WES). In such areas the plan states: *'These areas are open for consideration for wind energy development as these areas are characterised by low housing densities, do not conflict with European or National designated sites and have the ability by virtue of their landscape characteristics to absorb wind farm developments. Notwithstanding this designation, wind farm developments in these areas will be evaluated on a case-by-case basis subject to criteria listed in Development Management Standard 109 contained in Chapter 13 of Volume 1 of this County Development Plan and the*

	Section 28 Wind Energy Development Guidelines.' In relation to the above, I note that proposals for windfarms, such as that proposed here, are required to be evaluated with reference to Development Management Standard 109. I have considered the proposal compliance, or otherwise, with same in Table 5.2 below.
Stringently assess the impact of the proposed wind farm development on the 'Peatland and Nature Corridors' as detailed in Objective BLO-28 of Chapter 4;	I have considered impacts relating to *'Peatland and Nature Corridors*' Section 5.4 of my report.
Have regard to Development Management Standard 109 on wind farms contained in Chapter 13 of this Plan; and	See Table 5.2 below for a consideration of same.
Have regard to existing and future International, European, National and Regional policy, directives and legislation	I have set out all relevant International, European, National and Regional policy in Section 4.0 above, and considered compliance with same in this section, and where relevant, in other sections of this report.

5.3.2. **Compliance with Development Management Standard 109 of the OCDP 2021**

Development Management Standard 109 sets out a number of considerations when assessing applications for windfarms. This is considered in Table 5.2, as follows;

Table 5.2: Assessment against Development Management Standard 109

DMS-SDMS 109 Wind Farms When assessing planning applications for wind energy developments the Council will have regard to;	**Comment**
The Wind Energy Development Guidelines for Planning Authorities, DoEHLG, (2006) and any amendments to the Guidelines which may be made;	See comment in relation to WEDG 2006 and DWEDG 2019 in Table 5.1 above.
The Wind Energy Strategy Designations Map from the County Wind Energy Strategy showing areas identified as 'Areas Open for Consideration for Wind Energy Developments' and 'Areas not deemed suitable for Wind Energy Developments', and specific policy	I have considered the provisions of the WES and Objective BLO-28 in Section 5.4 of my report.

and objective BLO-28 for wind development in these areas as outlined in Section 8 of the County Wind Energy Strategy;	
In addition to the above, the following local considerations will be taken into account by the Council in relation to any planning application;	
Impact on the visual amenities of the area;	Impacts on visual amenity are considered in Section 14 'Landscape and Visual' of this report.
Impact on the residential amenities of the area;	Impacts on residential amenities are considered in the relevant sections of this report including Section 13 'Noise and Vibration' and Section 19 'Shadow Flicker'.
Scale and layout of the project, any cumulative effects due to other projects and the extent to which the impacts are visible across the local landscape;	I have considered the scale and layout of the project, as relates to landscape and visual impacts, in Section 14 'Landscape and Visual' of this report, and I have also considered cumulative effects on landscape therein.
Visual and cumulative impact of the proposal with respect to protected views, scenic routes and designated scenic landscapes and 'Peatland and Nature Corridors' as detailed in Chapter 4 of this Plan;	I have considered this in Section 14 'Landscape and Visual' of this report, as well as in this section of this report (in relation to Peatland and Nature Corridors).
Impact on the 'Peatland and Nature Corridors' (Objective BLO-28) in terms of tranquillity, landscape, options for amenity and tourism development, biodiversity protection and enhancement, and carbon sequestration.	I have considered Policy BLO-28 in Section 5.4 of this report. Therein I have considered the existing characteristics of the site. In relation to 'tranquillity', I note the site already has an element of human activity. Commercial forestry felling takes place on the site. I have considered impacts on landscape generally in Section 14 'Landscape and Visual' of this report. I have considered 'Biodiversity' and biodiversity protection and enhancement in Section 9 of this report. I have considered the issue of carbon in Section 16 'Air and Climate'.
Impact on nature conservation, ecology, soil, hydrology, groundwater, archaeology, built heritage and public rights of way;	I have considered impacts on nature conservation and ecology in Section 9 'Biodiversity'. I have considered impacts on soils in Section 12 'Lands and Soils'. I have considered impacts on hydrology and groundwater in Section 11 'Hydrology and Hydrogeology'. I have considered impacts on archaeology and built heritage in Section 15 'Cultural Heritage. In relation to public rights of way, there is no evidence on file that the proposed development would impact on any public rights of way.
Impact on ground conditions and geology;	I have considered impacts on ground conditions and geology Section 12 'Lands and Soils'.

Consideration of falling distance plus an additional flashover distance from wind turbines to overhead transmission lines;	I have considered the issue of 'falling distance' in Section 20 'Major Accidents and Disasters'. In relation to flashover distance, I am not aware of any high voltage overhead transmission lines traversing the site. I note also that the proposed cabling will be installed underground in order to convey electrical power between the turbines and substation, with the proposed grid connection route also running underground.
Impact of development on the road network in the area;	I have considered the impact of development on the road network in the area in Section 18 'Material Assets' Traffic and Transport'
Impact of the development on radio observatories and broadcast communications in the area; and	I have considered potential impacts on broadcast communications in Section 17 'Material Assets – Built Services'. There is no evidence on file that any radio observatories have the potential to be impacted by the development and no submissions on file have raised this as a concern. Within Country Offaly, I note a radio observatory exists at Birr Castle. This is located c. 55km south-west of the site. There is no evidence on file that the proposed development would impact on same.
Impact on human health in relation to noise disturbance (including consistency with the World Health Organisation's 2018 Environmental Noise Guidelines for the European Region), shadow flicker and air quality.	I have considered the issue of noise in Section 13 'Noise and Vibration'. I have considered the issue of human health more generally in Section 8 'Population and Human Health'. I have considered the applicability of the WHO Guidelines in Section 13.7.2.5 of this report. I have considered the issue of Shadow Flicker in Section 19 of this report. I have considered the issue of air quality in Section 16 'Air and Climate'.
This list is not exhaustive and the Council may consider other requirements contained in the chapter on a case by case basis with planning applications should the need arise. Where impacts are predicted to arise as a result of the development proposed, suitably detailed mitigation measures shall be proposed.	This is noted. As detailed in this report, where impacts are predicted to arise, mitigation measures are proposed, where feasible. Where mitigation measures are not feasible or would not be effective (i.e. in relation to significant adverse visual effects as detailed in Section 14 'Landscape and Visual' of this report), I am satisfied that there is sufficient justification for same, as set out in Section 14 and as set out in this section of my report in relation to 'Material Contravention').

5.3.3. **Wind Energy Targets**

Policy CAEP-07 states, in summary, that it is Council policy to support and facilitate European and National objectives for climate adaptation and mitigation. Table 3.1 of

the OCDP 2021 refers to renewable energy targets, which are 466.3 MW by the end of the plan period (2027).

In relation to operational, permitted and planned wind energy developments, I note that the Wind Energy Strategy (WES) contains information regarding other developments. I note that up-to-date data is available within the CE Report on Variation No. 1 (dated 9th July 2026)[4]. Page 18 of the CE report sets out the operational wind energy developments in Offaly as of July 2026 and therein it is noted that the total operational wind energy (max) output is currently 528.5 MW, exceeding the target set out in the OCDP 2021 by 11.3%. It further states that there are also 3 no. other extant permissions for windfarms[5] and should these permissions be operational before the end of the OCDP 2021 period (October 2027), the target set out in the OCDP 2021 will be exceeded by considerably more.

It is clear that Offaly has exceeded the targets for wind energy as set out in the OCDP 2021. Notwithstanding, I consider the allocations provided for wind energy in Table 3.1 of the Development Plan are targets only and do not set an upper limit for wind generation within the County. I note that while County targets have already been achieved, the proposal will provide for a total generation capacity of c. 50.4 MW of renewable energy, helping to achieve regional and national targets. The development of the windfarm will result in CO_2 emissions saving over a grid-mix of electricity generation of 49,669 tonnes per year as discussed in Section 16 of this report under my 'Air and Climate' assessment.

5.4. Principle of Proposed Development and Local Planning Policy

On the 5th September 2025, when the planning application was submitted to ACP, the entire site was located in an area that was deemed '*Open for Consideration for Wind Energy* Developments', with no other mapped restrictions pertaining to the site. Map 10 of the Wind Energy Strategy (WES) indicates that the site is located within such an area.

However, the Coimisiún will note that Variation No. 1 of the OCDP 2021 was adopted on 20th July 2026, which now designates an area to the south of the subject site as a

[4] https://www.offaly.ie/app/uploads/CE-Report_Variation1.pdf
[5] Cush, near Birr and Riverlyons, and near Daingean.

'Peatland and Nature Corridor'. By virtue of this designation, the southern section of the application site is no longer considered suitable for wind energy development. The remainder of the application site to the north is unaffected.

Map 10 of the WES was not varied, so in effect the entire site remains '*Open For Consideration*' for wind energy, but it is now subject to the new *'Peatland and Nature Corridor'* restriction.

Offaly County Council in their submission to ACP considers that the proposal in its current form would cause detrimental impact on the amenities in the area due to the siting of the proposed turbines. Further, they consider further information should be sought and significant alterations comprising a reduction in the number of turbines and alterations to their layout should be requested to protect the amenity of the local area and residents. See summary of submissions contained in Appendix 1 of this report in this regard.

5.4.1. **Variation No. 1 of the OCDP 2021**

Variation No. 1 of the OCDP 2021 was adopted on 20th July 2026. This provides for a number of amendments to the originally adopted OCDP 2021. Of relevance to this windfarm application is the update to the previous existing provisions relating to *'Wilderness Corridors'*, by way of amendments to Objective BLO-28, Policy CAEP-38 and other associated text changes, including amendments to the Wind Energy Strategy (WES), in conjunction with additional mapping which gives effect to '*Peatland and Nature Corridors'* within the County. The discussion below, and references to the OCDP 2021 below, reflects the OCDP 2021 (and associated WES), as varied.

Map 10 of the WES illustrates that the application site is deemed '*Open for Consideration for Wind Energy Development*'.

Notwithstanding, Section 11 of the WES identifies key areas within the County that are '*Open for Consideration for Wind Energy Developments' with the exception of lands within the Peatland and Nature Corridors'* as identified by BLO-28 (my emphasis).

Objective BLO-28, in summary, seeks to protect the County's '*Peatland and Nature Corridors'* as shown in Figure 4.9(*b*) of the OCDP 2021 and to strictly direct large scale energy production projects, most particularly windfarms, onto areas that are located

outside of the '*Peatland and Nature Corridors*'[6]. I highlight to the Coimisiún that the map in Figure 4.9(b) is not to scale, and it is unclear and difficult to delineate exact boundaries. However, in my opinion, it is likely that an area to the south of the application site now lies within a '*Peatland and Nature Corridor'*. Specifically, I consider that it is likely that proposed Turbines T4, T5, T6 and T7 are now located within this designation. As such, by virtue of this designation, this area of the site, is not supported by the WES for wind energy development, noting in particular, that Objective BLO-28 directs wind farms to areas that are outside those areas designated '*Peatland and Nature Corridors'*.

5.4.2. **Material Contravention of OCDP 2021 (as Varied)**

In my opinion, the proposed development would, therefore, constitute a material contravention of the OCDP 2021 Wind Energy Strategy. Specifically, I consider it is a material contravention of Section 11 of the WES, which states;

> ***'11 Strategic Approach to Wind Energy Development***
>
> *Offaly County Council has taken a strategic approach to developing this County Wind Strategy. It identifies key areas within the county that are 'Open for Consideration for Wind Energy Developments' with the exception of lands within the Peatland and Nature Corridors as identified by BLO-28 (my emphasis) or 'Unsuitable for Wind Energy Developments' based on a comprehensive assessment of wind speed, access to the electricity grid and substations, and avoidance of adverse impacts on the landscape and designated sites, all of which facilitate a more robust Plan preparation process. In particular, it is considered that this strategic approach:*
>
> *• Facilitates a strategic and plan led approach to wind energy development in the county.*
>
> *• Permits a more accurate analysis of existing environmental resources, potential impacts and identification of mitigation measures where necessary;*
>
> *• Facilitates the avoidance of particularly sensitive resources where necessary;*
> *• Allows for a cumulative assessment of wind energy developments within the*

[6] See full wording of same in Section 4.4.3 above.

county; and the biodiversity protection and enhancement of 'Peatland and Nature Corridors'; and

• Allows the Council a means to assess and potentially a means to progress wind energy developments within robust strategic areas in the county, assisting the achieving of national renewable energy targets, while ensuring that a reasonable balance is achieved.'

I consider that the proposed development also materially contravenes Objective BLO-28 in Chapter 4: Biodiversity and Landscape, Volume 1 of the OCDP 2021, which states the following;

'4.17 Biodiversity and Landscape Objectives

'Peatland and Nature Corridors'

BLO-28 *It is an objective of the Council to protect the County's 'Peatland and Nature Corridors' as shown in Figure 4.9(b) in such a manner that any future development therein is of an appropriate scale and design that does not give rise to significant adverse impacts on the environment, biodiversity & habitats, landscape character, or visual amenity and can integrate effectively into its surroundings; to strictly direct large scale energy production projects, most particularly wind farms, onto areas that are located outside of the 'Peatland and Nature Corridors', and to integrate routes identified in the Midlands Cycling Destination - Offaly Network Map and the National Cycle Network within the corridors.'*

I have reviewed the policy and objectives of the OCDP 2021, including the WES, and I have also reviewed why a portion of the proposed windfarm site is now effectively excluded from windfarm development, by virtue of Section 11 of the WES, and by virtue of Objective BLO-28, notwithstanding that Map 10 of the WES indicates the site is '*Open for Consideration for Wind Energy Development'*, after being previously found acceptable for wind energy prior to the adoption of Variation No. 1 of the OCDP 2021.

5.4.3. **The County Wind Energy Strategy (WES)**

The County Wind Energy Strategy (WES) is a standalone document, part of the adopted OCDP 2021 (as varied). Section 4 of the WES is a review of Wider Energy

Development and Future Energy Requirements in Offaly. As of 2019, the County had 34 no. turbines installed with a combined capacity of 98.5 MW. As of 2020, the total number of permitted and undeveloped windfarms in County Offaly consisted of a total of 80 no. turbines (which includes 1 no. in Co. Kildare) with a total of 287.3 MW capacity. Reference is made to the Climate Action Plan 2019, and the targets for renewable energy therein. It is set out that Offaly has an installed capacity of 2.33% the total installed capacity in the ROI today (as of Q2 2020). With existing and permitted windfarm developments, this equates to 4.7% of the national target for [7] wind capacity by 2030[8].

The WES builds on previous Wind Energy Strategies through a '*Sieve Mapping'* analysis as outlined in Section 5 of the WES.

I have summarised this '*Sieve Mapping'* analysis in Table 5.3 as follows;

Table 5.3 – Summary Table of Steps for Sieve Mapping Analysis

Step No.	Detail of Methodology
Step 1: Existing Wind Speeds and accessibility to electricity transmission and distribution grids.	In relation to wind speeds, the WES notes that areas considered economically viable have wind speeds above 7.5m per second. Map 2 of the WES sets out where current viable wind speed areas are located at a hub height of 100m above ground level. As noted in the WES, most areas of the county are included within this area, including all of the application site. In relation to access to the electricity transmission network, Offaly has an excellent transmission network, and no area of the County is over 15km from an electricity transmission line, and therefore no areas of the County are excluded on this basis, although the grid itself may require development to facilitate expansion in electricity generation from windfarms and other sources.
Step 2: Evaluation of the landscape and its sensitivity for wind energy developments	The WES refers to the Landscape Character Assessment, as contained within Chapter 4 of the OCDP 2021. The wetlands, designated bogland areas, eskers, River Shannon and Callows and archaeological and historical landscapes are identified as being of '*High Sensitivity'*.

[8] I note the CE Report on Variation No. 1 (dated 9th July 2026) contains more recent data in relation to completed and planned Wind Farms, and in relation to targets for the County. I have discussed same below.

	Rural, agricultural and cutaway bog are identified as a mix of *'Low and Moderate/Medium Sensitivity'*. Map No. 3 of the WES indicates same (as does Figure 4.22 of the OCDP 2021). The site as a whole is designated both *'Low Sensitivity'* (generally those areas to the north of the site) and '*Medium Sensitivity'* (generally those areas to the south of the site). The WES excludes those areas designated as *'High Landscape Sensitivity*' i.e. these areas have not been included in '*Areas Open for Consideration for Wind Energy Development'.*
Step 3: Overlay of the Wind Energy Mapping with Landscape Evaluation and Sensitivity Analysis with information regarding built and natural heritage, archaeological and amenity designations in the Development Plan and existing settlements within the county	This element of the '*Sieve Mapping'* excludes European and National Designated Sites from '*Areas Open for Consideration for Wind Energy Development'*. Areas that are designated as '*Areas of High Amenity'* as per Table 4.17 of Chapter 4 *'Biodiversity and Landscape'* are also excluded. Key Scenic Views, Prospects and Key Amenity Routes in County Offaly are also considered within the Sieve Mapping. The Coimisiún will note that the application site is not within a European or Nationally Designated Site, nor does it lie within an '*Area of High Amenity'*. The nearest such '*Area of High Amenity'* is the Grand Canal, located c. 500m to the north of the site.

Section 6 of the WES presents '*Field Analysis and Desk Top Survey of Potential Wind Energy Areas'*, with 12 no. potential wind energy areas identified on Map No. 7 of the WES, and assesses these areas in terms of protected views, patterns of residential development, along with prevailing landform and uses in these areas.

The subject site lies within a '*Potential Wind Energy Area'* as per Map 7.

Table 3 of the WES contains an assessment of Wind Energy Potential Areas. Spatially, the associated mappings show that the site lies between Area 1 - *'Area generally north of Rhode'* and Area 2 - '*Area generally from Cloneygowan to Clonbullogue'.* I consider the description of Area 2 more accurately describes the application site and its environs, noting, in particular, the site lies to the south-east of Rhode, and not to the north.

Table 3 describes Area 1 as characterised by areas of peatlands and agricultural lands, north of the village, with a precedent of windfarms and renewable energy projects. Sensitivity in relation to views of Croghan Hill are highlighted.

Area 2 is described as predominantly flat and in places slightly undulating landscape with a number of significant tracts of peatlands and transitional woodlands and coniferous forestry, with extensive tracts of peatlands in this area offering potential to accommodate a windfarm layout with depth, comprising a grid formation giving a better sense of balance and visual cohesion.

In addition, the WES sets out that there exists a precedent of windfarm and renewable energy projects developed in the area such as Mount Lucas windfarm, while other projects have been deemed suitable and are awaiting commencement of development.

A potential constraint to wind energy development highlighted within the WES is the Objective in Chapter 4, namely Objective BLO-28 to examine the feasibility of developing '*Peatland and Nature Corridors*' at bogs at Cavemount, Esker, Ballycon, Derrycricket, Clonsast North, Clonsast and Derryounce[9]. I note that Variation No. 1 replaces the term '*Wilderness Corridors'* throughout the existing County Development Plan with the term '*Peatland and Nature Corridors'.*

The Local Authority state they will not be in favour of any developments proposed on these bogs with the potential to impact upon the character, uniqueness and wilderness potential of these areas. The impact on a potential '*Peatland and Nature Corridor*' will be assessed at project level by the Council.

The application form accompanying the application states that the proposed development is located in the townlands of Leitrim, Ballyfore Big, Ballyeakin and Ballina (Geashill By). The Coimisiún will note that the application site does not lie within any of the townlands or areas mentioned above.

Figure 2.4 of the EIAR illustrates that the application boundary lies wholly within the townland of Leitrim, with the proposed Grid Connection Route (GCR) passing through

[9] This reference to specific areas is removed in the text of BLO 28 by Variation No. 1 but not in the WES

the remaining townlands cited above. The proposed GCR will be subject of a separate planning application, as detailed in Section 2.0 of this report.

Table 3 of the WES recommends Areas 1 and 2 are deemed '*Open for Consideration for Wind Energy development'*, in principle, with the proviso that such a designation does not imply automatic approval, with each proposal being considered on their individual merits at planning application stage.

Section 7 of the WES sets out the results of the '*Sieve Mapping'* and analysis of potential sites. It states that;

> *'Map No. 10 shows the areas in the county designated 'Open for Consideration for Wind Energy Development'. It should be noted that areas shown 'Open for Consideration for Wind Energy Developments';*
>
> - *have a viable wind speed and good access to the electricity grid;*
> - *have fewer environmental and landscape constraints outlined in Section 5 above;*
> - *are characterised by dispersed or sparse patterns of rural housing;*
> - *are of a sufficient size to accommodate commercial wind farms and associated infrastructure rather than a smaller remote and dispersed area.*
>
> *These areas have been identified based on the sieve mapping analysis in Section 5, a field analysis and desk top survey in Section 6. Figure 4.9 (b) in Volume 1 of the County Development Plan also identifies 'Peatland and Nature Corridors' as detailed in Objective BLO 28 Chapter 4 of the County Development Plan. All of this has been informed by the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) undertaken in relation to this County Wind Energy Strategy.'*

Figure 4.9 (b) in Volume 1 of the OCDP 2021 also identifies '*Peatland and Nature Corridors'* as detailed in Objective BLO 28 Chapter 4 of the OCDP 2021.

Map 10 of the WES sets out Wind Energy Strategy Designations, with areas either deemed '*Open for Consideration for Wind Energy Development'* or '*Areas not Deemed Suitable [for] Wind Energy Development'*.

The Coimisiún will note that the site lies within an area designated as *'Open for Consideration for Wind Energy Development'.* However, based on Figure 4.9 (b), the southern portion of the site is excluded from windfarm development resulting from its designation as a '*Peatland and Nature Corridor'* noting the above considerations.

Section 8 of the WES sets out Wind Energy Development Policy and states:

> *'It is the policy of the Council to assess proposals for new wind energy developments in accordance with Map No. 10 'Wind Energy Strategy Designations', Climate Action Energy Objective CAEO-05 (Chapter 3 Climate Action and Energy)'*

Section 8 of the WES sets out the parameters for '*Areas Deemed Open for Considerations'* and for '*Areas not Deemed Suitable for Wind Energy Development'*.

In relation to '*Areas Deemed Open for consideration for Wind Energy Development',* it states the following;

> *' These areas are open for consideration for wind energy development as these areas are characterised by low housing densities, do not conflict with European or National designated sites and have the ability by virtue of their landscape characteristics to absorb wind farm developments. Notwithstanding this designation, wind farm developments in these areas will be evaluated on a case by case basis subject to criteria listed in Development Management Standard 109 contained in Chapter 13 of Volume 1 of this County Development Plan and the Section 28 Wind Energy Development Guidelines.'*

The WES, Section 11 '*Strategic Approach to Wind Energy Development'* states *inter alia* that key areas have been identified by the WES that are '*Open for Consideration for Wind Energy Developments'*, with the exception of lands within the '*Peatland and Nature Corridors'* as identified by BLO-28 or '*Unsuitable for Wind Energy Developments'*.

It states that designations are based on a comprehensive assessment of wind speed, access to the electricity grid and substations, and avoidance of adverse impacts on the landscape and designated sites and such an assessment has allowed for *inter alia* a cumulative assessment of wind energy developments within the County; and the biodiversity protection and enhancement of '*Peatland and Nature Corridors'*, and a

means to progress wind energy developments within robust strategic areas in the county, assisting the achieving of national renewable energy targets.

As noted above, Figure 4.9(b) '*Peatland and Peatland Corridors'* of the OCDP 2021 is not to scale. Notwithstanding, the indicative mapping set out therein, it would appear to indicate that a portion of the site to the south now lies within an area designated as a '*Peatland and Nature Corridor'*.

While the mapping available at the time of writing this report does not allow for a definitive analysis, it is likely that proposed Turbines T4, T5, T6 and T7 fall within the designation. I would also note, with reference to the above analysis of the WES, and from an analysis of other relevant policies relating to Renewable Energy, Wind Energy, Peatlands and '*Peatland and Nature Corridors'*, that it is the site's designation as a '*Peatland and Nature Corridor'* that is the sole reason for the southern portion of the application site being deemed unsuitable for windfarm development, and no other overarching constraints are identified within the WES.

In relation to the justification for the exclusion of the southern portion of the site from wind energy development, I consider that a material consideration is the existing nature and characteristics of the site, and its suitability or otherwise, for a future '*Peatland and Nature Corridor'*. I will discuss this in the following section.

5.4.4. Characteristics of the Site

In relation to the characteristics of the site, a key consideration, in my view, is whether the southern portion of the site can be defined as '*Peatland'* or not. In this regard, I refer to Figure 4.8 '*Peatlands in County Offaly'* of the OCDP 2021.

Again, this map is not to scale, and one cannot be definitive in relation to whether a portion of the application site falls within this designation. Notwithstanding, the mapping allows for a reasonable conclusion to be made in relation to this issue, and I consider that it is unlikely that any element of the site does, in fact, lie within the '*Peatland Designation'*, noting in particular that Figure 4.8 of the OCDP 2021 would appear to correspond with mapping contained within Figure 9.2 of the EIAR 'Corine Landcover' (Chapter 9 Soils and Geology).

Figure 9.2 of the EIAR mapping demonstrates that the application site lies outside any area defined as a '*peat bog',* with this mapping illustrating that the existing landcover in the vicinity of Turbines 3, 4, 5 and 6 is a mix of Coniferous Forest and Mixed Forest.

Notwithstanding, Figure 9.5 *'Teagasc Soils Map'* of the EIAR indicates that the site is predominantly underlain by peat, with Figure 9.6 '*GSI Quaternary Sediment Mapping'* also showing that the proposed site is underlain by a combination of cut-over raised peat and limestone-derived till.

Site investigations also show that the southern portion of the proposed windfarm site is underlain by peat at depths ranging from 0.27m to 4.04m. The EIAR also describes land use changes occurring as a result of the proposed development, and at operational stage this is described as *a long-term change in land use from a combination of commercial forestry, agricultural pastures and peatland to a renewable energy generation site*.

Elsewhere within the EIAR, the site is described as having existing land cover consisting of agricultural land in the northern section and coniferous commercial forest in the southern section, with the surrounding lands comprising of agricultural fields, forestry and cutover peatlands.

In conclusion, I consider that while the site is underlain by peat, and potentially was previously exposed cutover peat, the current land use cover is commercial forestry, which is partly clear felled in some locations. The site is not pristine peatland or bogland, nor is the site exposed cut over bogland, and I consider it could reasonably be described as 'degraded peatland'.

Furthermore, the site is not 'rehabilitated peatland', as referred to in Section 4.7 '*Peatlands*' of the OCDP 2021. However, noting that the site is underlain by peat, and there is references to at least part of the site as being peatland in the EIAR, I have assessed the site against relevant policies that relate to peatlands, and I direct the Coimisiún to Section 12 'Land and Soils' of this report for my assessment.

5.4.5. **Peatland and Nature Corridors**

As noted above, of relevance to the acceptability or otherwise of wind turbines in the southern portion of the site, is a consideration of whether some element of the site is suitable for the future development of a '*Peatland and Nature Corridor'*.

Section 4.7 '*Peatlands'* of the OCDP 2021 sets out the vision for such '*Peatland and Nature Corridors'* and is as follows:

> *'Section 4.7 Peatlands - The Council recognises other potential long-term opportunities on rehabilitated peatlands such as the development of; a 'Regional Peatway' connecting natural and cultural attractions and the development of a National Park for the raised bog peatlands in the midlands; and Peatland and Nature Corridors' as shown on Figure 4.9 (b) and addressed in Objective BLO-28. The Council envisages that 'Peatland and Nature Corridors' will be large areas that are;*
>
> - *characterised by an absence of intrusive human activity, settlements, infrastructure or visual disturbance encouraging visitors to 'go off the beaten track', 'to get away from it all' and 'to immerse themselves in nature';*
> - *composed of natural habitats and species and regenerated peatlands;*
> - *located close to major tourist attractions such as Clonmacnoise, the River Shannon and the Grand Canal Greenway which provide opportunities to develop a network of interlinked 'peatways' by reusing existing turbary access tracks and bog railway lines along with routes of this nature*

In relation to the above, I would firstly note that the site does not comprise of rehabilitated peatland. The site is a mix of commercial forestry underlain by peaty soils. A section of the site was partly clear felled at the time of my site visit although large areas of forestry remain, notably to the south of the site.

In my opinion, the vision for '*Peatland and Nature Corridors'* as described in Section 4.7 of the OCDP 2021 does not accord with the actual nature of the site, as existing. Hence, I do not agree with the reasoning for this area to be excluded from windfarm development '*i.e. as a Peatland and Nature Corridor'*.

In addition, I note the southern portion of the site does not comprise of regenerated peatland and for the most part is mixed broadleaved-conifer woodland and Conifer Plantation (see detailed discussion of habitats in Section 9 of this report). Human activity already occurs within this area of the site, as a result of clear felling and general forestry maintenance. Further, I note that there is some element of visual intrusion already existing on this area of the site, with neighbouring windfarm turbines being partly visible from within the site.

No bog rail lines exist within the application site. In terms of the site's suitability to potentially provide linkages from other more defined peatland sites, to the west and east of the southern portion of the site for example, I consider the development of a windfarm would not preclude these linkages, although linkages would be wholly dependent on access rights and I note that this portion of this site is either in private ownership or within semi-state ownership (Coillte).

While the northern portion of the site lies within close proximity to the Grand Canal, there is no clear existing linkage to the Canal through the lands, and the current access tracks on the site are agricultural in nature and in private property.

I accept the introduction of turbines on the site will create a visual intrusion to immediately adjacent peatlands. However, as acknowledged within the WES (Table 3), there is precedent of windfarms and renewable energy projects within Area 2, such as the Mount Lucas windfarm and other such projects awaiting commencement of development (as of the time of original drafting of the WES).

I note Table 3 of the WES also refers to the extensive tracts of peatlands in this area offering potential to accommodate a windfarm layout with depth, comprising a grid formation giving a better sense of balance and visual cohesion. As such, there is some inconsistency within the WES regarding the suitability, or otherwise, of peatland areas for windfarm developments.

I accept that Chapter 4 of the WES acknowledges the potential constraint [to wind energy development] of developing '*Peatland and Nature Corridors'* at bogs at Cavemount, Esker, Ballycon, Derrycricket, Clonsast North, Clonsast and Derryounce. It is further stated that the Local Authority will not be in favour of any developments proposed on these bogs with the potential to impact upon the character, uniqueness

and wilderness potential of these areas and that the impact on a potential '*Peatland and Nature Corridors'* will be assessed a project level by the Local Authority.

As noted above, the application site is not on any of the above-named bogs, with the closest located at Esker, Ballycon Derrycriket and Clonast, located to the south of the site, on the southern side of the R402.

In conclusion, the WES has demonstrated that the site is suitable, in all other respects, subject to the normal environmental and appropriate assessment, for a windfarm development, save for its part designation (resulting from Variation No. 1) as a '*Peatland and Nature Corridor'*.

In relation to the latter designation, the current use of this area of the site is commercial forestry, planted on peat soils, and as such, the site is not an immediately obvious area of peatland, although it is bounded by more obvious areas of peatland to the west and east, and this is reflected in Fig. 4.8 of the OCDP 2021.

Having regard to the constraints cited above, I do not consider that, even in the absence of a windfarm development on this site, this particular site would be suitable for, or fit the vision of the Local Authority for, a '*Peatland and Nature Corridor'*.

As such, I consider that the exclusion of a windfarm development from a portion of the southern site, by virtue of its designation as a '*Peatland and Nature Corridor'* is unjustified, and I am satisfied that, subject to all other considerations, the turbines as proposed are acceptable in the locations as shown in the application documentation.

I am also of the opinion that, while the originally adopted WES followed an evidence-based approach to site selection including 'Sieve Mapping' and field analysis, the designation of an element of the application site to effectively exclude windfarm development, resulting from Variation No. 1, does not follow the same approach, and the inclusion of this portion of the application site as a '*Peatland and Nature Corridor'* as per Map 4.9(b) appears somewhat arbitrary, and unjustified, in my opinion, having regard to the 'real-world' conditions of the site (i.e. in that the existing land uses within site is commercial forestry).

I note that I am not commenting on other areas designated as '*Peatland and Nature Corridors'* as a result of Variation No. 1. However, I would further note that the mapping as illustrated in Fig. 4.9(b) itself is not well defined, is not to scale and hence

raises ambiguity in relation to the exact areas that are excluded from windfarm development, although as stated above, it is likely that a portion of the site lies within same.

5.4.6. **Variation No. 1 of the OCDP 2021 and Consistency with Climate Objectives**

In Section 5.1 above I have set out the provisions of Section 15(1) of the Climate Action & Low Carbon Development Act 2015, as amended. This sets out that the Coimisiún should perform its functions in a manner consistent with criteria (a) to (e) as cited therein.

Herein I shall consider if OCDP 2021, Variation No. 1, specifically the designation of the southern portion of this application site as a '*Peatland and Nature Corridor'* site is consistent with climate objectives, as set out in national policy.

In my opinion, the potential removal of 4 no. turbines, as a result of the designation of part of the site as a '*Peatland and Nature Corridor'* would not be consistent with achieving an onshore wind target of 9 GW by 2030 as set out in CAP 2024, and reaffirmed in CAP 2025, notwithstanding that wind energy targets as set out in the OCDP 2021 have already been achieved.

Furtherance of this national climate objective is set out in the NAF 2024, and therefore the removal of 4 no. turbines would not be consistent with climate objectives.

I note that the OCDP 2021 does not reference the most recent Climate Action Plan (the most recent Climate Action Plan referenced is the Climate Action Plan, 2019) and Variation No. 1 did not seek to update this.

I note that Section 1 of the '*Proposed Variation Covering Report'* states that;

> *'the Variation (as proposed) has been informed by and aligns with the relevant legislative framework and planning policy, including the Climate Action and Low Carbon Development (Amendment) Act 2021, Climate Action Plan 2025 and the Offaly Climate Action Plan 2024-2029'.*

Notwithstanding, and noting the lack of an evidence-based approach to the designation of this site (see discussion below regarding the submission of the OPR in relation to 'proposed' Variation No. 1) including a consideration of how the proposed variation is compliant with the targets as set out in the CAP 2024, I am of the view that

Variation No. 1 of the OCDP 2021, as relates to the effective exclusion of the southern portion of the application site for wind energy development, is not consistent with the achievement of national climate objectives, and therefore is not consistent with Section 15(1) of the Climate Action & Low Carbon Development Act 2015, as amended.

5.4.7. **OPR Submission on Variation No. 1**

Of relevance, in my opinion, is the submission of the OPR[10] on the proposed Variation to No. 1 of the OCDP 2021. In relation to the '*Proposed Peatland and Nature Corridors'* the OPR did not make a recommendation but rather made a number of observations. The OPR welcomed the proposed amendments 4(a)-(h) that related to Peatland and Nature Corridors, and the contribution of the Planning Authority's contribution to delivery of renewables to date was recognised.

However, the OPR was of the opinion that there would be a benefit to setting out the evidence-led justification for the approach taken, including the location and scale of the areas identified, and how the renewable energy targets in Section 3.2.7 of the OCDP 2021 will be achieved, as well as ensuring compliance with renewable targets within the forthcoming review of the Regional Spatial and Economic Strategy (RSES) and the National Planning Framework First Revision (2025) (NPF).

As such, while the OPR did not object in principle to the designation of such areas, the lack of an evidence-based approach was highlighted. I consider this is particularly relevant to the southern portion of the site under consideration here, noting the discussion in relation to the nature of the site in question, the suitability of the site for a peatland and nature corridor and the lack of clarity in relation to the location and scale of the '*Peatland and Nature Corridor'* designation, as pertains to this application site, due to the undistinguishable mapping which accompanied the Variation.

5.4.8. **Conclusion on Subject Site being Contained within a '*Peatland and Nature Corridor'***

Overall, I do not consider there has been an adequate evidence-based approach taken by the Local Authority during Variation No. 1 to exclude the southern portion of the

[10] https://www.opr.ie/wp-content/uploads/2026/06/2026.06.16-OPR-Submission-on-Proposed-Variation-No.-1-to-the-Offaly-County-Development-Plan-2021-2027.pdf

application site from windfarm development, based on a *'Peatland and Nature Corridor'* designation.

Furthermore, I do not consider the exclusion of windfarm development on the subject site is the recommended approach by either the current WEDG 2006 or the proposed DWEDG 2019, nor is the exclusion of this element of the site consistent with national climate objectives.

For this reason and notwithstanding the DWEDG 2019 are only Draft Guidelines, I consider the blanket exclusion of the southern area of the site from wind energy development in the OCDP 2021 and WES to be unreasonable and not aligned with national guidance.

I am of the view that the broadbrush approach used in designating this specific area of land within the application site on Fig 4.9(b) does not reflect the site conditions, which as noted above, are not bogland or peatland conditions, and with land cover on this element of the site predominantly commercial forestry, notwithstanding that the site is underlain by peat.

I consider that a site-specific assessment of wind energy development on this site to be a far more reasonable and accurate approach to potential impacts, as it provides an evidence-based assessment with practical mitigation to ensure that no significant impacts will occur, and this report presents such an assessment for the Coimisiún's consideration.

The Coimisiún may wish to consider if the removal of those turbines that lie within the *'Peatland and Nature Corridor'* designation (i.e. proposed Turbines T4 to T7) would be consistent with Section 15(1) of the Climate Action & Low Carbon Development Act 2015, as amended.

My view is that it would not be consistent with the Climate Act, in that the removal of 4 no. turbines would not be consistent with the achievement of the target for onshore wind energy as set out in Climate Action Plans.

Even if the Coimisiún were of the view that the removal of 4 no. turbines would be consistent with Section 15(1) of the Act, it may not in fact be practicable to do so, given that it is also possible that the removal of 4 no. of the 7 no. turbines proposed could

fundamentally undermine the overall viability of the project, and should this occur, it is unlikely the remaining 3 no. turbines would be delivered.

As such, I consider that the use of the site, in its entirety, for the purposes of wind energy generation to be an acceptable and a sustainable use of the land, subject to other considerations as detailed in this report, and consider the exclusion of an area to the south of the application site from wind energy development to be inconsistent with national policy in relation to renewable energy development.

I have come to this conclusion notwithstanding that, in allowing the development of wind energy infrastructure within an area that is designated as a '*Peatland and Nature Corridor',* that this would represent a Material Contravention of the OCDP 2021, specifically of Objective BLO-28 and of Section 11 of the Wind Energy Strategy.

5.5. **Visual Impact - Material Contravention of Objective BLO-25 of the OCDP 2021**

The Coimisiún will note that I have concluded in my assessment in Section 14.6.2 in relation to Landscape and Visual impacts that there will be a significant adverse visual impact from VP11(a) and from the road in the immediate vicinity of the location of VP11, and as such proposed Turbines 1 and 2 would create a significant visual intrusion from this viewpoint and from the road in the immediate vicinity.

Of relevance to this issue is Objective BLO-25 of the OCDP 2021 which states the following;

> *'**BLO-25** It is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.'*

As such the proposal in my opinion, would therefore also represent a Material Contravention of Objective BLO-25 of the OCDP 2021.

5.6. **Conclusion on Material Contravention**

I refer the Coimisiún to the considerations above wherein I have concluded that, for the reasons set out therein, the proposal represents a material contravention of the OCDP 2021, specifically of **Objective BLO-28 '*Peatland and Nature Corridors'*** and of **Section 11 '*Strategic Approach to Wind Energy Development'* of the Wind Energy Strategy (WES).** Refer to Section 5.4 above for details.

I refer the Coimisiún also to Section 14.6.2.1 wherein I have concluded that, for the reasons set out in Section 14.6.2.1, the proposal would represent a Material Contravention of **Objective BLO-25** of the OCDP 2021, which seeks to protect skylines and ridgelines from development where such developments will create significant visual intrusion.

The Coimisiún will be aware that under Section 37(G)(6) of the Planning and Development Act 2000, as amended, it may, in determining an application under that section, decide to grant a permission even if the proposed development contravenes materially the Development Plan.

The specific circumstances where permission may be granted notwithstanding a material contravention are set out in Section 37(G)(6) which provides that;

> *'(6) The Board may decide to grant a permission for development, or any part of a development, under this section even if the proposed development, or part thereof, contravenes materially the development plan relating to any area in which it is proposed to situate the development.'*

The Coimisiún will note that I have completed an EIAR and an NIS of the proposed development, and I have concluded that there is only one instance of a significant adverse environmental effect, and this is related to a significant adverse visual effect which is limited to a relatively small stretch of road in proximity to the application site. Within Section 14.6.2, I have concluded that reasonable balance needs to be found between preserving visual amenity and achieving targets for wind energy generation and subsequently achieving targets for fossil fuel reduction.

I am satisfied that, in this instance, such a balance has been found. I have also concluded that no other significant adverse environmental effects will result from this proposed development (see Reasoned Conclusion in Section 22 of this report). I am also satisfied that there would be no significant adverse effects upon any local European Designated Site.

The Coimisiún will also note that within Section 5.2.5 of this report, I have carried out an examination of the Council's WES, as well as other related policies and objectives that pertain to the appropriate location of wind energy development.

Therein I have concluded that, notwithstanding the provisions of Objective BLO-28, and the provisions of Section 11 of the WES, that the use of the site, in its entirety, for the purposes of wind energy generation, to be an acceptable and a sustainable use of the land, subject to other considerations as detailed in this report.

Furthermore, I have concluded that the exclusion of an area to the south of the application site (within the redline boundary) from wind energy development to be inconsistent with national policy in relation to renewable energy development.

I am also satisfied that the proposed development is compliant with the wider policies and objectives of the OCDP 2021 for wind energy development and environmental protection and is acceptable.

To conclude, notwithstanding the proposed windfarm being a material contravention of the Development Plan as relates to Objective BLO-28 *'Peatland and Nature Corridors'* and Section 11 '*Strategic Approach to Wind Energy Development'* of the Wind Energy Strategy (WES), and of Objective BLO-25 of the OCDP 2021, I consider the proposed development is of national importance in reaching Irelands Renewable Energy Targets and complies in every other respect with European, National, Regional and Local policies and objectives.

5.7. Wind Take/Impact on Development Potential of Adjoining Lands

I note that the issue of wind take and the impact on development potential of adjoining lands has been raised in the submission from Bord Na Mona (BNM), who have stated their landbank is located adjacent to this application site, and their site is deemed '*Open for Consideration'* for Wind Energy Development. [11]

Reference is made to Section 5.13 of the WEDG 2006, which refer to "*a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable".*

The submission from BNM sets out that that, noting the rotor diameter proposed (158.7m), best practice dictates a set-back of 317.4m (158.7m x 2) from each turbine

[11] The Coimisiún will note that that BNM made its submission prior to the adoption of Variation No. 1 of the OCDP 2021, which is detailed in Section 4 of this report, and considered in Section 5.1.1 of this report.

to the adjoining land, and the submission further notes that 3 no. turbines (T5, T6 and T7) are closer than the best practice guidance detailed above.

In response, the applicants have stated that the WEDG 2006 do not require developers to safeguard the future use of adjoining lands for wind energy, and that the reference to 'two rotor blades' is a design optimisation consideration rather than a prescriptive control or mechanism to reserve development capacity for third parties. It is set out that similar issues have previously been considered by the Coimisiún, including in ABP Ref PL19.244053.

In relation to the issue of wind take and setback distances, I note that the WEDG 2006, Section 5.13 states that the proposed layout of wind turbines should take into account the development potential of an adjoining site for a similar development. The optimal spacing of turbines is referred to (in the context of optimal performance), and it is further stated that;

> *'bearing in mind the requirements for optimal performance, a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance*'.

I note that the DWEDG 2019 also set out similar provisions. As such, the issue of 'wind take', and the distance to adjoining boundaries is, in fact, related to the development potential of adjoining sites, as is made clear in the WEDG 2006, and the DWEDG 2019, notwithstanding the view of the applicants.

In relation to the case cited by the applicants (ABP Ref PL19.244053), I note that this was an appeal that related to a proposed development of 9 no. wind turbines and associated works, at Kilcamin, Crancreagh and Derrinlough, Cloghan, Co. Offaly, granted by the [then] Board on 27th October 2016.

The issue of wind take and proximity to adjoining lands was considered by the Inspector in this case, and the Inspector recommended a refusal on this basis (as well as for 2 no. additional reasons relating to visual amenity and project splitting). Notwithstanding, the Board decided to grant permission, and in relation to the issue of wind take and distance to boundaries, the Board Order states that the Board had considered that;

'*any potential for effects on possible future neighbouring proposals would not be likely to be so material in planning terms as would merit refusal of permission for all or part of this proposed development, particularly in the context of the very substantial scale of the neighbouring lands*', and there was

'*no evidence of serious injury to a future project'*.

The Board was satisfied that material effects on the development potential of those lands in practical terms were not demonstrated.

In relation to this particular case, I accept that the two rotor distance has not been met in relation to proposed turbines T5, T6 and T7, and this is not disputed by the applicant, nor have the setback figures provided by BNM in their submission. For clarity, I have set out setback distances to BNM lands in Table 5.4 below.

Table 5.4 Distances to the Bord Na Mona Site

Turbine No.	**WEDG 2006 Recommended Setback (Two rotor diameters)**	**Provided Setback to boundary of the site**
T5	317.4m (158.7m x 2)	106m
T6	317.4m (158.7m x 2)	92m
T7	317.4m (158.7m x 2)	82m

In relation to the setbacks provided, I accept that the recommended setbacks of the WEDG 2006, and the DWEDG 2019, have not been provided. I also note the provisions of Policy CAEP-38 and DMS-109 Wind Farms of the OCDP 2021, which require that wind energy developments '*have regard to WEDG 2006, and draft WEDG (2019)'.* I note also that Section 8 of the WES '*Wind Energy Development Policy'* states that, in relation to areas that are deemed open for consideration, that windfarm developments in these areas will be evaluated on a case-by-case basis subject to criteria listed in *inter alia* Section 28 Wind Energy Development Guidelines.

In my view, this does not necessarily mean strict compliance with, and as such I am not of the view that the proposal represents a Material Contravention of Policy CAEP-38 and DMS-109, nor of Section 8 of the WES, as it relates to WEDG 2006, and DWEDG (2019).

In relation to the acceptability, or otherwise, of the setbacks provided, I note that there is no permission on the BNM site for a windfarm development, nor has the BNM submission referred to any windfarm projects that are 'in the pipeline' (i.e. at design or pre-application stage).

Notwithstanding, I accept that there is some theoretical potential for a windfarm development to come forward on the BNM site, noting that similar BNM peatland sites in Ireland have accommodated wind energy projects, and national policy is generally supportive of wind energy development on peatland sites.

Notwithstanding, a material bearing on the development potential of this specific BNM site is Variation No. 1 of the OCDP 2021, which I have described in detail in Section 5.4.1 of this report, and which has designated a portion of this application site, and the entirety of the BNM site, as a '*Peatland and Nature Corridor'* which effectively excludes windfarm development from such sites, notwithstanding they may be *'Open for Consideration*' as per Map 10 of the WES.

I note also the relatively large extent of the BMN site, which is illustrated in the submission from BNM. This in my opinion has a material bearing on the acceptability of this proposal in question. I consider the spatial extent of the BNM site allows for more options in terms of future wind turbine placement, notwithstanding any policy constraints that currently apply to the BNM site or may apply at a future date.

As such, I consider that it has not been demonstrated that the proximity of proposed Turbines T5, T6 and T7 would prejudice in any material manner, the development potential of the BMN site, notwithstanding the recommendations of the WEDG 2006 and the DWEDG 2019.

5.8. Potential Amenity Trails

I note that the CE report as submitted by the Planning Authority sought confirmation from the applicant as to whether the proposed development would include provision of amenity trails. In response, the applicant's submission has confirmed that no amenity trails are proposed. I also note that within Section 17 of the CE report, the PA have sought a condition in relation to the provision of same.

In this regard, I note the applicant's response, and I also note that the provision of '*amenity trails'* on the site is not a specific requirement of the OCDP 2021 (notwithstanding the part designation of the site as a '*Peatland and Nature Corridor'*). As such, I consider the imposition of a condition requiring investigation of amenity trails to be unjustified.

5.9. **Oral Hearing**

The submission from Alan Rowan has requested that an oral hearing be convened in order to allow affected parties the opportunity to present evidence in relation to the noise impacts of the currently operational Cloncreen Windfarm, which is located c. 2.1km from the application site. It is highlighted in the submission that Cloncreen Windfarm is operated by the same developer as the proposed windfarm under consideration here (Statkraft Ltd). I note that no other observers have requested an oral hearing.

Section 134(1) of the Planning and Development Act, 2000 (as amended) ('the Act'), provides that the Coimisiún has absolute discretion as to whether to hold an Oral Hearing.

In this case, and having regard to the documentation on file, and the submissions made by observers, it was my recommendation that it was not necessary for an Oral Hearing to be held in respect of this REDIII application as the matters raised can be dealt with adequately through written procedures.

In this regard, the recommendation to the Coimisiún dated 11th February 2026 noted that the application includes an Environmental Impact Assessment Report (EIAR), which includes a consideration of noise impacts, including potential cumulative noise impacts from the Cloncreen Windfarm. The Coimisiún determined on 20th February 2026 that an Oral Hearing was not necessary.

5.10. **Comments on Conditions**

I have reviewed the conditions requested by Offaly County Council and the Prescribed Bodies. In Table 5.5 below, recommended conditions are tabulated, and I have indicated whether these are included, or excluded from the recommended schedule of conditions. I have included some additional suggested conditions below.

Table 5.5 Recommended Conditions		
No	**Offaly County Council Recommended Conditions (In summary)**	**Included/ Excluded in Schedule of Conditions**
1	Timescale for completion, operation and decommissioning	Included in ACP Condition No. 1, 3 and 5
2	Turbines not to be replaced without consent.	Included in ACP Condition No. 5
3	Pre-roads surveys and reinstatement costs.	Included in ACP Condition No. 8 and 21
4	Noise levels during construction and operation, including monitoring and a noise complaint monitoring programme.	Included in ACP Condition No. 1, 6 and 11
5	Construction Environment Management Plan	Included in ACP Condition No. 14
6	Archaeological recording, reporting and any further mitigation arising from same.	Included in ACP Condition No. 19
7	Navigation lighting	Included in ACP Condition No. 18
8	Public lighting.	No specific Condition included
9	Mitigation measures in the EIAR to be applied	Included in ACP Condition No. 6 and 7
10	Bird monitoring and kill record (subject to NPWS report)	Not a specific condition. Included in ACP Condition No. 6 and 7 – compliance with EIAR
11	Surface water monitoring and management	Included in ACP Condition No. 16
12	Development contributions	Included in ACP Condition No. 23
13	Community Benefit Scheme	Included in ACP Condition No. 20
14	No Signage/Livery	No specific condition. Included in ACP Condition No. 1 – Plans and Particulars
15	Colour – standard off-white/light grey	Included in ACP Condition No. 2

16	Bonds	Included in ACP Condition No. 21 and 22
17	All required costs incurred by the Local Authority in ensuring full compliance with ongoing noise monitoring requirements for the duration of the operational life of the wind farm to be	No specific condition. Included in ACP Condition No. 6 and 7 – Compliance with EIAR – Monitoring measures
18	Conditions on road and traffic safety. Other suggested by OCC Roads Department	No specific condition. Included in ACP Condition No. 8 – CTMP, No. 14 – CEMP
19	Commitment by the Applicant to investigate (within a specific period) the potential of amenity trails/links within the subject site.	Not included. See comment in relation to same in Section 5.4 above.

Minister for Housing, Local Government and Heritage (Development Applications Unit/DAU)

No	**Archaeological Requirements**	**Included/Excluded in Schedule of Conditions**
1	Request condition as follows; All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 12 of the EIAR (date July 2025) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.	Specific Condition included in Condition No. 19
2	The developer shall engage a suitably qualified Archaeologist (licensed under the National Monuments Acts) to carry out a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation of the development site for all greenfield sections of the development and to submit an Archaeological Impact Assessment Report for the written agreement of the Planning Authority, following consultation with the National Monuments Service, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.	Included in Condition No. 19 with the exception of surveys being carried out on areas of proposed ground disturbance instead of all greenfield sections of the development.
2a	The Archaeological Geophysical Survey must be carried out under licence from the National Monuments Service or Ministerial Consent (as applies) and in accordance with an approved Method Statement. Having completed the work, the Archaeologist shall submit a written report to the Department and to the Planning Authority describing the results of the Archaeological Geophysical Survey.	Specific Condition included in Condition No. 19

2b	The Project Archaeologist shall liaise with the National Monuments Service (NMS) to establish—based on the results the Archaeological Geophysical Survey—the appropriate scope of the Archaeological Test Excavation to adequately characterise the character and extent of any potential subsurface archaeological material within the development site.	Specific Condition included in Condition No. 19
2c	The report on the Archaeological Test Excavation shall include an Archaeological Impact Statement and Mitigation Strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.	Specific Condition included in Condition No. 19
2d	Any further archaeological mitigation requirements specified by the Planning Authority, following consultation with the National Monuments Service, shall be complied with by the developer.	Specific Condition included in Condition No. 19
2e	No site preparation and/or construction works shall be carried out on site until the Archaeologist's report has been submitted to and approval to proceed is agreed in writing with the Planning Authority.	Specific Condition included in Condition No. 19
3	The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 12 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.	Specific Condition included in Condition No. 19
4	The Planning Authority and the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. **Reason: To ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.**	Specific Condition included in Condition No. 19
Department of Defence (DOD)		
No		**Included/Excluded in Schedule of Conditions**
1	All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000	Included in ACP Condition No. 18(a)

	candela to be visible in all directions of azimuth and to be operational H24/7 days a week. Obstacle lighting should be incandescent or, if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting used must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light.	
2	In the event negative impacts on future military radar systems, the owner will engage with the Department of Defence and will provide suitable mitigations as soon as practical.	Included in ACP Condition No. 18

HSE		
No		**Included/Excluded in Schedule of Conditions**
1	**Shadow Flicker** - In the interest of the protection of public Health the proposed zero shadow flicker identified in Chapter 16 of the EIAR should be conditioned if permission is given for the development.	No specific condition. Included in ACP Condition No. 6 – compliance with EIAR
2	**Hours of Construction** - Recommended condition for hours of construction are: • Monday to Friday 08.00 to 19.00 • Saturday 09.00 to 14.00 • No work on Sunday or Bank Holidays • Work outside these hours at the express permission of the Planning Authority. **Reason: In the interest of the protection of public health**	Included in ACP Condition No. 15

Transport Infrastructure Ireland (TII)		
No		**Included/Excluded in Schedule of Conditions**
1i	An updated Construction Environmental Management Plan (CEMP) and Traffic Management plan (TMP) shall be prepared and agreed with relevant County Councils and TII, prior to the commencement of development. The matters to be addressed in the CEMP and TMP relating to national road network maintenance and road safety shall include: Demonstration that Compliance with TII Publications (Standards) in accordance with relevant TII Publications (Technical) will be required for any work that may impact the national road pavement, structures and infrastructure including drainage.	Included in specific Condition No. 12
1 ii	All national road structures on the haul route through all the relevant County Council administrative areas shall be checked	Included in

	by the applicant/developer to confirm their capacity to accommodate any abnormal 'weight' load proposed. Any requirements for 'Exceptional Abnormal Loads' shall be addressed in accordance with TII Publications.	specific Condition No. 12
1iii	The haul route shall be assessed to confirm capacity to accommodate abnormal 'length' loads and any temporary works required are identified. Any damage caused to the pavement of the existing national road due to the turning movement of abnormal 'length' loads (e.g. tearing of the surface course) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development onsite.	Included in specific Condition No. 12
1iv	iv. Any proposed works associated with the haul route on the national road network, including signage, to facilitate construction traffic shall comply with TII Publications and shall be subject to Road Safety Audit as appropriate. Works and traffic management shall ensure the ongoing safety for all road users and prior to any development necessary licenses, approvals or agreements with PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) Companies and local road authorities for the entire haul route shall be in place.	Included in specific Condition No. 12
Uisce Eireann		
No		**Included/Excluded in Schedule of Conditions**
1	The applicant shall ensure compliance with the proposed mitigation and monitoring measures outlined in the EIAR, to ensure protection of any Uisce Éireann abstraction sources and ensure that these measures be fully complied with as a condition of grant during the pre-construction, operational and decommissioning phases of the development to ensure that there will be no negative impact to any of UÉ's Assets and / or infrastructure which may be in proximity to the development.	Included in ACP Condition No. 6 and specific Condition no. 17
2	That the applicant shall engage with the Uisce Eireann diversions section in relation to anticipated intersections with Uisce Éireann assets along the proposed cabling route and that where necessary appropriate mitigation or diversionary measures be agreed. **Reason: To protect existing public infrastructure and public water sources.**	Included in ACP Condition No. 17

6.0 Environmental Impact Assessment

6.1. Statutory Provisions

This section of the report addresses the potential environmental impacts of the proposed development during the construction, operation and decommissioning phases.

The development consists of a wind farm comprising 7 wind turbines and associated infrastructure. An EIA is required for Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts. Therefore, the development is subject to mandatory EIA.

6.2. EIA Structure

This section of the report comprises the environmental impact assessment of the proposed development in accordance with the Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European Directives on environmental impact assessment (Directive 2011/92/EU as amended by 2014/52/EU). Where the Board is mentioned in the legislation below, this now refers to An Coimisiún Pleanála (ACP). Section 171 of the Planning and Development Act, 2000 (as amended) defines EIA as:

a. Consisting of the preparation of an EIAR by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and

b. Includes an examination, analysis and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction of these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

Article 94 of the Planning and Development Regulations, 2001 and associated Schedule 6 set out requirements on the contents of an EIAR.

This EIA section of the report is therefore divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- Population and human health,
- Biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- Land, soil, water, air and climate,
- Material assets, cultural heritage and the landscape,
- The interaction between the above factors, and
- The vulnerability of the proposed development to risks of major accidents and/or disasters.

It also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Boards decision, should they agree with the recommendation made.

6.3. Issues Raised in Respect of EIA

Issues raised in respect of EIA by the Planning Authority Prescribed Bodies and Observers are discussed in detail in Appendix 1 of this report, and I have also referred to same when assessing each of the various EIA topics below.

6.4. Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations 2001

The applicants EIAR comprises of the following:

- Volume 1: EIAR Non-Technical Summary
- Volume 2: EIAR Main Report – Chapters 1 to 18
- Volume 3: EIAR Appendices
- Volume 4: EIAR Photomontages

I assess below compliance with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001(as amended);

Table 6.1. Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 1)

A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development (including the additional information referred to under section 94(b))

A description of the proposed development site location and setting (including maps) is contained in Chapter 2. This chapter includes details on the proposed development site location and setting, the surrounding area.

Chapter 2 also provides a detailed description of the development components, access and transportation details, site drainage, construction phasing and timing and construction details and methodologies. Details in relation to the operation and decommissioning of the windfarm are also provided.

The description is adequate to enable decision making.

A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b).

Chapter 5 to Chapter 18 of the EIAR describes the significant effects on the environment as follows;

Table 6.1.1 – Summary Table of Adequacy of Information on Likely Significant Impacts

Technical Chapter	Description of Likely Significant Impacts	Adequacy of Info (Y/N)
Chapter 5 Population and Human Health	Predicted Impacts & Mitigation Measures – Sections 5.4 and 5 .5 Residual Impacts and Significance of Impact - Section 5.6 Cumulative Impacts – Section 5.5.5	**Y**
Chapter 6 Biodiversity	Predicted Impacts, Mitigation Measures, Residual Impacts – Sections 6.4, 6.5 and 6.6 Cumulative Impacts – Section 6.4.4	**Y**
Chapter 7 Ornithology	Potential Impacts – Section 7.5 Mitigation and Monitoring Measures– Section 7.6 Residual Impacts - Section 7.6.5 Cumulative Impacts – Section 7.5.6	**Y**
Chapter 8 Hydrology and Hydrogeology	Predicted Impacts – Section 8.6 Mitigation and Monitoring Measures – Section 8.7 Residual Effects – Section 8.7.4 Cumulative Impacts – Section 8.6.4	**Y**
Chapter 9 Lands and Soils	Predicted Impacts – Section 9.4 Mitigation & Monitoring Measures – Section 9.5 Residual Effects – Section 9.7 Cumulative Impacts – Section 9.4.5	**Y**
Chapter 10 Noise and Vibration	Predicted Impacts – Section 10.6 Mitigation & Monitoring Measures – Section 10.7 Residual Effects – Section 10.8 Cumulative Impacts – Section 10.6.5	**Y**

Chapter 11 Landscape and Visual	Predicted Impacts – Sections 11.4 and 11.5 Mitigation & Monitoring Measures – Section 11.6 Residual Effects – Section 11.7 Cumulative Impacts – Section 11.5.10	**Y**
Chapter 12 Cultural Heritage	Predicted Impacts – Section 12.4 Mitigation Monitoring Measures – Section 12.5 Residual Effects – Section 12.6 Cumulative Impacts – Section 12.4.4	**Y**
Chapter 13 Air and Climate	Predicted Impacts – Section 13.4 Mitigation Measures– Section 13.5 Residual Effects – Section 13.7 Cumulative Impacts – Section 13.4.5	**Y**
Chapter 14 Material Assets – Built Services	Predicted Impacts – Section 14.4 Mitigation Measures– Section 14.5 Residual Effects – Section 14.6 Cumulative Impacts – Section 14.4.4	**Y**
Chapter 15 Material Assets – Traffic and Transport	Predicted Impacts – Section 15.4 Mitigation Measures– Section 15.7 Residual Effects – Section 15.8 Cumulative Impacts – Section 15.6	**Y**
Chapter 16 Shadow Flicker	Predicted Impacts – Section 16.6 Mitigation Measures– Section 16.10 Residual Effects – Section 16.11 Cumulative Impacts – Section 16.9	**Y**

Interactions are considered in EIAR Chapter 17, and a Schedule of Mitigation and Monitoring Proposals is presented in EIAR Chapter 18. An assessment of the likely significant effects of the development is carried out for each of the technical chapters of the EIAR. I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.

A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information referred to under section 94(b)).

The EIAR includes designed in mitigation measures and monitoring to address potential adverse effects identified in technical studies. (See Table 10.1.1 above indicating location of Mitigation Measures in each EIAR Chapter).

Chapter 18, Table 18-1 Schedule of Mitigation of the EIAR provides a summary of the proposed mitigation (and monitoring) measures, with each measure referenced from each Chapter.

Mitigation measures comprise standard good practices and site-specific measures and are largely capable of offsetting the majority of potential significant adverse effects identified in the EIAR, for the reasons stated in the assessment below.

A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b).

The consideration of Reasonable Alternatives was analysed in Chapter 4 of the EIAR. The EIAR describes those reasonable alternatives that have been studied. The chapter describes the site selection process, the project design process, the alternatives considered and a do-nothing scenario.

In terms of site selection, a screening process was carried out which considered a large number of factors, including but not limited to, policy designations, landscape sensitivity, proximity to grid infrastructure and available grid capacity, as well as available wind resource. Site suitability criteria are summarised in Table 4-1 of the EIAR. It is set out that alternative locations were eliminated in the early stages of the site selection process as the goal for this project was to deliver a large-scale wind farm, which met the screening criteria.

In terms of project design and layout, this was determined with regard to a number of factors as set out in Section 4.3.1 including but not limited to sensitive habitats, ornithology, public roads and population density and potential visual impacts, and constraint mapping then identified the buildable area on the site. Technical design criteria was to maximise the annual energy yield, while maintaining the required separation distance between turbines.

In terms of the positioning of the turbines, a range of alternative layouts and configurations were considered, with 5 no. iterations considered, with Table 4-3 of the EIAR describing same. I note that the number of turbines is reduced from 10 no. turbines to 7 no. turbines during the process, due to potential visual impact from the Grand Canal and due to landowner considerations.

Justification for the proposed grid connection route and substation location is set out in Section 4.4.2 of the EIAR.

The EIAR sets out that in a 'Do Nothing' scenario, the site's potential to contribute to Ireland's renewable energy generation targets would remain unrealised.

I consider that the EIAR contains a description of reasonable alternatives, which is thorough, and which includes decisions being made on a strategic and specific site selection process. I consider that the legislative requirement to provide information relating to the reasonable alternatives which were considered, has been met.

Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).

A description of the baseline environment and likely evolution in the absence of the development.

A description of the baseline environment and site is contained within Chapter 2, with a description of the baseline environment, specific to that topic, also contained in each technical chapter of the EIAR. A 'Do-Noting' Scenario is also set out within each technical chapter.

A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved.

The methodology employed in carrying out the EIA, including the forecasting methods is set out in each of the individual chapters assessing the environmental effects. The applicant has indicated in the different chapters of where difficulties have been encountered (technical or otherwise) in compiling the information to carry out EIA. I comment on these, where necessary in the Summary Table below and for the reasons stated, I am satisfied that forecasting methods are adequate as outlined below.

Table 6.1.2 – Summary Table of Adequacy of Forecasting Methods Used
Chapter 5 (Population and Human Health)

Description of Forecasting Method Used
The assessment relies on the assessments and draws on the findings of the following chapters to assess the impacts on human health: Chapter 2 Description of the Proposed Development, Chapter 10 Noise, Chapter 11 Landscape and Visual, Chapter 13 Air and Climate, Chapter 14 Material Assets – Built Services, Chapter 15 Material Assets – Traffic and Transport (and Appendix 15C) and Chapter 16 Shadow Flicker. **Adequacy/Omissions/Difficulties** **Omissions/Difficulties** None noted. **Adequacy of Forecasting** I have reviewed the adequacy of forecasting of individual chapters which feed into the Population and Human Health Chapter as outlined above. I am satisfied that the forecasting carried out is adequate.

Chapter 6 (Biodiversity)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
No forecasting carried out for this chapter	The Study Area contains areas of dense conifer mixed forestry plantation in the south of the site. Due to the inaccessibility of some area of dense conifer, the internal forestry area could not be fully surveyed. However, clearings and the outskirts of the plantations were accessible for surveys. A trail camera became dislodged after having been deployed outside of a potential badger sett within the wider study area. Notwithstanding, it is noted that the location has been identified as a badger sett using the precautionary principle and due to the presence of recent activity by way of latrines and fresh digging in the vicinity of the suspected sett, with protection measures for same set out in the EIAR. **Adequacy of Forecasting** I am satisfied that the assessment of biodiversity is adequate based on the methodology used by the applicant.
Chapter 7 (Ornithology)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
The Collision Risk Assessment was calculated using a mathematical model to predict the number of individual birds of a particular species that may be killed by collision with moving wind turbine rotor blades. The assessment is based on vantage point	Section 7.2.8 outlines that there was a requirement to move vantage points 3 and 4 during the initial phase of surveys, due to access difficulties, although it was possible to maintain 100% viewshed coverage of the SNH turbine buffer during all survey periods, and the accuracy of the results was not impacted upon.

surveys (as described in Chapter 7. Guidance used to inform Collision Risk Modelling (CRM) included Band (2024) 'Using a collision risk model to assess bird collision risks for onshore wind farms' and NatureScot (2025). Appendix 7.8 is the 'Collision Risk Model Report'. I am satisfied that this represents best practice.	**Adequacy of Forecasting** I am satisfied that the Collision Risk Assessment is adequate based on the methodology used by the applicant.
Chapter 8 Hydrology and Hydrogeology	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
The Flood Risk Assessment (Appendix 8-3 was carried out with regard to the The report has been prepared in the context of The Planning System and Flood Risk Management – Guidelines for Planning Authorities, November 2009 and the methodology of same is based on best practice guidance.	Section 8.8 of the EIAR notes that no limitations or difficulties were encountered during the preparation of the Chapter. **Adequacy of Forecasting** I am satisfied that the Flood Risk Assessment is adequate based on the methodology used by the applicant.
Chapter 9 (Lands and Soils)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
The Peat Stability Assessment was carried out in accordance with Peat Landslide Hazard and Risk Assessment: Best Practice Guide for Proposed Electricity Generation Development (PLHRAG, Scottish Government, 2017) as well as the British Standards Institute (2009). BS 6031:2009 Code of practice for earthwork, Draft Revised Wind Energy Development Guidelines December 2019 and OPW Flood Risk Management Climate Change Sectoral Adaptation Plan, September 2019. See Appendix 9 of EIAR.	**Chapter 8** Section 9.2.5 of the EIAR notes that no limitations or difficulties were encountered during the preparation of the overall Chapter. **Peat Stability Assessment** **Adequacy of Forecasting** I am satisfied that the Peat Stability Assessment is adequate based on the PLHRAG methodology used by the applicant. **Omissions/Difficulties** None noted.
Chapter 10 (Noise and Vibration)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
The guidance in the WEDG 2006[12] has been used to assess operational noise from the Proposed Development and this has been supplemented by the guidance	**Omissions/Difficulties** It is noted that the WEDG 2006 are currently under review and a set of 'draft WEDG 2019' updated guidelines were issued for consultation

[12] DEHLG Wind Energy Development Guidelines 2006 (WEDGs)

	in ETSU-R-97[13] and the IOA GPG[14] where appropriate. **Construction Phase – Noise** The construction noise assessment has been undertaken using the BS 5228 guidance, together with published noise data for appropriate construction plant. **Operational Phase – Noise** For the operational noise assessment, a background noise survey was undertaken at five noise monitoring locations. The data was analysed in conjunction with on-site measured wind speed data and operational noise limits have been derived in accordance with the WEDG 2006. In terms of assigning noise limits, a conservative 'envelope review' was applied to all non-surveyed locations. The envelope review is a conservative approach that adopts the lowest noise criteria derived from the measured background noise levels and applies it to all non-surveyed locations for the purpose of the assessment. **Construction Phase - Vibration** Threshold values to determine the potential for damage to buildings are detailed in BS 7385-2:1993 and BS 5228) (Detailed in Section 10.3.2.4 of the EIAR). **Operational Phase – Vibration** Operational Vibration is discussed in Section 10.3.2.8 of the EIAR. It is noted that vibration generated form the operation of a wind turbine unit will decrease rapidly with distance. Reference is made to a study which indicates that at distances of less than 300m from the turbine, vibration levels had dropped so far that they could no longer be differentiated from background vibration levels. It is noted that the shortest distance from any turbine in the	in December 2019. The draft WEDG 2019 included reference to, and reliance upon, some elements of ETSU-R-97 and the IOA GPG, however, significant concerns were raised during the consultation process regarding the noise section of the draft WEDG 2019 and at the time of writing this report, no further updates have been issued. Given the limitations of the draft and the likelihood that significant changes would need to be made to them before they could be adopted, an assessment using those WEDG 2019 draft guidelines has not been undertaken. I note that ETSU 2026 are the updated UK guidelines for assessing and controlling noise from wind turbines, which took effect on June 19th 2026. These updated UK guidelines replace ETSU-R-97. I note that these guidelines took effect after the current application was submitted to ACP. In terms of the proposed, turbine details, Section 10.4.5.3 sets out details of the model assumed for the noise modelling. It is set out that the exact make and model of the turbine will be dictated by a competitive procurement process but will adhere to the specification and parameters as set out in the EIAR. I noted that operational noise levels would have to comply with the noise limits imposed by An Coimisiún Pleanála, informed by this noise assessment. No other assumptions or data gaps have been identified. **Adequacy of Forecasting** Methodology and Assumptions are described in Section 10.4 of the EIAR. I am satisfied that the forecasting methodology used are adequate in respect of the likely significant effects in relation to construction and operational phase noise and construction phase vibration. I am satisfied that operational phase vibration can be scoped out of further assessment.

[13] Department of Trade & Industry (UK) Energy Technology Support Unit (ETSU) publication The Assessment and Rating of Noise from Wind Farms (1996)

[14] Institute of Acoustics publication of A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise (IOA GPG)

Proposed Development to the nearest NSL is 590m.	

Chapter 11 Landscape and Visual	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
No forecasting carried out for this chapter.	n/a

Chapter 12(Cultural Heritage)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
No forecasting carried out for this chapter.	N/A

Chapter 13 (Air and Climate)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
The methodology utlised in this Chapter accords with guidance and best practice as outlined in Sections 13.2.3.1 to Section 13.2.3.3 of the EIAR. **Air Quality** Air Quality significance criteria are assessed on the basis of compliance with the appropriate standards or limit values which incorporate European Commission Directive 2008/50/EC which has set limit values for pollutants SO2, NO2, PM10, Lead, Benzene and Carbon Monoxide. **Climate** The document, 'Calculating Carbon Savings from Wind Farms on Scottish Peat Lands', was utilised. The purpose of the tool is to assess the carbon effect of wind farm developments. This is done by comparing the carbon costs of wind farm developments with the carbon savings attributable to the wind farm, and in the absence of an equivalent Irish version, the use of this document is accepted best practice.	**Adequacy/Omissions/Difficulties** None noted. **Adequacy of Forecasting** I am satisfied that the forecasting carried out is adequate.

Chapter 14 Material Assets Built Services	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
No forecasting carried out for this chapter.	N/A

Chapter 15 (Material Assets -Traffic and Transport)	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
Traffic and Transport	

The report adopts the guidance for set out by Transport Infrastructure Ireland, or TII, in the document number PE-PDV-02045 'Traffic and Transport Assessment Guidelines, May 2014' as well as a number of other best practice guidance documents as set out in Section 15.2 of the EIAR.

Construction Phase
Traffic forecasts assume a construction year of 2027. TII Standards document DN-GEO-03031 Road Link Design was used to establish link capacity.

For the purpose of the traffic impact assessment, projections based on the numbers of trips per quantum of material, the length of the construction phase and work periods etc. were made to inform the assessment.

Adequacy of Forecasting
I am satisfied that Traffic Forecasting is adequate based on the TII methodology used by the applicant.

Omissions/Difficulties
None noted.

Chapter 16 (Shadow Flicker))	
Description of Forecasting Method Used	**Adequacy/Omissions/Difficulties**
Shadow flicker was calculated for the proposed wind turbines using industry-standard simulation software 'Wind Farm', with simulations carried out for the proposed candidate turbine. Current assessment criteria are described in the Department of the Environment, Heritage and Local Government, Wind Energy Development Guidelines, 2006.	**Omissions/Difficulties** None noted. **Adequacy of Forecasting** I am satisfied that the forecasting carried out is adequate.

A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.

Refer to Section 20.0 of this report for full a full assessment in relation to major accidents and natural disasters.

Article 94 (c) A summary of the information in non-technical language.

This information has been submitted as a separate standalone document entitled Non-Technical Summary (NTS). I have read this document, and I am satisfied that the document is concise and comprehensive and is written in a language that is easily understood by a lay member of the public.

Article 94 (d) Sources used for the description and the assessments used in the report

The sources used to inform the description, and the assessment of the potential environmental impact are set out within each specific chapter. . I consider the sources relied upon are appropriate and sufficient.

Article 94 (e) A list of the experts who contributed to the preparation of the report

Details of the assessment team as well as their respective inputs to the EIAR is presented in Chapter 1, Section 1.Project Team. Table 1-3 provides details of companies and staff responsible for EIAR compilation. Table 1.1 details a short biography of each of the project team members. I am satisfied that the EIAR has been prepared by competent experts within the various chapters of the EIAR.

6.5. Consultations

The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) in respect of public notices.

Consultations are described in Chapter 1, Section 1.5.1 of the EIAR. The applicant consulted with Prescribed Bodies, Offaly County Council and the Community. Appendix 1.2 presents a Community Engagement Report outlining the community consultation process. I am satisfied, therefore, that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposals in advance of decision making.

6.6. Conclusion on compliance with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001(as amended)

Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and supplementary information provided by the developer is sufficient to comply with Article 94 of the Planning and Development Regulations, 2001(as amended).

7.0 Assessment of Likely Significant Effects

This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out Section 171A of the Planning and Development Act 2000, as amended:

- Population and human health.
- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively).
- Land, soil, water, air and climate.
- Material assets, cultural heritage and the landscape.
- The interaction between these factors.

In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses

the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised in submissions received by ACP.
- Examination, analysis and evaluation of the EIAR.
- The Assessment: Direct and indirect effects.
- Conclusion: Direct and indirect effects.

8.0 Population and Human Health

8.1. Issues Raised

8.1.1. Planning Authority

The Planning Authority have requested that a map showing all dwellings (existing, granted and under construction) within 2km of the proposed turbines should be provided, along with a map showing all permitted and under construction energy developments within 15km of the site. The PA have also raised concerns in relation to issues that may be indirectly related to the issue of population and human health, including separation distances and visual impact (addressed in Section 14, shadow flicker (addressed in Section 19) and noise (addressed in Section 13).

8.1.2. Prescribed Bodies

NEHS raises concerns in relation to potential significant effects on Human Health as a result of noise. I have summarised the comments on the NEHS in the relevant section of this report (Section 13, and also in Appendix 1: Observations, and I refer the Coimisiún to this section of the report from my assessment of potential noise impacts arising from the proposed development. More generally relating to human health, the NEHS recommend that the Planning Authority following the Population Health approach when considering public health in their decision making.

8.1.3. Observers

Observers have stated that the EIAR is deficient in its assessment of significant effects on human health, particularly in relation to noise and impact on mental health. It is

stated that there is an absence of a formal baseline health assessment and it stated that the assessment requires a systematic Health Impact Assessment addressing potential physiological and psychological effects. Observers have also stated that proposed community benefit funds do not offset the irreversible intrusion on quality of life. Concerns are also raised in relation to a lack of community engagement. Other submissions include concerns in relation to impacts on drinking water. I have addressed potential impacts on water in Section 11 of this report.

8.2. Context

Impacts of the wind farm development on population and human health will be addressed in this section of the report. Other issues raised which relate to specific topics such as visual impacts, noise, and shadow flicker have been considered under those specific chapters and will not be repeated here.

EIAR Chapter 5 describes the potential effects of the proposed development on population and human health. The EIAR describes methodology used, receiving environment, likely significant impacts and associated mitigation measures.

The chapter provides an assessment of impacts on population including land use change, population and settlement, economic activity and employment, tourism and activities, human health, climate change and visual elements.

8.3. Baseline

The study area for the population and human health assessment used for the baseline analysis and assessment comprises the Electoral Divisions (EDs) that are within or located close to the proposed development, and include Monasteroris ED, Offaly and Edenderry Rural ED and the Cappancur ED (as shown in Figure 5-1, noting that Table 5-4 does not include the Cappancur ED). The study area has a total population of 3,483 persons. Edenderry is the closest town (population 7,888) and is located c. 7km to the east of the proposed development.

In terms of the general health profile of the study area, Census data shows that the majority of the local population were in ‘good’ or ‘very good’ health, with less than 4% in ‘bad’ or ‘very bad’ health. In terms of economic activity, the EIAR notes that the workforce is employed within a diverse range of industries with the highest level of

employment within the Professional Services category with 27.7% of the Study Area population employed in this sector. Commerce and Trade is the second highest employing sector and employs 20.3% of the Study Area workforce. Other key employment sectors include Manufacturing Industries (13.1%), Other (11%), Building and Construction (6.5%), Agriculture, Forestry and Fishing (7.2%).

8.4. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 8.1 below;

Table 8.1: Summary of Potential Effects (Population and Human Health)
Do Nothing
• There will be no changes to the baseline environment of the site and existing activities such as agricultural activities and periodic tree felling will continue. There will be no increases in local employment and the economic benefit the community benefit fund will not be realised. • There would be no potential shadow flicker, noise or visual effects. • There would be no benefits arising from the use of renewable energy.
Construction Impacts
• **Land Use** – Apart from the felling required to facilitate construction, agricultural and forestry activities will cease within the site footprint during construction. Short term restrictions on access may be required to facilitate deliveries. Temporary, transient impacts on the public road will be experienced as a result of the grid connection. Effects are concluded to be direct, short-term, slight to moderate, negative and localised. • **Population and Settlement** – It is set out that 60 jobs will be created during the construction phase of the project, which will be of a duration of 18-24 months. • **Property Values** – No significant impact on property values is expected. • Effects are concluded to be neutral localised short-term, with imperceptible significance to population and settlement patterns during the construction phase. • **Economic Activity and Employment** - Direct, short-term, localised and positive effect. • **Tourism and Activities** – Localised, neutral, short-term, imperceptible effect. • **Human Health** – Serious risks to human health and safety are not envisaged. Construction and decommissioning will be managed in accordance with health regulations. • **Traffic and Road Usage** – Slight, short-term, negative effect with isolated brief, moderate effects.
Operational Impacts
• **Land Use** – Once operational, conventional agricultural and forestry activities will continue to take place at the site, and on neighbouring lands the proposed development does not pose a significant risk to either existing or future land uses. Effects are concluded to be direct, long-term, neutral and localised. • **Population and Settlement** – Neutral, localised, long-term, imperceptible effect. • **Economic Activity and Employment –** Proposed development is likely to have a minimal effect on employment, which is not significant.

• **Community Benefit Fund** – The proposed development will establish a Community Benefit Fund to support local community groups and local educational funds, which will result in positive, moderate, long-term economic benefits to the local area. • **Tourism and Activities** – Visual effects on the Grand Canal are discussed in Section 14 of this report. The EIAR concludes that the proposed development will have a long-term, slight effect on tourism, which is not significant. • **Human Health** – No significant risks are envisaged from potential hazards. Adequate upkeep and maintenance will ensure turbines are in good working order. Residences and public roads are all well beyond turbine falling distance. No significant risks to human health are envisaged. • **Traffic and Road Usage** - This is assessed in Section 18 of this report. • **Air Quality** - This is assessed in Section 16 of this report. • **Noise** - This is assessed in Section 13 of this report. • **Shadow Flicker** – This is assessed in Section 19 of this report. • **Climate Change –** See Section 16 of this report. • **Visual Elements** – See Section 14 of this report. • **Property Values** – International literature indicates that property values are not impacted by the positioning of wind farms near houses. It is reported that there would be a long-term imperceptible impact from the proposed development.
Decommissioning Impacts
• Works required for decommissioning are described in Section 5.4.3 of the EIAR. Impacts at decommissioning stage are expected to be similar to those at construction phase. No significant impacts expected.
Cumulative Impacts
• The potential for cumulative effects on aspects indirectly related to human health and population (i.e. noise, air quality, traffic, visual impacts, water quality, shadow flicker) is assessed in the relevant chapters of the EIAR. • This current chapter summarises that cumulative noise, air quality and traffic impacts have the potential to arise locally when construction activities associated with the Proposed Development take place at the same time as other developments in a specific location. These effects are considered to be temporary, short-term and of slight significance. • In relation to landscape and visual cumulative effects arising from this development and other operating, permitted and planned are deemed to be slight to moderate and long-term.

8.5. Mitigation

Section 5.5 of the Applicants EIAR - 'Mitigation and Monitoring Measures' sets out that the potential for significant effects will principally arise during the construction phase from traffic, noise and dust effects and during the operational phase from noise and shadow flicker effects, and mitigation measures in relation to same are set out in the relevant sections of the EIAR.

8.6. Residual Effects

No significant residual effects will result on the human environment following implementation of the specific mitigation measures referred to above.

8.7. The Assessment: Direct and Indirect Effects

I have examined, analysed and evaluated Chapter 5 of the EIAR, and all of the associated documentation and submissions on file in relation to Population and Human Health. I address the specific concerns raised by Prescribed Bodies and Observers below;

8.7.1. Methodology

The NEHS submission, amongst other issues, raises concerns in relation to the approach and methodology taken in relation to the assessment of human health, and it is stated that a 'Population Health' approach should be followed. Observer submissions have also stated that there is an absence of a formal baseline health assessment, and it stated that the assessment requires a systematic Health Impact Assessment. In response the applicant has stated that the assessment has been carried out in accordance with EPA Guidelines and NEHS practice, and the 'Population Health' approach has been followed, rather than an assessment of individual medical outcomes. In this regard, the applicant notes that data from the 2022 census has been utilised and a general health profile of the local population is set out in the EIAR.

In relation to this issue, I am satisfied that the approach followed by the applicant in this instance is in line with EPA Guidelines, and is a standard approach to assessing impacts on human health and population, and the information contained within the EIAR in relation to human health is sufficiently robust in my view to allow a general assessment of potential effect on human health to be considered. Where there is potential for indirect effects on human health, such as that resulting from noise and air quality impacts, I have considered same in the relevant sections of this report.

8.7.2. **Community Engagement**

I note third party concerns regarding the level of community engagement undertaken. In response the applicant refers to Appendix 1-2 of the EIAR which sets out an Community Engagement Report and the applicant has stated that extensive engagement was carried out over a 2-year period and that the consultation strategy was fully aligned with national best practice.

I note the contents of the Community Engagement Report and highlight that regard was had to the 'Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement 2016. The engagement process consisted of face-to-face meeting with households as well as 12 no. meetings with representatives from community groups. A project website was also available to view. Key issues raised during the consultation process included concerns in relation to shadow flicker, visual impact and design and impact on property values. I have considered all of these aspects in this report under the relevant Chapters. I am satisfied that adequate community consultation was carried out to inform the applicants of issues raised by the local community in relation to the concerns regarding the proposed development.

8.7.3. **Community Benefit Fund**

I note the observers concern in relation to the Community Benefit Fund. In addition, I also note the provisions of Policy CAEP-27 of the OCDP 2021 which seeks to ensure that community benefits are derived from all renewable energy development in the county. In relation to same, I note the contents of the applicant's The Community Engagement Report sets out the Community Benefit Fund is to be provided and this fund will be worth c. €240,000 per year for the local area for the duration of the scheme (c. €3.6 million over a 15-year period).

I concur with the view as set out in the EIAR that the fund would have a positive effect on the local population as a result of the additional benefits this fund would provide. I am also of the view that the provision of same is also in line with Policy CAEP-27 as cited above.

8.7.4. Impact on Property Values

A number of observers have raised concerns that the proposed development will have a negative impact on property values. This issue is addressed in Section 5.4.1.2 and within the Community Engagement Report, where the applicant notes the finding of a US Study, *'The Impact of Wind Power Projects on Residential Property Values in the United States: A multi-site Hedonic Analysis'* (Hoen et al, Dec. 2009, updated in 2013) and a Scottish Study published by Climate exchange in October 2016 titled 'Impact of wind Turbines on House Prices in Scotland which found that there is no evidence of a consistent negative effect on house prices due to the presence of wind turbines.

The EIAR notes that there have been no empirical studies carried out in Ireland on the impacts of wind farms on property prices. Based on the international literature presented in the EIAR by the applicant, and noting that there is a minimum separation distance of 740 metres from the nearest non-involved residential dwelling, I consider it reasonable to conclude that the proposed development is not likely to result in a significant impact on property values in the area.

8.8. Conclusion: Direct and Indirect Effects (Population and Human Health)

I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I consider the proposed wind farm development will have a positive impact on the local socio-economic environment due to community funding and investment. There is no evidence to suggest that significant direct or indirect impacts on human health will result and I am satisfied that the potential for significant adverse impacts on population and human health can be avoided, managed and mitigated by measures that form part of the proposed scheme and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on population or human health.

9.0 Biodiversity (Excluding Birds)

9.1. Issues Raised

9.1.1. Planning Authority

The Planning Authority has raised concerns in relation to the location of the replacement woodland/habitat creation area, as well as clarification in relation to the area of commercial forestry to be felled.

9.1.2. Prescribed Bodies

I note that no Prescribed Bodies have raised concerns in relation to biodiversity.

9.1.3. Observer Submissions

I would note that a number of observer submissions have raised various concerns in relation to biodiversity, and these are summarised in Appendix 1 of this report. I have also set out the applicant's response to same in Appendix 1of this report, and I refer the Coimisiún to same, in the interest of avoiding undue repetition. I have considered same issues below.

9.2. Context

Biodiversity (excluding birds) is addressed in Chapter 6 and Appendices 6.1 Aquatic Ecology and Fish Report and 6.2 Bat Survey Report of the EIAR. Ornithology is addressed separately in Chapter 7 of the EIAR. Chapter 6 sets out the Regulatory and Policy Framework, Statement of Authority, Methodology, Baseline Ecological Conditions, Description of the Existing Environment, Ecological Impact Assessment and Cumulative Impacts. A Natura Impact Statement was submitted with the application, and I have addressed the issues relating to Appropriate Assessment in Appendices 2 and 3 of this report.

A desktop study was carried out as well as field surveys. Habitat and flora surveys were undertaken in June 2023 and January 2024, with a re-examination of the habitats carried out in February 2024. Non-volant mammal surveys were carried out in February 2024. Other dedicated surveys related to bats (as detailed in Appendix 6-2 Ballinla Bat Survey Report) and aquatic surveys.

Some limitations arose as a result inaccessibility of the dense conifer mixed forestry plantation in the south of the site. In addition, the applicant notes that a trail camera was dislodged outside of a potential badger set. However, due to other evidence, it was assumed that a sett was located in this area, and relevant mitigation measures are proposed in relation to same (See Section 9.5 below).

The EIAR describes the methodology utilised to identify target receptors and '*Important Ecological Receptors'*. The method employed for assessment of impacts and effects on ecological features followed that recommended by National Roads Authority (NRA) Ecological Assessment Guidelines published in 2009 (NRA, 2009) and the Chartered Institute of Ecology and Environmental Management (CIEEM) in the *Guidelines for Ecological Impact Assessment in the UK and Ireland.*

The EIAR concludes that the implementation of mitigation and protection measures throughout the construction and operational phases will ensure that no significant residual effects are likely to arise from the Proposed Development, either alone or in combination with other plans or projects.

9.3. **Baseline**

The '*Study Area'* is defined in Figure 6-4 of the EIAR. A detailed habitat map is shown in Figure 6-5 of the EIAR. It is set out within the EIAR that the dominant habitat throughout the site is '*Improved Agricultural Grassland'*.

Broadleaved woodland occurs to the north of the Study Area where it occurs in large sections amongst conifer plantation. '*Mixed Broadleaved Conifer Woodland (WD2)'* occurs in small areas to the north and in larger assemblages to the south. '*Conifer Plantation (WD4)*' occurs in the northwest of the study area and to the south of same and is described as one of the dominant habitats on site. 3 no. active badger setts were present within these areas of conifer plantation, but are located outside of the proposed development site.

Evidence of badgers were recorded throughout the Study Area, predominantly in the northwestern area, with a main sett recorded in the north-east of the conifer woodland, with an annex sett located c. 120m to the south of this. A subsidiary sett was recorded c. 1km west of these 2 no. setts in the north-west of the study area. The closest turbine

is located c. 152.2m south of the nearest sett. See Figure 6.6 of the EIAR – 'Active Bager Setts within the Study Area'. An attempted sett was observed in January 2025 at the western extent of the study area in the centre of the site. This is located c. 380m from the nearest proposed infrastructure footprint and will not be removed as part of the proposed development.

Other habitats within the study area comprise scrub, recently felled woodland, spoil and bare ground. There are farm holdings to the north-east of the study area. These will remain in situ. In relation to watercourses, the Leitrim River drains watercourses to the south of the site. A naturalised land drain runs east to west in the southern area of the study area, and drainage ditches are located extensively throughout the northern extent of the study area.

Hedgerows and treelines are located exclusively in the northern section of the study area. These habitats also occur along the proposed GCR and at the proposed TDR nodes along the L-5006 local road. Roadside grass verges occur within the study area, and along the proposed GCR and proposed TDR nodes.

No invasive plant species were identified in the study area. In relation to invasive faunal species, a likely American mink was identified on a field camera. No rare or protected species were recorded.

No rare or protected flora species were recorded during the ecological surveys within the Study Area.

In terms of non-volant mammals, no evidence of otter was found on the site, although within the wider study area there was instance of likely otter scat recorded along the banks of the Leitrim River in the south of the study area. Irish Hare were present in the vegetated area, and were noted in the northeast of the study area and in the centre of the site.

In relation to bats, bat habitat suitability for all Irish Bat species within the study area was concluded to be 'very low; and it is stated that the area is considered to be of 'negligible' potential to bats. Surveys indicated that activity was predominantly focused on the Grand Canal, and along the watercourse within the Study Area to the south. Potential Roost Features (PRF) were considered to be of 'low' habitat suitability, due to the isolated nature of the trees in question, and the poor health of

same. In accordance with Collins (2023), it was determined that no further survey of these PRFs was necessary.

In terms of invertebrates, no protected and/or threatened species were recorded during the ecological surveys. In relation to Reptiles and Amphibians, some suitable habitat for common frog were identified within the study area.

In terms of European Sites, Table 6.2 of the EIAR, with reference to the AA Screening Report, sets out a list of sites with the potential to be affected by the proposed development. I refer An Coimisiún to Appendices 2 and 3 of this report for a consideration of European Sites. In relation to AA, I note that the EIAR incorrectly states that;

> '*The Screening for Appropriate Assessment report objectively concluded that the Proposed Development will not result in any likely significant effects on any European sites and consequently, all QI habitats and species and impact mechanism combinations were screened out for further assessment'* (Section 6.3.8.1.1 refers).

This is not the case, and the Coimisiún will note that a Screening Report was submitted which concluded that, in the absence of mitigation, there is potential for likely significant effects, or significant effects cannot be ruled out at this stage, on the following European sites:

- River Barrow and River Nore SAC (002162);
- River Boyne and River Blackwater SPA (004232);
- River Boyne and River Blackwater SAC (002299).

I am satisfied that the above error in the EIAR does not fundamentally undermine any subsequent conclusions within same, and I am of the view that the AA Screening Report submitted, and the NIS submitted, represents a thorough and considered assessment of potential effects on the above European Sites and I am satisfied therefore that impacts on European Sites have been appropriately considered in the suite of documentation provided within the application.

In terms of sites of national importance, it is noted that the study area does not lie within the boundary of any NHA or pNHA, and a list of said sites are set out in Table 6-3 and 6-4 of the EIAR, and illustrated in Figure 6-3, the nearest being the Grand

Canal pNHA, which borders the Study Area to the north and the Black Castle Bog NHA, located c. 0.7km to the west of the study area. There are no hydrological links to either site, or to other NHAs and pNHAs listed in the EIAR. The EIAR rules out any ecological/hydrological connections to these NHAs or pNHAs, and it is concluded same are located outside of the zone of influence, and effects on these sites as a result of the proposed development are unlikely to occur and are not considered further in the evaluation.

9.4. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 9.1 below.

Table 9.1: Summary of Potential Effects (Biodiversity)

Do Nothing

- It is likely that the current land-use practices, mainly comprising agriculture in the north of the Study Area and forestry in the south, will continue at the Proposed Development site. As such, the general biodiversity on the site would likely remain similar to its current state.

Construction, Operational and Decommissioning Phase Impacts

The following broad categories of impact could arise during all phases of the proposed development and are considered, where potentially relevant, in relation to each of the ecological features scoped in to detailed assessment:

Construction Stage

Habitats and Flora

- It is noted that habitat loss will result from the construction of the windfarm and associated access tracks, substation, and underground cabling, as well as removal of hedgerow to facilitate turbine delivery. The total area of habitat loss is set out in Table 6-14 of the EIAR and mainly involves the loss of mixed broadleaved-conifer woodland (13 Ha) and Conifer Plantation (6.2 Ha), with 143 linear metres of Hedgerow being removed (not including loss along the TDR), and 192 linear metres of treeline removed. 126 linear metres of drainage ditch (covered due to access tracks) and 5 linear metres of 'depositing/lowland river' will be lost (as a result of culvert installation). Most of the infrastructure is situated in Improved Agriculture Grassland and Mixed Broadleaved-conifer woodland.
- In the absence of mitigation the loss of hedgerow will lead to permanent, likely significant, negative effects (direct habitat loss). No other significant effects are cited in the EIAR.

Non-Volant Mammals

- No significant effects on same are predicted, having regard to habitat loss, and disturbance and/or displacement.
- Otter – No direct habitat loss is cited. There may be potential for direct disturbance and/or displacement effects on otter as a result of increased noise, lighting and human activity. Indirect effects as a result of a deterioration of water quality could result, although watercourses on site are identified as being sub-optimal for otter. However, suitable habitat for foraging is located downstream of the proposed

development site. The development includes a setback distance of a minimum of 10m from all main watercourses, reducing the risk of direct and indirect effects on same. In the absence of mitigation, effects (habitat loss, and disturbance and/or displacement) are concluded to be temporary or short term, slight negative.

- Badgers – In relation to habitat loss, it is noted that linear habitat such as hedgerows will be lost and these provide foraging habitat for badger. The 3 no. badger setts identified are all located outside of the proposed development area, with the closest badger sett located c. 152.2m from the nearest point of any proposed infrastructure and there will be no direct loss of same. There is potential for disturbance or displacement effects. In the absence of mitigation, effects are concluded to be likely, short-term, slight negative.
- In relation to the remaining species considered (Pine marten, Irish Hare, Irish Stoat, European Hedgehog, Pygmy shrew and Red Squirrel), in the absence of mitigation effects on same are concluded to be likely, short-term, slight negative.

Bats

- Table 6-16 describes the potential impacts on bats As noted above, no bat roosts were confirmed within the proposed development area, and activity was determined to be within the northern section of the study area, and within the areas to the south that were relatively clear of trees such as along the river watercourse and in areas of scrub. Loss of linear features that provide foraging and commuting habitat will occur. Construction phase lighting has the potential to attract certain species and displace others. Impacts on bats are concluded to be likely permanent, slight, negative (habitat loss) and likely short-term, slight negative (disturbance/displacement). The bat survey report, which is included in Appendix 6.2 provides further detail and analysis with regard to the effects on bat species.

Terrestrial Macro-Invertebrates

- Habitat loss will result in a reduction the abundance and potentially the diversity of this group with the impact being at a local scale. The effects, without mitigation, are concluded to be likely, temporary to permanent, slight to moderate negative effects.

Freshwater Aquatic Species

- Brook Lamprey – Low densities of same are likely to occur within the watercourses draining the site. Culvert works, and potential water quality impacts, could result in indirect disturbance and displacement of same. Disturbance to same are assessed as temporary to short-term, likely slight to moderate negative effects. In relation to other fish species and Aquatic Macro-invertebrates (excluding FWPM and white-clawed crayfish) effects on same, in the absence of mitigation, are assessed as being temporary to short-term, likely slight negative, mainly as a result of the culvert works.

Reptiles and Amphibians

- Common Frog – Due to the culvert works and due to potential impacts on water quality, there is potential for direct and indirect disturbance and or displacement effects on same. In the absence of mitigation, potential effects are concluded to be temporary to short-term, slight negative.

Water Quality

- Potential Impacts on same, in the absence of mitigation, are concluded to be likely, short-term, significant negative (see detailed discussion of same in Section 11 '*Hydrology and Hydrogeology*' of this report).

Operational Stage

Habitats and Flora

- It is noted that no additional habitat loss is required as part of the operational stage. Potential impacts at operational phase relate to the use of plant and machinery, and potential spills and contamination from same, noting in particular the duration of the operational phase, which is likely to operate for up to 35 years. Other impacts relate to the alteration of surface water flows by new drainage systems. In the absence of mitigation, potential effects on terrestrial habitats and flora are concluded to be long-term, imperceptible, slight negative effects, with potential effects on aquatic habitats, concluded to be long-term, slight negative.

Non-Volant Mammals

- Impacts may result from noise and activity on the site from periodic maintenance, and impacts from any maintenance works. In the absence of mitigation, effects are assessed as long term, slight to imperceptible negative effects.

Bats

- The primary impacts are associated with potential injury/mortality caused by potential collision with turbine blades and/or barotrauma (damage to internal tissues caused by rapid changes in air pressure as a result of moving turbine blades). Risk to same is associated with species type, with those species at greater risk include Leisler's bat which are relatively larger, higher flying and forage independently of linear features such as treelines and hedgerows. The EIAR utilises the methodology outlined in NatureScot (2021) which recommended a two-stage process in determining risk to bats from windfarms, first considering the habitats present and the nature of the development proposed, and secondly assessing risk for high collision species, considering species vulnerability and results of bat activity. Having regard to same, the overall risk to species was assessed as being 'low' with the potential effect on bat species, in the absence of mitigation, concluded to be slight negative at a local level.

Terrestrial Macro-Invertebrates/Freshwater Aquatic Species/Reptiles & Amphibians

Potential effects on same relate in the main to disturbance or displacement effects, and/or potential water quality impacts from maintenance works, with potential effects on same, in the absence of mitigation, being long-term, neutral or long-term, insignificant negative.

Decommissioning Stage

- At the end of the estimated 35-year lifespan, the wind farm will be decommissioned and reinstated with all 7 no. wind turbines and towers removed. Hardstand and foundation areas will be left in situ and covered with soil to match the existing landscape. It is anticipated the cables will be cut back and left underground, if an environmental assessment dictates that this is the most environmentally sound option. The substation and associated grid connection will remain part of the national grid and will not be decommissioned. Potential impacts in the absence of mitigation are similar to construction, and are concluded to be likely, temporary, moderate negative.

Cumulative Impacts

- Section 6.4.4 of the EIAR considers Cumulative Effects. Potential short-term moderate negative cumulative effects on water quality in combination with surrounding agricultural activities, is cited, particularly at construction stage, and in the absence of mitigation measures.
- Other wind farm developments are considered, as well as relevant solar farm development. No significant effects are cited.

9.5. Mitigation

Section 6.5 of the EIAR describes the proposed mitigation measures to ensure the protection of biodiversity.

9.5.1. Mitigation by Design

Surface Water Drainage – Measures proposed in the applicants EIAR include the proposed surface water drainage system, which will largely mimic the existing drainage regime across the site and will not deteriorate water quality. A Water Quality Management System has been prepared to control erosion and to prevent sediment runoff during construction. A site-specific Surface Water Management Plan (SWMP) has been designed to avoid impacts to water quality in both immediate and downstream surface waters.

Bats – To the north of the site, within the areas to be managed for bats (as per the SNH guidance) at T1, T2 and T3, linear hedgerow habitats within the zones will be retained with hedgerows being kept short. Retaining these features should limit bats being drawn towards the turbines. Areas of hedgerow losses will be reinstated within the proposed site, with c. 1km linear length being planted, with a further minimum of c. 0.76ha of additional potential enhancement and/or creation area provided. This 'enhancement/creation area' is illustrated in Fig. 6-8 of the EIAR. Conifer trees will be removed in an area south of T5, in order to create a bat buffer felling zone, which will serve to minimise the drawing of bats towards the turbines, although the riparian corridor closer to T6 and T7 will be preserved as this will preserve a potential bat corridor along the stream. Of note, it is stated in the EIAR that, given the current condition of the site, it was concluded that the creation and enhancement of habitats within the site may lead to negative impacts on species such as bats, as enhanced habitats could result in attracting bats towards the proposed turbines. A 'No Net Loss' approach was followed in relation to the overall biodiversity of the site.

Habitats – There is an overall gain of c. 578m of additional linear habitat within the site. Table 6-25 of the EIAR sets out the 'Areas and lengths of Important Ecological Features (IEF) habitats being removed and gained'.

9.5.2. **Mitigation by Management**

9.5.2.1. **Construction Stage**

- **General** – Employment of a Project Ecologist/Ecological Clerk of Works (ECoW)
- **Protection of Fauna** – The badgers setts referred to above will be retained. Pre-construction surveys for badger and otter will be undertaken prior to the commencement of any construction activity, and where necessary, mitigation will be carried out in accordance with best practice guidelines. Felling of forestry will be limited to appropriate times of the year to avoid breeding seasons for pine martin/red squirrel and other fauna, as well as general avoidance of removal of vegetation during bird nesting periods.
- **Bats** – Creation of a minimum 50m buffer from the blade tip to the nearest key habitat features (e.g. woodland, hedgerow etc) is proposed and lighting which will adhere to the appropriate guidelines.
- **Protection of Habitats** – No removal of habitat outside the proposed development area.
- **Forestry Felling** – c. 18ha of commercial forestry will require to be felled. This felling will be undertaken in accordance with best practice guidance to minimise nutrient run off and other environmental impacts.
- **Water Quality/Dewatering** – I refer the Coimisiún to Section 11 of this report wherein detailed measures to prevent adverse effects on water quality are set out. Measures in relation to dewatering are also described in Section 11.
- **Storage of Materials and Fuels/Fuel management** – Measures are set out in relation to appropriate storage of Cement Bound Granular Mixtures (CBGM), utilised in cable trench construction, as well as in relation to fuel management and refuelling of construction plant. Such measures are in the main designed to prevent negative effects on water quality.
- **Excavation Works and Soil Management** – I refer the Coimisiún to Section 12 (Land and Soils) of this report for detailed mitigation measures.

- **Other Measures** – Other measures in the main relate to those as set out in the Construction and Environmental Management Plan (CEMP) and include measures relating to wheel wash, construction compounds and storage. Refer to applicants EIAR, Appendix 2-1

9.5.2.2. **Operational Stage**

- **Habitat Reinstatement Management** – Measures include hedgerow maintenance, including those within the buffer felling areas where hedgerows will be kept short to discourage their use by bats.
- **Bats** – A post-construction monitoring programme will be carried out, which will be completed annually for three years after construction. This will include casualty searches and acoustic monitoring, the latter to determine any significant changes in bat activity.
- **Water Quality** - I refer the Coimisiún to Section 11 of this report wherein detailed measures to prevent adverse effects on water quality are set out.
- **Decommissioning** – Reinstatement programme, including the implementation of a programme that details any removal of structures and landscaping, will be submitted to OCC for approval prior to the decommissioning work.

9.6. **Residual Effects**

Section 6.6 of the EIAR has assessed the residual impacts on Habitats/Species following implementation of proposed mitigation measures. Of note is that the EIAR concludes that the loss of habitat is a likely, permanent, significant negative effect. The preservation of existing habitat elsewhere on the site is concluded to be likely, permanent, significant positive. The overall effect on habitat is assessed as likely, slight positive taking into account the greater proportion of habitat converted for overall biodiversity net gain beyond that which already exists within the site prior to development and beyond that which would exist in a do-nothing scenario.

I summarise the construction and operational phase residual impacts in Table 9.2 below;

Table 9.2 Summary Table of Residual Impact on Habitats/Species Post Mitigation (Construction and Operational Phase)	
Habitats/ Species	**Residual Effect Following Mitigation (Construction and Operation)**
Broadleaved Woodland/Scrub	Long-term, Likely Neutral
Hedgerow/Treeline	Likely Permanent, Likely Slight Positive
Drainage Ditch/Depositing Lowland River	Long-term, Likely Slight Negative
Otter, Badger, Eurasian Pygmy Shrew, Eurasian red Squirrel, European Hedgehog, Pine marten, Irish Hare, Irish Stoat	Short-term, Likely Slight Negative
Bats Common pipistrelle Soprano pipistrelle Leisler's bat Nathusius' bat	Long-term, Likely Slight Negative
Terrestrial macro-invertebrate	Long-term, Likely Slight Negative
Brook lamprey Other fish species	Long-term, Likely Slight Negative
Common Frog	Long-term, Likely Slight Negative Effect

9.7. **The Assessment: Direct and Indirect Effects**

I have examined, analysed and evaluated Chapter 6 of the EIAR, and all of the associated documentation and submissions on file in relation to Biodiversity. The applicants EIAR has raised no significant concerns in relation to Biodiversity. As outlined above in Table 9.2, following the implementation of mitigation measures, no significant likely effects on habitats/species have been identified as part of the EIAR assessment during all phases of the proposed development.

In particular, I note that, in the absence of mitigation, the loss of c. 143 linear meters of hedgerow could lead to negative effects on biodiversity. Mitigation related to this loss includes the replanting of c. 964m of hedgerow, as well as the provision of at least c. 0.76 ha of enhancement habitat. The overall net gain is c. 821m of hedgerow. With mitigation in place, the residual effect is concluded to be slight, positive. I am satisfied that the proposed mitigation will avoid any potential significant negative effects on hedgerow, and I concur the conclusions as set out in the EIAR as relates to the visual effects on same.

I note also that potential short-term, significant negative effects on water quality could result at construction stage, in the absence of mitigation. I have considered impacts on water quality in Section 11 of this report, and in the interest of avoiding repetition, I refer the Coimisiún to this section of the report, for my assessment.

In the below paragraphs I have considered specifically those issues that have been raised by submissions on the application.

9.7.1. **Loss of Forestry/Habitat Replacement**

The Planning Authority has raised concerns in relation to the location of the replacement woodland/habitat creation area, as well as clarification in relation to the area of commercial forestry to be felled.

In response the applicant has stated that c. 18 ha represents the current area of standing commercial forestry on site and c. 21 ha represents the total forestry land use area. In relation to the area of habitat creation, the habitat creation area is illustrated in Drg. No. 23882-MWP-00-00-DR-C-5426 and Figure 6.8 (Proposed Biodiversity Creation Area) of the EIAR and this indicates the rewilding area located to the west of the access road around the proposed substation.

I am satisfied that sufficient clarification has been provided by the applicant in relation to the issues raised above.

9.7.2. **Adequacy of the EIAR**

The EIAR has been prepared having regard to best practice guidance, and has been authored by sufficiently qualified persons, as detailed in EIAR, Chapter 1 and in Table 6.1 of this inspectors report which has assessed compliance of the submitted EIAR with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001(as amended)

9.7.3. **Reduction in Biodiversity**

While the EIAR has outlined that there will be some negative effects on biodiversity, in particular significant negative effects resulting from the loss of habitat on the proposed development site, the overall effect on habitats is concluded to be slight positive.

9.7.4. **Impact on Badgers**

I note that 3 no. badger setts were found within the study area, but not within the proposed development site itself. These badger setts will be retained and pre-construction surveys for badger will be undertaken prior to the commencement of any construction activity, and where relevant, mitigation will be carried out in accordance with best practice guidelines. I note that an observer has stated that there is an old, active badger sett on the grounds in Lumville, and the development is putting the badger colony and cattle at risk of TB infection. There is no evidence to support this conclusion, and the evidence that is on file would support the conclusion of no significant effects on badgers within the study area, or within the wider area.

I am satisfied the proposed mitigation measures as outlined in detail in Section 6.5 of the EIAR will protect local badger populations.

9.7.5. **Effects on Pine Martins, Foxes, Irish Hare and Common Frog**

The EIAR has considered the potential effects on all of the species above and has concluded that there will be no significant residual effects on these species, following implementation of mitigation measures proposed.

9.7.6. **Bats**

The EIAR has concluded that there will be no significant residual effects on bats. I consider the EIAR has demonstrated that the existing site, is not particularly suitable for bats, and that bat activity was limited to existing treelines and river corridors. The strategy for the site was to limit the potential for the site to become more attractive to bat species, thereby heightening the risks of collision impact. In relation to those areas that were not accessible, for example on private property, and I note that an observer has stated that there is a maternity roost within their property, the applicant has set out that a precautionary approach was applied where roosts could not be inspected.

I note that the EIAR concludes that, with mitigation measures in place, no significant effect on the local bat populations are predicted and I am satisfied that the evidence on file would support this conclusion.

9.7.7. **Honeybees**

There is no evidence that the site is particularly suitable for honeybees, noting that the majority of existing habitats comprise of improved agricultural grassland and conifer plantation forest. The removal of these habitats, where occurring, would not be expected to impact on honeybees.

9.7.8. **Seismic Effect on Species**

I note that an observer has raised the issue of seismic effects on frogs, worms, herbivores and badgers. There is no evidence submitted that seismic effects would result in a significant negative effect on the species noted above. Notwithstanding, I note that the EIAR concludes that no significant effects will result on either humans or animals, at the construction or operational phases.

9.7.9. **High Nature Value (HNV) Grassland**

A number of observers have stated that the proposal would impact on the surrounding HNV Grassland and would impact on efforts to improve surrounding farmland. In this regard, I would note that the habitat survey did not identify such HNV grassland within the study area itself. I would note that the EIAR does not identify any significant negative effects on habitats outside of the study area, ether through direct mechanisms (through loss of said habitat) or through indirect mechanisms such as via a deterioration of water quality (see Section 11 for a discussion of same). As such I am satisfied that the proposed development will not have any significant effect on surrounding HNV grassland.

9.7.10. **Impact on Peatland Habitat/Peat Stability/Risk of Landslide**

An observer has raised concerns in relation to impacts on peat, noting the potential for peat drying effects from wake effects, as well as from road foundations.

In response, the applicant has set out that there are no deep peat deposits or peatland habitats present within the site. In relation to peat stability, it is set out that the site is generally flat with no evidence of historical landslides or instability. I refer the Coimisiún to the Peat Stability Risk Assessment, which is included in Appendix 9 of the EIAR, which highlights that the applicant completed a two-stage peat stability risk

assessment approach. Stage 2 involved quantitative risk assessment factor of safety analysis (Infinite Slope Stability Analysis), and application of the Peat Slide Hazard Rating System (PHRS) (Nichol, 2006). The findings of the PHRS were that the risk level is "Negligible". I note that design measures in the form of peat stability monitoring programme during construction has been proposed in order to further mitigate and manage risk.

Overall, I am satisfied with the results of the applicants Peat Stability Risk Assessment and am confident that the risk in relation to peat stability and landside on the site is low.

9.8. **Conclusion: Direct and Indirect Effects (Biodiversity)**

I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that the proposed development would not have an adverse impact on biodiversity (including habitats and species), subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CEMP mitigation measures and compliance with recommended conditions.

10.0 Ornithology

10.1. **Issues Raised**

10.2. **Planning Authority** – Refer to Appendix 1. The Planning Authority have not raised any fundamental concerns in relation to ornithology. The Planning Authority have requested the applicant to provide further details of potential enhancement habitat for Merlin, Woodcock and Snipe.

10.3. **Prescribed Bodies** – Refer to Appendix 1. I note that no issues relating to ornithology have been raised by Prescribed Bodies.

10.4. **Third Party Observers** – Refer to Section Appendix 1. In summary, observers have raised concerns in relation to general impacts on birds, the methodologies underpinning the EIAR and the collision risk analysis, impacts on migration paths as well as specific concerns relating to individual species.

10.5. Context

Ornithology is addressed in Chapter 7 and Appendices 7-1 – 7-8 of the EIAR as follows;

- Appendix 7.1 Baseline Ornithology Report Year 1
- Appendix 7.2 Baseline Ornithology Report Year 2
- Appendix 7.3 Additional VP Results Years 3 - 4
- Appendix 7.4 Flight path observations years 3 – 4
- Appendix 7.5 Winter 2024-25 Transect survey results
- Appendix 7.6 Hen harrier roost survey report
- Appendix 7.7 Whooper swan report
- Appendix 7.8 CRM Report

Chapter 7 sets out the regulatory and policy framework, the assessment approach and methodology, the baseline ornithological conditions including results of field surveys, receptor evaluation, potential impacts, cumulative effects, mitigation and best practice, monitoring and residual impacts. The competency of the Project Team is summarised in Section 1.7.

Consultations were carried out with a number of statutory and non-statutory bodies. The EIAR states in Section 7.2.4 that no responses relevant to ornithology were received.

A description of the study area is set out in Section 7.2.5 of the EIAR. The study area for flight activity surveys is comprised of the vantage point viewsheds which encompass a 500m buffer (as per SNH, 2017) around proposed turbine locations. Hinterland surveys encompass the areas surrounding the proposed development (extending to 6km from the proposed wind farm boundary, as per SNH, 2017).

A description of the various field surveys carried out is set out in Section 7.2.6 of the EIAR and is summarised below;

Table 10.1: Field Surveys Undertaken		
Survey Type	**Time Period**	**Description/Detailed Results**
Vantage Point (VP) Surveys[15]	Breeding Season: 2021, 2022	As described in Section 7.2.6.3 of the EIAR with locations illustrated in Fig. 7.1 to 7.3, Volume 3-Appendices 7-1 and 7-2

[15] Carried out in accordance with SNH methodology for onshore Wind Farms (SNH, 2017).

	Winter Season: 2021/2022, 2022/2023, 2023/2024, 2024/2025	Appendices 7-1, 7-2, 7-6 and 7-8
	Migration Periods: Spring and Autumn 2022, April 2024	Appendices 7-2 and 7-7
Hinterland Surveys[16]	Summer: 2021, 2022	As described in Section 7.2.6.5 of the EIAR with VPs and transect locations illustrated in Fig. 7.5 and 7.6, Appendices 7-1 and 7-2
	Winter: 2021/2022, 2022/2023, 2023/2024, 2024/2025	Appendices 7-1, 7-2 and 7-7
Breeding Bird Transect Surveys[17]	2021 and 2022	As described in Section 7.2.6.6 of the EIAR with transect locations illustrated in Fig 7.7, Appendices 7-1 and 7-2
Winter Bird Transect Surveys	2021/2022, 2022/2023, 2023/2024, 2024/2025	Appendices 7-1, 7-2 and 7-5
Breeding Wader Surveys[18]	2021, 2022	As described in Section 7.2.6.8 of the EIAR with survey locations illustrated in Figure 7.8 and Transect locations in Fig 7.9 of the EIAR. Appendices 7-1 and 7-2
Hen Harrier Roost Surveys[19]	Winter 2023/2024	As described in Section 7.2.6.4 of the EIAR with viewshed locations illustrated in Fig. 7.4/Appendix 7-6
Nocturnal Migration Audio Surveys	Spring and Autumn: 2024	Audio Device Deployment Locations illustrated in Fig. 7.10/Appendix 7-7
Whooper Swan Migration Surveys	Winter 2023/2024, Autumn 2024	Appendix 7-7

The EIAR describes the potential risks to birds from wind farms which includes direct habitat loss, disturbance/displacement and collision. Section 7.2.2 sets out the relevant guidance that has been followed, which includes, but is not limited to '*Guidelines on the information to be contained in Environmental Impact Assessment Reports'* (EPA, 2022) and '*Guidelines for Assessment of Ecological Impact of National Road Schemes'* (NRA, 2009). The description of impacts is quantified according to

[16] Carried out in accordance with I-WeBS (Irish Wetland Bird Survey) methodology (Lewis et al., 2019)
[17] Carried out in accordance with British Trust for Ornithology (BTO) Breeding Bird Survey (BBS or CBS. Bibby et al. 2000).
[18] Methods were combined from published literature including Bibby et al, (2000), Gilbert et al, (1998), O'Brien & Wilson (2011) and SNH (2017)
[19]Carried out in accordance with Irish Hen Harrier Winter Survey (IHHWS) (O'Donoghue, 2019) and Hardey et al. (2013).

two assessment criteria, namely Percival (2003) and the Environmental Protection Agency (EPA, 2022). The Percival (2003) avifauna-specific assessment feeds into and informs the EPA (2022) assessment, which is the primary basis of assessment within the EIAR.

The Collision Risk model was calculated using a mathematical model to predict the number of individual birds of a particular species that may be killed in collision with moving wind turbine rotor blades.

The EIAR concludes that, with mitigation in place, the proposed development will not result in any significant effects on any of the identified '*Key Receptor'* Species, as identified in Table 7-21 '*Key Receptors Assessment'*.

No significant residual effects on receptors of International, National or County Importance were identified. Provided that the proposed development is constructed, operated and decommissioned in accordance with the design and best practice mitigation measures that are described within the application, significant individual or cumulative effects on the identified Key Receptor species are not anticipated.

10.6. Baseline Ornithological Conditions

10.6.1. Designated Sites within the Likely ZOI of the Development

Three designated Special Protection Area (SPA) sites are located within the likely Zone of Influence (ZOI) of the development as follows;

Table 10.2 Designated SPAs within ZOI of the Wind Farm

No.	SPA	Location	Special Conservation Interest (SCI)
1	River Boyne and River Blackwater SPA	c. 17km from the Wind Farm Site	Kingfisher
2	Lough Ennell SPA	c. 19.8km	Tufted Duck, Coot, Pochard, Wetland and Waterbirds
3	Slieve Bloom Mountains	c. 25.3km	Hen Harrier

10.6.2. Datasets Utilised

The EIAR desk study collated and analysed ornithological data from the following sources:

- National Parks and Wildlife Service (NPWS) website (mapviewer).

- National Biodiversity Data Centre (NBDC) website and data.
- Irish Wetland Bird Survey I-WeBS datasets.
- Bird Atlases, including Ireland's Wetlands and their Waterbirds: Status and Distribution (Crowe 2005), the Atlas of Wintering Birds in Britain and Ireland (Lack, 1986), the Atlas of Breeding Birds in Britain and Ireland (Sharrock, 1976) and the Breeding and Winter Birds of Britain and Ireland Bird Atlas 2007-11 (Balmer et al., 2013).
- I-WeBS site counts.
- Wetlands Ireland GIS resource/register of wetland sites.
- OSI Aerial photography and 1:50000 mapping.
- Google Maps/Street View.
- EPA Maps.

10.6.3. **Field Survey Results and Avifauna Evaluation**

A determination of population importance for target species within the Zone of Influence (ZOI) is detailed in Section 7.4 of the EIAR following NRA (2009) and CIEEM (2019) guidance. These range from National Importance to County and Local Importance.

Based on field survey results, Table 7-21 outlines the 'Key Receptors' selected for assessment, and the rationale for the inclusion or exclusion of each target species[20] recorded during field surveys as a key receptor, based on NRA guidance (NRA, 2009a) and CIEEM, 2019. I provide a summary in Table 10.3 below of the results of the assessments;

Table 10.3: Summary of Key Receptors Assessment

Bird Species	Sensitivity	NRA Evaluation	Key Receptor	Rationale (summary)
Black Headed Gull	Medium	Local Importance (High Value)	Yes	Recorded during the 2022 breeding season and 2022/23 non-breeding season.
Brambling	Local Importance (High Value)	Medium	No	Habitat not present within the proposed development footprint.
Buzzard	County Importance	Low	Yes	Recorded across all seasons over 2 yr survey period.
Common Coot	Local Importance (High Value)	Medium	No	Suitable habitat not present at proposed development.
Common Gull	Local Importance (High Value)	Medium	Yes	Recorded during the 2022/23 non-breeding season.

[20] The criteria for selecting same is set out in Section 7.2.6.2 of the EIAR.

Cormorant	County Importance	Medium	Yes	Recorded during the 2022/23 non-breeding season.
Goldcrest	Local Importance (High Value)	Medium	Yes	Recorded during the breeding season of 2021/winter 2022-23. May use wooded habitats subject to loss during the construction phase.
Golden Plover	County Importance	Very High	Yes	Recorded regularly during the non-breeding season. Observed to winter in locality/large flocks of up to 1,000 in flight activity/flocks of up to 1,500 in the surrounding hinterland.
Great Black-backed gull	Local Importance (High Value)	Low	Yes	Flight activity recorded during the 2021 breeding season
Greenfinch	Local Importance (High Value)	Medium	Yes	Recorded during breeding and non-breeding seasons over multiple years/may use hedgerow habitat.
Grey Heron	Local Importance (High Value)	Low	Yes	Occurs in locality/construction disturbance/changes in water quality.
Greylag Goose	National Importance	Medium	Yes	Recorded once in the 2023/2024 non-breeding season/no records of foraging or breeding.
Hen Harrier	County Importance	Very High	Yes	Observed during non-breeding season/hunting behaviour over cutover bog/farmland. Isolated observations of transitory causal roosting to east of southern part of development site and within site near T4.
House Martin	Local Importance (High Value)	Medium	Yes	Potential habitat loss and disturbance.
Kestrel	National Importance	High	Yes	Recorded throughout all seasons indicating a resident population/hunting behaviour.
Kingfisher	County Importance	Very High	Yes	One incidental record/species present in the region/Indirect effects via changes in water quality.
Lapwing	Local Importance (High Value)	High	Yes	Observed across all seasons.
Lesser Black Backed Gull	Local Importance (High Value)	Medium	Yes	Observed across all seasons.
Linnet	County Importance	Medium	Yes	Potential habitat loss and disturbance.

Little Egret	Local Importance (High Value)	Very High	Yes	Occurs in the locality/potential construction disturbance or changes to water quality.
Little Grebe	Local Importance (High Value)	Low	Yes	One observation in the 30-100m flight band.
Mallard	County Importance	Medium	Yes	Observed in all seasons/suitable habitat.
Meadow pipit	County Importance	High	Yes	Observed during 2021/2022 surveys
Merlin	County Importance	Very High	Yes	Recorded during the 2021/2022 and 2023/24 non-breeding seasons/suitable habitat in region.
Mute Swan	County Importance	Medium	Yes	Recorded during 2021 breeding survey/2022-23 no breeding season.
Peregrine	County Importance	Very High	Yes	Recorded in flight activity during breeding season/Hunting and landing on peat.
Redshank	County Importance	High	Yes	Heard calling near VP3 during autumn migration 2022.
Redwing	County Importance	High	Yes	Recorded during surveys/may forage in hedgerows and agricultural habitats.
Ringed Plover	Local Importance (High Value)	Medium	No	Observed in wider area/no recorded at or near the proposed development.
Sand Martin	Local Importance (High Value)	Medium	Yes	Barrier and displacement effects.
Short-eared Owl	County Importance	Very High	Yes	Observed hunting/flight activity overlapped 500m buffer.
Skylark	Local Importance (High Value)	Medium	Yes	Recorded during surveys.
Snipe	County Importance	High	Yes	Observed across all seasons/feeding and breeding activity recorded/one occupied territory was recorded near the proposed development.
Sparrowhawk	Local Importance (High Value)	Low	Yes	Recorded during breeding and non-breeding seasons/hunting behaviour observed.
Spotted Flycatcher	Local Importance (High Value)	Medium	Yes	Observed in 2021 breeding season/may use hedgerow
Starling	Local Importance (High Value)	Medium	Yes	Potential for breeding and wintering birds to be affected by habitat loss and disturbance.
Stock Dove	County Importance	High	Yes	Present in the study area.

Swallow	Local Importance (High Value)	Medium	Yes	No breeding habitat present/Potential barrier and displacement effects.
Swift	County Importance	High	Yes	No breeding habitat present/Potential barrier and displacement effects.
Whooper Swan	County Importance	Very High	Yes	Recorded across multiple winter seasons/occasionally traversed the 500m buffer/wintering herds known to roost and graze in the surrounding region/use of fields near T3/Nocturnal flight calls recorded.
Willow Warbler	County Importance	Medium	Yes	Recorded during 2021 breeding season/Potential to use woodland habitats
Woodcock	Local Importance (High Value)	High	Yes	Recorded in agricultural areas/potential to use hedgerows.

10.7. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 10.4 below.

Table 10.4: Summary of Potential Effects (Ornithology)

Do Nothing

- It is assumed that the character of the bird community, including the KORs identified, will remain much as it is described in the baseline ornithological conditions.

Construction and Operational Phase Impacts

- Effects on Key Receptors during Construction and Operation are described in Sections 7.5.3 and 7.5.4 of the EIAR, respectively.
- Effects on non-target/passerine species are assessed in Section 7.5.1.1.1.
- Effects on each bird species identified as Target Species, are assessed in Section 7.5.3.2.2, in terms of Direct Habitat Loss/Alteration (Construction/Operational phases), Indirect Disturbance/Displacement (Construction/Operational phases) and Barrier Effect and Collision Risk (Operational Phase). These effects are defined according to Percival (2003) and EPA (2022).

Construction Phase

- For non-target/passerine species no potential significant effects are highlighted.
- For target species, Table 7.24 highlights potential construction effects on non-passerine target species.
- Of note is that potential significant effects, with reference to EPA, 2022, in the absence of mitigation, are highlighted for the following species:
  - **Kestrel (Indirect)** – Short-term significant effect relating to disturbance and displacement[21]
  - **Kingfisher (Indirect)** – Short-term significant effect relating to the impact of displacement (via indirect effects on feeding habitat)

[21] Only in the event that breeding kestrel become established with 100-200m prior to construction. Should the baseline remain the same the effect will be short-term not significant.

- **Snipe (Indirect)** – Short-term significant effect relating to the impact of **disturbance.**
- **Woodcock (Direct and Indirect)** – Short-term significant effect relating to the impact of disturbance.

Operational Phase

- Section 7.5.4 considers potential effects at operational phase and direct effects including collision risk. In relation to collision effects, no potential significant effects on any species is cited (direct effects).
- Indirect effects relate to disturbance and displacement, relating to the operation of the turbines, which include effective habitat loss through avoidance or disturbance due to factors such as perceived collision risk. Indirect effects also relate to the barrier effect. No potential significant effects on any species is cited.

Effects on Designated Areas

- In relation to European Sites, and where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly blocked through the use of avoidance, appropriate design and mitigation measures as set out within the Natura Impact Statement and its appendices. The measures ensure that the construction and operation of the proposed wind farm does not adversely affect the integrity of European sites. Therefore, it can be objectively concluded that the proposed development, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site. I refer the Coimisiún to Appendices 3 and 4 of this report where potential effects on European Sites are assessed.
- In relation to other Designated Sites (i.e. pNHAs and NHAs), those sites with ornithological interests are detailed in Table 7.2.3 of the EIAR, and potential effects on same are considered in 7.5.2.1 (Construction), 7.5.2.2 (Operation) and Decommissioning (7.5.2.3). No potential significant effects are identified.

Effects Associated with the Grid Connection Route (GCR) and Turbine Delivery Route (TDR)

- The EIAR states the proposed TDR and the habitats bordering the proposed GCR are of limited value for breeding birds and species of higher conservation concern. The limited loss of low growing hedges, one mature ash tree and areas of improved agricultural grassland will not result in significant effects for avifauna at construction phase, with no impacts predicted at operational phase (Sections 7.5.3.3 & 7.5.4.4 of the EIAR)

Decommissioning Impacts

- The decommissioning phase of the proposed windfarm poses similar risks to the construction phase (See above). There will be no additional habitat loss during the decommissioning phase. The magnitude and significance of disturbance are similar for each species as above for the construction phase and as detailed in Table 7-24 of the EIAR.

Cumulative Impacts

- Cumulative Impacts considered included relevant Plans, Forestry and Agricultural Practices, other developments and the following Wind Farms (either consented, under construction, operational or in planning) located within 25km were assessed; Ballivor, Cushaling, Cloncreen, Drehid, Dernacart, Moanvane, Mount Lucas, Yellow River and Clonarrow.
- No significant cumulative effects are predicted (Table 7-28)

10.8. Mitigation

Section 7.6. of the EIAR explains that effects on birds have been addressed through the design of the proposed development and the management of the development phases.

10.8.1. Mitigation by Design

The hard-standing areas have been kept to the minimum necessary, and site design and layout have avoided direct impacts on designated sites and sensitive habitats. All cabling is to be placed underground. Where hedgerow and treeline is to be removed, these areas of loss will be reinstated within the proposed site. 1km linear length of hedgerow is proposed, with a minimum of 0.76ha of additional potential enhancement and/or creation areas provided.

10.8.2. Mitigation during Construction, Operation and Decommissioning Phases

10.8.2.1. Construction Phase

At construction stage, measures include, but are not limited to, the following;

- A Project Ecologist (EcOW) will be employed.
- Vegetation clearance will take place outside of bird breeding season. Where clearance is required during this period, a suitably qualified ecologist will carry out pre-clearance surveys, with suitable mitigation measures implemented should nesting birds be present.
- A re-confirmatory ornithological survey will be undertaken in March or April prior to the commencement of construction to identify any new breeding territories or nesting activity, particularly for species such as snipe and woodcock. A 500m buffer will be applied around any confirmed snipe territories, and a 250m buffer will be maintained for woodcock. A re-confirmatory ornithological survey for wintering birds will also be undertaken during the winter months. In the event that grazing whooper swans are recorded within 600m of the site prior to construction, targeted monitoring will be undertaken to assess potential disturbance or displacement. Appropriate mitigation will be undertaken including the creation of a 600m

exclusion zone, if necessary until the birds have departed in the spring. Similar measures are proposed for lapwing and golden plover.

- Works in the vicinity of areas (as shown in EIAR, Fig 7.4) which would potentially be used by roosting hen harrier on a casual basis during winter will be avoided/minimised during the winter season. If works are required in these areas, the ECoW will undertake roost watches to check for hen harrier activity, and if required, working hours in the vicinity of these areas will be restricted to avoid night, dawn and late afternoon/dusk.

10.8.2.2. Operational Phase

During operational phase, measures include the use of appropriate turbine lighting. A post construction monitoring programme, relating to flight activity and collision monitoring, consistent with best practice guidance will be undertaken, as described in detail in Section 7.6.3.2 of the EIAR. Curtailment measures are proposed as a contingency for nocturnal migratory species, particularly whooper swan, in line with international best practice for high sensitivity species, as detailed in Section 7.6.3.3 of the EIAR. In summary, it is set out that if post-construction monitoring detects collision fatalities or increased migratory activity, a night-time curtailment regime will be implemented during peak migration periods (15th September to 15th December and 21st February to 15th April). It is set out in the EIAR that this approach represents a conservative and responsive mitigation strategy, consistent with international best practice for high-sensitivity species.

All monitoring results will be reviewed annually, and any necessary adjustments to the mitigation strategy will be agreed with the NPWS.

10.8.2.3. Decommissioning Phase

Measures during decommissioning are similar to those outlined for the construction phase.

10.9. Residual Effects

No significant residual effects on Key Ecological Receptors (KERs) with regard to direct habitat loss, disturbance/displacement or collision mortality are predicted (Refer

to EIAR, Table 7-29). For the majority of species, the residual effects range from Long-term imperceptible to slight reversible. Other residual effects predicted include the following:

- **Merlin/Woodcock** - Long-term moderate residual habitat loss effects.
- **Golden Plover & Lapwing** - Long-term slight to moderate residual barrier effects.
- **Kestrel** – Long-term Slight to Moderate residual disturbance/displacement and barrier effects.
- **Whooper Swan** – Long-term Not significant to Slight residual disturbance/displacement and barrier effects.
- **Snipe** - Long-term moderate residual disturbance/displacement effect.

10.10. The Assessment: Direct and Indirect Effects

I have examined, analysed and evaluated Chapter 7 of the EIAR, and all of the associated documentation and submissions on file in relation to Ornithology. I am satisfied that the assessment was based on sufficient evidence resulting from extensive bird surveys, as described above.

I have considered specifically the issues raised by the Planning Authority and Observers below.

Observers have raised their concerns in relation to the impact of the proposed development on bird species. (See Appendix 1 of this report for full details of submissions). I have considered each of these by issue below.

10.10.1. Adequacy of the EIAR/Ornithological Assessment

An observer has stated that the EIAR is inadequate and there is a lack of a robust Ornithological Assessment.

The applicant has stated that there is no identification of any specific issue relating to the assessment. More generally, and in relation to the overall impact on birds, the applicant response has stated that there will be no decline in the abundance of any species other than snipe, and this decline in snipe is within 500m of turbines, rather than an absolute decline.

Overall, I consider there is no specific assessment weakness raised in this submission, and I am satisfied that this chapter of the EIAR has been carried out with regard to

best practice methodologies and guidance. In addition, I have considered effects on Snipe below.

10.10.2. Bird Collision Data

A submission has stated that the use of bird collision data from 2003 is not acceptable (This is a reference to Percival, 2003). It is further stated wind turbined sizes have increased since then and that more up to date collision models are available.

In response, the applicant has stated that collision risk has been calculated using the current NatureScot model (Band/NatureScot, 2024), and not Percival (2003). It is further set out that best practice guidance has been utilised to determine collision rates.

I consider the applicant has utilised the most up to date best practice guidance Band/NatureScot, 2024 in order to inform the collision data, and I am satisfied current wind turbine sizes have been considered in the collision risk assessment.

10.10.3. Impacts on Specific Species

The Coimisiún will note that Section 7.2.7.2 'Avifauna Specific Assessment' of the EIAR sets out an explanation of Percival, 2003 and how it relates to the EPA, 2022 assessment, and notes that once completed, the Percival (2003) avifauna-specific assessment feeds into and informs the EPA (2022) assessment, which is the primary basis of the assessment within the EIAR.

10.10.3.1. Snipe

The EIAR states that this species was observed across all seasons, with feeding activity recorded and breeding activity recorded in the wider area. As noted above, the applicant has highlighted in the response to the submissions that this is the only species that will experience a decline in abundance and that this decline is limited to within 500m of turbines. Table 7-24 outlines potential direct effects (habitat loss/alteration – local scale) and indirect effects (disturbance/displacement – local scale) on snipe. It is noted therein that the primary habitats for this species occur on the bogs to the east and west of the proposed development. The potential impact of habitat loss, therefore, was concluded to be a long-term, Imperceptible effect.

In terms of disturbance/displacement, the EIAR highlights that snipe is known to be susceptible to disturbance, with evidence of snipe population density reducing during the construction of windfarms. As it was noted that snipe activity was recorded within the potential disturbance zone of the proposed windfarm (500m) and noting the suitability of the adjacent bogs for breeding snipe, there is potential for construction-related disturbance to breeding snipe, without mitigation in place. The potential impact therefore was concluded to be short-term significant effect, prior to mitigation.

No potential significant effects at operational stage is noted in the EIAR.

In terms of collision risk, it is stated in Table 7-25 of the EIAR that evidence of collision fatality is low. The EIAR notes that the local population of Snipe is estimated conservatively as 10 birds, based on survey observations. The predicted collision risk for snipe (assuming 98% avoidance rate) is 0.01 per year (0. 0.000% of national population, 0.005% county population and 0.1% local population). The potential impact is concluded to be a long-term, imperceptible effect. In terms of indirect effects (disturbance/displacement), it is noted within Table 7-26 of the EIAR that studies have shown that windfarms can have a significant impact upon Snipe within an area, with use of habitat within 400m of turbines less than expected.

However, reference is made to the low number of records of Snipe within the 500m buffer, in addition to the abundant displacement habitat in the locality and it is concluded therefore that the overall significance is considered to be a long-term moderate effect.

In terms of the barrier effect (an indirect effect), it is stated that recorded infrequent activity contains low level of flight activity within the 500m turbine buffer, and therefore the proposed windfarm is unlikely to act as a significant barrier to Snipe. The overall significance is considered to be a long-term Imperceptible effect. No significant cumulative effects are predicted.

In terms of mitigation, I note those general mitigation measures as described in Section 7.6 of the EIAR will apply to snipe, as well as to other species. Specifically in relation to snipe, I note that a re-confirmatory ornithological survey will be undertaken in March or April prior to the commencement of construction to identify any new

breeding territories or nesting activity, particularly for species such as snipe, with a 500m buffer being applied around confirmed snipe territories.

The residual effect is noted as being a Long-term Moderate residual disturbance/displacement effect for snipe. However, the EIAR notes that the realised effect is likely to be lower (i.e. Slight to Moderate) due to the abundance of suitable alternative habitat for breeding snipe within Esker Bog and Esker Bog Rathlumber. It is further noted in the EIAR that habituation over the lifetime of the proposed Windfarm is likely to reduce the magnitude of all of the residual operational effects identified (for all species).

I am satisfied that potential effects on snipe have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR.

10.10.3.2. **Kestrel**

Concern was raised in observer submissions in relation to impacts on Kestrel. In response, the applicant has stated that Kestrel is assessed in detail in the EIAR with long-term slight to moderate residual disturbance/displacement and barrier effects identified.

No potentially significant effects are highlighted at construction stage. However, while no nesting was observed in the study area, the EIAR highlights potential significant indirect effects, relating to disturbance/displacement. The applicant has stated that should a kestrel nest be established within 100-200m of the proposed windfarm site prior to the commencement of construction activities, and with reference to EPA (2022) these effects are described as Short-term Significant, in the absence of mitigation.

At operational stage, and with specific reference to the risk of collision, the predicted magnitude of collision effects for Kestrel are concluded to be negligible at national and county scale, and Low at the local scale, and no potential significant effects are predicted. A slight to moderate effect is predicted, at operational phase, in relation to disturbance/displacement, based on the majority of kestrel flight activity away from turbine locations, and published studies in relation to this species. Mitigation measures include re-confirmatory surveys, with a 500m buffer applied if nesting birds are present. Residual effects on Kestrel are as follows:

- Construction – Short-term not significant (disturbance/displacement)
- Operation – Long-term slight to Moderate (Disturbance/Displacement & Barrier Effect)

I am satisfied that potential effects on Kestrel have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR.

10.10.3.3. **Greenland White Fronted Geese/Whooper Swans/Mute Swans**

I note observers have cited concerns in relation to effects on swan (Whooper Swan and Mute Swan), and an observation has specifically cited potential effects on Greenland White Fronted Geese and the impact of the proposed development, and other wind farm developments, on migration paths for the birds from Iceland to Wexford Slobs.

In response the applicant has stated that, in relation to Whooper Swans, and other species associated with the River Brosna corridor, extensive vantage point surveys and flight activity monitoring was undertaken and that a Collision Risk Model (CRM) was prepared in accordance with current guidance. The assessment concludes that predicted collision risk is low and not significant.

In relation to the issue of migratory corridors, it is stated that no key migratory corridors intersect the turbine layout.

10.10.3.4. **Greenland White Fronted Goose**

In relation to the Greenland White Fronted Geese, surveys did not record any observations of Greenland White Fronted Goose traversing the flight activity study area. The applicant is of the view, that while data submitted by the observer indicates that the species migrates through the wider region, it is stated that the same data shows the main migration route of the Greenland White-fronted Goose is located further west/south-west of the proposed development.

In relation to the 'Barrier' effect presented by other windfarms, as cited in the submission from Colm Quinn, the applicant states that there are significant gaps between other windfarms, and that furthermore, the EIAR does not identify the potential for cumulative barrier effects.

In relation to the specific issue of wintering sites used by geese, the applicant states that the site highlighted by the observer, in Co. Westmeath, lies to the north-west of the proposed development, and that proposed development would not be traversed by geese wintering on these sites.

Having regard to the considerations above, I am satisfied that potential effects on Greenland White Fronted Goose have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR.

10.10.3.5. **Whooper Swan**

Specifically in relation to Whooper Swan, I note that, as well as the VP surveys which are as described in Section 7.2.6.3, additional specific Whooper Swan Migration Surveys were carried out in the Winter 2023/24, and in Autumn 2024. In addition, nocturnal migration audio surveys were carried out in Spring and Autumn 2024.

In relation to sites of importance for Whooper Swan, the presence of wintering swan populations of international importance located c. 17km north of the site is noted, which is associated with the River Boyne and River Blackwater SAC. The Whooper Swan is not a qualifying interest of the River Boyne and River Blackwater SAC. However, they are noted as being present in the NPWS site synopsis. Sites of local importance for Whooper Swan include the Raheen pNHA, located c. 13.5km SW from the site.

In relation to survey observations, and conclusions from same, it is stated in Table 7.21 of the EIAR that Whooper Swans were recorded across multiple winter seasons. This species occasionally traversed the 500m buffer, and wintering herds are known to roost and graze in the surrounding region. It is also stated within the EIAR that Whooper Swan migrates through the wider area in which the proposed site is located and as such may traverse the proposed development at times. No Whooper Swan roosting sites were observed during the surveys. Occasional use of Esker Bog (located c. 28m west of proposed peat deposition area)) for day roosting and grazing were observed, but no evidence of night roosting, although there is potential for some nearby sites to have suitability for night roosting.

In terms of potential effects on Whooper Swan no potentially significant effects at either construction stage or operational phase were identified. At construction stage, a short-term slight to moderate disturbance/displacement effect was identified for whooper swan on a precautionary basis, with a loss of suitable habitat resulting in a potential short-term slight effect, in the absence of mitigation.

In addition, considering the potential for effects on whooper swan at the proposed development, and potential for swans to frequent both the proposed development and Raheen Lough pNHA, there is a potential for a Short-term Slight to Moderate effect on Raheen Lough pNHA in terms of whooper swan, prior to mitigation.

In relation impacts at operational stage, specifically collision risks, Table 7.25 sets out that the predicted collision risk for whooper swan (assuming 99.5% avoidance rate) is 0.01 per year (0.000% of national population, 0.002% county population and 0.029% local population) and the resultant potential effect is concluded as being long-term and not significant.

Specifically in relation to the barrier effect, an issue raised by an observer, the EIAR concludes that the overall effect is long-term not significant to slight.

No other potential significant effects are highlighted. In terms of cumulative effects, the EIAR identifies the potential for cumulative long-term moderate effects at County scale to whooper swans migrating through the region at night during spring and autumn prior to mitigation.

Mitigation in relation to Whooper Swan includes a re-confirmatory ornithological survey for wintering birds to be undertaken during the winter months. If grazing whooper swans are recorded within 600m of the proposed site prior to construction, targeted monitoring will be undertaken to assess potential disturbance or displacement. If significant disturbance is observed, or if regular use of the area by wintering swans is confirmed, a 600m exclusion zone will be implemented until the birds have departed in spring. At operational stage, activity and collision monitoring will be carried out as described in Section 10.5.2.2 above, with observations focusing on flight height, direction, and avoidance behaviour in proximity to turbines. Specifically in relation to Whooper Swan, contingency curtailment measures are proposed as described in Section 10.5.2.2 above. I note that residual effects in relation to Whooper Swan are

as described in Table 7.29 of the EIAR i.e. Long-term Not significant to Slight residual disturbance/displacement and barrier effects.

Having regard to the considerations above, I am satisfied that potential effects on Whooper Swan have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR. I am satisfied therefore that no significant residual impact on same will result.

10.10.3.6. **Mute Swan**

In relation to Mute Swan, as set out in Table 7-21 of the EIAR, this species was recorded in the flight activity survey study area during the 2021 breeding season and the 2022/23 non-breeding season. Mute swans were occasionally seen flying over the study area but were not observed using the site although there were indications of occasional use of improved agricultural grassland (GA1) in the study area. The overall habitat survey study area is c. 120.39 ha. The proposed permanent loss of improved agricultural grassland is limited to c. 4.74 ha, which equates to c. 1.46% of the total lands within the biodiversity study area.

Direct and indirect potential impacts at construction stage are considered short term, not significant, and short term imperceptible, respectively.

At operational stage, and specifically in relation to collisions, the predicted number of collisions per year (assuming a 99.5% avoidance rate) is 0.00 per year, with the potential significance of the effect being long-term, imperceptible.

Indirect effect due to disturbance and the barrier effect are both concluded to be long term imperceptible. No potentially significant cumulative effects on Mute Swans are noted in the EIAR. Residual effects on same are concluded to be long-term imperceptible, with mitigation in place, which include those mitigation measures as cited above, including, but not limited to, the implementation of a buffer if required at construction stage, and operational phase collision monitoring and activity surveys.

Having regard to the considerations above, I am satisfied that potential effects on Mute Swan have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR. I am satisfied

therefore that no significant residual impact on same will result and that the residual effects on same will be as described in the EIAR i.e. imperceptible.

10.10.3.7. **Buzzard**

The EIAR notes Buzzard is a green listed species of low conservation concern due to its ongoing expansion in population size and range (Refer to EIAR Table 7-25). It is also noted that this species was recorded across all seasons over the two-year survey period, and Table 7-24 notes that the site is used frequently by buzzards, primarily for foraging and commuting.

It is also highlighted that the study area provides suitable foraging and breeding habitat (woodland) within the site boundary. Indications of breeding and hunting behaviour were also observed. The loss of woodland habitat combined will be c. 20.15ha (11.25% of total land within the biodiversity study area), with the loss of combined linear woodland habitat being 335m or 1.65% of total. It is noted in the EIAR that not all of the woodland habitat present on site would provide suitable nesting opportunities for buzzard. At construction stage, the EIAR concludes that the loss of habitat will result in a long term not significant effect, with effects from disturbance and displacement, being short-term and imperceptible.

With reference to potential operational effects, Table 7-25 of the EIAR states that a local population of 15 no. buzzards within a 5X5km square area overlapping the proposed windfarm is estimated based on survey observations.

The predicted number of collisions per year (assuming 98% avoidance rate) is 0.5 per year (0.017% of national population, 0.7% county population and 3.33% local population), and in the absence of mitigation, the proposed impact of the collision risk will be a long-term, imperceptible effect.

In relation to indirect disturbance/displacement effects and barrier effects, these were concluded to be long-term Imperceptible. No significant cumulative effects on Buzzard were noted in the EIAR.

Mitigation measures are as the general measures described in Section 10.5 above, noting that if nesting birds are present, mitigation including the implementation of a 200m buffer zone is required.

Having regard to the considerations above, I am satisfied that potential effects on Buzzard have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR. I am satisfied therefore that no significant residual impact on same will result and that the residual effects on same will be as described in the EIAR i.e. imperceptible.

10.10.3.8. **Peregrine**

Table 7-21 notes that Peregrine was recorded in the flight activity survey study area during the breeding season, with hunting and landing on peat areas also observed. Table 7-24 states that there is no suitable breeding habitat for this species in the study area, although the presence of a breeding pair at an artificial nesting structure at Edenderry power plant c. 4.3km south-east of the site is noted.

At construction stage, direct effects resulting from habitat loss will be short-term, not significant. Effects relating to disturbance/displacement at a local scale are predicted to be short-term and not significant, noting that no breeding activities were observed, and there are no suitable nesting habitats at the proposed site. Therefore, it is unlikely for breeding peregrine to be affected by noise and/or visual disturbance. At operational stage, the predicted number of collisions per year (assuming 98% avoidance rate) is 0.01 per year (0.001% of national population, 0.042% county population and 0.5% local population). The proposed impact of collision risk will be a long-term, not significant effect.

Potential Indirect impacts resulting from displacement/barrier effects were concluded to be long-term and not significant. No significant potential cumulative effects on peregrine are predicted in the EIAR.

Mitigation measures related to peregrine include those cited in Section 10.5 above, although specifically in relation to peregrine, should nesting birds be found a 500m buffer will be put in place at construction stage. Residual effects on Peregrine were concluded to be long-term and not significant.

Having regard to the considerations above, I am satisfied that potential effects on Peregrine have been adequately assessed in the EIAR and I have no evidence before me that would serve to undermine those conclusions as set out in the EIARI am

satisfied therefore that no significant residual impact on same will result and that the residual effects on same will be as described in the EIAR i.e. not significant.

10.10.3.9. **Owl (Barn Owl/Long Eared Owl/Short-Eared Owl)**

Short-eared owl was observed hunting to the east of the proposed site during winter 2023/34. Some flight activity overlapped the 500m buffer near T5.

Potential direct and indirect effects on Owls at construction stage were concluded to be short-term, not significant.

At operational stage, effects due to disturbance and displacement, and due to the barrier effect, were concluded to be long-term not significant, having regard to low population/activity levels indicated by surveys, and the limited potential for disturbance or displacement effects, with reference to published studies.

Mitigation in relation to short eared owl is as described in the general mitigation measures referred to above.

No reference to Barn Owls or Long Eared Owl is made with reference to the survey data, although reference to these species is made when considering potential cumulative impacts in conjunction with other wind farms, although no significant cumulative effects on Owls is predicted.

The applicant response to submissions states that Long-Eared Owl was not detected during survey but was noted as being present within the surrounding hinterland. Reference to Owls in the EIAR is made in the context of the Cushaling Wind Farm.

As such, and having regard to the considerations above, I am satisfied that the EIAR has adequately considered potential impacts on owl, and I am satisfied that no significant residual impact on same will result.

10.10.3.10. **Kingfisher**

I note that no specific concerns were raised by observers, nor by any other parties, in relation to effects on Kingfisher. However, as noted above, the EIAR highlights potential short-term significant effect relating to disturbance and displacement, in the absence of mitigation. With mitigation in place, residual effects are long-term and imperceptible, as described in Table 7.29 of the EIAR.

In relation to Kingfisher, I note that the nearest SPA to the site is the River Boyne and River Blackwater SPA, located c. 17km from the site and is designated for Kingfisher. The EIAR further notes that the Raheen pNHA, located c. 13.5km to the southwest, is of local importance for a number of species including but not limited to Kingfisher.

In relation to the survey data, Table 7.21 notes that one incidental record of Kingfisher during hinterland surveys in Winter 2021-22, which occurred on 5th December 2021 to the north of TR18, confirms that this species is present in the region, and that there is potential for indirect effects via changes in water quality.

Table 7-24 states the lands within the site boundary are not utilised by kingfisher and do not contain suitable habitat for this species. However, a potential impact related to displacement (via indirect effects on feeding habitats downstream) is highlighted in the EIAR and this will be a short-term significant effect, prior to mitigation.

At operational stage, I note no collision data in relation to kingfisher is presented. However, I note that Section 7.5.4.1.1 of the EIAR outlines that a total of 17 no. species were selected for collision risk modelling, being selected because they were recorded within the 500m buffer of the proposed turbines (the flight activity survey area) at rotor swept heights, and are of conservation concern (i.e. red or amber-listed species).and/or are listed on Annex I of the Birds Directive or green-listed and sensitive to wind farm developments (i.e., Buzzard).For all the other species recorded but not included for collision risk modelling, the effective collision risk can be assumed to be zero. As such and noting that there is no record of Kingfisher being recorded, the effect collision risk is assumed at zero.

Other potential operational indirect effects relate to disturbance and the barrier effect. Effects for disturbance are predicted as long-term and Imperceptible. In relation to the barrier effect, the EIAR notes that such effects on either migration or regular flights of kingfisher has not been shown to date, in a European context, and it is further stated that Kingfisher fly low when commuting and mainly follow watercourse, making it unlikely that turbines would represent a barrier to movement.

No significant cumulative effects on Kingfisher are predicted.

In relation to mitigation, those measures outlined in Section 7.6 of the EIAR are of relevance, and specifically in relation to Kingfisher, water protection measures are also

of relevance, as described in Chapter 6 ‘Biodiversity ‘and Chapter 8 ‘Hydrology and Hydrogeology’ of the EIAR, and I have considered these measures in Sections 9 and 11 of this report, respectively. Residual impacts on Kingfisher are concluded to be long-term imperceptible, following implementation of mitigation.

Having regard to the considerations above, I am satisfied that the EIAR has adequately considered potential impacts on kingfisher, and I am satisfied that no significant residual impact on same will result.

10.10.3.11. **Woodcock**

No specific concerns were raised by observers, nor by any other parties, in relation to effects on Woodcock. However, as noted in Section 10.4 above, the EIAR highlights potential short-term significant effects relating to disturbance and displacement, in the absence of mitigation.

The EIAR notes that Woodcock was recorded during breeding wader surveys, with breeding/territorial behaviour noted in open woodland near T4 and near the Grand Canal. It is noted that c. 5ha of open mixed broadleaved/conifer woodland near T4 where 4 no. records of woodcock were made, will be lost within the proposed peat deposition area and T4 hard standing. It is stated that this would equate to c. 58% of potentially suitable woodcock breeding habitat.

The EIAR states that surveys indicate a low density of breeding and wintering woodcock occur within and surrounding the proposed site.

At construction stage, there is potential for breeding woodcock to be affected by noise and/or visual disturbance prior to mitigation. In relation to loss of habitat, it is set out that, given the abundance of suitable displacement habitat in the locality and the wider landscape, the potential impact of habitat loss will be a long-term, moderate effect. The potential impact of disturbance will be a short-term, significant effect, prior to mitigation.

At operational stage, the EIAR highlights the potential for displacement arising from habitat alteration (turbine felling buffers) and from disturbance caused by operational turbines, as well as occasional human presence. The EIAR notes that, with reference to published studies on woodcock, the potential for species to nest within 250m of

proposed T4 location must be considered, and the potential for impacts on the audibility of roding calls must also be considered, due to noise from operational turbines.

However, the magnitude of the effect is reduced due to the abundance of displacement habitat in the local area. In addition, the EIAR notes that the disturbance and displacement of breeding birds at construction stage are of higher concern than operational disturbance/displacement, and a low magnitude of effect is predicted. In relation to disturbance and displacement therefore, the significance of the effect is concluded to be long-term, not significant.

Significant barrier effects are not expected, with the significance of same concluded to be imperceptible.

No significant cumulative effects are predicted within the EIAR.

Mitigation measures are as set out in Section 7.6 of the EIAR and are summarised above. Specifically in relation to woodcock, if nests are identified, a 250m buffer zone will be put in place. A re-confirmatory survey will also be undertaken in March or April prior to commencement of construction to identify any new breeding territories, with works in those areas to be delayed until the breeding season has concluded or until fledging has been confirmed through monitoring and a 250m buffer will be maintained for confirmed woodcock territories.

In terms of monitoring, breeding bird surveys and dedicated breeding wader and woodcock surveys will be undertaken post construction during April to June in each monitoring year, with adjustments to the mitigation strategy made with agreement with the NPWS

Residual effects were concluded to be long-term moderate (relating to habitat loss), at construction phase, based solely on assessment of habitat loss. The realised effect is likely to be lower (i.e. slight to moderate), taking into account the abundance of suitable displacement habitat in the local area, and the fact that assessment of habitat loss is based on the total habitat resource within the land ownership boundary rather than all suitable habitat in the locality.

Having regard to the above, I am satisfied that the EIAR has adequately considered potential impacts on woodcock and I am satisfied that no significant residual impact

on same will result. The potential short-term significant effects relating to on same, relating to noise and disturbance at construction stage, can be adequately mitigated by measures as described in the EIAR, and as summarised above, including the imposition of a 250m buffer zone and a confirmatory survey to be undertaken in March or April prior to commencement of construction. It is of note that a relatively high percentage of potentially suitable woodcock habitat would be lost close to proposed T4, i.e. 58% of potentially suitable woodcock breeding habitat within the study area, and as such the overall residual effect on Woodcock is concluded to be long-term moderate. I concur with this conclusion. However, as noted within the EIAR, there is also abundant suitable habitat within the wider area, and as such the availability of this habitat will reduce the magnitude of the effect on woodcock in the wider area and I am satisfied that the loss of habitat will not result in significant effect on woodcock.

10.10.3.12. **Hen Harrier**

No specific concerns were raised by observers, nor by any other parties, in relation to effects on Hen Harrier, and the EIAR does not highlight any potential significant effects on same, either at construction or operational stages. At operational stage, the collision modelling indicates that the predicted number of collisions is 0.00 per year, and therefore the collision risk was concluded to be '*not significant'*.

However, of note is that there is a loss of 58% of potentially suitable roosting habitat within the study area, in an area close to T4, where 5ha of the open/scrubby mixed broadleaved conifer woodland will be lost within the peat deposition area and T4 hard standing. While there is no suitable hen harrier breeding habitat within the study area, unconfirmed hen harrier roosting was recorded on a single occasion in December 2023, with identification inconclusive due to low light. Notwithstanding, this was assessed as a record of roosting hen harrier on a precautionary basis. In terms of potential direct effects on hen harrier, the EIAR notes the isolated/casual use of this area for roosting observed, and the abundance of suitable displacement habitat in the locality and wider landscape, and the potential impact of habitat loss was concluded to be long-term, slight to moderate. Given that no specific replacement habitat is proposed, the residual effect on same, as a result of habitat loss, was concluded to be long-term slight to moderate (as per Table 7.29 of the EIAR). In terms of mitigation as

relates to potential disturbance/displacement effects, Section 7.6 of the EIAR sets out that mitigation will include confirmatory surveys prior to construction will be carried out. Specifically in relation to hen harrier, the EIAR sets out that, where possible, works in the vicinity of areas which could potentially be used by roosting hen harrier on a casual basis during winter will avoided/minimised during the winter season. If works are required in these areas during winter, the ECoW will undertake roost watches to check for hen harrier activity and if required, working hours in the vicinity of these areas shall be restricted to avoid night, dawn and late afternoon/dusk. I note that, within mitigation in place, indirect residual effects on hen harrier are concluded to be short-term and not significant.

In relation to the conclusions of the EIAR, in relation to hen harrier, I concur with same, and I am satisfied that no significant effects will result on same, either at construction or operational stage. While I note the relatively high loss of potential roosting habitat , some 58% of said habitat within the site area, I also note that the isolated occurrence of potential roosting hen harrier within the site, and the abundance of suitable displacement habitat within the wider area, as cited in the EIAR.

10.10.3.13. **Sea Eagle**

I note an observer submission which states the potential for sea eagles to be killed by wind turbines. I note that no observations of sea eagle were made, with reference to the survey data contained in the EIAR, and, as such, I am satisfied that the proposed development will not impact on this species.

10.11. **Conclusion: Direct and Indirect Effects (Ornithology)**

I am satisfied the proposed development will not result in any significant effects on any of the identified KERs or on receptors of International, National or County Importance. I am satisfied that if the proposed wind farm is constructed, operated and decommissioned in accordance with the design and best practice mitigation measures that are described within the application documentation, that no likely significant individual or cumulative impacts on the identified KERs are predicted.

I have considered all of the written submissions made in relation to Ornithology and the relevant contents of the file including the EIAR. I am satisfied that any potential

impacts would be avoided, managed and mitigated by the measures which form part of the proposed development, the bird monitoring programme and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in relation to ornithology.

11.0 Hydrology and Hydrogeology

11.1. Issues Raised

11.1.1. Planning Authority

The Planning Authority (PA) are of the view that an assessment of potential cumulative effects associated with the project and other developments has not been completed as part of the WFD Compliance Assessment. I note the PA's Environment and Water Section are satisfied with the findings of the assessment provided by the applicant and have recommended conditions.

11.1.2. Prescribed Bodies

Uisce Eireann have not raised any objections to the proposed development and have recommended conditions to ensure the adequate provision and protection of water and wastewater facilities.

11.1.3. Observers

Observers have raised concern in relation to potential impact on surface water and groundwater quality. Impact on drinking water is raised as concern. Specifically, concerns are raised in relation to the impacts on the Doden River, which flows into the River Nore and River Barrow SAC, and the impacts on spawning habitat for fish. Concerns also relate to potential sedimentation, water run-off and vibration impacts on spawning habitat. Indirect impacts on forestry is highlighted due to changes to drainage patterns.

Flooding is raised as a concern with subsequent contamination of ground water and impact on private water supply schemes. It is stated that flood risk will be increased to lands to the east as a result of the change in contours.

In relation to groundwater, it is stated that baseline water quality and yields should be undertaken, and there is no information to show that this has been done. It is also stated that a detailed hydrological assessment should be carried out, and that furthermore the measures cited to protect groundwater are inadequate. It is stated that the applicants have failed to identify a fault traversing the site.

11.2. **Context**

EIAR Chapter 8 including Appendix 8-1 (Peat Probing and Soakaway Results), Appendix 8-2 (Flood Risk Assessment) and Appendix 8-3 (Water Framework Directive Assessment) has assessed the potential impacts on hydrology and hydrogeology associated with the proposed development. The EIAR provides a statement of authority and describes the legislation and guidance, the methodology used, the receiving environment, the characteristics of the proposed development and the likely significant effects and associated mitigation measures proposed.

A site walkover survey to establish the environmental site setting and baseline conditions at the site, was undertaken in October 2024. Ground investigations, in the form of peat probing and soakaway testing, were completed for portions of the proposed development in August 2024 and September 2024. The ground investigations in the northern section of the site included the excavation of eight soakaway pits to a maximum depth of 2.1m below ground level (mbGL) and logging of soils encountered.

EIAR Chapter 3 '*Civil Engineering'* sets out a comprehensive description of activities that relate to the proposed development and, in relation to aspects of the proposed development of relevance to Hydrology and Hydrogeology, these are summarised in Section 8.5 of the EIAR. During the construction stage, the following works are proposed;

- Felling of coniferous forestry plantation as necessary to facilitate construction works.
- Construction of site entrances and any sections of internal access tracks necessary to facilitate access to the temporary construction compound.
- Construction of the temporary construction compound and storage area.
- Establishment of the temporary storage of stockpiled overburden and surplus excavated materials topsoil and subsoil within the temporary material storage areas. Establishment of the spoil deposition area at T4.

- Earthworks and drainage infrastructure associated with construction of new and upgraded internal access tracks, crane hardstand, turbine foundations and substation compound.
- Construction of upgraded and new watercourse crossings for construction of internal access tracks and underground cables.
- Excavation of turbine bases and associated turbine hardstand areas.
- Installation of sections of underground cabling between turbines.
- Installation of sections of underground cabling to selected connection point option.
- Construction of the substation compound.
- Turbine delivery works, installation and commissioning.
- Landscaping and biodiversity enhancement.

11.2.1. **Water Course Crossings**

In terms of water course crossings, a total of 4 no. watercourse crossings on EPA registered streams are proposed. The water crossings will consist of 1 no. clear span bridge and 3 no. culverts. There are also c. 13 no. field drains to be crossed using either bottomless culverts or box culverts. The proposed grid connection, which is c. 8km long on local roads, crosses the Leitrim Stream, an EPA registered watercourse, as well as 18 no. land drains. The crossing of the Leitrim Stream, located on the L-5010 between the northern and southern site entrances of the proposed windfarm, will be constructed using Horizontal Directional Drilling (HDD).

11.2.2. **Tree Felling**

Felling of commercial conifer forestry will be required to accommodate the construction of 4 no. turbines. Felling of the forestry is proposed around turbines both to facilitate construction and as a mitigation measure for bats (see Section 9 'Biodiversity' of this report).

11.2.3. **Site Water Management**

At construction stage, and as set out in Chapter 3.11 of the EIAR, and within the CEMP, a site water management system will be constructed on site to attenuate runoff, guard against soil erosion and protect downstream water quality. The design is to maintain the existing flow regime and water quality, with clean water from upstream diverted around work areas to avoid contamination, with dirty water collected and treated separately. There will be no direct outfalls to watercourses, instead each clean water drain will be terminated in a discharge channel running parallel to ground

contours that will function as a weir to disperse the flow over a wider area of vegetation. Soiled water from the works areas will be collected in a separate drainage system and treated by removing the suspended solids before overland dispersal, with the treatment consisting of a series of settlement ponds at designated locations throughout the site. Water quality monitoring is proposed, as detailed in Section 3.11.4.6 of the report, with monitoring taking place preconstruction, during the construction period and post construction periods.

At operational stage, surface water run-off will be treated and attenuated in the same settlement ponds as construction stage, although same will be partly filled with stone to negate long-term safety risks, before being discharged via the outfall weirs. There will be no direct discharges to watercourses.

11.2.4. **Waste**

Operational waste is expected to be minimal and may include lubricating oils, cooling fluids, and packaging from spare parts. Hazardous materials will be handled and disposed of by approved contractors in accordance with the Waste Management (Hazardous Waste) Regulations, 1998.

11.3. **Baseline**

The bedrock aquifer beneath the Proposed Wind Farm is within the Rhode Groundwater Body (GWB). A small area of the northeastern portion of the proposed GCR and TDR works is within the Trim GWB. The most southerly 1km of the proposed GCR and 2 no. nodes of the proposed TDR are within the Cushina GWB. The Ballinla (Geashill-By) TDR node is underlain by the Geashill GWB (EU Code: IE_SH_G_103). The Ballina GWB covers c. 280 km^2.

The Geological Survey Ireland (GSI) has assigned a groundwater vulnerability rating of ‘Moderate’ (M) for the majority of groundwater beneath the site. The majority of the proposed GCR are also assigned a groundwater vulnerability rating of ‘Moderate’ (M) with the exception of the lands in the vicinity of Ballykilleen Hill which exhibits rock at or near the surface.

In relation to catchment and surface water features, the proposed wind farm is within the Barrow WEF Catchment, with a small section of the northern portion of the subject

site with the Boyne WFD Catchment. The site lies within the Figile_SC_020 sub-catchment, with the exception of a small section in the northern portion of the site which is within the Figile_SC_10 sub-catchment.

The Barrow catchment includes the area drained by the River Barrow upstream of the River Nore confluence and all streams entering tidal water between the Barrow railway bridge at Great Island and Ringwood, Co. Kilkenny, draining a total area of c. 3,025km².

The Boyne Catchment includes the area drained by the River Boyne and by all streams entering tidal water between The Haven and Mornington Point, Co. Meath, draining a total area of c. 2,694km².

The Boyne_020 river sub basin begins within the proposed development site and drains in a northeasterly direction for c. 9km before discharging into the Boyne_030 with the Boyne eventually discharging to the Boyne Estuary. A section of the Boyne_020 drains the northeast most section of the proposed GCR and is referred to by the EPA as the Kinnafad Stream. The Leitrim Stream begins within the site and flows in a southerly direction for c. 4.95km before discharging into the Figile_040, further discharging into the Barrow_090 c. 26.2km downstream of the site with eventual discharge to the Barrow Suir Nore Estuary.

A number of open drainage ditches are present on the site. These drainage ditches are connected to the Leitrim Stream and as such the entirety of the proposed site is considered to drain to the Barrow Catchment. There is no identified direct hydrological connection between the proposed development site and the Grand Canal, located to the north of the site.

Of note is EIAR, Section 8.3.6.4 '*Aquatic Ecology and Fish Report'* (which is included in EIAR Volume III, Appendix 6-1) which states the watercourses at the proposed wind farms are highly modified and degraded, consisting mainly of drainage ditches, small streams and deepened rivers. It states the water quality issues stem from agriculture, forestry and past peat harvesting and that high sediment loads negatively impact water quality and aquatic life.

11.4. Flood Risk Assessment (FRA)

A standalone FRA is included in EIAR Volume III (Appendix 8-2). Noting that the site has potential for flooding, flood modelling was carried out which indicated that Turbine 1 and the proposed substation are located within Flood Zone B. Flood Zone B has a moderate probability of flooding for river flooding (between 1 in 100 and 1 in 1000). The remaining 6 no. turbines are located in Flood Zone C, which has a low probability of flooding.

Mitigation measures include sufficient freeboard for the proposed substation and for the 7 no. turbines. The design flood level for the proposed substation is the 0.1%AEP Mid-Range Future Scenario (MRFS) flood level plus 500mm freeboard. For the proposed turbines, the design flood level for the proposed seven turbines is the 1%AEP MRFS flood level plus 500mm freeboard. Noting that the substation is classified as '*essential infrastructure'*, it is considered a 'highly vulnerable' development, as per the Flood Risk Management Guidelines.

As it falls within Flood Zone B, a Justification Test is required. The Justification Test is provided in Section 6 of the FRA, and I concur with the justifications and conclusions therein, i.e. that Criterion 1 and Criterion 2 of the Justification Test have been satisfied.

The FRA has shown that there will be no significant residual risks to the proposed development or the local area.

11.5. Water Framework Directive (WFD)

A WFD Assessment is included in Appendix 8-3 of the EIAR, which assesses Surface Water Bodies (SWB's) and Ground Water Bodies (GWBs) hydraulically linked to the site. The WFD Assessment states that the construction phase will be carried out in accordance with the Construction and Environmental Management Plan (CEMP), with the site drainage system designed to maintain the existing flow regime and water quality. Clean water from upstream is diverted around work areas to prevent contamination, while dirty water is collected and treated separately. At operational stage, surface water will be managed in accordance with SuDS to treat and attenuate water prior to discharge off-site, as detailed in Chapter 3 of the EIAR. There will be no direct outfalls to watercourses. Instead each clean water drain will be terminated

in a discharge channel running parallel to the ground contours that will function as a weir to disperse the flow over a wider area of vegetation.

Table 5.1 of the WFD Assessment comprises a '*Surface Waterbodies Screening Assessment'* which determines which surface waterbodies are potentially at risk from the proposed development, and a total of 9 no. waterbodies are screened-in for further assessment. A number of waterbodies screened-in are shown to have *'Moderate'* or '*Poor*' WFD Status (2016 – 2021) and are shown to be '*At Risk'*.

Table 5.2 of the WFD assessment provides a '*Groundwater Bodies Screening Assessment'* with 4 no. Waterbodies screened in for further assessment. All 4 no. waterbodies are shown to have 'Good' WFD status (2016-2021). Potential effects from the construction stage and the operational stage are discussed, with potential effects on groundwater and surface water considered. The WFD assessment sets out design avoidance and mitigation measures, including, but not limited to good practice measures at construction stage and measures relating to in-stream works.

Overall, the assessment concludes that *'…There will be no impact to the existing WFD status of waterbodies associated with the Proposed Development as a result of the Proposed Development taking account of embedded design avoidance and mitigation measures'.*

11.6. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 11.1 as follows;

Table 11.1: Summary of Potential Effects (Hydrology and Hydrogeology)
Do Nothing
• I note Chapter 8 '*Hydrology and Hydrogeology'* of the EIAR does not set out a 'Do-Nothing' scenario. However, as set out in other Chapters of the EIAR, if the wind farm were not to proceed, forestry and agricultural activities will continue at the site. Potential impacts on surface water and groundwater, related to the wind farm would not occur. Impacts related to forestry and agriculture would continue to occur. • Also as noted in other Chapters of the EIAR, if the windfarm were not to proceed, the opportunity to generate renewable energy and electrical supply to the national grid would be lost, as would the opportunity to further contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions.
Construction Impacts
• **Alteration of Local Hydrological/ Hydrogeological Flow** – Potential impacts due to watercourse crossings, land re-profiling and drainage modifications. Potential for 'imperceptible' to 'imperceptible to slight' negative effects.

- **Increased Suspended Solids/Disturbance of Stream Bed** - Impacts on the Leitrim Stream as a result of in-stream works. Likely, moderate, negative effects.
- **Disturbance of Stream Banks and Beds** – During clear span bridge construction – Unlikely, negative, moderate effects on the Leitrim Stream.
- **Contaminated Surface Water runoff** - Likely, negative, moderate effects on Leitrim Stream, Kinnafad Stream, Figile River and downstream waterbodies (from the wind farm construction).
- **Accidental Spills and Leaks** – Unlikely, negative, Significant effects on Leitrim Stream, Kinnafad Stream, Figile River and downstream waterbodies.
- **Contamination of GWBs and Surface Water (Cementitious Material)** – Unlikely, negative, Significant effects on the underlying groundwater environment.
- **Contamination of GWBs and Surface Water (Wastewater**) - Imperceptible, neutral, effects.
- **Contamination of Surface Water (Flooding)** – Unlikely, Moderate to Significant Effects on hydrological receptors.
- **Contamination of Potable Waters (Groundwater/Surface Water sources)** – Unlikely, Imperceptible to Slight effects.

Operational Impacts

- **Alteration of Hydrological/Hydrogeological Flow Regime** - Leitrim Stream, Kinnafad Stream, Figile River, and downstream waterbodies/underlying groundwater – Imperceptible effects on same.
- **Contaminated Surface Water runoff** - unlikely, negative, imperceptible effects on Leitrim Stream, its tributaries and downstream waterbodies
- **Accidental Spills and Leaks** –Likely, negative, slight effects on Leitrim Stream, and downstream waterbodies.
- **Contamination of GWBs and Surface Water (Wastewater)** - Imperceptible, effects.
- **Contamination of Surface Water (Flooding)** – Unlikely, Moderate to Significant Effects on hydrological receptors.
- **Flood Risk** – Likely, negative imperceptible/imperceptible to slight effects on hydrological receptors.

Decommissioning Impacts

- Decommissioning will involve all 7 no. wind turbines and towers removed with the hardstand and turbine foundation areas will be left in-situ and covered with soil to match the existing landscape.
- The substation and proposed Grid Connection will remain a permanent part of the national grid and therefore decommissioning is not foreseen. Decommissioning phase effects are likely to be very similar to construction phase impacts but the overall likelihood for adverse effects will be much lower due to reduced groundworks and excavations taking place.

Cumulative Impacts

Construction and Operational Stages

- **Water Quality Impacts** – Arising from sedimentation, accidental spills and the use of cementitious materials. Overall cumulative impacts are assessed as negligible and not significant (at construction stage). At operational stage, proposed drainage measures will ensure that there is no runoff from the proposed development and rainfall will percolate back to ground. No significant cumulative impacts will arise.
- **Water Supply** – Water supply requirements to the proposed development will be minimal – Impacts of same are concluded to be imperceptible.

- **Waste Water** – Foul water will be tankered off-site. Cumulative impacts are concluded to be imperceptible.
- **Agriculture** - Agriculture has been identified as a pressure on water quality in the Figile sub-catchment, with potential for sediment and nutrient runoff into nearby waterbodies. The Proposed Development, along with other land uses, could contribute to cumulative water quality pressures during construction. In the absence of mitigation, cumulative effects on water quality are concluded to be likely, negative, moderate and short term, at construction stage.
- **Forestry** - Cumulative Impacts are not expected to be significant associated with commercial forestry activities.

11.7. Mitigation

11.7.1. Construction and Decommissioning Phase Mitigation Measures

Section 8.7.1 of the EIAR sets out construction phase measures, comprising general good practice measures which are not considered to be mitigation measures but form an integral part of the design/construction process. All works will be undertaken in accordance with the CEMP. Measures include:

- Control and Management of surface water runoff.
- Control and management of shallow groundwater during excavation and dewatering.
- Management and control of soil and materials.
- Appropriate fuel and chemical handling, transport and storage.
- Management of accidental release of contaminants at the site.
- Control and handling of cementitious materials.

A Pollution Prevention Plan will be prepared which will include procedures for various activities including, but not limited to, dewatering of excavations, fuel storage and for the concrete wash out area. Emergency procedures will be developed by the main contractor in advance of works commencing.

Measures are also set out in relation to in-stream works, which relate to the construction of watercourse crossings and culverts, and include carrying out such works in accordance with best practice guidance. There will be no instream works outside the permitted IFI window of July 1st to September 30th, to protect aquatic habitats and fish spawning periods. Regular water quality monitoring upstream and downstream will be carried out to detect any changes and initiate corrective actions if necessary. Silt fences and sediment control measures will also be put in place, as well as measures to prevent accidental spills and leaks.

Measures to limit potential impacts on the hydrological and hydrogeological flow regime will also be put in place and include the implementation of the site-specific surface water management system, and the use of crossings that maintain flow continuity and minimise in-stream works.

Mitigation measures in relation to flood risk are set in out Section 8.7.1.8 of the EIAR and include the implementation of a Flood Risk Management Plan, avoidance of flood-prone areas for the storage of materials and the use of permeable surfaces to reduce surface water flow.

11.7.2. Operational Phase Mitigation Measures

During the operational phase, the EIAR sets out that that routine maintenance of infrastructure and tracks will be required, with such works adhering to measures as set out in the CEMP should any construction type activities be necessary.

11.8. Residual Effects

Section 8.7.4 and Table 8-11 of the EIAR set out that there will be no significant adverse residual impacts on the receiving hydrological and hydrogeological environment, with effects noted as being at worst, slight and for the most part, imperceptible. Based on mitigation measures proposed during all phases of development, no significant effects on the surface water quality will occur.

11.9. The Assessment: Direct and Indirect Effects

I have examined, analysed and evaluated Chapter 8 of the EIAR, and all of the associated documentation and submissions on file in relation to hydrology and hydrogeology. The main impacts identified prior to mitigation occur during the construction phase which include potential moderate effects on the Leitrim Stream and other waterbodies as a result of increased suspended solids, disturbance of the stream bed, and contaminated surface water runoff.

Potential significant effects on Leitrim Stream, Kinnafad Stream, Figile River and downstream waterbodies, albeit unlikely, were identified resulting from accidental spills and leaks, and from contamination of surface water and underlying groundwater from cementitious materials. I note also that potential moderate to significant effects

on surface water resulting from contamination due to flooding were identified in the EIAR.

I am satisfied, however, that the comprehensive mitigation measures outlined in Section 8.7.1 of the EIAR, which include, but are not limited to, appropriate fuel and chemical handling, and control and handling of cementitious materials, as well as appropriate flood control measures, will ensure that residual effects on the water environment are as reported in the EIAR, i.e. at worst, slight and for the most part, imperceptible.

During the operational phase, no potential significant effects were identified. Notwithstanding, the EIAR notes that should construction activities be warranted during maintenance of the wind farm, appropriate mitigation will be employed including those best practice measures as included in the CEMP.

In relation to potential cumulative impacts, no potential significant cumulative effects either at construction or operational phase were identified, although potential moderate effects on water quality at construction stage, when considered in combination with agricultural activities were identified. However as per the mitigation measures referred to above, I am satisfied that such impacts will be reduced in significance to 'slight' as per the conclusions of the EIAR.

Overall, I consider the applicants assessment has identified the relevant issues and that with the implementation of mitigation measures outlined in the EIAR, I consider that the proposed development is not predicted to give rise to significant adverse at any phase of the development.

I have considered those issues raised within the PA submission on the application, and those raised within observer submissions, below.

11.9.1. **Cumulative Effects and WFD Assessment**

The Planning Authority are of the view that an assessment of potential cumulative effects associated with the project and other developments has not been completed as part of the WFD Compliance Assessment, although I note that the PA's Environment and Water Section are satisfied with the findings of the assessment provided by the applicant and have recommended conditions relating to same.

In response, the applicant has referred to the WFD Assessment contained within Appendix 8-3 of the EIAR and has stated that cumulative impacts are addressed within the assessment. The applicant contends that, if the proposed development does not adversely affect the implementation of the Water Action Plan (WAP) measures then it cannot give rise to cumulative impacts. The applicant notes that cumulative effects are assessed in Section 8.6.4 of the EIAR, and further notes that both the WFD assessment and the EIAR confirm that the project will not contribute to a deterioration of any waterbody status. The potential for cumulative effects has been considered in the context of other existing, permitted and under construction developments in the surrounding area, including a review of applications for the proceeding 5 years in townlands common to the development area, as well as other operational and permitted renewable energy developments within 15km of the site (8 no. of which were identified in Section 8.6.4 of the EIAR). It is noted therein that 4 no. of these projects are already operational and therefore pose minimal cumulative risks to water quality at construction stage.

The EIAR has also considered potential cumulative effects from other activities in the area, including those arising from forestry and agriculture. I have considered forestry and agriculture in the assessment above. I note that no potential significant cumulative effects are identified.

As noted above, detailed mitigation measures are set out to prevent deterioration of surface water and ground water quality at construction, operational (when necessary) and decommissioning stages.

In relation to the WFD Directive, I have considered this in my assessment above and I have no evidence before me that would contradict the findings of either the EIAR, nor of the WFD assessment, and I accept the conclusions of both in relation to WFD.

11.9.2. **Impacts on the Doden River/River Barrow SAC**

I note that an observer has raised a specific concern in relation to the Doden River, which flows into the River Nore and River Barrow SAC. I have considered impacts on this SAC in Appendices 3 and 4 of this report.

I note that EPA mapping[22] identifies the Doden River, which is located south of the L5010 Road. EPA mapping indicates that this, in fact, forms part of the Leitrim River (EPA Name Leitrim 14). I am satisfied that potential effects on these watercourses have been considered satisfactorily within the EIAR, and within the WFD assessment, including risks from sedimentation and water runoff, as well as potential impacts on the wider ecological integrity of the watercourses (see also Section 9 in relation to Biodiversity). In relation to effects of vibration on local watercourses, I note that the issue of vibration is considered in Section 13 of this report, and I am of the view that there is no evidence before me that would lead to the conclusion that significant effects would result from vibration.

11.9.3. **Flooding/Contamination of Ground Water**

I note that the EIAR, and the associated FRA as set out in Appendix 8-2 of the EIAR, has considered the issue of flooding, and I have considered this issue above. Potential moderate effects are identified at construction stage, for both surface water and ground water, noting that flood waters can mobilise contaminants present onsite.

Parts of the site lie within Flood Zone B, where the probability of a fluvial flood event occurring is less than 1%. Notwithstanding, the EIAR describes relevant mitigation measures that will be implemented, including but not limited to, storage of such materials, and appropriate on-site responses to predicted flood events, including the removal of site materials from flood zones. In this manner, the potential to impact on surrounding water quality, resulting from flood events, is minimised.

Following implementation of mitigation measures outlined in the EIAR, I am satisfied the risk of ground water contamination from potential flooding events to be low.

11.9.4. **Drinking Water/Public Water Supply/Groundwater Wells**

Section 8.3.8 of the EIAR considers water supply and drinking source protection. Table 8-6 sets out GSI Springs and Wells within 2km of the site, and it states there are 22 no. groundwater sources either at the proposed development site or within a 2km

[22] https://gis.epa.ie/EPAMaps/

radius of the site. Figure 8-6 sets out the location of Groundwater Wells and Springs and Public Supply SPAs.

Section 8.6.1 of the EIAR states that, in the absence of mitigation, there is potential for the proposed development to impact on the above 22 no. groundwater source receptors, and on the Clonbulloge Public Water Supply scheme, located downstream of the proposed Grid Connection via the Figile River.

Section 8.6.1.8 of the EIAR points out that groundwater sources within 2km of the site are generally recorded as having a 'poor' yield indicating limited connectivity with the wider aquifer. Considering this, in conjunction with the separation distances between the proposed development and groundwater sources, it concluded that, in the absence of mitigation, such impacts will be unlikely and negligible.

In terms of the Clonbulloge Public Water Supply (PWS), It is noted that while the proposed site drains to the Figile_040, this is via the Leitrim Stream which confluences with the Figile River c. 50m downstream of the Clonbulloge WTP. As such, the proposed windfarm site does not impact this source via surface water mechanism.

I note a submission has raised a specific concern in relation to potential impacts on drinking water due to a landside event, or underground coalmine collapse. In relation to issue of landslide, I have considered the issue of peat stability in Section 12 of this report, and I have concluded that the risk of peat failure is low, and therefore the risk to drinking water is low. The site does not lie above a coalmine and I am satisfied that there is no risk to drinking water as a result of potential underground coalmine collapse.

Generally, I am satisfied that the EIAR has identified all potential impacts on drinking water including public water supply and groundwater wells, and has also satisfactorily considered cumulative impacts, and has set out mitigation measures to ensure impacts are minimised and that no significant residual effects are identified.

11.9.5. **Baseline Water Quality and Yields**

An observation has raised the issue that baseline water quality and yields should be undertaken. In relation to this, I accept that there is no groundwater quality data for the windfarm site, derived from groundwater sampling undertaken by the applicant.

However, I am of the view that groundwater sampling would not be undertaken for this type of development in terms of EIAR reporting, as significant groundwater quality impacts are not likely, given the nature of the development proposed. Furthermore, I note that the WFD status for the local groundwater bodies underlying the windfarm site in terms of water quality is '*Good*'. In my opinion, it is a reasonable assumption that this is the baseline condition for groundwater underlying the windfarm site. I note that the WFD assessment has also concluded that following implementation of mitigation measures outlined in the EIAR, the proposed windfarm will not impact on the WFD status of underlying groundwater bodies

While excavations are necessary for various aspects of the development, most notably for the turbines, I note that the potential impacts of all of these activities on groundwater has been considered and mitigation measures have been proposed to protect underlying groundwater.

As such, in this manner, the Coimisiún can be satisfied therefore that there will be no significant effects on public water supply sources via groundwater mechanisms.

11.9.6. **Fault Line on the Site**

An observer has stated that the EIAR fails to identify a fault line traversing the site. In response the applicant has stated that the EIAR confirms there are no fault lines within the proposed development site, and further states that the feature referred to in the submission is a section line on the GSI mapping and does not represent a fault.

In this regard, I note the relevant mapping is Figure 9.3 'Regional Geology of County Offaly' of the EIAR, and I am satisfied that no fault line is indicated on this map, which could lead to a subsequent increased risk of groundwater impacts.

11.9.7. **Monitoring**

An observer submission has stated that the works should be subject to a detailed hydrogeological assessment and continuous monitoring to ensure full compliance with regulatory protections. In relation to the former, I am satisfied that such an assessment has been carried out within the EIAR (and the associated WFD Assessment) and all potential effects have been considered. Monitoring measures are set out in Section 8.7.6.1 of the EIAR, including visual inspections, which will be undertaken during

excavations and other groundworks to ensure that water quality protection measures are being employed. I note that while surface water monitoring (by way of sampling) will be carried out upstream and downstream of the site, the EIAR does not propose sampling of groundwater. However, I am satisfied that the nature of the works, with the proposed mitigation measures in place, would not warrant continuous groundwater monitoring either at construction stage and operational stage, and this would be an unreasonable burden on the applicant in my view.

11.10. Conclusion: Direct and Indirect Effects (Hydrology and Hydrogeology)

I am satisfied that the potential for significant adverse impacts can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on hydrology and hydrogeology.

12.0 Land and Soils

12.1. Issues Raised

12.1.1. Planning Authority & Prescribed Bodies

The Planning Authority and Prescribed Bodies did not raise any issues related to Land and Soils.

12.1.2. Observations

Observer submission has raised concerns in relation to soil health (and impact on HNV Grassland). An observation has also raised concerns in relation to peat drying effects (from wake effects) and has also raised concern in relation to the potential for landslides.

12.2. Context

EIAR Chapter 9 including Appendix 9-1 (Peat Stability Risk Assessment) and associated figures and tables, has assessed the potential impacts on land and soil associated with the proposed windfarm. The EIAR provides a statement of authority

and describes the legislation and guidance, the methodology used, the baseline conditions, the mitigation measures proposed and any residual impacts.

12.3. Baseline

The majority of the site consists of agricultural pasture lands, while the more elevated areas of the site are comprised of coniferous forest. The surrounding lands are primarily occupied by agriculture. Section 9.3.2 & Figure 9.2 of the EIAR sets out existing land uses with associated Corine Landcover Map. The Corine Map shows there are large areas of peat bogs to the south, east and west of T4, T5, T6 and T7. T6 and T7 are located in Mixed Forest, T4 and T5 are located in Coniferous Forest and the substation and T1, T2 and T3 are located on Non-irrigated Land. The site is mostly flat with a gentle slope in the area of the substation. The elevations range from 69.5m to 78.6m AOD.

In terms of geology, the proposed site and the majority of the GCR is underlain by limestone. In terms of soil and subsoil, the Teagasc Soil Map (EIAR, Figure 9.5) indicates the site is predominantly underlain by peat, which is classified as having '*poor drainage'*. There are pockets of limestone derived till to the north of the site, which are considered to have '*moderate drainage'*.

QSI Quaternary Sediment Mapping (EIAR, Figure 9.6) indicates that the proposed windfarm site is underlain by a combination of cut-over raised peat and limestone-derived till.

Ground investigations, in the northern portion of the site, encountered topsoil (encountered from ground level to depths typically ranging from 0.2mbGL to 0.35mbGL), Gravelly CLAY and SAND with low cobble content (encountered between 0.35mbGL and the final depth of excavation at 2.1mbGL) with groundwater encountered as seepage at a depth of 2.0mbGL in trial pit SA06 only.

The southern portion of the site is underlain by peat depths ranging from 0.27m to 4.04m. Peat Probing and Soakaway results are presented in Appendix 8.1 of the EIAR. In terms of slope stability, reference is made to the Peat Stability Risk Assessment as included in Appendix 9 of the EIAR (see further discussion below). There are no records of any landslide events recorded within or in proximity to the

development site. There were no signs of past instability or incipient instability noted during the site walkover.

In terms of Geological Heritage, the EIAR notes that there are no mapped sites within the proposed development.

12.4. Characteristics of the Proposed Development

The detailed characteristics of the development are set out in Chapter 3 of the EIAR. In summary, and in the context of land and soils, the proposed windfarm will involve the removal of soils to facilitate the construction of elements of the proposed development including turbine foundations, access tracks, hardstand emplacements, underground cabling and temporary works, with substantial amounts of aggregates, concrete and steel used during construction.

There is 1 no. permanent spoil deposition area located in a commercially forested area that will be cleared to accommodate T4. This area will be used for surplus excavated material generated during construction. The area is proposed to hold c. 86,600m3 of material and will raise the ground level at the area by c. 2m. The total volume of excavated material for the proposed development is c. 84,714m^3 (total volume estimates in Chapter 3 'Site Engineering' Table 3-1).

An estimated c. 87,795m^3 of imported stone is required, with a number of quarries within c. 30km of the site identified as potential sources of aggregate for the proposed development.

Permanent felling of c. 21ha of forestry is required for the construction and operation of the turbines, as well as the hardstands, access tracks and deposition area. It is proposed to fell around turbines as a mitigation for bats and to facilitate construction with c. 5m either side of the access tracks required to be felled.

12.5. Peat Stability Risk Assessment (PSRA)

A PSRA is contained within Appendix 9 of the EIAR. The assessment methodology included site walkovers, peat probing and the use of LiDAR data to create a Digital Elevation Model (DEM) of the site.

It was noted that blanket peat is present on the site and slope angles greater than 2 degrees also present on the site. The factor of safety analysis indicated that, for each location probed the lowest recorded Factor of Safety (FOS) was 2.8. Values above 2 are considered to have a negligible probability of occurrence of landslide.

For the proposed turbines located in areas underlain by Peat (Turbines T4, T5, T6, and T7 – See PSRA, Table 3.3.5) the lowest factor of safety was 12.1 for T6 (PSRA, Table 4.1). A FOS of 1.3 is the minimum FOS design required by "*BS 6031:2009 Code of practice for earthworks".*

No infrastructure has been placed in areas with FOS<1.6 (allowing for future climate change). A risk assessment was then carried out for each of the Turbines, with reference to the FOD, and with reference to potential adverse consequences should a landslide occur. The results of this risk assessment are set out in PSRA, Table 4.11, which indicates that for each of the Turbines (T4 to T7) the risk level is *'Negligible'*. Notwithstanding, mitigation measures are set out in PSRA, Sections 5.1 (Design Mitigation), Section 5.2 (Engineered Mitigations) and Section 5.3 (Control Slide/Emergency Responses).

12.6. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 12.1 below.

Table 12.1: Summary of Potential Effects (Land and Soils)
Do Nothing
• If the Windfarm were not to proceed, no development would take place on this site. The land and soils environment would remain unchanged, with the exception of future agricultural/forestry change.
Construction Impacts
Land and Land Use • Land use will change over the course of the construction phase from existing forestry and pastural activities to the construction of the windfarm. The proposed TDR and GCR traverse a variety of land uses. Outside of the proposed development, existing land uses, including forestry and agricultural activities, will remain. Removal of soil and subsoil will result in slight alterations to the site topography. No significant effects are expected, with the overall significance being assessed as slight. **Soil Erosion** • Topsoil, subsoil and peat will be excavated or moved from certain areas of the site. Excavated subsoil will be used for site levelling and for other aspects of the wind farm infrastructure. **Soil Compaction**

- Soil compaction may occur due to the movement of overland traffic or from Horizontal Directional Drilling (HDD). It is set out that soil compaction will result in an increased risk to soil integrity in the absence of mitigation measures. Other effects such as temporary increase in surface water runoff, and subsequently an increase in erosion may result.
- The potential use of piled foundations (if necessary) could also result in soil compaction and spoil generation.

Slope Stability

- Without mitigation, this can result in soil erosion, contamination, instability of the land and waste generation, with indirect effects on water, biodiversity, material assets and landscape and visual impacts. It is stated within the EIAR that slips are more likely to occur on slopes >25° but have been known to occur on much gentler slopes.

Stone Importation

- The total volume of stone importation represents 0.23% of national annual production and as such does not represent a significant demand on national aggregate resources.
- The EIAR concludes that the proposed development could result in a negative, moderate, local, short-term, direct and likely effect of medium magnitude on the soil environment of medium sensitivity. The overall significance of impact assessed to be moderate.
- Excavation and construction activities in limestone bedrock are predicted to have a negative, slight, local, short term, direct and unlikely effect of low magnitude on bedrock slope stability, resulting in an overall not significant effect.
- The use of quarried stone aggregate for the proposed development represents a negative, slight, regional, short-term, indirect and likely effect of low magnitude on the natural resource environment of low sensitivity. The overall significance of impact is assessed to be slight.

Accidental Spills, Contamination and Pollution

- In the absence of appropriate mitigation measures, accidental spills of hydrocarbons, cement, or contaminated waters during construction could result in a negative, significant, local, temporary, direct, and likely effect of medium magnitude on the land and soils environment.
- Such contamination poses a negative, significant, local, temporary, indirect and unlikely effect of medium magnitude on the geological and hydrogeological environment, which is considered to have medium to high sensitivity.

Tree Felling

- The felling of forestry will have a negative, slight, local, short term, direct, and likely effect of medium magnitude on the land and soils environment, primarily due to increased exposure of soils, potential for erosion, and loss of organic matter. The overall significance of the unmitigated effect is assessed as moderate.

Operational Impacts

- During the operational phase, the development of the proposed windfarm will result in a long-term change in land use from a combination of commercial forestry, agricultural pastures and peatland to a renewable energy generation site. No significant effect is predicted to result from this.
- Other effects include potential accidental leaks or spills of fuel/oil from construction vehicles or plant used for maintenance of turbines, potential for spills/leaks of oils from the oil used for cooling the transformer in the substation causing contamination of soils and groundwater. This could have a negative, moderate effect.
- Other potential effects include slight effects on soils and geology as a result of soil erosion prior to vegetation becoming established.

Decommissioning Impacts
• The proposed development has been designed with an operational life of 35 years, at the end of which it can be decommissioned. Impacts are considered to be a similar nature and duration to those arising from the construction phase but of reduced magnitude.
Cumulative Impacts
• There is no potential for significant cumulative effects in-combination with other local developments on the land and soils.

12.7. Mitigation

12.7.1. Construction and Decommissioning Phase Mitigation Measures

Section 9.5.1 of the EIAR sets out construction phase mitigation measures. In relation to land use, it is noted that all tree coverage felled will be replaced at other replanting sites through a separate consenting process. Measures to prevent and minimise soil erosion are described in EIAR Section 9.5.1.2 , including but not limited to minimising areas of exposed soil and appropriate stockpiling measures. Measures to prevent soil compaction are also outlined in the EIAR. In order to reduce the potential for significant effects on land and soils, mitigation measures are proposed for accidental spills and contamination, including but not limited to the maintenance of an emergency response plan, appropriate storage of materials and the use of spill kits. All of the measures above are set out in the CEMP for the proposed development, which is included in Appendix 2-1 of the EIAR.

Measures are also included to minimise impacts on soil, and indirect impacts on water, from tree felling, including the reuse of topsoil and the use of berms, silt traps and settlement ponds to separate clean and dirty water.

Mitigation measures applied during decommissioning activities will be similar to those applied during construction phase as outlined above. Some impacts will be avoided by leaving elements of the proposed development in place. The turbine bases will be rehabilitated by covering with topsoil.

12.7.2. Operational Phase Mitigation Measures

During the operational phase, the EIAR sets out that routine maintenance of infrastructure and tracks will be required, with such works adhering to measures as set out in the CEMP, should any construction type activities be necessary.

12.7.2.1. Peat Stability

I note that Section 9.6.1 of the EIAR states that there is no risk of peat instability at this site, as the limited area of peat identified on site, is being completely avoided.

This is not the case, and the Peat Stability Assessment clearly indicates that Turbines T4, T5, T6 and T7 are within lands underlain by blanket peat.

Notwithstanding, and as set out above, a detailed assessment has been undertaken to determine the risk of landslide associated with peat instability, and as stated within the EIAR, the report concludes that there is a negligible risk of landslide from the proposed development.

I am satisfied that the inaccuracy I have identified in Section 9.6.1 of the EIAR, does not undermine the conclusions therein, noting that same conclusions are supported by a specific Peat Stability Risk Assessment, and I have not identified any inaccuracies therein, nor have any submissions on the application identified any inaccuracies within this assessment.

12.8. Residual Effects

As set out in EIAR, Table 9.2 - 'Residual Effects', following the implementation of mitigation measures described in the Chapter, no significant residual effects are expected, with slight negative effects predicted for all aspects associated with the construction phase (i.e. land use, soil erosion and soil compaction for example).

No significant effects on the land, soils and geological environment will occur during the decommissioning stage. No mitigation measures are considered necessary to address cumulative impacts, given the lack of potential impacts identified.

In the operational phase no significant impacts are anticipated, no significant residual effects are expected, with slight negative effects predicted for all aspects associated with the operational phase (i.e. potential for spills and contamination for example).

12.8.1. Residual Impacts Conclusion

Following implementation of the mitigation measures described, no significant residual impacts on the land and soils environment are anticipated as a result of the construction, operation and decommissioning of the proposed development.

12.9. The Assessment: Direct and Indirect Effects

12.9.1. Introduction

I have examined, analysed and evaluated Chapter 9 of the EIAR, the associated documentation, and submissions on file regarding the proposed development and the potential effects of the proposed project on land and soils. During the construction phase, potential impacts include land take with the loss of c. 21ha of commercial forestry, and the loss of agricultural land, as well as the excavation of soil, subsoil and peat from certain areas of the site.

Excavated subsoil will be used for site levelling and for other elements of the wind farm. No significant effects are predicted to arise in this regard, and while other effects such as soil compaction have the potential to occur, potential effects are not considered to be significant.

I note that the EIAR refers to potential significant effects on land and soils arising from accidental spills, contamination and pollution, as well as potential significant effects on the geological and hydrogeological environment arising from same. The EIAR sets out detailed mitigation to reduce the risk of soil contamination, and these measures are summarised above, and are also set out in detail in the CEMP (as included in Appendix 2-1 of the EIAR). I am satisfied that a suitably detailed and comprehensive range of measures has been proposed to ensure that no significant contamination impacts or contamination of surface water or groundwater will arise as a result of the proposed development.

During the operational phase, there remains the potential for soil and water contamination to occur, as a result of maintenance and operational activities. However, such potential effects are not predicted to be significant. Notwithstanding, mitigation measures related the operation and maintenance of the wind farm are set out in the EIAR.

12.9.2. Peat Instability and Failure

Having reviewed the information submitted by the applicant including the PSRA in Appendix 9, the geotechnical investigations and having inspected the site, I am satisfied that the applicant has demonstrated that the site has an acceptable margin

of safety and low risk of peat failure and that it is suitable for a wind farm. I am satisfied that the risk of peat failure as a result of the proposed windfarm has been appropriately assessed in line with PLHRAG (Scottish Government, 2017) and I am satisfied that the risk of peat failure is low.

12.9.3. **Peat Drying Effects (Wake Effects)**

I note that an observer has raised concern in relation to the drying out of peat on the site as a result of wake effects. In relation to same, the applicant has referred to peer-reviewed studies that show that wake temperature changes are extremely small, typically fractions of a degree and generally less than 1 °C, and occur only under specific atmospheric conditions and show that wake effects are not a source of environmental impact.

In relation to same, I am satisfied therefore that potential for wake effect to cause the drying out of peat on the site is very unlikely, and I am satisfied therefore that there will be no significant environmental effects arising from same.

12.9.4. **Compliance with OCDP 2021 Policy in relation to Peatlands**

I have considered the issue of peatlands in Section 4 above, and I have concluded that polices of the OCDP 2021 that relate to peatlands are of relevance in this instance. Of those policies I have not already considered above, other relevant policies in relation to peatlands include Policy CAEP15 which seeks to support the enhancement of carbon sinks such as peatlands, forestry and permanent grasslands, with consideration of in conjunction with other climate mitigation actions such as the re-wetting and restoration of cut away peatlands, where appropriate. I note that while there is a loss of some peat soil in this instance, as well as a loss of some forest, the carbon impacts of same are considered in Section 16 Air and Climate' of this report, and I note the proposed project will offset the carbon produced within a period of 1.7 years (see detailed discussion on same in Section 16 'Air and Climate' of this report). I note that there is no evidence on file that the lands are subject to plans to restore the peatlands nor is there evidence that there are plans to re-wetting any peatlands on site.

Policy CAEP-19 states that planning applications for development on or immediately adjacent to peatlands shall be accompanied by assessments considering the following issues where relevant; peatland stability, hydrology, carbon emissions balance and ecological impact assessment. In relation to same peatland stability is considered in this section of the report, hydrology is considered in Section 11, carbon emissions are considered in Section 16. In relation to the requirement for an ecological impact assessment, I note an EIAR has been submitted which considers impacts on ecology, and I have assessed same in Sections 9 and 10 of this report.

Objective CAEO-07 seeks to ensure that renewable energy projects located on peatlands or in close proximity to peatlands do not negatively impact on any rehabilitation measures including enhanced rehabilitation measures (i.e. drain blocking and rewetting). In relation to same, there is no evidence on file that the proposal will impact on any proposed rehabilitation measures either on this site, nor on adjacent peatlands, and no parties have raised concerns in relation to same. I note that there is a submission from Bord Na Mona on the application, which raises other potential concerns, not related to any proposed rehabilitation measures on peatlands owned by BNM, which lies adjacent to the southern portion of this site.

Policy BLP-14 seeks to protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological and cultural heritage and to develop educational heritage. In relation to same, I am not of the view that the site is a 'designated' peatland (with reference to Figure 4.8 of the OCDP 2021, and with reference to the discussion on same above). Notwithstanding, there is no evidence that there are any historical walkways traversing the site that could be impacted by the development proposed here. In relation to landscape impacts, I have considered same in Section 14 of this report.

Objective BLO-10 requires the preparation of a hydrological report for developments within or in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems. Figure 4.8 indicated the site is located adjacent to 'exploited raised bog' and is not adjacent to 'intact raised bog'. There is no evidence that the exploited raised bog adjacent to the site is protected. Notwithinstanding, impacts on hydrology of the site and the wider

area are considered in Section 11 of this report, and impacts on ecology are considered in Sections 9 and 10 of this report.

I have considered compliance or otherwise with Policy DMS-108 in Table 12.2 below;

Table 12.2 Compliance with Policy PMS – 108

DMS-108 Peatlands ***In the consideration of development on or adjacent to peatland areas, the following guiding principles should apply:***	**Comment**
Consideration of the potential contribution of peatlands to climate change mitigation and adaptation including renewable energy production;	I would note that the land use of the southern portion of the site is currently commercial forestry, underlain by peat soils (as discussed in Section 5.4 of this report). Chapter 15 sets out that the felling of the forestry has been accounted for in order to estimate the carbon savings associated with the wind farm (as described in Appendix 13 'Carbon Calculator' of the EIAR). I would also note that the losses from 'soil organic matter' have also been accounted for within carbon calculator. As such CO_2 losses as result of the peat soil removal have been accounted for. The development of the windfarm will result in CO_2 emissions saving over a grid-mix of electricity generation of 49,669 tonnes per year. The CO_2 losses due to the wind farm construction will be 86,911 tonnes. As such, the Carbon Payback Time will be 1.7 years, with the total carbon savings over the 35-year operational lifetime of the wind farm being 1,653,977 tonnes (49,669 tonnes X 33.3 years). As such the development of the site will contribute to climate change mitigation. In relation to adaption to renewable energy production, the proposal here is for a wind farm, a renewable energy source and the site is suitable for same.
Consideration of habitats and species of environmental significance;	I have considered same in Section 9 'Biodiversity' of this report.
Consideration of the potential contribution of peatlands to an existing or proposed greenway / blueway / peatway network;	I would note that the southern area of the site is likely within a 'Peatland and Nature Corridor' and as such could be construed to have the potential to form part of a 'peatway network'. I have considered the potential of this element of the site to be developed as a 'Peatland and Nature Corridor' in Section 5.4 above and I have concluded therein that, given the nature of the site and the existing context of same, the site is not particularly suitable for the development of same.
Consideration of the ecosystem services and tourism potential provided by peatlands;	As per the discussion above, the southern area of site is currently in use for commercial forestry underlain by peaty soils, and, in my view, is limited in its tourism potential. The southern area of the site currently provides a form of

	ecosystem service through the provision of timber from the commercial forestry (with reference to Table 4.1 of the OCDP 2021).
Development of peatlands shall ensure that there are no negative impacts on water quality and hydrology;	I have considered impacts on water quality and hydrology in Section 11 of this report and I have concluded therein the proposed development would not have any significant residual effects on water quality and hydrology.
Consideration of existing and future rehabilitation measures including enhanced rehabilitation measures (i.e. drain blocking and rewetting);	There is no evidence on file that the site is subject to future rehabilitation measures, noting in particular the current use of the southern area of the site for commercial forestry.
Consideration of peatland stability;	I have considered peatland stability in this section (Section 12.9.2 of the report).
Achieving of a carbon emissions balance	I have considered achieving of a carbon emissions balance in Section 16 'Air and Climate' of this report.
Incorporation of fire mitigation measures such as fire breaks or ensuring access points and routes are suitable for travel by emergency	I have considered the issue of fire risk in Section 20 of this report, with relevant mitigation measures relating to same set out in Section 20.5. These measures, in the main, relate to turbine design, and do not relate to the provision of fire break. There is no evidence that the development of a wind farm on the site would increase the fire risk from wildfires, for example, such that the provision of fire breaks would be necessary, noting that the management of the existing commercial forestry is a matter for the landowner. I note that the proposed internal access tracks (generally 5m in width) will allow access to all wind turbines and wind farm infrastructure should an emergency occur.

12.10. Conclusion: Direct and Indirect Effects (Land and Soils)

I consider the applicants assessment has identified the relevant issues in relation to Land and Soils. With the implementation of mitigation measures outlined in the EIAR, I consider that the proposed development will not give rise to significant adverse impacts at any phase of the development.

13.0 Noise and Vibration

13.1. Issues Raised

13.1.1. Planning Authority (PA)

The PA are not satisfied that sufficient details on noise and in particular, combined noise generation from the proposed development and existing windfarms in the area have been provided by the applicant. The PA is concerned that there is no

assessment of cumulative noise impact from Yellow River Windfarm. In addition, the PA highlighted the need for a Noise Complaint Monitoring Programme.

13.1.2. **Prescribed Bodies (NEHS)**

The NEHS questions the methodology utilised by the applicants in order to determine noise impacts, including cumulative impacts, and is of the view that the most appropriate criteria for assessing noise impacts is the WHO Guidelines (2018). It is further stated that the use of the Wind Energy Development Guidelines 2006 (WEDG 2006) guidance is resulting in a significant volume of complaints from communities exposed to noise from wind turbines post development.

In relation to construction stage impacts, NEHS is of the opinion that if the mitigation measures are implemented in full there is adequate protection of Public and Environmental Health during the proposed construction phase.

13.1.3. **Observer Submissions**

I note the majority of observer submissions have concerns regarding the potential impact of noise. Observers on the application have stated that the noise criteria set out in the WHO Guidelines (2018) should be utilised. Many of the submissions cite the negative effects that have been experienced as a result of the operation of other wind farms in the area, in particular, the Cloghan Wind Farm and the Meenwaun Wind Farm. Concern is raised that noise regulations will not be complied with. Further concerns are raised in relation to cumulative effects of other wind farms in the area, in conjunction with this proposed wind farm. Reference is made to recent High Court rulings in relation to noise impacts on neighbouring properties.

Observers have also questioned the methodology of the noise survey undertaken and have highlighted shortcomings in relation to the methodology. A peer review Noise Report has been submitted within an observation, prepared by Huson & Associates, and I shall refer to this in my assessment below.

Observers have raised concerns in relation to vibration impacts as a result of the substation construction and impacts from blasting or rock breaking at the borrow pit.

Concerns have also been raised in relation to animal welfare, and impacts on the bovine and equine industries.

13.2. Context

EIAR Chapter 10, and related Appendices 10-1 to 10-8, have assessed the potential impacts associated with noise and vibration. The EIAR provides a statement of authority, describes the legislation and guidance, consultation undertaken, assessment of methodology and significance criteria, baseline conditions, describes the likely significant effects and associated mitigation measures and residual effects.

The EIAR states that the guidance in the Wind Energy Development Guidelines 2006 (WEDG 2006) has been used to assess potential operational noise. These guidelines are in turn based on detailed recommendations set out in the Department of Trade and Industry (UK) Energy Technology Support Unit (ETSU) publication 'ETSU-R-97 The Assessment and Rating of Noise from Wind Farms' (1996). The ETSU document has been used to supplement the guidance contained within the Wind Energy Development Guidelines publication where necessary.

ETSU-R-97 calls for the control of wind turbine noise by the application of noise limits at the nearest noise sensitive properties. ETSU-R-97 considers that absolute noise limits applied at all wind speeds are not suited to wind turbine developments and recommends that noise limits should be set relative to the existing background noise levels at noise sensitive locations. A critical aspect of the noise assessment of wind energy proposals relates to the identification of baseline noise levels through onsite noise surveys.

In summary, the WEDG 2006 outlines the following guidance to identify appropriate wind turbine noise criteria curves at noise sensitive locations:

- An appropriate absolute limit level in the range of 35 – 40dB L_{A90} for quiet daytime environments with background noise levels of less than 30dB $L_{A90,10min}$.
- 45dB $L_{A90,10min}$, or a maximum increase of 5dB above background noise (whichever is higher), for daytime environments with background noise levels of not less than 30dB $L_{A90,10min}$ and
- 43dB $L_{A90,10min}$. for night-time periods.

While the caveat of an increase of 5dB(A) above background for night-time operation is not explicit within the current guidance, it is commonly applied in noise assessments prepared and is detailed in numerous examples of planning conditions issued by planning authorities.

Topics relating to operational wind farm noise such as Amplitude Modulation (AM), a potential characteristic of wind turbine noise, and Infrasound/Low Frequency Noise (LFN), are also discussed in Section 10.3.2.5 of the EIAR.

13.2.1. **Infrasound/Low Frequency Noise**

The EIAR in Section 10.3.2.1 states that '*Low Frequency Noise'* is noise that is dominated by frequency components less than c. 200Hz whereas 'Infrasound' is typically described as sound at frequencies below 20Hz. It states in the EIAR that low frequency noise and infrasound associated with wind turbines is expected to be below perceptibility thresholds and are not likely to result in any significant effects at NSLs. There are no criteria proposed to assess low frequency noise or infrasound as part of the EIAR.

13.2.2. **Amplitude Modulation (AM)**

Further, the EIAR defines AM as regular fluctuation in amplitude at the Blade Passing Frequency (BPF) of the wind turbine blades (the rate at which the blades of the turbine pass a fixed point), and it is generally accepted that there are 2 no. mechanisms that can cause amplitude modulation; '*norma*l' AM and *'other'* AM (sometimes referred to as *'excessive'* AM).

In relation to '*Normal*' AM, an observer at ground level close to a wind turbine will experience '*blade swish'* because of the directional characteristics of the noise radiated from the trailing edge of the blades as it rotates towards and then away from the observer. This effect is not generally expected to be significant at typical separation distances, at least on relatively level sites.

'Other' AM relates to a sound that is sometimes observed at large distances from a wind turbine (or turbines) and is generally heard as a periodic *'thumping'* or *'whoomphing'* at relatively low frequencies. On sites where it has been reported, occurrences appear to be occasional, although they can persist for several hours under some conditions.

'Normal' AM is typically expected and accounted for in noise assessments, whereas *'Excessive'* AM, should it occur, may require additional mitigation measures due to its potential impact on nearby residents. There is no clear industry consensus on how

AM should be regulated or managed at the planning stage. Consequently, there is no methodology that can be applied to predict the likelihood of AM at a particular wind farm site. Any site-specific assessment would need to be undertaken at post-commissioning stage. The assessment of AM at post-commissioning stage is discussed in Section 10.7.1.2 of the EIAR.

13.2.3. **Draft Wind Energy Development Guidelines, 2019 (WEDG 2019)**

With regard to the DWEDG 2019, the EIAR notes that at the time of writing, updated guidelines have yet to be published. The EIAR notes that during the related public consultation several concerns relating to the proposed approach of the draft Guidelines were expressed by various parties. If updated WEDG are published during the application process for the current application, it is anticipated that any relevant changes affecting noise will be addressed through an appropriate planning condition.

13.2.4. **Construction Noise**

Construction noise was assessed under BS 5228 criteria[23]. The approach adopted here calls for the designation of an NSL into a specific category (A, B or C) based on existing ambient noise levels in the absence of construction noise. A threshold noise value is applied to each category. Exceedances (construction noise only) of the threshold value, at the facade of a noise-sensitive location (NSL) during construction, indicates a potential significant noise impact associated with the construction activities. The threshold values recommended by BS5228-1 (BSI 2014a) are depicted in Table 13.1 as follows:

Table 13.1: Threshold values recommended by BS5228-1 (BSI 2014a)

Assessment category and threshold value period (T)	Threshold value, in dB LAeq,T		
	Category A Note A	Category B Note B	Category C Note C
Night-time (23:00 to 07:00hrs)	45	50	55
Evenings and weekends Note D	55	60	65
Daytime (07:00 – 19:00hrs) and Saturdays (07:00 – 13:00hrs)	65	70	75

[23] BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration. (BS5528-2)

Note A: Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are less than these values
Note B: Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are the same than category A values.
Note C: Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are higher than category A values.
Note D: 19:00 – 23:00 weekdays, 13:00 – 23:00 Saturdays and 07:00 – 23:00 Sundays

The threshold values are applicable to both construction and decommissioning noise. For the assessment of potential noise impacts from construction related traffic along public roads, guidance from Highways England (now National Highways) DMRB Sustainability & Environment Appraisal LA 111 Noise and Vibration (Revision 2) (UKHE, 2020) was utilised.

13.2.5. Vibration

The EIAR states in relation to construction vibration that Guidance relevant to acceptable vibration within buildings is contained in the following documents:

- BS 7385 – Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from ground borne vibration (BSI, 1993) (BS7385).
- BS 5228-2:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (BSI, 2014) (BS5228-2).

The EIAR states that vibration generated from the operation of a wind turbine unit will decrease rapidly with distance. It states the shortest distance from any proposed turbine to the nearest Noise Sensitive Location (NSL) is c. 590m (approximate distance from turbine WTG-01 to NSL ref H248). The EIAR confirms that the level of vibration will be significantly below any thresholds for perceptibility, and that therefore, vibration criteria have not been specified for the operational phase of the proposed development.

13.3. Baseline

To establish the baseline conditions, a study area was defined, which included, at a minimum, the area predicted to exceed 35dB L_{A90} from all existing, permitted and proposed wind turbines. Due to the potential for cumulative effects with other existing wind farm developments, the study area for the operational phase of the proposed development covered the area predicted to exceed 25dB L_{A90} at the maximum

predicted noise emission level (noise contour maps are included in EIAR Appendix 10-2).

The study area extends to 3km from the boundary of the site. EIAR, Appendix 10-7 presents the noise contours for the proposed windfarm at 11m/s standardised wind speed. The EIAR states that the set of 523 no. noise sensitive locations included in this noise assessment extends well beyond the 35dB LA90 noise contour.

In terms of existing turbines, Section 10.4.3.4 of the EIAR notes that the operational Cloncreen and Mount Lucas wind farms are located c. 2.2km southeast and 4.1km southwest of the proposed wind farm site, respectively. Yellow River wind farm was not operational during the survey period and therefore not generating wind turbine noise which could affect the baseline noise measurements.

Baseline noise conditions are described in the EIAR, as measured at a total of 5 no. Noise Monitoring Locations (A-E). Predominant noise sources in the area were noted to be local and distant traffic movements, activity in and around the residences, wind generated noise from local foliage and other typical anthropogenic sources typically found in such rural settings.

A summary of derived background noise levels is set out in Table 10-14 of the EIAR.

Appendix 10-6 details the coordinates of the 523 no. NSLs used in this assessment. Noise predictions were prepared in respect of the various operational turbine wind speeds at these locations.

The derived turbine noise limits have been assigned to the various NSLs where noise monitoring has been undertaken. Where background noise measurements have been conducted in the vicinity and/or are judged to be typical/indicative of the background noise levels at other locations, these are assigned to the nearby representative location for the purposes of setting appropriate turbine noise limits for the assessment. The EIAR states that this approach is in line with best practice guidance set out in the IOA GPG.

The EIAR also confirms that a conservative *'envelope review'* was applied to all non-surveyed locations. The envelope review is a conservative approach that adopts the lowest noise criteria derived from the measured background noise levels and applies it to all non-surveyed locations for the purpose of the assessment.

Table 10-15 of the EIAR outlines the operational noise criteria that will apply to this assessment. The derived criteria at 11m/s have been applied to higher wind speeds for the purpose of this assessment. It should be noted that as wind speed increases so too will the background noise levels. This approach to the assessment is therefore considered conservative.

13.4. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 13.2 below.

Table 13.2: Summary of Potential Effects (Noise and Vibration)

Do Nothing

- Section 10.6.4 of the EIAR considers a do-nothing scenario. It is set out that the existing noise environment is expected to remain unchanged.

Construction Impacts

Noise

- Noise from various elements of the construction stage is considered including:
  - Site preparation and earthworks. [Conclusion unlikely to have any significant noise and vibration effects]
  - Construction of internal site access tracks. [Predicted noise effects – negative, slight to moderate, brief to temporary]
  - Construction of turbines (including foundations, component delivery and erection) and hardstand areas [Predicted noise effects – negative, not significant, short-term]
  - Construction of substation {Predicted noise effects – negative, slight, temporary]
  - Cabling and grid connections. [Predicted noise effects – negative, not significant to moderate, brief]
  - Temporary accommodation works [Predicted noise effects – negative, not significant to slight, short-term].
  - Other Works (spoil management areas, landscaping and areas of tree felling [Predicted effects – negative, not significant, temporary)
- Construction Traffic (Predicted effects – Negative, imperceptible to not significant, short-term).
- Save for those works considered below (TDR Works and Grid Connection) the construction noise assessment results show that the worst-case predicted construction noise levels are below the Category A Threshold Levels for daytime works (lowest threshold in BS8223) for all of the nearest NSLs and for all scenarios, therefore, there would be no significant construction noise effects.
- Temporary works for the TDR are at 40 to 50m (ITM Ref: 656,895 Easting, 730,502 Northing) for the southern entrance and the TDR node in Ballyfore little (ITM Ref: 659,037, 730,194 Northing). At these closest NSLs, the predicted construction noise level is 68dB, assuming all plant items operate simultaneously along the closest boundary to the NSLs. These works are temporary in nature and unlikely to be at the worst-case predicted effects for more than a few days. On this basis that the duration of the noise effect is brief, no specific mitigation measures are required.
- In relation to the grid connection, a review of the underground electrical cabling route has identified that there are 25 no. NSLs within 25m of route. The predicted noise

levels at the closest NSLs, at distances of within 25m from works have the potential to exceed the construction noise criterion of 70dB LAeq,1hr set out in Section 10.3.2.1 of the EIAR, if the works generate high noise levels in proximity to the NSLs. As these works will progress along the route the worst-case predicted effects will reduce. However, on this basis that the duration of the noise effect is brief, mitigation measures are not required. No specific mitigation measures are required.

Vibration

- Due to the large separation distances between the construction activity area and the nearest receptors, no significant effects are anticipated.

Operational Impacts

Noise

Turbine Noise: Cumulative Noise Assessment

- The EIAR sets out that, at all NSLs, the worst cumulative omni-directional cumulative turbine noise levels are below the noise criterion curves, and at rated power at 11 m/s the highest predicted noise level is 41.9dB L_{A90} (At NSL ID H248), which is more than 1dB below the minimum 43dB night-time threshold, regardless of background noise levels. The complete results are tabulated in Appendix 10-8 of the EIAR.
- Table 10-27 of the EIAR sets out the result of the turbine noise predictions and assessment review at 13 no. locations with the highest levels of wind turbine noise predicted. At all other locations the maximum turbine noise levels are predicted to be <40dB L_{A90}.
- The EIAR states the predicted cumulative noise levels associated with the proposed windfarm are within best practice noise criteria recommended in the WEDG 2006.
- While noise levels at low wind speeds will increase due to the development and specifically the operation of the turbines, the predicted levels will remain low, albeit new sources of noise will be introduced to the soundscape.
- The potential worst-case associated effects at the most impacted noise sensitive locations associated with operation of the wind turbines are concluded to be 'negative, not significant, long term'.

Fixed Plant Noise

- The noise level from the substation was predicted to be 30dB LAEq T and is well below the criteria as set out in Section 10.3.2.6 of the EIAR. The predicted effect from fixed plant noise was concluded to be negative, not significant, long-term.

Vibration

- Section 10.3.2.8 of the EIAR considers 'Operational Phase Vibration'. It is set out therein that at distances of less than 300m from the turbine, vibration levels can could no longer be differentiated from the background vibration levels. Noting the distance to the nearest NSL of 590m, no significant effects from vibration at operational phase are identified.

Decommissioning Impacts

- Activities that occur during the decommissioning phase are unlikely to produce higher noise levels than those produced during construction and many of the activities will be similar in nature. Less works will be required as only above ground structures will be removed. As such it is considered that if construction noise levels are predicted to be below the threshold levels, then decommissioning noise will also be within the threshold levels.

Cumulative Impacts

- **Construction Phase** - No significant cumulative construction noise effects.

- **Operational Phase** – Existing permitted and proposed windfarm developments with the potential for cumulative impacts have been considered as part of the turbine noise impact assessment.
  A review of existing, proposed and permitted wind turbine developments in the wider study has been undertaken in accordance with the guidance contained in the IOA GPG, as outlined in Section 10.4.5.4 of the EIAR.
  A cumulative wind turbine assessment has been scoped in for Cloncreen Wind Farm and Mount Lucas Wind Farm and the contributions from these wind farms and the results have been presented in Section 10.6.2.1 of the EIAR.
  All other wind farm turbines at distances greater than 5km from the proposed development are more than 10dB below the lowest turbine noise limit and therefore have not been included in the cumulative assessment.

13.5. **Mitigation**

Noise and Vibration (Construction & Decommissioning Phases)

Section 10.7.1 of the EIAR sets out a range of best practice mitigation measures which will be implemented during the construction and decommissioning phases, including but not limited to, the use of plant that is compliant with EC Directive on Noise Emissions for Outdoor Equipment and adherence to the codes of practice for construction working given in BS 5228-1: 2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.

A schedule of noise and vibration control measures has been formulated in accordance with best practice guidance and are outlined in the CEMP (EIAR, Appendix 2-1).

The core hours for construction activity will be 07:00 to 19:00, Monday to Friday and 08:00 to 14:00 Saturday, with occasional works outside these hours when agreed in advance with the planning authority.

13.5.1. **Noise (Operational Phase)**

Section 10.7.1.2 of the EIAR confirms that the predicted operational noise levels from the proposed development will be within the relevant best practice noise criteria. Therefore, no specific mitigation measures are required. If alternative turbine models within the proposed specifications are considered for the proposed development, an updated noise assessment will be prepared to confirm that the noise emissions will comply with the noise criteria as per best practice guidance outlined in Section

10.3.2.5 of the EIAR and/or the relevant operational criteria associated with the grant of planning for proposed windfarm.

13.5.2. **Amplitude Modulation (AM)**

In the event of a complaint which indicates potential AM associated with turbine operation, the operator will employ a qualified acoustic consultant to assess the level of AM in accordance with the methods outlined in the IOA Noise working Group (Wind Turbine Noise) Amplitude Modulation Working Group (AMWG) namely, Institute of Acoustics IOA Noise Working Group (Wind Turbine Noise) Amplitude Modulation Working Group Final Report: A Method for Rating Amplitude Modulation in Wind Turbine Noise (9 August 2016) or subsequent revisions. The measurement method outlined in the IOA AMWG document, known as the '*Reference Method'*, will provide a robust and reliable indicator of AM and yield important information on the frequency and duration of occurrence, which can be used to evaluate different operational conditions including mitigation.

These mitigation measures, if required, will consist of the implementation of operational controls for the relevant turbine type, which will include curtailment of turbines under specific operational conditions. In the absence of widely accepted and robust planning conditions to control AM from wind turbines, the commitments outlined in the EIAR are considered best practice. The proposed approach will ensure that any negative impacts arising from AM associated with the operation of the proposed windfarm will be effectively addressed by the operator.

13.5.3. **Fixed Plant**

In order to ensure noise is minimised at NSL's, plant will be selected and located so as to minimise noise impacts, with a maintenance programme in place.

13.5.4. **Monitoring**

Wind Turbine Noise - If an exceedance of the noise criteria is identified as part of the commissioning assessment, the guidance outlined in the IOA GPG and Supplementary Guidance Note 5: Post Completion Measurements (July 2014) will be followed, and relevant corrective actions taken. The commissioning survey will include a review for the presence of audible tones associated with the operation of the wind

turbine farm in accordance with Annex C of ISO 1996-2:2017 Acoustics — Description, measurement and assessment of environmental noise Part 2: Determination of sound pressure levels.

Curtailment of Turbine Operation - For example, implementation of noise reduced operational modes resulting in curtailment of turbine operation can be implemented for specific turbines in specific wind conditions to ensure turbine noise levels are within the relevant noise criterion curves/planning conditions limits. Such curtailment can be applied using the wind farm SCADA system without undue effect on the wind turbine performance. Following implementation of these measures, noise surveys will be repeated to confirm compliance with the noise criteria.

13.6. **Residual Effects**

Section 10.8 of the EIAR describes Residual Effects, with a summary of residual impacts provided in Table 10-30. No significant residual effects are predicted. Of note is that predicted noise levels associated with the proposed windfarm will be within best practice noise criteria curves recommended in Irish guidance '*Wind Energy Development Guidelines for Planning Authorities'* (2006).

13.7. **The Assessment: Direct and Indirect Effects**

I have examined, analysed, and evaluated Chapter 10 and associated appendices of the EIAR, and the submissions on file in respect of Noise and Vibration.

13.7.1. **Construction and Decommissioning Phase Noise and Vibration Impacts**

In relation to construction phase noise impacts, I note that potential noise impacts from fixed works associated with the construction of the wind farm itself will be below the relevant threshold levels for daytime works for all of the nearest NSLs, and for all scenarios, and therefore I am satisfied that there would be no significant construction noise effects associated with works related to the construction of the wind turbines and associated works on the wind farm site itself.

I note that temporary construction works related to the proposed Turbine Delivery Route (TDR) will take place within 40 to 50m of the nearest NSLs, and assuming a 'worst-case' scenario i.e. that all plant operate simultaneously along the closest

boundary to the NSLs, the predicted construction noise level is 68dB, which is slightly higher than relevant 65 dB threshold. However, as set out in the EIAR, such works are temporary in nature and unlikely to be at the worst-case predicted effects for more than a few days. On the basis that the duration of the noise effect is brief, no specific mitigation measures are required. The EIAR does not identify any significant negative effects associated with same. I am satisfied that effects associated with same will not be significant, noting that the exceedance of the noise threshold is only slight, noting the temporary nature of the works associated with the TDR, and noting the predicted noise levels are 'worst-case' scenario where all plant is operating simultaneously.

Similarly, proposed works associated with the grid connection, also have the potential to impact NSLs within 25m of the routes, with noise levels having the potential to exceed the construction noise criterion of 70dB LAeq,1hr set out in Section 10.3.2.1 (Highest predicted cumulative plant noise level is 75 dB at 15m, and 69 dB at 25m). Table 10.22 of the EIAR sets out that the significance of grid connection and cabling effects are 'Not Significant to Moderate'. I concur with same, and noting that these works are temporary, I am satisfied no mitigation is required for same.

In relation to vibration impacts at construction phase, it is set out within the EIAR that, due to the large separation distances between the construction activity area and the nearest receptors, no significant effects are anticipated, and I am satisfied that this is the case.

In relation to decommissioning phase noise and vibration impacts, I am satisfied that activities that occur during the decommissioning phase are unlikely to produce higher noise levels than those produced during construction and many of the activities will be similar in nature, and as such I am satisfied that no significant noise or vibration impacts will result at decommissioning phase.

13.7.2. **Operational Phase Noise and Vibration Impacts**

I note that the EIAR does not identify any significant operational noise or vibration impacts. In relation to operational noise, I am satisfied that it has been demonstrated that the proposed development complies with daytime and nighttime noise level criteria at noise sensitive receptors as per the WEDG 2006. I am also satisfied that the

cumulative assessment has demonstrated that the proposed development can operate concurrently with other operational windfarms while meeting the WEDG 2006 noise limits.

I am also satisfied that it has been demonstrated that there will be no significant noise impact from fixed plant at operational phase.

In relation to vibration impacts, Section 10.3.2.8 of the EIAR sets out that vibration generated from the operation of a wind turbine unit will decrease rapidly with distance, and reference is made to a report from Germany[24] which concluded that at distances of less than 300 m from the turbine, vibration levels had dropped so far that they could no longer be differentiated from the background vibration levels. The EIAR sets out that the shortest distance from any turbine in the Proposed Development to the nearest NSL is approximately 590 m and at this distance, the level of vibration will be significantly below any thresholds for perceptibility. As such, I am satisfied that it has been demonstrated that no significant vibration effects will result at operational stage.

In relation to the specific issues raised by the PA, Prescribed Bodies and by observers, I have considered same below.

13.7.2.1. **Cumulative Assessment and the Yellow River Wind Farm**

I note that concerns are raised by both the PA and observers that the Yellow River Wind Farm was not included in the noise assessment. The applicant, in the response to submissions states that Appendix 10-2 of the EIAR concludes that it is not necessary to include Yellow River Wind Farm in a cumulative assessment due to the fact that the 25 dB LA90 contour for the Yellow River Wind Farm does not overlap the 35 dB contour for the proposed windfarm and therefore will not have a cumulative impact on noise levels for surrounding NSLs.

However, the applicant has clarified that the Yellow River Wind Farm was, in fact, included in the modelling, and reference is made in Appendix 10-7 which sets out the predicted cumulative noise contour and therein it can clearly be seen that the proposed development, Cloncreen Wind Farm, Mountlucas Wind Farm, along with Yellow River

[24] 'Low frequency noise incl. infrasound from wind turbines and other sources' - State Office for the Environment, Measurement and Nature Conservation of the Federal State of Baden-Württemberg 2016.

Wind Farm, are included in the noise predictions. I note also that Section 10.4.1.2 of the EIAR confirms that Cloncreen Wind Farm located c. 2.2km (21 no. turbines), Mount Lucas Wind Farm located c. 4.1km (28 no. turbines) and Yellow River Windfarm located c. 4.2km (29 no. turbines) from the application site, as well as the development proposed here, have all been included in the cumulative assessment presented in the EIAR. I note that other wind farms within a 15km distance (namely Cushaling, Drehid and Moanvane) were not included in the cumulative assessment. As such I am satisfied that the Yellow River Wind Farm has been included in the noise assessment, and I am also satisfied that, as per the screening detailed in Appendix 10-2, all wind farms that have the potential to contribute to cumulative noise impacts have been included in the noise assessment, and this screening process has been carried out in line with best practice guidance. The inclusion of Yellow River Wind Farm would appear to be in line with a precautionary approach.

13.7.2.2. **NSL's Downwind of the Proposed Windfarm**

I note that the noise impact assessment is a '*worst-case'* assessment that assumes all NSL's are downwind of all turbines. As such I consider that issues relating to prevailing wind and residential locations relative to the wind turbines have been accounted for in the applicants EIAR assessment.

13.7.2.3. **Yellow River Wind Farm Not Operational**

An observer has stated that the Yellow River Wind Farm was not operational during the baseline noise surveys and that this represents a flaw in the data. The applicant acknowledges that this was not included in the baseline noise survey but points to best practice guidelines that states that noise from existing wind turbines should not be included in the baseline noise determination. As such the omission of this wind farm, and other wind farms, in the determination of baseline noise levels, is in line with said guidelines. I am satisfied that the baseline noise assessment is appropriate and has been carried out in line with best practice guidelines.

13.7.2.4. **Relevant Section 28 Guidelines (WEDG 2006 and WEDG 2019)**

I note the third-party concern in relation to the use of the WEDG 2006 guidelines in undertaking the noise assessment rather than the use of the Draft WEDG 2019 guidelines.

I consider the appropriate guidance in relation to noise limits to be the current WEDG 2006, which have not been withdrawn by the Minister and which are therefore still the relevant Section 28 Guidelines that the Coimisiún must have regard to. In the absence of convincing evidence or scientific consensus that the WEDG 2006 are not adequate or fit for purpose and noting that the noise assessment has been undertaken in accordance with the ETSU-R-97 and the IOA GPG, I consider the application of the WEDG 2006 noise limits to be appropriate.

In terms of the consideration that the current Guidelines are not fit for purpose, while it is acknowledged that the Guidelines date from 2006, draft Guidelines dated 2019 have been prepared and consenting authorities await the finalisation of these guidelines by the Department which according to the CAP 2025 - Action Number EL/24/5 were to be published in Q1 of 2025. Notwithstanding, at the time of writing this report. these revised guidelines have not been published and as such the existing WEDG 2006 guidelines remain in force Hence, I consider they represent appropriate noise guidance in relation to this windfarm assessment.

13.7.2.5. **Huson and Associates Report**

I note a report entitled '*Peer Review of Proposed Ballinla Wind Farm Planning Application'* is included with the submission from Colm Quinn and Family. This report has been written by William Leslie Huson (BSc (Hons) Applied Physics, UK 1975; MSc Sound and Vibration Studies, Institute of Sound and Vibration Research, Southampton, UK 1977) and is a critique of the submitted noise report. The main issues of relevance to this chapter raised in this report are as follows:

- Minimum setback distances to residential property has not been achieved;
- Use of 40db Noise Target;
- Compliance with WEDG 2006/WEDG are outdated;
- Predicted sound levels are too low;
- Excessive AM;
- Low Frequency Noise;

- Up to 228 dwellings will exceed the 35 dB (A) noise limit target;

I note that Appendix 1 of the applicant's response to submissions outlines a response to noise issues, including those raised within the Huson Report. I have addressed each of the issues raised above, in the assessment below.

13.7.2.6. **Minimum Setback Distances**

The Huson Report sets out that the minimum recommended setback of 10 times the rotor diameter has not been applied. I have considered the issue of Setback Distances in Section 14 of this report, and I refer the Coimisiún to same and will not repeat it here.

13.7.2.7. **Use of 35dB Noise Target**

The Huson Report states that the noise compliance with WEDG 2006 should have been completed at 7 m/s, not 11 m/s, and that Target Noise Limits should be lower at 35 dB{A) in 7 m/s wind speed at standardised height.

It is stated also that the guidelines used to underpin ETSU-R-97 are under review and are not referred to in WEDG 2006. Additional references are made to the contents of the EPA document '*Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*'.

In response the applicant has stated that the applicable guidelines are discussed in detail in Section 10.3.2.4 of the EIAR, and that the noise modelling inputs and parameters used in the assessment are presented in Appendices 10-4 and 10-5 of the EIAR. The predicted turbine noise levels presented in the EIAR are calculated in full accordance with ISO 9613-2 and fully in accordance with IOA GPG and in line with best-practice guidance.

Section 10.5.2 of the EIAR relating to Wind Turbine Noise Limits, sets out the rationale for the use of the 40 dB LA90 as the lower threshold value and have been derived from a detailed review of background noise data. The applicant states that the use of the 40 dB LA90 is considered appropriate noting that the proposed lower threshold

daytime criterion for wind turbine noise here is 3dB more stringent than the equivalent daytime noise limit for areas of low background noise outlined in NG4.[25]

In addition, the applicant's make reference to conditions imposed on other wind farms including Cloncreen[26] and Yellow River[27] in which a lower threshold of 40 or 43 dB is commonly adopted in planning conditions imposed by ACP or Planning Authorities.

In relation to the other elements of the EPA document '*Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities* (NG4)', I note that same is not the relevant guidance document for the assessment of noise from wind turbines that do not fall under the remit of the EPA, and Section 11 of same refer to the Wind Energy Development Guidelines for such developments, noting that this document outlines the appropriate noise criteria in relation to wind farm developments.

In relation to the guidelines used to underpin ETSU-R-97, the applicant's response notes that the draft update to ETSU-R-97 is a UK consultation document and is not appliable to wind energy assessments in Ireland.

In relation to same, I note that ETSU 2026 are the updated UK guidelines for assessing and controlling noise from wind turbines, which took effect on June 19th 2026. These updated UK guidelines replace ETSU-R-97. I note that these guidelines took effect after the current application was submitted to ACP.

Having regard to the considerations above, I am satisfied that the applicant have utilised appropriate methodologies and current best practice guidelines and standards in the consideration and assessment of potential noise impacts on surrounding sensitive receptors and I am satisfied therefore that it has been demonstrated that no significant residual noise impacts will result from same.

13.7.2.8. **Excessive AM and Low Frequency Noise**

The issue of AM is discussed above and I refer the Coimisiún to Section 13.5.2 of this report. In relation to low frequency noise, this is considered in Section 10.3.2.5 of the

[25] EPA document 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)
[26] Planning Ref PL 19.PA0047
[27] Planning Ref. PL 19.PA0032

EIAR. Therein it is concluded that low frequency noise and infrasound associated with wind turbines are expected to be below perceptibility thresholds and are not likely to result in any significant effects at NSLs.

Having regard to the considerations above, I am satisfied that potential effects resulting from Excessive AM and low frequency noise have been considered and I have no evidence before me that would serve to undermine those conclusions as set out in the EIAR. I am satisfied therefore that no significant residual impacts will result from same.

13.7.2.9. **Academic Reports (Noise)**

I note the submission from Colm Quinn references a number of academic papers in respect of noise impacts from windfarms. While noting the contents of same, I do not consider the academic papers themselves would lead to a conclusion that the subject proposal would lead to significant negative noise effects on surrounding NSLs, noting that the academic papers do not refer to the specific particulars of the subject proposal or the documentation submitted in respect of the current application.

13.7.2.10. **Impact on Horses/Livestock**

Observers have raised concerns that the proposed development, as a result of noise, poses a significant threat to the local equestrian industry including local bloodstock industries, and raised concerns regarding impact on animal welfare, animal health, safety of handlers and business concerns.

The applicant is of the view that available evidence confirms that wind farms do not displace livestock farming or adversely affect the welfare or productivity of domesticated animals and has made reference to studies to support same. It is further set out that no reduction in dairy production is expected to occur and the existing dairy herd on site will remain in the fields immediately adjacent to the turbines

Having regard to the lack of guidance on the matter within this jurisdiction, and in the absence of any peer reviewed scientific evidence which indicate that wind farms have a negative adverse effect on equine and bovine interests, I am satisfied that the proposed development will not have a significant adverse effect on equine bovine interests within the area.

13.7.2.11. WHO Recommendations in Relation to Wind Turbine Noise

In relation to the WHO recommendations with respect to wind turbine noise, I refer to their publication 'Environmental noise guidelines for the European Region'[28]. The guidelines describe a recommendation to avoid adverse health effects, that the average noise exposure levels produced by wind turbines is reduced below 45dBL_{den}. No recommendation is made for average night noise exposure. However, the recommendation in relation to average noise exposure is 'conditional', which is described in the report as having less certainty of its efficacy owing to lower quality evidence of a net benefit. The document also states on page 86 of the full document, that:

> *"…it may be concluded that the acoustical description of wind turbine noise by means of Lden or Lnight may be a poor characterization of wind turbine noise and may limit the ability to observe associations between wind turbine noise and health outcomes*."

As such, I refer to the adopted guideline requirements in this report, under the WEDG 2006. I note submissions highlighting concern that these are outdated, however these are the current guidelines in place at the time of writing this report. As such, the WEDG 2006 are relied upon throughout my assessment in this report.

13.8. Conclusion: Direct and Indirect (Noise and Vibration)

In relation to operational noise specifically and having reviewed the information submitted by the applicant in the EIAR, associated appendices and figures, I consider that a robust noise assessment, informed by adequate background noise monitoring, was undertaken. I note in this regard that the cumulative noise modelling assessment used worst-case assumptions. The EIAR indicates in the cumulative assessment that the proposed development can operate concurrently with other operational windfarms while meeting the WEDG 2006 noise limits.

The assessment has demonstrated that the proposed development complies with daytime and nighttime noise limit criteria at noise sensitive receptors as per the WEDG 2006, which are the applicable guidelines in the Irish context. I consider a suitable

[28] https://iris.who.int/server/api/core/bitstreams/f53c45ba-11d3-4502-a424-c1cf49f5a053/content

condition be included to limit daytime and night-time noise at NSLs in line with the WEDG 2006 and the applicant is required to submit and agree a noise compliance monitoring programme for the proposed windfarm with the planning authority to include the mitigation measures required to achieve compliance with the noise limits such as curtailing of particular turbines. The condition should also require that the results of the initial noise compliance monitoring to be submitted to and agreed in writing with the planning authority within 12 months of commissioning of the wind farm.

Subject to compliance with the identified mitigation measures and noise limits and noting the significant separation distances between the proposed turbines and the nearest residential receptors, I do not consider that the proposed development would be likely to have a significant impact on sensitive receptors in relation to noise.

I have considered all of the written submissions made in relation to noise and vibration and the relevant contents of the file including the EIAR. I am satisfied that the potential for significant adverse noise and vibration impacts can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative noise and vibration impacts.

14.0 Landscape and Visual

14.1. Issues Raised

14.1.1. Planning Authority (PA)

The PA have raised concerns in relation to the potential visual Impact of the proposed turbines on the local area and residents. The PA states there is insufficient justification for the proposed setback distances provided and this would set an undesirable precedent and likely cause detrimental impact on the residential amenity of these dwellings.

In relation to the Visual Impact Assessment, the PA state there is an absence of an overall map showing all viewpoints. Concerns were raised in relation to overall assessment of prominent views, in particular, those views to the east.

Concern was also raised in relation to the quality of the submitted photomontages noting the background appears to be hazy and the ordering is out of sequence, with VP 11 and 13 mixed together.

As a result of the setbacks from existing dwellings, the minimum separation distance between the proposed turbines and the existing turbines in the surrounding area, the PA considers the proposed development will have a significant visual impact on the residential amenity of local residents and the wider area.

The PA refers to dwellings along the local road between the northern and southern sections of the proposed development. The PA is of the view that these dwellings will be subject to an overbearing impact, specifically from T1, T2, T3 and T4.

The PA are also of the view that cumulative impact of permitted but not yet constructed wind turbines has not been factored into the Landscape & Visual Assessment (LVIA) by the applicant and that a revised LVIA should be provided.

In conclusion the PA consider the layout and or the number of proposed turbines should be reconsidered.

14.1.2. **Prescribed Bodies**

The Minister for Housing, Local Government and Heritage (Development Applications Unit) (DAU) have raised concerns in relation to visual impact in the context of cultural heritage assets. I have addressed these concerns in Section 15.7.3 of this report and I refer the Coimisiún to same.

14.1.3. **Observer Submissions**

The majority of observer submissions raise concerns in relation to the visual impact of the proposed turbines, the proximity of turbines to dwellings and the height of turbines. Concerns were also raised in relation to the impact of turbines on the rural landscape, including the Grand Canal, in combination with other turbines in the surrounding area. It is stated that a number of properties are located between turbines (i.e. turbines are located both to the north and south of the dwellings). Observers have also raised concerns in relation to the visual impact of the proposed substation. The observers highlight that the EIAR is deficient in its assessment of significant effects on residential

amenity and that there are deficiencies in the data provided including in relation to separation distances.

14.2. Context

14.2.1. Landscape Policy

In terms of landscape policy, generally speaking the northern portion of the site falls within an area of Low Sensitivity (as per Figure 4.22 of the OCDP 2021) which are defined as robust landscapes which are tolerant to change, such as the county's main urban and farming areas, which have the ability to accommodate development (Table 4.18 of the OCDP 2021 refers). The OCDP 2021 sets out that these areas in general can absorb quite effectively, appropriately designed and located development in all categories (including: telecommunication masts and wind energy installations, afforestation and agricultural structures). With reference to Figure 4.22 of the OCDP 2021, the southern portion of the site generally falls within an area designated as Moderate Sensitivity, which are associated with cutaway bog landscapes. Table 4.19 sets out that Moderate sensitivity areas can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change. In terms of particular characteristics, it is set out that cutaway bogs cover a large part of the landscape of Offaly and in their entirety, are c. 42,000 hectares.

Generally, there are a number of land uses suitable for cutaway bog, not included in High Sensitivity Areas, which include wilderness, grassland, forestry and recreation. Some cutaway bog landscapes are more robust and may be considered for other uses and may be appropriate for other sensitively designed and located developments including renewable energy (wind farms, biomass crops) and/or industrial use.

Also of relevance, and considered further in Section 14.6.2 below, is Objective BLO-25 which stated that it is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.

Landscape and Visual Impact Assessment (LVIA) is addressed in Chapter 11 of the EIAR and Appendices 11-1 (Visual Impact Assessment), 11-2 (Ballinla ZTV Map) and

11-3 (Route Screening Study Map). EIAR Volume 4 contains the Photomontage Booklet.

Chapter 14 including appendices sets out the methodology, baseline environment, assessment of landscape impacts and effects, assessment of visual Impacts and effects, mitigation and monitoring measures and residual impacts and effects.

As set out in Section 11.2.4 of the EIAR, the Chapter has been prepared in accordance with the EPA Guidelines (2022) as well as the 2013 Landscape Institute Guidelines on preparing Landscape and Visual Impact Assessments (GLVIA3, 2013), WEDG (2006) and the draft WEDG (2019), as well as other best practice guidance documents including *'SNH Visual representation of wind farms: Best Practice Guidelines (version 2.2 - 2017*)' and '*Landscape Institute Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals'*(2019).

A detailed description of the proposed turbines is outlined in Chapter 2, Section 2.3.1 of the EIAR. The proposed windfarm comprises a total of 7 no. turbines, each with a turbine tip height of 185m, a hub height of 104m and a blade length of 79.35m. Having regard to the proposed 185m blade tip height, a 20km study area was defined in the EIAR (Wider Study Area), with a 'Central Study Area' of 5km proposed.

14.2.2. **Baseline**

Section 11.3 of the EIAR sets out the landscape baseline having regard to both the landscape designations and policy context. The landscape of the study area is described as predominantly flat to gently undulating, particularly in the central study area, with isolated hills in the wider study area, to the northwest, south/southeast and west of the proposed site. There are some areas of higher ground however in the wider area, including but not limited to Croghan Hill (287m AOAD, c.7.8km north-west).

Landcover consists of a mix of cutaway peatland as well as more productive farmland. The closest settlements are Rhode and Edenderry. Edenderry Power Station is located c.5.2km southeast of the site.

Under the Offaly County Development Plan 2021 – 2027 (OCDP 2021), a classification of landscape sensitivity for various landscapes is set out, with three categories of same: High, Medium and Low.

The EIAR states the proposed development is located predominantly within a *'Low'* sensitivity area except two turbines to the south which are located within a '*Medium*' sensitivity area. The nearest area of '*High*' Sensitivity is located around the Grand Canal c. 500m north of the nearest turbine (Refer to Fig 11-2 of the EIAR).

In relation to '*Low Sensitivity Landscapes',* these are described generally as areas which are tolerant to change and can absorb appropriately designed development including wind energy installations. '*Moderate Sensitivity Landscapes'* are described as areas that can accommodate development but with limitations in scale and magnitude. Some cutaway bogs may be appropriate for developments including wind farms.[29]

The EIAR sets out relevant policies of the OCDP 2021 (refer to Section 11.3.3.1.1 of the EIAR for details). Of note and in relation to BLP-23 '*Waterways Corridor Study',* the EIAR states that the proposed development falls outside the two principal zones of consideration *(*the *'Canal Corridor'* and the '*Area of Immediate Influence'*).

The Coimisiún will note that since the submission of the application, Variation No. 1 of the OCDP 2021 has been adopted and I have detailed same in Section 4.4.3 of this report. In summary the following provisions are relevant to this application, and the consideration of landscape and visual impacts:

Objective BLO-28, in summary, seeks to protect the County's 'Peatland and Nature Corridors' as shown in Figure 4.9(b) of the OCDP 2021 and to strictly direct large scale energy production projects, most particularly wind farms, onto areas that are located outside of the 'Peatland and Nature Corridors[30].

Fig. 4.9(b) of the OCDP 2021 identifies Peatland and Nature Corridors. As noted in Section 5.2.2 above, it is likely an area to the south of the application site now lies within a Peatland and Nature Corridor, and it is also my view that it is likely that proposed Turbines T4, T5, T6 and T7 fall now within this designation.

In relation to the Wind Energy Strategy (WES), I refer the Coimisiún to Section 5.2.2 of this report for a detailed consideration of the WES. Map 10 of the WES illustrates that the application site is deemed 'Open for Consideration for Wind Energy

[29] Refer to Section 4.4.3 of this report for full wording of landscape sensitivity types.
[30] See full wording of same in Section 4.4.3 above.

Development'. Notwithstanding, Section 11 of the WES identifies key areas within the county that are 'Open for Consideration for Wind Energy Developments' with the exception of lands within the Peatland and Nature Corridors as identified by BLO-28.

By virtue of the designation of part of the site as a 'Peatland and Nature Corridors , this particular area of the application site is not supported by the WES for wind energy development, noting that Objective BLO-28 directs wind farms to areas that are outside those areas designated 'Peatland and Nature Corridors'.

I note that the outer study area encompasses a number of different counties including Kildare, Meath, Westmeath and Laois. A consideration of same is set out in the EIAR. It is determined that the site is of sufficient distance from same so as not to influence landscape character within same.

14.2.3. **Visual Baseline**

The EIAR determines a Zone of Theoretical Visibility (ZTV) and Figure 11-5 illustrates same. This map is also included in Appendix 11-2 of the EIAR. A Route Screening Assessment which is contained in Appendix 11-3 was also carried out by the applicant, from roads in the vicinity of the site to c. 3km from the site in all directions.

A rationale for the selection of viewpoints as the basis for the LVIA is set out in the EIAR, and a total of 29 no. viewpoints (VPs) were selected. Table 11-9 of the EIAR sets out a brief description of each viewpoint. The location and orientation of VPs is also set out in the Photomontage Booklet (Refer to Part IV of the EIAR).

The EIAR in Section 11.3.4.4 and Table 11-8 has considered views and prospects that may be of scenic relevance in the CDPs and other media that represents the area. The EIAR considers the only views or routes that have the potential to be impacted upon are highlighted in Table 14.1 below:

Table 14.1: Views or Routes that have the Potential to be Impacted		
Offaly CDP 2021-2027		
Scenic View	**Relevance**	**Viewpoint Representation**
V8 – View towards Croghan Hil and Bog lands	Elevated views oriented in the direction of the site.	VP 29 (c. 8.6km southeast).
V9 – Views South to bog lands	Proposed development in the periphery of the view.	VP 7 (c. 6.3km west)

Kildare CDP 2023-2029		
Route Reference	**Relevance**	**Viewpoint Representation**
08 - Views of Bogland Plains. The L3002 from Kilmoney crossroads to Feighcullen crossroads at Boston Hill.	Elevated views oriented in the direction of the Site.	VP 26
26 - Views from the county roads (L1005, L5019, L5018, L1006, L5017 and L5011) of Carbury Castle and Hill – Teelough road junction with the R402 and upland area at Mylerstown.	Views oriented in the direction of the Site.	VP 28
34 - Views of the Bog of Allen and the Hills of Allen, Grange, and Dunmurry along the R403 and R414 from Allenwood to Rathangan.	Views oriented in the direction of the Site.	VP 27
Meath CDP 2021-2027		
54 - On R161 at Royal Canal	Elevated views from bridge oriented in the direction of the Site.	VP 18
Westmeath CDP 2021-2027		
13 - Panoramic views from Garrane Hill on the Regional Road R-446.	Views oriented in the direction of the Site.	VP 21
14 - Views of Sculpture along the M6.	Views oriented in the direction of the Site.	VP 20

14.3. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 14.2 below.

Table 14.2: Summary of Potential Effects (Landscape & Visual)
Do Nothing
• If the proposed development were not to proceed, the EIAR concludes that the receiving landscape and visual baseline would remain in the same or in similar condition as it is currently should the proposed development not proceed.
Construction Impacts
Landscape Effects • Modest effects on the landscape are expected with disturbance being localised and relatively limited. The felling of commercial forestry, as well as the construction of access tracks and hardstanding will result in impacts on landscape. • It is noted that most construction phase landscape effects will be substantially reversible at decommissioning stage. The overall landscape effect is concluded to be moderate, negative. **Visual Effects** • The most substantial visual effects will arise from requisite construction activities such as erecting the turbines. • For visual receptors in the '*Central Study Area'* the level of visual effect will be no greater than moderate. • For visual receptors in the '*Wider Study Area'*, the level of visual activity will be no greater than slight.

Operational Impacts

Landscape Effects

- The greatest potential for landscape impact occurs as a result of the change in character of the immediate area due to the introduction of tall structures with moving components. The EIAR states the wind turbines are a familiar and characteristic feature of the central study area and wider study area, with existing wind turbines associated with the Mount Lucas, and Cloncreen Wind Farms covering the landscape a short distance to the southwest and southeast respectively and with turbines from the Yellow River and Cushaling Wind Farms slightly further away to the north and southeast respectively. Effects are therefore generated primarily as a result of the introduction of additional turbines to this wider wind farm context.
- Within the Central Study area, the landscape effect was deemed to be Moderate-Slight in the immediate environs (within c. 1km) reducing to Slight to Slight-Imperceptible. Within the Grand Canal corridor, the indirect effect was considered to be Moderate within 1km of the site. The quality of effects was deemed negative, and duration was long-term.
- Beyond the Central Study, the effect on the landscape was concluded to be neutral, slight, long-term.

Visual Effects

- Photomontages were used to assess the visual effects arising as a result of the proposed development from 29 no. viewpoint locations (EIAR Vol. 4). A detailed assessment of potential visual effects from each VP is set out in Appendix 11-1 of the EIAR 'Visual Impact Assessment'.
- Table 11-10 sets out a summary of the Visual Impact Assessment. No significant visual effects are reported. The greatest magnitude of effects are reported at the following locations:
    - VP2 – Moderate, Negative, Long-Term
    - VP3 – Moderate-slight, Negative, Long-Term
    - VP7 – Moderate, Negative, Long-Term
    - VP10 – Moderate-slight, Negative, Long-Term
    - VP11 – Substantial-moderate, Negative, Long-Term
    - VP12- Moderate, Negative, Long-Term
    - VP13- Moderate-slight, Negative, Long-term
    - VP14a – Substantial-moderate, Negative, Long-term
    - VP14b – Moderate, Negative, Long-term
    - VP15 – Moderate, Negative, Long-term
    - VP16 – Moderate-slight, Negative, Long-term
    - VP29 – Moderate-slight, Negative, Long-term

Designated Scenic Routes/Views

- The EIAR states that all of the views/routes experienced imperceptible visual effects save for VP7 and VP26. From VP 26 (which is a representative view of 'Route 08-Views of Bogland Plain' - Kildare County Council) this is located over 17km but is afforded clear views of the turbines. The overall effect was deemed to be 'Slight'.
- From VP 7 (which is a representative view of V9 – Views South to bog lands) the effect is Moderate, Negative, Long-term. The view is from near Croghan Hill, and the EIAR states the turbines will generate some visual clutter with more distance turbines although within the context of vast areas of lowland plains.

Local Community Receptors

- In terms of visual impacts on local community receptors, 9 no. VPs were selected as being representative including VP 2, 3, 8, 10 to 13, 15 to 16.

- A substantial moderate effect occurs at VPs 11 and 12, which are from the local road that dissects the two turbine clusters, and are afforded views of turbines to either side of the road, with the EIAR stating that there is some sense of being surrounded by turbines at close quarters.
- Moderate effects are experienced from VPs 2 and 15, which have relatively clear and close views of the nearest cluster of turbines.
- Slight-moderate effects are experienced at VPs 3, 10, 13 and 16, and these views are generally beyond 2km of the nearest turbine.

Centres of Population

- In relation to visual impacts on settlements/centres of population, 4 no. VPs were selected as being representative including VP 1, 19, 22 and 24. The greatest significance was recorded as slight from VP1 (western outskirts of Edenderry) with the remaining visual effect recorded as Imperceptible.

Major Routes

- From major routes, visual effects were recorded as 'Slight' from VP9 (from hump-backed bridge on the R400 passing over the Grand Canal) and 'Imperceptible' from VP20 (Overpass of the M6 motorway).

Tourism, Recreation and Heritage Features

- Moderate visual effects are experienced from the representative VPs along the Grand Canal (VP14 a and b).
- From VP29 (summit of Croghan Hill) the effect was deemed to be slight-moderate with the proposed development contributing to the density of the existing cluster of turbines.

Decommissioning Impacts

- Decommissioning Impacts similar nature and duration to construction impacts.

Cumulative Impacts

- Cumulative landscape and visual effects are considered in the context of cumulative wind energy developments as set out in Table 11.1 of the EIAR. A cumulative ZTV is provided in Appendix 11-2 of the EIAR. It is noted that all of the wind farms assessed are already operational, save for the permitted Dernacart Wind Farm and the planned Drehid Wind Farm. Both are a considerable distance from the site (20km and 18km from the site respectively). As such the operational wind farms are described as part of the baseline landscape conditions and are included in the baseline photography for the purposes of the Visual Impact Assessment.
- The EIAR sets out that the main assessment of landscape and visual effects is essentially a cumulative one. It states that of the 7 no. operational, planned and permitted windfarms considered, the proposed development can only readily be seen in the context of 3 no. existing windfarms namely Cloncreen/Cushaling, Mount Lucas and Yellow River. The more distant windfarms will not be readily visible with the proposed development except in distant elevated views such as from Croghan Hill.
- The EIAR concludes that the cumulative effect is no greater than 'Slight-Moderate'.

14.4. Mitigation

Section 11.6.1 of the EIAR states there are no specific mitigation measures proposed that seek to reduce the visual effects as described above, noting that such measures are unlikely to be successful at reducing landscape and visual effects.

It is further stated in the EIAR that landscape and visual mitigation is embedded in the siting and design, with earlier iteration including moving the location of turbines that were located closer to the Grand Canal. It is also set out that the proposed turbines are set back at least 740m from the nearest non-involved residential receptors.

14.5. Residual Effects

Residual Effects are as those as set out in the assessment above.

14.6. The Assessment: Direct and Indirect Effects

14.6.1. Construction Stage

I concur with the assessment as set out in the EIAR in relation to landscape and visual impacts during the construction and decommissioning stages, which will occur due to the temporary visibility of construction activities such as movement of machinery, building tower sections and erecting the turbine, as well as the construction of access tracks and from the felling of commercial forestry. These effects will be short-term and will be experienced within the site and from locations with open views of sections of the proposed development. From locations outside the site the impact will not be significant. I am also satisfied that no significant landscape and visual impacts will result from the proposed Grid Connection Route (GCR) and the proposed Turbine Delivery Route (TDR). Overall, and as concluded in the EIAR, I am satisfied that no significant landscape and visual effects will arise at construction stage.

14.6.2. Operational Stage

In general, I consider the LVIA submitted with the applicant's EIAR, including the methodologies employed, to be a well-considered and a robust analysis. I am satisfied the identified 20km Zone of Theoretical Visibility and location and number of viewsheds selected, represents a comprehensive and reasoned consideration of potential landscape and visual impacts.

I consider the assessment in this regard has sufficient and appropriate regard to the WEDG 2006, the Draft WEDG 2019 and the GLIVA 3, 2013 Guidelines and allows for adequate consideration of landscape and visual impacts. I note that the EIAR concludes that no significant landscape or visual impacts will occur.

14.6.2.1. **Visual Amenity**

In terms of visual impacts, the EIAR includes a Visual Impact Assessment which has concluded that no significant effects will result from the selected VPs, with the greatest magnitude being described as '*substantial-moderate, negative, long term'* (from VPs 11, and 14a) and '*moderate (or moderate slight), negative, long term*' (from VPs 2, 3, 7, 10, 12, 14b, 15, 16 and 29).

From VP2 for example, I concur that the visual impact can be described as moderate, negative and long term. While the turbines are clearly visible from this viewpoint, the sensitivity of view is not high in my opinion, noting that the view is from a GAA ground (Ballyfore GAA Club) rather than from a residential receptor. I have discussed VPs 7 and 29 (Protected Scenic View, and from Croghan Hill) below.

From other VPs where moderate effects are described, I note that some of the turbines are clearly visible from these VPs. However, the receptors are either not particularly sensitive (i.e. from VP3 and 10), or the setback for the turbine from a more sensitive receptor (i.e. a residential property) is such that the visual impact is not significant, and the turbines do not present as overbearing structures (i.e. from VPs12, 15 and 16 for example).

I note that the submission from Damien Walsh states that he has received planning permission for a new house to replace existing house and this will be looking directly at Turbines 4, 6 and 7. I note that no Planning Reference Number is provided with the submission. Notwithstanding, the submission includes a map indicating the location of the existing house, which is located on the eastern side of the R402, to the south-east of the application site. With reference to the Offaly County Council website, 'GPlan' mapping shows that permission was granted on 27th March 2013 for the demolition of an unoccupied bungalow and to replace same within a two-storey dwelling house, and associated works (Reference 23295). I note the plans for same indicate a dwelling house located on the same wider site as an existing house on the site, albeit in a slightly different location, and with a larger footprint. In relation to the visibility, or otherwise, of the proposed turbines from this location, I refer to Appendix 11-3 Route Screening Study, which indicates that there are views towards the site from the location of this dwelling house. Notwithstanding, the closest turbines to this property

are T5 (approximately 1.6km from the proposed dwelling house) and T7 (approximately 1.8km from the proposed dwelling house) and, while these turbines, and others, are likely to be visible from this location, I am satisfied that the visual effects will not be significant, noting the distance from dwelling house to the closest turbine.

I note '*substantial-moderate, negative, long term'* are described from VP11. Notwithstanding the conclusions of the EIAR, I am of the view that this is more reasonably described as '*significant, negative, long-term'*. VP11 is described within the Visual Impact Assessment as a view from the L5010. This is a local road that runs between the northern and southern portions of the site, and as such lies between those turbines to the north and those to the south. I note that the view represents a '*community receptor view'* and there are a cluster of rural dwellings to the east and west that share similar views.

Specifically in relation to VP11, Part I, I note that this is a view facing north and 2 no. Turbines (T1 and T2) are clearly visible behind the dwelling house indicated. The closest proposed turbine is c. 730m from the viewpoint itself. Other operational turbines are also seen in the distance.

Viewpoint 11, Part 2 shows a view facing north-east and within this view T2 and T3 are visible. Viewpoint 11, Part 3 shows a view south-east from the local road L5010 with 4 no. of the proposed turbines in view (T4, T5, T6 and T7). The VIA accepts that there will be prominent views of the closest turbines in both directions, and of note it is stated that *'when combined with the more distant turbines of the Yellow River Wind Farm to the north, and the Cloncreen Wind Farm to the south, the proposed wind farm generates something of a sense of being surrounded by turbines'.*

However, the VIA sets out that those 4 no. turbines to the south (T4, T5, T6 and T7) are generally further away from the viewer than those to the north, and do not appear overbearing. The VIA sets out that those to the north are closer and rise above the intervening dwelling at dominant scale, albeit they do not appear overbearing for the viewer at this VP location. I would accept that those turbines to the south would have less of a visual impact, noting the slightly further distance, and the lack of intervening dwellings (from VP11c at least). However, I would have most concern in relation to

the visual impact from VP11a, and I am of the view that the impact on visual amenity from areas in the immediate proximity of VP11a can be concluded to be *'significant, negative'*.

I note that while the nearest turbine (T1) is located c. 730m from the VP itself, the turbine is c. 585m from the curtilage of the property that is visible in VP11a. The Coimisiún will note that this property does not form part of the landholding. However, there is a letter of support from the owner of the dwellinghouse (see discussion in Section 14.6.2.5 and 14.6.2.6 in relation to setback distances and guidelines in relation to same). Nevertheless, there are other sensitive receptors in close proximity to this viewpoint.

I am of the view that the proposed development will have a significant adverse visual impact from VP11a, and from the road in the immediate vicinity of the location of VP11, noting the specific context of same, with a number of sensitive receptors (residential dwellings) which will experience dominant views of 2 no. turbines in relatively close proximity.

I have reached this conclusion notwithstanding the letter of support from the owner of the dwelling as seen in VP11a. The nature of such development is that it results in the introduction of structures of a large scale into an area where existing development is low rise, and where existing dwellings are relatively close and mitigation in the form of screening is not possible, nor would it be effective.

I note that the SPPR2 of the draft WEDG 2019 imposes a setback distance for visual amenity purposes of 4 times the tip height (which in this instance equates to 740m), except where reduced setback requirements have been agreed with the relevant landowners. I note that, in relation to the residential dwelling as seen in VP11, and as set out in this landowner's letter of support, the landowner in question has been made aware of the potential impacts of the proposed wind farm, including those relating to visual impacts, and fully accepts them, and is fully supportive of the development of the project. As such, I am of the opinion that it is not necessary to seek a setback distance of 4 x tip height in this instance (see additional discussion in relation to setback distances below).

Of relevance to the discussion above, is Objective BLO-25 of the OCDP 2021 which states that it is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.

I have concluded that there will be significant adverse visual impacts from VP11(a) and from the road in the immediate vicinity of the location of VP11, and as such proposed Turbines 1 and 2 would create a significant visual intrusion from this viewpoint and from the road in the immediate vicinity of same.

As such the proposal would represent a Material Contravention of Objective BLO-25 of the OCDP 2021. I have considered the issue of Material Contravention in Section 5 of this report and I refer the Coimisiún to same.

Notwithstanding the finding of significant, negative visual effects, and notwithstanding the finding of a Material Contravention of Objective BLO-25, which seeks to protect skylines from significant visual intrusion, the Coimisiún will note that the proposal is for renewable energy generation, which is supported at a national, regional and local level, and will help to achieve a reduction in carbon emissions, and will help the State to reduce reliance on fossil fuels and will improve the energy security of the State.

I am of the view that a reasonable balance needs to be found between preserving visual amenity and achieving targets for wind energy generation and subsequently achieving targets for fossil fuel reduction. I am satisfied that, in this instance, such a balance has been found, noting that this significant adverse effect is limited to a relatively small stretch of road, and that, furthermore, that I have concluded that no other significant adverse environmental effects will result from this proposed development (see Reasoned Conclusion in Section 22 of this report)

In addition, I note the proposed windfarm is for a period of 35 no. years, and as such the effect will be reversed after this period of time (should no subsequent permission be issued). As such I conclude that, on balance, the proposal is acceptable.

14.6.2.2. **Landscape**

The greatest magnitude of effect in relation to landscape is described as '*Moderate-Slight'* in the immediate environs (within c. 1km) reducing to '*Slight to Slight-Imperceptible'*. Within the Grand Canal corridor, the indirect effect was considered to

be '*Moderate*' within 1km of the site. Beyond the 1km radius, the effect on the landscape was concluded to be neutral, slight, long-term. The quality of effects was deemed negative, and duration was long-term.

I concur with these conclusions, as relates to landscape, and the EIAR has set out a thorough and comprehensive landscape analysis. Of note is that the majority of the site is located within an area defined as a 'Low Sensitivity Landscape', with 2 no. Turbines to the south defined as 'Medium Sensitivity'. As described in the CDP, both landscape types have capacity to absorb development of the nature proposed here, provided they are appropriately designed. I note that other wind farms exist in the immediate area including the Mount Lucas, Cloncreen Wind Farms, Yellow River and Cushaling Wind Farms and the proposed development will be seen in the context of this landscape.

14.6.2.3. **Impacts on Grand Canal**

In relation to the impacts on the Grand Canal, I note VPs14a and VP14b are taken from the Grand Canal and VPs 9 and 13 are taken from bridges or junctions over the Canal. In relation to views from VP14a and b, the 3 no. closest turbines are clearly visible from these locations. However, I am satisfied that the visual effect from these locations can reasonably be described as '*substantial moderate, negative'* (from VP 14a) and '*moderate, negative'* (VP14b) noting that the views gained from this amenity walkway and cycleway will be transient.

While views from VP14a, Part 2 are quite prominent however, and would dominate views south from this location, as a result of both the lack of intermittent screening and the distance to the nearest turbine (0.65km), the views gained are by walkers, cyclists (and potentially those travelling on the canal itself) and as such are transient in nature. I note also, and as described in the Visual Impact Assessment in Appendix 11-1, the turbines are seen obliquely to the canal, and as such do not draw from views of the canal itself. In this regard I am satisfied that the visual effect of same will not be significant.

14.6.2.4. **Impacts on Proposed Peatland and Nature Corridors**

Objective BLO-28, in summary, seeks to protect the County's 'Peatland and Nature Corridors'. I have considered the impacts of the proposed development on same in Section 5.4.4 and 5.5.4 of this report, and in the interests of avoiding repetition, I refer the Coimisiún to same.

14.6.2.5. **Protected Views and Scenic Routes**

In relation to impacts on Protected Views and Scenic Routes, I am satisfied that the EIAR has adequately considered same. I note that a moderate, negative effect is described from VP 7, which is a representative view of '*V9 – Views South to bog lands'* as described in Table 11-9 of the EIAR. The view is from near Croghan Hill, and it states that the turbines will generate some visual clutter with more distance turbines although within the context of vast areas of lowland plains.

I concur that no significant effects will result on this protected view, nor on any other protected views or scenic routes as described in the EIAR (and as referred to in Table 14.2 above).

14.6.2.6. **Setback Distances - Wind Energy Guidelines 2006 (WEDG 2006)**

I note that the current WEDG 2006 do not specify exact separation distances between wind turbines and dwellings. Instead, the guidelines focus on a more comprehensive approach, considering various factors such as the size of the turbines, local topography, and the existing environment. Notably, they provide specific recommendations for mitigating certain impacts such as shadow flicker at neighbouring dwellings not exceeding 30 hours per year or 30 minutes per day when within 500 meters of a turbine (Section 7.14).

Additionally, the guidelines indicate that noise impacts are generally not significant if the nearest turbine is more than 500 meters away from any noise-sensitive property (Section 5.6). I note that the proposed development adheres to the recommended 500m set back distance in the WEDGs (DoEHLG, 2006) and no properties are within this 500m of any wind turbines.

14.6.2.7. **Draft Wind Energy Guidelines 2019 (DWEDG 2019)**

The DWEDG 2019 in Section 6.18.1 discusses appropriate setback distances to apply. In this regard SPPR 2 of WEDG 2019 states;

> *'With the exception of applications where reduced setback requirements have been agreed with relevant owner(s) as outlined at 6.18.2 below, planning authorities and An Bord Pleanála (where relevant), shall, in undertaking their development planning and development management functions, ensure that a setback distance for visual amenity purposes of 4 times the tip height of the relevant wind turbine shall apply between each wind turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development, subject to a mandatory minimum setback of 500 metres from that residential property. Some discretion applies to planning authorities when agreeing separation distances for small scale wind energy developments generating energy primarily for onsite usage. The planning authority or An Bord Pleanála (where relevant), shall not apply a setback distance that exceeds these requirements for visual amenity purposes.'*

An observer to the application has raised concern that the applicant has not adhered to the setback distances from dwellings stipulated in the DWEDG 2019, which is 4 times the turbine blade tip height (4x tip height).

Permission is being sought for a turbine with a tip height of 185m. Hence, based on the maximum proposed tip height, the setback required by DWEDG 2019 is 185 x 4 = 740m.

The applicant has stated that all non-involved residential properties (my emphasis) in the area are located at a distance greater than 740m of proposed turbines (Refer to Section 11.3.3 of the EIAR).

In this instance, I note that the property as seen in VP 11 is less than 740m from the nearest turbine, with the distance to the curtilage being c. 585m. However, the property owner has agreed to the reduced setback distance and as such I am satisfied that the setback is acceptable, having regard to the DWEDG 2019.

14.7. Conclusion: Direct and Indirect Effects (Landscape and Visual)

I have considered all of the written submissions made in relation to landscape and visual impact and the relevant contents of the file including the EIAR.

I note that the proposed windfarm is located in a relatively flat landscape, is set back from the majority of sensitive landscape and visual receptors, large population centres and receptors protected in local planning policy and for the majority of these receptors, no significant effects result.

However, for the reasons I have set out above, I do not concur with the conclusions as set out in the EIAR in relation to visual impacts from VP11a, and I have concluded that significant, negative, long-term visual effects will result from this viewpoint, located on the L5010 Local Road. However, I do not consider that these visual effects are sufficient reason to refuse permission for the development for the reasons set out above and summarised below.

On balance, based on National Policy, Regional and Local policy supporting renewable energy, I consider that the potential benefits associated with wind farm developments and renewable energy generation within the context of a climate emergency, outweigh the significant adverse visual impact for a small number of residential receptors. I am therefore satisfied, that the proposed windfarm development would be consistent with the Climate Act and National Policy in support of renewable energy and a refusal of permission would not be warranted on the basis of residual landscape and visual effects.

15.0 Cultural Heritage

15.1. Issues Raised

15.1.1. Planning Authority

The Planning Authority have requested photomontages from Ballinla House (Protected Structure) located c. 600m from proposed turbine T3, as per the report of the Senior Executive Architect (dated 7th October 2025).

15.1.2. **Prescribed Bodies**

The Minister for Housing, Local Government and Heritage (Development Applications Unit) (DAU) have stated that the proposed development is located in proximity to a number of Recorded Monuments and hence has potential for previously unknown sub-surface archaeological features or deposits within the site. The Department have also advised advance archaeological test excavation prior to development and have recommended conditions in this regard. Other issues raised include indirect impacts to the setting of National Monuments and Recorded Monuments and cumulative impacts to the archaeological and cultural heritage environment.

15.1.3. **Observations**

1 no. observation has stated that their home is a Protected Structure (Ballymoran House - Ref No 14911022) and this was not referred to in the application documentation. I note that this submission concerns other related issues including noise, for example difficulties in upgrading insulation due to the protected structure status of the building. I have considered the issue of noise in Section 13 of this report, and I refer the Coimisiún to same. An observation has also raised concerns in relation to deficiencies in the data provided with the application, including that related to archaeology.

15.2. **Context**

EIAR Chapter 12 considers impacts on Cultural Heritage. The EIAR describes the legislation and statutory consultation undertaken, provides an assessment of methodology, existing environment, describes the likely effects and associated mitigation measures and the cumulative impacts.

15.3. **Baseline**

The applicants EIAR describes the following baseline in Section 12.4, which can be summarised as follows:

15.3.1. **Recorded Monuments**

There are no known archaeological sites or monuments within the boundary of the proposed development. The nearest known monuments are listed in Table 12.1, the

closest of which is located c. 415m from the nearest element of the proposed development, a Ringfort-rath in the townland of Clonack.

15.3.2. Protected Structures/Buildings Listed on the NIAH

Table 12.2 sets out 3 no. buildings/structures located close to the site, with the closest being Ballinla House, located c. 740m from the nearest element of the proposal. This is listed on the NIAH (Reg 14911015).

It is noted that a series of farm buildings, open agricultural land and a grove of trees separate the house from the proposed windfarm. Ballymoran House (NIAH) is located c. 900m to the east of the proposed development and has a 'Regional Rating' in the NIAH. It is separated from the nearest proposed turbines by extensive areas of standing forestry.

It is also noted that the Grand Canal is a notable cultural heritage feature with its associated bridges, the nearest of which is Triblestown Bridge, which is listed in the NIAH and given a 'Regional Rating'. This is located c. 1.4km to the north-east.

In relation to the proposed grid connection, there are 2 no. recorded monuments in the immediate vicinity of the roadside where the cable trench will be excavated, one close to the L5019 road (RMP OF11-054) and the second close the L5006 road (RMP RMP011-03501).The EIAR also sets out the location of a number of other recorded monuments within proximity of the proposed grid connection route.

15.4. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 15.1 below.

Table 15.1: Summary of Potential Effects (Cultural Heritage)
Do Nothing
• I note that a 'Do-Nothing' Scenario is not set out in Chapter 12 of the EIAR. Notwithstanding, and as described in other sections of the EIAR, if the proposed development were not to proceed, no changes would be made to the current land-use practice of agriculture and commercial forestry. It is not anticipated that the do-nothing scenario would have any negative effects on the existing environment in terms of archaeology, architectural and cultural heritage. Land use would continue without the need for mitigation measures.
Construction Impacts
• As noted above, there are no Recorded Monuments within, or close to, the proposed site. There are monuments, mainly ringforts/enclosures, in the wider vicinity, with 2 no. being just over c. 400m from Turbine 1.

• The EIAR records that there will be no direct impacts on any upstanding known archaeological monuments nor on any standing building. • The locations of the proposed turbines have been guided to avoid impacts on known archaeological monuments and buildings as well as areas of strong archaeological potential. • It is noted that a risk of potential impact on archaeology may occur at construction stage, with an inadvertent impact on unknown buried archaeological material. • In relation to the proposed grid connection, it is stated that the proximity to known monuments brings the potential that buried archaeology may be encountered during the course of the works, with said impacts being '*indeterminable*'. • No significant construction phase impacts are recorded.
Operational Impacts
• The EIAR notes that impacts at operational phase (indirect impacts) tend to be mainly visual. It is set out that visual effects on archaeological monuments and historic buildings are mitigated primarily by distance from known features, and the turbines will be located at a distance of over 400m from known monuments and 600m or greater to the historic buildings. Visual impact is further mitigated by the low-lying topography and vegetation screening, as well as by areas of coniferous forest. Effects are deemed to be 'Imperceptible'.
Decommissioning Impacts
• There will be no significant potential impacts on the archaeological, architectural and cultural heritage environment during the decommissioning phase. Any potential direct impacts will already have been resolved through mitigation measures during the construction phase.
Cumulative Impacts
• The EIAR sets out that there will be no cumulative impacts arising.

15.5. Mitigation and Monitoring

Section 12.6 of the EIAR sets out mitigation and monitoring measures. The principal measure, in relation to the protection of archaeology is a pre-construction geophysical survey and test trenching at the location of each turbine and areas where soil removal is proposed, as well as at the location of the proposed substation and access road.

It is noted that lands within the southern portion of the site may not be suitable for geophysical survey, due to the terrain and existing forestry. Archaeological monitoring at construction phase is recommended, both on the proposed wind farm site and for the grid connection route.

15.6. Residual Effects

The EIAR concludes that predicted residual effects will be *'not significant-imperceptible'* with mitigation in place.

15.7. The Assessment: Direct and Indirect Effects

I have examined, analysed, and evaluated Chapter 12 and all of the associated documentation on the file.

15.7.1. Impacts on Archaeology

I note that detailed geophysical surveys, archaeological testing and trenching has not been carried out, and this has been raised by the DAU and by observers. I also note that the EIAR records that there is a risk of inadvertent impact on unknown archaeology on the site, although the magnitude of this effect is not set out.

I am of the view, and applying a precautionary approach, that in the absence of mitigation, the potential impact on archaeology can reasonably be described as significant, negative. However, with the mitigation as set out in Section 12.6 of the EIAR, which includes a pre-construction geophysical survey and test trenching at the location of each turbine and areas where soil removal is proposed, as well as at the location of the proposed substation and access road, and archaeological monitoring at construction stage, as well as the imposition of an appropriate worded condition, I am satisfied that residual impacts on archaeology are reduced to not significant.

I am satisfied that matters relating to archaeology can be addressed by condition, and the submission from the DAU advises that matters can be addressed by condition, with mitigation measures contained therein to ensure that any material will be preserved in-situ or by record.

15.7.2. Protected Structures (Ballinla House and Ballymoran House)

15.7.2.1. Ballinla House

I note the Planning Authority have raised a concern in relation to the potential impact on Ballinla House (Protected Structure) which is located to the east of proposed turbine T3. This is also listed on the NIAH register (Reg. 14911015), with a Regional Rating. It is set out in the NIAH that the house represents an important component of mid nineteenth-century domestic built heritage of County Offaly. The house is accessed via a private road, which also leads to a commercial premises (Liffey Mills),

and the boundary of same is some 790m from the L5006 road to the east. There is no visibility towards the house from the public road.

I note that the applicant response to submissions (dated January 2026) sets out that the EIAR submitted with the application includes a full Cultural Heritage assessment in accordance with the EPA (2022) EIAR Guidelines, the National Monuments Acts, and the Architectural Heritage Protection Guidelines for Planning Authorities.

The EIAR references Ballinla House, and affirms that no significant impacts are expected, with the EIAR noting that Ballinla House lies c. 740m from the nearest element of the proposal and a series of farm buildings, open agricultural land and a grove of trees separate the house from the proposed windfarm.

More generally, it is stated within the EIAR that impacts on historic buildings are mitigated primarily by distance, with 600m or greater to any historic buildings. Visual impact is further mitigated by the low-lying topography and vegetation screening, as well as by areas of coniferous forest. Effects are deemed to be *'Imperceptible'*.

I accept that no photomontage is included from Ballinla House. However, a photograph of same is included within the EIAR (Plate 12-21). I have also visited the grounds of the house as part of my site visit. I note the house itself is heavily screened by trees and vegetation which form part of the immediate boundary of the house.

I am of the view that given the context of the house, as described above, it is likely that the turbines will not be readily visible from the immediate environs of the house, due to the screening on the western boundary, but will be visible from the access road leading to the house, noting the lack of screening towards the proposed turbines (facing west and south-west) along this access road, and noting the height of the turbines. It is likely however, that the screening surrounding Ballinla House will limit the intervisibility of the turbines and the house.

Also of relevance is the view, or otherwise, of Ballinla House from the public road, in conjunction with the proposed turbines. The house itself is not visible from the public road and having regard to the 'Route Screening Study', as contained in Appendix 11-3 of the EIAR, there are very limited views towards turbines from the L5006 road to the east, with the majority of this road being fully screened from the turbines.

There is a small area of open visibility just south of the entrance to the access road leading to Ballinla House, but noting the lack of visibility of the house from the road, the turbines will not be seen in the context of same, and as such I consider there would not be a significant effect on the character of Ballinla House, and I accept the findings of the EIAR that effects are mitigated by distance and by intervening screening, and I accept that no significant effects would result.

15.7.2.2. **Ballymoran House**

An observer submission has stated that impacts on Ballymoran House (a Protected Structure) were not considered in the EIAR. In response, the applicant has stated that Ballymoran House was in fact considered in the EIAR, although there is a typo within one reference to same (it is titled 'Ballmoran' House). In this regard, I accept that it is clear that the correct heritage asset was assessed within the EIAR, and the EIAR references the correct asset reference number.

The EIAR notes that this property lies at a distance of c. 900m to the east of the proposed windfarm and is separated from the proposed turbines by extensive areas of standing forestry. As per the discussion above, no significant effects are predicted on Ballymoran House, for similar reasons as cited above for Ballinla House, i.e. intervening distance, topography and vegetation screening.

The nearest turbine to this structure is Turbine 5 (T5), c. 890m north-west of the property. I note that no photomontage is provided from Ballymoran House. The property would appear to have some screening provided by either existing buildings or by vegetation, in the immediate vicinity, with reference to Bing Mapping. The NIAH register also provides a number of photographs of Ballymoran House, as well as the surrounding gardens. I note also the intervening distance. However, it may well be the case that the turbines are visible in the context of this property. I note that the nearest Viewpoint to Ballymoran House, VP2, from Ballyfore GAA Club, where the turbines are quite visible, notwithstanding the intervening distance of c. 1.2km from the viewpoint. However, I am of the view that even if the turbines were visible in the context of this property, I am satisfied that it is unlikely that significant effects on the character of the protected structure would result. I note that the property itself is not

visible from the public road, and furthermore, there is only very limited intermittent visibility from this road, as per the Route Screening Study.

15.7.3. **Heritage Landscape**

I note the DAU has raised concerns in relation to indirect impacts on the setting of National & Recorded Monuments, as well as cumulative impact to the archaeological and cultural heritage environment. In particular, the DAU points out that there are 3 no. National Monuments in the ownership or guardianship of the Minister located within c. 10km of the proposed site, and 2 no. of them have the potential to be impacted (Grange Castle and Clonin Ring Barrow). A number of other Recorded Monuments within 10km are also referred to.

In response to the DAU, Section 3.11 of the applicant's submission sets out a response to the issues as raised above. In relation to the impacts on the wider cultural heritage landscape and National and Recorded Monuments therein, the applicant has set out that Chapter 12 of the EIAR did not specifically address National Monuments in the wider area as they are located at considerable distances from the proposed development and there is no visual impact on their setting by virtue of distance, topography and the character of the monuments themselves.

Of the 1 no. National Monument where the turbines will be seen, namely Clonin Ring Barrow, situated on top of Clonin Hill, c. 3.5km NNW of the proposed development site, the applicant states the turbines will be in the distance and therefore will have no indirect impact on the setting of the Monument itself, noting also that the village of Rhode stands between the monument and the turbines, and that the primary view of historical significance is that from Clonin Hill to Croghan Hill, which will be unaffected by the turbines.

In relation to Grange Castle, Cannakill Deserted Settlement, the applicant has addressed this within their response, and has ruled out significant impacts, noting that the castle sites within a farmyard complex within trees surrounding same, and noting that the castle sites within a landscape of undulating topography, at a distance of over 7km from the proposed development,

In relation to comments of the DAU, I accept that there is little discussion in the EIAR in relation to the interaction between the LVIA and the cultural heritage assessment.

However, the DAU have not cited specific negative effects on a particular cultural heritage feature but rather have raised concerns in relation to some features which may not have been addressed in the EIAR. In relation to this omission, the applicant has now explicitly responded to those areas of concern, and I accept the conclusions that are set out in the applicant's EIAR, which are further supported by the commentary as set out in Section 3.11 of the Applicant's Response to Submissions and I am satisfied that there will be no significant effects on the wider cultural heritage landscape.

15.7.4. **Archaeology**

I note that, as set out in the EIAR, in the absence of mitigation, there is potential for effects on archaeology during the construction stage. However, with the implementation of mitigation measures outlined in Section 12.6 of the EIAR, and with the implementation of relevant conditions (as discussed in Section 5.4), I am satisfied that the potential for negative effects on unrecorded sites and artefacts during excavations, will be reduced and I am satisfied that no significant effects will occur in relation to archaeology.

15.8. **Conclusion: Direct and Indirect (Cultural Heritage)**

I have considered all of the written submissions made in relation to archaeology, architectural and cultural heritage and the relevant contents of the file including the EIAR. I consider a robust assessment has been undertaken in the EIAR.

I am satisfied that the potential for adverse impacts on archaeology, architectural and cultural heritage can be avoided, managed and/or mitigated by measures that form part of the proposed development, the proposed mitigation and monitoring and through suitable conditions.

I consider that temporary effects arising from the process of decommissioning will be similar in nature and duration to those temporary effects arising from the construction process.

I consider the proposed mitigation in relation to archaeological sites/features, as well as an additional condition in relation to archaeology, which includes monitoring of all ground works to ensure accidental damage will not occur during construction phase,

to be appropriate and I am satisfied that the potential for negative effects on unrecorded sites and artefacts during excavations, will be avoided.

I consider the assessment of the impact of the proposed wind farm on cultural heritage as set out in the EIAR, and as supported by the applicant's response to submissions (dated January 2026), is sufficiently robust, and I am satisfied that there will be no significant impact on the setting of any cultural heritage asset.

Overall, I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative residual impacts on archaeology, architectural and cultural heritage.

16.0 Air and Climate

16.1. Issues Raised

16.1.1. Planning Authority & Prescribed Bodies

No issues raised.

16.1.2. Observers

An observer queries the applicant's position that;

> '*The proposed development will generate electricity that would otherwise require the burning of fossil fuels'*.

Consideration should also be afforded to alternative renewable energy types.

16.2. Context

EIAR Chapter 13 Air and Climate, along with the associate Carbon Calculator in Appendix 13, has assessed the potential impacts on the air quality and climate associated with the proposed windfarm. The EIAR describes the legislation and guidance, as relates to air and climate and provides a statement of authority.

In relation to air quality, the EIAR describes air quality standards, the baseline conditions, the likely significant impacts and associated mitigation measures and cumulative effects. In relation to climate, the EIAR describes the baseline conditions,

calculates carbon losses and savings and describes the likely significant effects and associated mitigation measures and cumulative assessment.

16.3. **Baseline (Air)**

The baseline environment is described in Section 13.3 of the EIAR. The EPA has designated 4 no. Air Quality Zones for Ireland including Zone A: Dublin City and environs, Zone B: Cork City and environs, Zone C: 16 urban areas with population greater than 15,000 and Zone D: Remainder of the country. The site lies within Zone D, which represents rural areas located away from large population centres.

It is noted within the EIAR that EPA validated air monitoring data for 2023 was collated to reflect ambient air quality data at the proposed site. There is an EPA station within 7km (east) of the site. The station is situated at Edenderry Library, Co. Offaly (Station 102 – Zone D). It records parameters NO_2, SO_2, PM_{10} and $PM_{2.5}$. The Edenderry station was commissioned in August 2021.

The EIAR presents the findings from the latest EPA report (produced in 2024, based on 2023 data) on air quality in Ireland which provides air quality data for areas in Zone D, as well as data for the station located within Edenderry.

The EIAR states the average $PM_{2.5}$ concentrations in Zone D (7.1µg.m3) and at the Edenderry Station (12.4 $\mu g.m^3$) were well below the 20$\mu g.m^3$ air quality standard limit in the Ambient Air Quality Standards Regulations 2022 which incorporate limits (EU Directive 2008/50/EC). Limits within the wider Zone D area within the revised directive limits to be enacted. The Edenderry average value would be above the future 10 $\mu g.m^3$ air quality limit which is required to be enacted by December 2026.

Both average levels recorded for PM10 are below the 40$\mu g.m^3$ air quality standard limit (For Zone D - 10.9$\mu g.m^3$ and for Edenderry - 16.3$\mu g.m^3$). The results are within the proposed 20 $\mu g.m^3$ air quality limits to be enacted by December 2026.

Both average levels for NO_2 recorded are well below the 40$\mu g.m^3$ air quality standard limit. Zone D for 2023 was an average of 8.1 $\mu g.m^3$ and for Edenderry was 8.6 $\mu g.m^3$. The results are within the proposed 20 $\mu g.m^3$ air quality limits to be enacted by December 2026.

16.4. Dust

In relation to potential air quality impacts arising from dust, the EIAR notes that there are less than 20 no. residential receptors within 250m of the proposed windfarm, and there are no sensitive receptors within 250m of any of the turbines, substation or the spoil deposition area. There are c. 90 no. residential receptors along the grid route to Philipstown Substation. Due to the proximity of some highly sensitive receptors (residential) to elements of the project, a detailed assessment was undertaken for potential impacts on air quality during construction.

16.5. Baseline (Climate)

Climate and weather in the existing environment is described in Section 13.3 of the EIAR. The Met Éireann weather station at Mullingar, Co. Westmeath located c. 40km to the north of the site, is the nearest weather and climate monitoring station to the site. Meteorological data recorded at Birr over the period from 2011-2023 is shown in Table 13-8 of the applicant's EIAR.

16.6. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 16.1 below.

Table 16.1: Summary of Potential Effects (Air Quality and Climate)
Do Nothing
• If the wind farm were not to proceed, the opportunity to reduce Greenhouse Gas Emissions including carbon dioxide, oxides of nitrogen (NOx), and sulphur dioxide (SO2) to the atmosphere from coal, oil and gas-fired power stations would be lost, with associated climate and indirect human health impacts. In a Do-Nothing scenario, there would be an adverse, moderate, long-term effect should the proposed windfarm not proceed, as emissions associated with the burning of fossil fuels will continue.
Construction Impacts
• Section 13.4.2 sets out that the main air quality impacts that may arise during the construction phase include dust deposition, resulting in the soiling of surfaces; visible dust plumes, which are evidence of dust emissions, elevated PM_{10} and $PM_{2.5}$ concentrations, because of dust generating activities onsite and increase in concentrations of airborne particles and nitrogen dioxide due to exhaust emissions from diesel powered vehicles and equipment used onsite. • **Exhaust Emissions** – During the proposed 18 months construction duration, the proposed construction works would increase Annual Average Daily Traffic (AADT) volumes up to 70 vehicles, including 30 heavy vehicles, which equates to an AADT increase of up to 4.3% on regional roads. The proposed grid construction works along public roads would increase AADT volumes on those roads by 18 vehicles,

including nine two-way heavy vehicles. During peak construction traffic generation periods, the peak daily increase in daily traffic volumes would be up to 220 vehicles, including up to 180 HGVs. The construction highest peak hour increase in traffic volumes would be up to 18 heavy vehicles. The peak daily increase in traffic volumes generated by the proposed grid construction works along public roads would be up to 53 vehicles, including 26 two-way heavy vehicles. It is predicted construction stage traffic has the potential for not significant, negative and short-term impact on air quality.

- **Earthworks** – The total excavation involved is c. 84,714m3 of material, and the dust magnitude is classified as *'medium'*. The EIAR states the excavated materials are not of dusty soil type. An overall low risk of temporary dust soiling impacts, a low risk of ecological effects and a low risk of temporary health effects is concluded.
- **Construction -** The risk of dust impacts, as a result of the construction of the proposed works prior to mitigation is Medium with respect to dust soiling and health impacts and low with respect to ecological impacts.
- **Trackout** - The risk of dust impacts as a result of the proposed windfarm trackout activities prior to mitigation is Medium with respect to dust soiling and human health and ecological receptors.
- **Dust Effects** - Table 13-16, 13-17 and 13-18 sets out the significance of construction stage effects in relation to dust soiling, human health and ecological receptors. Overall, in the absence of mitigation, dust effects from the construction stage are predicted to be negative, slight to not significant, temporary to short-term and direct.
- **Vehicle Emissions** – Traffic levels are below TII criteria and therefore a quantitative assessment of construction traffic is not required. It is concluded that in the absence of mitigation, construction stage traffic will have a negative, imperceptible, local, short-term and direct effect on air quality.

Operational Impacts

- **Dust and Vehicle Emissions** – Emissions will arise from maintenance and operator vehicles estimated at 10 to 20 visits per month. Impacts from this on air quality will be imperceptible.
- **Carbon Savings/Losses -** The electricity produced by the windfarm will displace electricity that would otherwise have been produced by burning fossil fuels and will displace the associated GHG emissions. Carbon losses will occur due to the manufacturing of the wind turbines, construction processes and decommissioned, as well as clear felling and losses from soil organic matter. As set out in Appendix 13 Carbon Calculator, the payback time for same is 1.7 years. Therefore, for the remaining 33.3 years of operation, the proposed windfarm will be directly responsible for significant carbon savings. The EIAR concludes that there will be a long-term, moderate, positive effect.

Decommissioning Impacts

- As set out in the EIAR, works during the decommissioning phase will primarily involve the dismantling and removal of the wind farm infrastructure offsite and the dust generating activities will be greatly reduced when compared to the construction phase. Similarly, emissions from plant and machinery exhausts will be lower than anticipated for the construction phase.

Cumulative Impacts

- The potential cumulative effects with other renewable energy projects will be long term, significant and positive on air quality and climate as there is no emission to the atmosphere from the proposed development during the operational phase, there will be no cumulative effect on air quality with ongoing operations.

16.7. **Mitigation**

Mitigation measures are discussed in EIAR, Section 13.5 in relation to exhaust emissions and dust, comprising standard good practice measures, during the construction and decommissioning phases. During operational phase, no mitigation measures are required.

16.8. **Residual Effects**

No significant residual impacts have been identified at construction stage. At operational phase, the development will have a positive, moderate and long-term effect on air quality and climate.

16.9. **The Assessment: Direct and Indirect Effects (Air Quality and Climate)**

I have examined, analysed and evaluated Chapter 13 of the EIAR, in relation to Air Quality and Climate. I note the existing baseline environment with air quality in the area expected to be good and typical of a rural environment located in Zone D (as per EPA designation).

The main potential for significant effects will arise during the construction stage associated with exhaust emissions from plant and machinery and the generation of dust from construction works. Subject to the mitigation measures proposed in the EIAR and a construction stage CEMP, which will comprise good practice methods and measures, I am satisfied that no significant adverse effects on air quality are likely to occur during any phase of the development.

I accept the conclusions of the EIAR and am satisfied that following the implementation of mitigation measures outlined in the EIAR, that no significant impacts are likely, at construction stage, in relation to air quality and climate either alone or in combination with other developments. At operational stage, I accept that there will be significant cumulative positive effects on air quality and climate when the proposed development is considered in conjunction with other renewable energy projects cited in Section 14.4.5 of the EIAR.

Specifically in relation to climate, I consider that the construction phase would generate GHG emissions primarily from removal of soil, tree felling, construction materials, and the operation of vehicles and plant.

The EIAR uses the Scottish Carbon Calculator to calculate the total carbon emissions associated with the proposed windfarm development including manufacturing of the turbine technology, transport, construction of the development and carbon losses due to soil disturbance. The model also calculates the carbon savings associated with the proposed windfarm. The development of the windfarm will result in CO_2 emission saving over a grid-mix of electricity generation of 49,669 tonnes per year. The CO_2 losses due to the wind farm construction will be 86,911 tonnes. As such, the Carbon Payback Time will be 1.7 years, with the total carbon savings over the 35-year operational lifetime of the wind farm being 1,653,977 tonnes (49,669 tonnes X 33.3 years).

This would be a significant positive outcome, aligning with Ireland's trajectory towards net zero by 2050.

I consider that the proposed development would have a significant positive, long-term impact on climate due to its contribution to renewable energy targets and the reduction of GHG emissions. The operational phase would further enhance this positive impact through continuous renewable energy generation, contributing to the Climate Action Plan 2024 (CAP24) commitment of achieving 80% of electricity demand from renewable sources and a key target of achieving up to 6 GW of onshore wind capacity by 2025 and 9 GW of onshore wind capacity by 2030.

16.10. Conclusion: Direct and Indirect (Air Quality)

I am satisfied that the potential for significant adverse impacts on air can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on air quality.

16.11. Conclusion: Direct and Indirect (Climate)

I have considered all of the written submissions in relation to climate and the relevant contents of the file including the EIAR. The proposed wind farm will have an export capacity of c. 50.4MW and the project accords with relevant guidelines and would contribute positively to Ireland's environmental climate objective of accelerating renewable energy generation. The windfarm, in conjunction with other renewable energy projects, would have a significant positive impact on climate due to the displacing of fossil fuel energy generation and the associated displacement of CO_2 and other greenhouse gas emissions.

I consider the proposed windfarm development would have a significant positive effect on climate and am satisfied that the development would not have any unacceptable direct, indirect or cumulative impacts.

17.0 Material Assets – Built Services

17.1. Issues Raised

17.1.1. Planning Authority

The Planning Authority have not commented on aspects related to built services.

17.1.2. Prescribed Bodies

- **The Department of Defence (DoD)** have made a submission which has made recommendations in relation to obstacle lighting and the operation of its radar systems.
- **Uisce Éireann UE (Irish Water)** have made a submission which has made recommendations in relation to water and wastewater facilities, interactions with its existing services and impacts on water supply including water quality. Conditions are recommended.

17.1.3. Observations

Observers have not commented on aspects related to built services.

17.2. Context

EIAR Chapter 14 (and related Appendix 14 'Telecommunications Impact Study'). presents the results of the material assets assessment of the proposed development. In line with EPA Guidelines (2022), material assets comprise of the following:

- **Built Services** – Utilities including electricity, telecommunications, gas, water supply and sewerage).
- **Water Management**
- **Infrastructure** – Roads and Traffic (See Section 18 of this report)

17.3. Baseline

17.3.1. Built Services

17.3.1.1. Forest Resources

Commercial forestry resources are present in the southern section of the site. The area is made up of conifer and mixed broadleaf/conifer plantations.

17.3.1.2. Grid Capacity and Electrical Infrastructure

The area currently has considerably more generation than demand, and development of the network is required to connect a high level of renewable energy generation, and network reinforcement is required to connect of area of high demand.

17.3.1.3. Telecommunications

It is set out that there are five radio links that cross over the proposed development, with analysis indicating that none of the radio links would be impacted by the proposed turbine layout. Additional details of same are set out in the Vol 3 Appendix 14 'Telecommunications Impact Study' of the EIAR.

17.3.1.4. Aviation

The nearest airports to the proposed development are set out in Table 14-2 of the EIAR, with Clonbulloge Airfield (Irish Parachute Club) being the closest, located c. 6.5km to the south. The EIAR states that consultations were carried out with the Irish Aviation Authority and the Irish Parachute Club.

17.3.1.5. **Gas**

There are no gas network utilities within or immediately adjacent to the proposed development.

17.3.2. **Water and Wastewater Infrastructure**

There is a water distribution main along the L5010 which transects the middle of the proposed development site. There are a number of group water schemes in the vicinity of Edenderry, including Ballyfore/Ballykilenn GWS, Mountlucas GWS, Bracknagh GWS and Ballingard GWS.

The nearest Wastewater treatment plant is Edenderry WWTP. The 2023 Annual Environmental Report indicates the plant is compliant with the relevant emission limit values.

17.3.3. **Waste Management and Resource Use**

It is set out that the primary natural resources required are as follows:

- Peat, subsoil, crushed and graded stones from the site from excavation for construction of turbines.
- Crushed and graded stone from local quarries.
- Ready mix concrete (manufactured from natural materials).
- Water for wash down of vehicles and at site compound.

The EIAR notes there are no existing sources of solid waste associated with the site.

17.4. **Potential Effects**

Likely significant effects of the development, as identified in the EIAR are summarised in Table 17.1 below.

Table 17.1: Summary of Potential Effects (Material Assets)
Do Nothing
• I note that a 'Do-Nothing' scenario is not set out within the EIAR. Notwithstanding, I am satisfied that if the development were not to go ahead, existing activities such as agricultural activities and periodic tree felling will continue, with no benefits arising from additional electrical infrastructure i.e. the substation.
Construction Impacts
Forest Resources • A total of c. 21ha of commercial forestry is required to be felled. This resource will be replaced as part of a felling licence, with replanting occurring offsite. There will be no net loss of trees. There is some limited trimming as part of the turbine delivery. Potential effects on forest resources are concluded to be neutral, imperceptible and long-term. **Grid Capacity and Electrical Infrastructure**

- Some minor brief disruption is likely as part of the grid connection construction and turbine delivery. No significant effects are reported.

Telecommunications

- There will be no impact on telecommunications.

Aviation

- Potential effects on existing aviation are considered to be temporary, long-term, negative, slight, localised, direct and likely as a result of potential obstructions.

Gas

- There will be no impact on gas infrastructure.

Water and Wastewater

- There is relatively little demand on wastewater or water infrastructure during the construction stage, which mainly arise from construction workers on site. Effects are reported as being imperceptible.

Waste Management

- There is sufficient capacity at licenced disposal or recycling facilities in proximity to the proposed development to accept waste generated at construction phase. Waste management procedures are included in the CEMP. Potential effects at construction phase are concluded to be slight, negative, localised, indirect and short term and likely.

Operational Impacts

Forest Resources

- There will be no impact at operational phase.

Grid Capacity and Electrical Infrastructure

- The proposed development will offset CO and will maximise a natural asset. Effects are concluded to be likely, direct, long term, regional, significant and positive.

Telecommunications

- There will be no impact on telecommunications.

Aviation

- Potential effects on existing aviation are considered to be temporary, long-term, negative, slight, localised, direct and likely as a result of potential obstructions.

Water and Wastewater

- During the operational phase effects on water and wastewater infrastructure are concluded to be imperceptible.

Waste Management

- Minimal amount of waste will be generated. Potential effects at construction phase are concluded to be slight, negative, localised, indirect and short term and likely.

Decommissioning Impacts

Forest Resources

- There will be no impact at decommissioning phase.

Grid Capacity and Electrical Infrastructure

- The EIAR concludes that there will be a negative, significant, regional, permanent, direct and likely effect on power generation as a result of removal of electricity generating infrastructure and the loss of renewable electricity to the national grid. There will be a potential direct permanent positive effect associated with the installed substation and underground grid infrastructure which will continue to be used for electricity distribution in the locality and region and have a positive effect on grid capacity.

Telecommunications

- There will be no impact on telecommunications.

Aviation

- Potential effects on existing aviation are considered to be temporary, long-term, negative, slight, localised, direct and likely as a result of potential obstructions.

Water and Wastewater • During the decommissioning phase effects on water and wastewater infrastructure are concluded to be imperceptible. **Waste Management** • Effects are as per the construction stage.
Cumulative Impacts
• There is potential for cumulative effects on waste management facilities if other permitted and planned windfarms are constructed at similar times as this proposed development. Potential effects will be slight, negative, short-term and localised.

17.5. Mitigation

17.5.1. Grid Capacity and Electrical Infrastructure

There are no specific mitigation measures proposed beyond good construction practices.

17.5.2. Gas

No specific mitigation measures are proposed.

17.5.3. Aviation

The developer will agree an aeronautical obstacle warning light scheme for the wind farm development with the IAA.

The developer will provide the IAA with as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location.

The developer will notify the IAA of intention to commence crane operations with a minimum of 30 days prior notification of turbine erection.

17.5.4. Telecommunications

No specific mitigation measures are proposed.

17.5.5. Water and Wastewater Infrastructure

Measures include pre-construction surveys.

17.5.6. Waste Management

Best practice waste management procedures will be followed as per the CEMP.

17.6. Residual Effects

At the operational phase, significant, positive effects on electrical infrastructure are reported. At decommissioning stage, significant negative effects are reported as a result of the removal of the wind turbines. Also at decommissioning stage, the EIAR reports significant positive effects are reported as a result of the freeing up of additional electrical grid capacity. No other significant effects (either positive or negative) are recorded.

17.7. The Assessment: Direct and Indirect Effects

I have examined, analysed, and evaluated Chapter 13 and all the associated documentation and submissions received on the file.

17.7.1. Telecommunications and Aviation

I am satisfied that the proposed development will not have any adverse impact on telecommunications.

In relation to aviation, the applicant has noted that lighting requirements for turbines from the IAA and DoD will be complied with and any further details will be agreed in advance of construction with the IAA. In addition, the coordinates and elevations for built turbines will be supplied to the IAA, as is standard practice for wind farm developments. The Coimisiún will note the IAA has not made a submission on this application.

Having reviewed the documentation on file and the submissions received, I am satisfied that the proposed development would not have significant adverse impacts on telecommunications and aviation, subject to the standard conditions as generally required by the IAA (notwithstanding that the IAA have not made a submission on this specific application) and the DoD and other relevant mitigation measures mentioned in the EIAR. With reference to the application documentation, I am satisfied that no electromagnetic interference with telecommunications will occur. The proposed development will adhere to the DoD's specifications for obstacle lighting, ensuring turbine visibility for military aviation. Therefore, subject to conditions and the implementation of the mitigation measures, I conclude the proposed development would not incur significant adverse effects on telecommunications or aviation safety.

17.7.2. **Existing Built Services and Utilities**

I note that the EIAR has reported a significant positive impact at operational stage on the Electrical Infrastructure Network as a result of the wind turbines.

In relation to same, a significant negative effect is reported at decommissioning stage, as a result of the removal of the turbines, although as significant positive effect is reported from the freeing up of capacity on the grid network. I would not concur with this assessment and consider that these effects are not significant.

In Section 16 of this report, I have reported a significant positive cumulative effect on Climate Change and CO_2 emission reductions, in conjunction with other renewable energy projects in the area. Notwithstanding, I am not of the view that the development, in and of itself, would have significant positive impacts on grid capacity and electrical infrastructure. While the provision of the grid connection and substation are positive, and provide additional grid capacity, I do not consider the effect on the overall electricity network can be deemed 'significant'. Conversely, I do not consider that significant effects (either positive or negative) would occur at decommissioning stages, noting that the grid infrastructure (i.e. substation and grid connection) would remain in situ, and remain as part of the wider electrical network.

I consider the decommissioning of the wind farm would have negative effects on renewable energy generating infrastructure, but I am not of the view that this effect can be deemed to be 'significant', in the context of the wider renewable energy network at a national level, nor would the freeing up of grid capacity be a significant effect, at a national level, in my view.

Other potential impacts for existing built services and utilities occur during the construction phase. I note the construction of the grid connection, and turbine delivery, may have a temporary, negative impact on local electricity supply but this is not significant. No significant operational phase impacts are predicted associated with built services and waste management.

I have assessed the EIAR and consider the mitigation measures outlined in the CEMP. I am satisfied that a robust assessment has been completed and consider that subject to conditions and the implementation of the mitigation measures, I conclude the

proposed development would not incur significant adverse effects on existing built services and utilities.

17.8. Conclusion: Direct and Indirect (Material Assets)

I have considered the written submissions made in relation to Material Assets and am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise, subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CEMP mitigation measures and monitoring and compliance with recommended conditions. The proposed development will not give rise to any significant residual or cumulative impacts with other developments in the surrounding area.

18.0 Material Assets – Traffic and Transport

18.1. Issues Raised – Traffic and Transport

18.1.1. Planning Authority

The Planning Authority has sought Further Information on a number of traffic issues (as detailed in Appendix 1) including issues such as road strengthening proposals, surface water measures and details of passing bays. The PA have recommended conditions in the event of an approval of permission.

18.1.2. Prescribed Bodies

Transport Infrastructure Ireland (TII) issued a response on 16th October 2025 and recommend consultation with bodies responsible for the roads which will be traversed for the haul route, as well as a road safety audit for any proposed works and a full assessment of all structures along the haul route. TII note that they will rely on the Coimisiún to abide by official policy in relation to development on/affecting national roads as outlined in DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012). Conditions are recommended.

18.1.3. Observations

Observers have raised concerns that the local road network is unsuitable to accommodate this project, and that the construction phase will cause congestion on the network, as well as damage to the road surface. An observer has also questioned the traffic count data supplied and has also raised concerns in relation to sightline distances and the lack of a road condition survey. Concern was raised in relation to the widths of the roads stating that they are insufficient to accommodate the development.

18.2. Context

EIAR Chapter 15 and Appendix 15 (Traffic Management Plan) which presents the results of the material assets (Traffic and Transport) assessment of the proposed development.

18.3. Baseline

18.3.1. Traffic and Transport

The EIAR assesses the effects of traffic during all phases of development and the effect of the road network grid connection, traffic management of large deliveries and abnormal load route assessment. The EIAR describes the methodology used, the existing environment, the likely significant effects and associated mitigation measures.

The existing roads and transport network is described in Section 15.3.1 of the EIAR, and Section 15.3.2 describes existing traffic volumes, with all regional roads operating within capacity, based on a traffic volumes survey carried out by the applicants in March 2024.

In terms of future capacity, it is noted that the R420, between the N52 and R402 junctions, would operate in excess of its capacity in 2034 and 2044. All other roads are expected to operate within capacity for each year considered (2027, 2029 (Opening Year), 2034 and 2044).

It is proposed to access the site via two site entrances to the northern and southern sections of the site from the L5010. Access for the proposed GCR and proposed TDR construction works along public roads would be via the associated existing roads. The

overall duration of the construction works is c. 18 months. The expected peak staff would be up to 60 construction personnel, which would generate c. 40 car and van trips, both to and from the site each working day.

Over the 18-month construction period, it's expected that up to 10,973 truckloads of construction materials will be delivered to the site, while around 623 loads, mainly from the Proposed Grid Connection works along the public road, will be removed. Abnormal loads associated with the Proposed Development would be delivered in consultation with OCC, other County Councils and TII motorway operators located along the proposed turbine delivery route and An Garda Síochána, during off-peak traffic periods. A total of 90 delivery vehicles would be required for the seven turbines in delivery convoys during the night.

As detailed in Chapter 2 and Appendix 2-2 (Turbine Delivery Assessment Report), the turbine components will arrive at a deepwater port, such as Bellview, Co. Waterford, and from there travel via the national road and motorway network to Junction 5 (Killbeggan/Tullamore) on the M6, and then onwards to the site.

18.4. Potential Effects

Likely significant effects of the development, as identified in the EIAR are summarised in Table 18.1 below.

Table 18.1: Summary of Potential Effects (Material Assets)
Do Nothing
Traffic and Transport • If the proposed development does not proceed there will be no additional traffic generated or works carried out on the road network and therefore no effects with respect to traffic.
Construction Impacts
Traffic and Transport • Proposed construction works would result in an additional 70 vehicles, including 30 heavy vehicles. The proposed grid construction works along public roads would increase by up to 18 vehicles, including nine two-way heavy vehicles. During peak construction traffic generation periods, the peak daily increase in daily traffic volumes would be up to 220 vehicles, including up to 180 heavy vehicles. The construction highest peak hour increase in traffic volumes would be up to 18 heavy vehicles. The peak daily increase in traffic volumes generated by the proposed grid construction works along public roads would be up to 53 vehicles, including 26 two-way heavy vehicles. • During the construction period, all relevant roads are shown to have sufficient capacity to accommodate same. The R402, R401 and R420 would continue to operate within their estimated capacities with volume/capacity ratios 86%, 55% and

98%, respectively. This compares to ratios of 85%, 55% and 97%, respectively, without the proposed development. • The R402 at Mount Lucas and Edenderry would continue to operate within its estimated capacity, with highest volume/capacity ratios during the peak hour of 29% and 46%, respectively. This compares to ratios of 28% and 45%, respectively, without the proposed development. • There will be some impact as a result of traffic management arrangements, albeit temporary, with increased journey times for users during construction hours, along the proposed GCR. • Heavy vehicle could result in damage to the existing public roads. • It is concluded that the potential effect would be negative, slight to moderate, local, likely, short-term.
Operational Impacts
Traffic and Transport • The proposed development will typically have two operational staff and will generate negligible operational traffic volumes. The potential effect on the local road network is concluded to be neutral, imperceptible, local, likely, long-term.
Decommissioning Impacts
Traffic and Transport • Traffic and transport effects would be similar to the construction phase mobilisation and turbine abnormal loads delivery phase when decommissioning occurs. The grid cable and substation will remain a permanent part of the national grid infrastructure and will not be decommissioned. The decommissioning phase is anticipated to result in a negative, slight, local, likely, short-term effect on the local road network due to increased traffic volumes.
Cumulative Impacts
Traffic and Transport • No significant cumulative impacts have been identified in the EIAR.

18.5. Mitigation

18.5.1. Traffic and Transport

Mitigation measures are outlined in Section 15.7 of the EIAR. At construction stage, it states, along with other measures, passing bays will be provided along the L5010 to facilitate two-way vehicle movement. Pre-construction road and bridge condition surveys will be carried out, with monitoring taking place during the construction period. A detailed Traffic Management Plan (TMP) is included as Appendix 15 of the EIAR. At operational phase, no mitigation is required.

18.6. Residual Effects

Residual effects are reported as slight, negative, short term at construction stage, with construction effects reported as being imperceptible.

18.7. The Assessment: Direct and Indirect Effects

I have examined, analysed, and evaluated Chapter 15 and all the associated documentation and submissions received on the file.

18.7.1. Traffic and Transport

Having regard to the assessment as set out in the EIAR, I am satisfied that the national, regional and local road network has sufficient capacity to cater for this increase in traffic volumes for all phases of the development and that no significant effects on traffic volumes or on the surrounding road network will occur.

I am satisfied that a robust assessment has been undertaken and that the additional traffic movements for all stages of development will not give rise to any significant traffic hazards or disruptions along any of the roads or main junctions.

In relation to operational traffic, I note that the EIAR has reported that the R420 is predicted to operate above capacity for years 2034 and 2044. Notwithstanding, I am satisfied that operational stage traffic will not have any material impact on the capacity of this regional road, or of other surrounding roads, given the small daily traffic flow generation, which will mainly be required for maintenance purposes, noting that a total of two operational staff are envisaged for the operational phase.

18.7.1.1. Traffic County Data

I note that an observer has questioned the traffic count data within the EIAR. In relation to this point, I consider the Traffic and Transport Chapter of the EIAR was carried out in accordance with best practice guidance, including but not limited to EPA, 2022 Guidelines and TII Guidelines, as detailed in Section 15.2 of the EIAR. Specifically in relation to the traffic count data, this was derived from a 24hr traffic volume survey, carried out on Thursday 14th March 2025 (on the L5010), and peak hour traffic volumes were factored on the basis of TII's automatic traffic counter data, for the nearby N52, in order to establish typical Annual Average Daily Traffic (AADT) volumes for the latest full year, 2023, on the local road network.

I am satisfied that the methodology utilised to derive the baseline traffic data is sound. The road traffic assessment was based on the worst-case scenario (i.e. peak period)

with an assumed construction year of 2027, and I am satisfied that the assessment is robust.

I note observer concerns regarding the impacts of increased levels of traffic on the local roads. Construction phase will last c.18 months with predicted increase in traffic volumes being less than 5%, and therefore a detailed TTA is not required, as per TII Guidelines. I would note that during peak construction traffic generation periods, the peak daily increase in daily traffic volumes would be up to 220 vehicles, including up to 180 heavy vehicles. The road network remains within capacity however, although I note that the R420 Regional Road approaches capacity both with and without the construction activity taking place (97% and 98% ADDT Volume/Capacity Ratio Respectively).

Notwithstanding, it is acknowledged in the EIAR that there will be some moderate, negative impacts in the absence of mitigation, in particular, as a result of temporary traffic arrangements where some delays may result. By way of mitigation, measures include the implementation of a Traffic Management Plan, which seeks to minimise disruption to local residents in particular.

Residual effects on the local road network are reported as being slight, negative and I concur with same, noting that not all inconveniences can be avoided. However, impacts are short-term. There will also be some minor disruption as a result of the grid connection works and turbine delivery route, however these are again short-term and will not be significant. As detailed in the 'Turbine Delivery Route Assessment' (Appendix 2-2 of EIAR), transport of large turbine components will be carried out at night to avoid disruption to daytime traffic.

18.7.1.2. **Road Capacity**

I note that an observer has stated that the road capacities as quoted in Table 12-2 of the EIAR are not applicable to roads less than 7m in width. In relation to this point, I note the EIAR sets out that the rural road link capacity of the R402 and R401 regional roads are estimated on the basis of the TII Guidance[31], for a typical road carriageway width of 6m.

[31] Rural Road Link Design DN-GEO-03031 May 2023

The width of the relevant regional roads (R401, R402 and R420 is set out in the EIAR). The EIAR states that TII does not provide rural road link capacities for rural roads with typical road carriageway widths of less than 6m. Therefore, I am satisfied that capacity has been calculated in line with best practice guidance.

18.7.1.3. **Potential Damage to Road Network**

In relation to potential damage to the road network, I note that the applicant has acknowledged that there is potential for damage and will implement a monitoring programme to ensure that any potential effects are minimised. Section 2.6.12 of the Traffic Management Plan in the EIAR details this and notes that any damage directly linked to project activities will be repaired in consultation with Offaly County Council.

I note that the Planning Authority have recommended that FI be sought in relation to a number of road related issues, including, but not limited to, road strengthening proposals, and details of passing bays. However, conditions are also recommended which cover all of these issues, and I am satisfied that Further Information is not necessary in this instance, given that all of the issues can be satisfactorily addressed by way of condition.

Similarly, TII have also recommended conditions in relation to haul routes, assessment of structures along the haul routes and in relation to a road safety audit, and I recommend these conditions be imposed on any grant of permission.

18.7.1.4. **Sight Distances**

In relation to sight distances, I note that Chapter 3, Section 3.3 of the EIAR sets out details in this regard, and it is stated that required sight distances of 90m are provided in both directions (as shown in Drg. 23882 MWP-00-00-DR-C-5004) and are in line with the relevant TII guidelines[32].

I note DMS-97 (*Safe Sight Distances required for access onto National, Regional and Local Roads*) and DMS-98 (*Distance from Junctions*) in Section 13.9.11 of the OCDP 2021 in relation to sightlines. This includes sightlines of 90m on local secondary roads

[32] Transport Infrastructure Ireland (TII) 'DN-GEO-03060: Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)' and 'DN-GEO-03031: Rural Road Link Design'.

in line with TII standards. I am satisfied sightlines provided in the application are in compliance with development plan and TII standards.

18.8. Conclusion: Direct and Indirect (Traffic and Transport)

I have considered the written submissions made in relation to Material Assets (Traffic and Transport) and am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise, subject to compliance with relevant legislation and guidance, implementation of the EIAR and final CTMP mitigation measures and monitoring and compliance with recommended conditions. The proposed development will not give rise to any significant residual or cumulative impacts with other developments in the surrounding area.

19.0 Shadow Flicker

19.1. Issues Raised

19.1.1. Planning Authority

The Planning Authority have not raised specific concerns in relation to shadow flicker, although as detailed in Appendix 1 have raised other concerns relating to residential and visual amenity.

19.1.2. Prescribed Bodies

The submission from the HSE states that the proposed mitigation for Shadow Flicker as identified in Chapter 16 of the EIAR should be conditioned if permission is granted for the proposed development.

19.1.3. Observations

The majority of submissions have raised the issue of shadow flicker and the potential impact on residential amenity. It is raised that the elimination of shadow flicker is reliant on potential future mitigation. A submission from one observer has stated that his property will be subject to a level of shadow flicker that is above benchmark levels.

19.2. **Context**

EIAR Chapter 16 describes the potential effects of the proposed development in relation to Shadow Flicker. The EIAR describes methodology, the receiving environment, likely significant impacts and associated mitigation measures.

19.3. **Baseline**

As described in the EIAR, shadow flicker is an effect that can occur when the shadow of a moving wind turbine blade passes over a small opening (e.g. a window) causing a flickering effect to be perceived. For the purposes of assessing the potential effect of shadow flicker on surrounding receptors, the EIAR has defined the study area, which is equivalent in length to 10 of the proposed wind turbine diameters. This is in line with best practice guidelines. The proposed candidate turbine type has a rotor diameter of 162m, and as such the study area was determined to be 1.629km from each turbine. It is set out there are 141 no. residential properties within the boundary of 10 times rotor diameter study area. The WEDG (2006) recommend that shadow flicker at offices and dwellings within 500m of a turbine should not exceed 30 hours per year or 30 minutes per day. It is noted that there are no dwellings within 500m of a turbine.

19.4. **Potential Effects**

Likely significant effects of the development, as identified in the EIAR are summarised in Table 19.1 below;

Table 19.1: Summary of Potential Effects (Shadow Flicker)
Do Nothing
• The 'do nothing' scenario would result in no shadow flicker impacts on local receptors.
Construction
• **Shadow Flicker** – No impacts predicted.
Operational Impacts
• **Shadow Flicker –** Only occurs during the operational phase. There is potential for shadow flicker at 111 no. residential properties, taking a conservative approach. However, taking into account conditions such as amount of sunshine hours (regional data indicates the proportion of daylight hours with sunshine is 28%), the potential shadow flicker reduces below the 30 hours per year threshold value at all but 1 no. residential receptor (Receptor No. 46) and below the 30-minutes per day threshold at all locations. • Overall, the details presented in Section 16.7 of the EIAR demonstrate that by using a turbine control system and specialised software, it will be possible to reduce the

level of shadow flicker at any potentially affected property to zero, by programming the relevant turbines to switch off at the required dates and times when shadow flicker might occur. Without mitigation, shadow flicker could potentially have a long-term, moderate, negative impact.
Decommissioning
• No impacts as a result of decommissioning are expected.
Cumulative Impacts
• **Shadow Flicker** – The EIAR considers cumulative effects in Section 16.9. The only other windfarm with the potential for cumulative effects is the Cloncreen Wind Farm, located south of the proposed development. The EIAR states that modelling has shown that there are zero cumulative shadow flicker impacts on the identified receptors within the theoretical zone of shadow impact.

19.5. **Mitigation**

Section 16.7 of the EIAR (Zero Shadow Flicker), states that shadow flicker control modules, consisting of light sensors and specialised software, will be installed on all turbines, irrespective of the individual turbine shadow flicker impact. This will prevent operation during periods when shadow flicker is experienced at nearby properties if it is determined there is an issue post construction. The applicant is committed to a zero-shadow flicker strategy which means that the turbines shadow flicker module will be programmed to shut down whenever the conditions for shadow flicker at a property are met, irrespective of which turbine in the range is installed.

19.6. **Residual Effects**

Based on mitigation proposed, there are no expected residual impacts relating to shadow flicker on any potentially affected properties.

19.7. **The Assessment: Direct and Indirect Effects**

I have examined, analysed and evaluated Chapter 16 of the EIAR, and all of the relevant submissions received in relation to shadow flicker. As detailed in Chapter 16, there is a theoretical possibility that 141 no. residential receptors could be impacted by shadow flicker. However, when accounting for more realistic conditions, such as the amount of daily sunshine received, the number of properties that would potentially exceed a total of 30 hours per year is reduced to one (Residential Receptor No. 46) with no property exceeding a total of 30 mins per day. Notwithstanding, and of particular note, is the applicant's commitment to reducing shadow flicker to zero, as detailed above.

As stated in the EIAR, shadow flicker control modules are incorporated within the proposed turbines. In relation to same, a relevant condition should be imposed ensuring that the 'zero shadow flicker' approach is mandated from the beginning of the operational period. This will ensure that no impacts are experienced at any residential receptor.

No significant cumulative or residual impacts have been identified in the EIAR. I note that the EIAR has not tabulated the results of the cumulative assessment, which has considered the potential cumulative effects of shadow flicker resulting from the Cloncreen Wind Farm together with this proposed wind farm. However, I do not have any evidence before me that the conclusions of the EIAR are flawed. Furthermore, I am of the view that given the imposition of a zero-shadow flicker approach for the development proposed here, there cannot be any cumulative effects as a result of both wind farms operating concurrently.

19.8. Conclusion: Direct and Indirect Effects (Population and Human Health)

I have considered all of the written submissions made in relation to shadow flicker and the relevant contents of the file including the EIAR. With the proposed mitigation in place, I consider the proposed wind farm development will have no effects on surrounding residential receptors, resulting from shadow flicker.

20.0 Major Accidents and Natural Disasters (MA&ND)

20.1. Issues Raised

I note that the submission from Bord Na Mona (BNM) raises the issue of turbine fall distance and states that 3 no. Turbines (T5, T6 and T7) are located within fall distance of the BNM landbank, which creates a risk to BNM owned land. An observer submission has raised concerns in relation to potential blade failure.

20.2. Context

The EIAR does not contain a specific MA&ND Chapter, however, Section 2.13 of the EIAR considers the risk of MA&ND. In summary it states there is no risk for the proposed development to cause MA&ND and the proposed development is not

vulnerable to potential disasters or accidents, and justification for this is set out within the EIAR. I have considered this below.

More generally, I note that operational wind farms are not a recognised source of chemical pollution. Should a MA&ND occur, the potential sources of pollution on site during both the construction and operational phases are limited. Sources of pollution with the potential to cause significant environmental effects and associated negative effects on health include bulk storage of hydrocarbons or chemicals and storage of waste, none of which will occur on the site. The site is not regulated under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 i.e. SEVESO sites and so there is no potential effect from this source. With reference to the HSA website[33], the closest SEVESO sites, are as follows:

Upper Tier Sites

- William Grant & Sonds Irish Brands Ltd, Clonminch Tullamore, Co. Offaly - located c. 18km south-west of the site.
- Kemec Limited, Enfield Co. Kildare (formally Irish Industrial Explosives Ltd) located c. 22km to the north-west.

Lower Tier

- Synergy Health Ireland, Ltd, I.D.A Business and Technology Park, Tullamore Co. Offaly, located c. 23.5km south-west of the site.

The site lies outside any relevant consultation zones relating to same.

I note that the Construction & Environmental Management Plan (CEMP) in EIAR Appendix 02-1 contains an Emergency Response Plan (EMP-12), which sets out measures for the prevention of an environmental accident or incident and the response required to minimise the impact of such an event, as well as a range of other measures and procedures, and other relevant Environmental Management Plans in the CEMP that relates to specific risks (i.e. Surface water management (EMP-2), for example).

As noted in the Emergency Response Plan, environmental incidents may include, but are not limited to, fuel and oil spills, release of concrete or silt, flood events in the case of extreme rainfalls and fires on site.

[33] https://www.hsa.ie/media/5fxbdsit/upper-tier-sites-021225.pdf & https://www.hsa.ie/media/tnzo1gcm/lower-tier-sites-021225.pdf

20.3. **Baseline**

In terms of risks at construction stage, the applicant has set out that, as with all construction activities, there is a wide range of potential risks and hazards, with specific risks for wind farm works relating to working in windy conditions, transport and installation of heavy equipment, use of heavy cranage and specialised electrical installation works. In relation to these risks, it is set out that all work on site will be carried out in compliance with all relevant legislation and work practices, as detailed in Section 2.13.1.1 of the EIAR. The CEMP as contained in Appendix 2 of the EIAR also outlines safety procedures to be followed.

I would note that Ireland is a geologically stable country with a mild temperate climate. As such I am of the view that the potential natural disasters that may occur are therefore limited to peat-slide, flooding and fire. The site is relatively flat with areas of peat confined to the southern portions of the site.

Peat Stability

In relation to peat stability, I have considered same in Sections 9 and 12 of this report, and in the interests of avoiding repetition, I refer the Coimisiún to those sections. In summary, there is no risk of instability on the site, the access tracks, the turbine bases or grid connection from peat.

Flood Risk

The issue of flood risk, at both construction and operational phases is considered in the EIAR, including Chapter 8 Hydrology and Hydrogeology, and within Appendix 8 – Flood Risk Assessment (FRA). A standalone FRA is included in EIAR Volume III (Appendix 8-2). I have considered this issue in Section 11 of this report, and I refer the Coimisiún to this section, in the interests of avoiding repetition.

In terms of flood risk at construction stage, which can lead to mobilisation of contaminants with potential impacts on surface water for example, I note that this issue is considered within the CEMP (See Section 6.2.2.7 of CEMP) and measures are set out therein, including the avoidance of flood prone areas for the storage of materials, fuels and machines, the storage of hazardous materials above predicted flood levels and the monitoring of water levels during high risk periods. I note that Section 3.11.4

'Water Quality Management Systems' of the EIAR sets out detailed measures relating to surface water management at construction stage, and I have summarised this in Section 2 of this report.

At operational stage, flood modelling indicates that proposed Turbine 1 (T1) and the proposed substation are located within Flood Zone B. Flood Zone B has a moderate probability of flooding for river flooding (between 1 in 100 and 1 in 1000). Mitigation measures include sufficient freeboard for the proposed substation and for the turbines and the FRA has shown that there will be no significant residual risks to the proposed development or the local area.

20.4. Potential Effects in the Absence of Mitigation

I consider the likely significant effects of the development, which are summarised in Table 20.1 below;

Table 20.1 – Summary of Potential Effects (MA&ND)
Do Nothing
• If the wind farm were not to proceed, the existing uses for the site would continue. • The opportunity to capture a significant part of County Offaly's and Ireland's valuable renewable energy resource would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions.
Construction Impacts
• Section 2.13 of the EIAR 'Risk of Major Accidents and Disasters' identifies a number of potential risks at construction stage including those relating to health and safety of workers and peat stability. • In addition, the CEMP, contains an Emergency Response Plan (EMP 12) and this has identified various types of emergencies which could occur on the site and includes the release of hazardous substance including fuel and oil spills, concrete spills or release of concrete or silt, flood events related to an extreme rainfall event, environmental buffers and exclusion zones breach, housekeeping of materials and waste storage areas breach, stop works order due to environmental issue or concern (threat to archaeological or ecological feature) and fire on site. • Such incidents could affect drainage systems, surface waters, aquatic ecosystems, groundwater and soils. These incidents could also affect air quality by producing toxic fumes and airborne pollutants which may damage human health, wild and domestic animals and ecosystems.

Operational Impacts
• Section 2.13 of the EIAR 'Risk of Major Accidents and Disasters' identifies a number of potential risks at operational stage including those relating to fire risk, lightening strike, turbine structural failure and risks relating to climate change, including severe weather and flooding. • In relation to flooding, I note that, flood modelling indicates that Turbine 1 and the proposed substation are located within Flood Zone B. Flood Zone B has a moderate probability of flooding for river flooding (between 1 in 100 and 1 in 1000).
Decommissioning Impacts
• Risks are similar to Construction Phase as outlined in the ERP (See above).
Cumulative Impacts
• No significant cumulative effects predicted for the project to be impacted by major accidents or natural disaster or the proposed developments potential to cause major accidents or natural disaster.

20.5. Mitigation Measures

As noted above, and in terms of health and safety risks at construction stage, the applicant has set out that all work on site will be carried out in compliance with all relevant legislation and work practices, as detailed in Section 2.13.1.1 of the EIAR.

In terms of those risks identified in Section 2.13 'Risk of Major Accidents and Disasters' the EIAR, I note the following:

- **Peat Stability:** I have considered peat stability in Sections 9 & 12 of this report, and in the interests of avoiding repetition, I refer the Coimisiún to those sections. In summary, I concur with the conclusions within the EIAR that there is no risk of instability of the site, access tracks, turbine bases or grid connection from peat.
- **Fire Risk/Lightening Risk:** As noted within the EIAR, fire risk can emanate from the presence of electrical generating equipment as well as the storage of flammable materials on site. It is set out that modern wind farm designs will minimise the use of combustible materials. Lightening and surge protection measures will be employed. Each element of the design has various protocols that seek to eliminate fire risk, including consideration of the flammability or chemical properties of each of the oils, lubricants and fuels that may be used

within the equipment on site. Each of the turbines will be equipped with an electrical grounding system in order to protect from damage caused by lightening strikes.

- **Turbine Structural Failure:** Such risks can include tower collapse, blade failure or separation. The EIAR sets out that in order to mitigate such risks, rigorous safety checks are conducted on the turbines during operation to ensure risk of failure is negligible. Furthermore, the applicant notes that separation distances from public roads and residences are well beyond fall over distances that would present a risk of significant accidents.

  With reference to the submission from BNM, which states that 3 no. turbines (T5, T6 and T7) are within 'fall distance' to BNM lands, I note that there is no specific policy in relation to 'fall distance' to adjoining landbanks and this is highlighted in the applicant's response to the BNM submission. Furthermore, I am satisfied that the risk of structural failure has been addressed adequately by the applicant, as detailed above, so as to reduce the risk of turbine fall to 'negligible'.

- **Severe Weather:** Risks posed by severe weather including increased wind speeds and storms are mitigated by brake mechanisms within the turbines which ensure that they only operate under specific wind conditions and will shut down during high wind speed events. It is concluded within the EIAR that there is very low risk to the proposed development from high wind speeds.

- **Flood Risk**: In relation to flood risk at construction stage, I note that Section 6.2.2.7 of the CEMP considers same, and measures are set out therein, including the avoidance of flood prone areas for the storage of materials, fuels and machines, the storage of hazardous materials above predicted flood levels and the monitoring of water levels during high-risk periods. Measures relating to accidental spills and contamination are set out in Section 6.2.3.4 and include measures relating to appropriate storage of materials and the stocking of spill kits on site.

- At operational stage, flood risk arising from the operation of the wind farm is considered in the Flood Risk Assessment, and I have considered this in Section

11 of this report. In summary, I note that flood modelling indicates that Turbine 1 and the proposed substation are located within Flood Zone B. Flood Zone B has a moderate probability of flooding for river flooding (between 1 in 100 and 1 in 1000). Mitigation measures include sufficient freeboard for the proposed substation and for the turbines and the FRA has shown that there will be no significant residual risks to the proposed development or the local area.

- **Other:** In terms of the other risks identified by the ERM, I note that a wide range of best practice and site-specific mitigation measures are identified in the application documentation in relation to same and specifically the CEMP provides a comprehensive range of measures as relates to issues such as surface water management, protection of water quality, protection of ecology, protection of air quality, and Appendix 1 of the CEMP also sets out a range of Environmental Management Plan measures which relate to various aspects of the construction stage of the project. For example, Section 4.6 of the CEMP sets out Site Drainage and Water Quality Management Procedures (which are also set out in Section 3.1.4 Water Quality Management Systems' of the EIAR). Section 4.7 sets out Traffic Management Procedures. Section 5.2.5.1 sets out an Ecological Clerk of Works (ECoW) will be employed. Section 6.2 sets out a comprehensive suite of environmental mitigation, control measures and proposals, relating to biodiversity, hydrology and hydrogeology, including flood risk.

20.6. Residual Effects

I am satisfied that all reasonable risks have been identified within the EIAR, including the associated appendices. I am also satisfied that following implementation of environmental protection measures outlined in the EIAR, the CEMP, as well as other measures relating to flood risk at operational stage as set out in the Flood Risk Assessment, that this will reduce the risk of accidental spillage and contamination of pollution risk to groundwater, surface water and associated ecosystems, and to terrestrial ecology. I consider the risk of contamination is very unlikely to occur and will have limited consequences should it do so. Hence, there will be no significant

residual risks of major accidents and/or disasters associated with the proposed development, at construction, operational or decommissioning stages.

20.7. **Assessment: Direct and Indirect Effects**

I have examined, analysed, and evaluated the EIAR and associated appendices, including but not limited to the CEMP and accompanying Management Plans, and the Flood Risk Assessment.

I note that a windfarm by its nature is not a recognised source of pollution and it is not subject to an Industrial Emissions Directive Regulation or any other EPA regulatory consent. I consider there is a low risk for significant natural disasters to occur having regard to the stable geology and mild climate of the country.

The EIAR provides an assessment in relation to the likely impacts and proposed mitigation of any major accident or natural disaster (Section 2.13 of same refers) as well as those risks associated with Climate Change (i.e. severe weather and flooding – Section 2.14 refers). The wind farm will be designed and built in line with current best practice and, as such, mitigation against the risk of major accidents and/or disasters will be embedded through the design.

In addition, other risks are identified within the CEMP, and measures are set out therein to reduce the significance of these identified risks. This includes an assessment relating to transportation, contamination and fire during construction, operation and decommissioning phases. The EIAR confirms that the wind farm will be designed and built in line with current best practice and, as such, mitigation against the risk of major accidents and/or disasters will be embedded through the design. Furthermore, prior to commencement of development, an updated CEMP will be prepared by the appointed contractor to ensure an effective response to disasters, or the risk of accidents. The final CEMP will be prepared and implemented prior to commencement to ensure that potential risks of major accident and/or disaster are identified, avoided and mitigated. I consider based on the assessment undertaken and the mitigation proposed that the proposed development has a low potential to cause natural or major accidents and that the final CEMP can be dealt with by way of condition.

20.8. Conclusion Direct and Indirect Effects

I consider that an adequate description of the expected significant adverse effects on the environment due to the project's vulnerability to major accidents and disasters has been provided in the applicants EIAR. The EIAR outlines comprehensive mitigation strategies designed to minimise such impacts. I consider that the risks identified to be reasonable and the mitigation measures proposed will be adequate to minimise the risks highlighted. Based on the above, I am satisfied that the overall risk of MA&ND has been adequately addressed and the risk of MA&ND is low.

21.0 Interactions

Chapter 17 of the EIAR evaluates the potential interaction of effects described within the EIAR. A matrix of the interactions is presented in Table 17-1 of the EIAR. The EIAR notes that, where relevant, the interaction between the factors, which is the interactions between specific environmental aspects and effects, has already been addressed within each of the individual assessment topic areas or chapters of the EIAR. Where the potential for significant negative impacts has been identified during the assessment process, these impacts have been avoided or reduced by the proposed mitigation measures, as presented throughout the EIAR and highlighted in Section 17.2 of the EIAR.

I have considered the interactions and interrelationships between environmental effects and am satisfied that significant impacts in relation to interactions can be avoided, managed and mitigated by the measures contained within the EIAR and any recommended planning conditions.

22.0 Reasoned Conclusion

Having regard to the examination of environmental information contained above, to the EIAR provided by the applicant and the submissions received, the contents of which I have noted, I consider that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- **Landscape and Visual Effects:** Visual effect during operation is summarised as follows: of the 29 No. viewpoint locations assessed, there is one viewpoint (VP11) where visual effects were judged to be 'Significant' and 'adverse'. Noting the reversibility of these effects in the decommissioning phase (in the absence of a further planning permission) and in light of the national, regional and local planning policy context, which support renewable energy projects as needed to urgently respond to the climate crisis, these significant negative effects are justified and therefore acceptable.
- **Air Quality and Climate:** The proposed development, in conjunction with other renewable energy projects as cited in the EIAR, would have a significant, positive, cumulative effect on air quality and climate due to the displacing of fossil fuel energy generation (with subsequent improvements in air quality) and the associated displacement of CO_2 and other greenhouse gas emissions.

Having regard to the above, the likely significant environmental effects arising as a consequence of the proposed development have been satisfactorily identified, described and assessed in this EIA. I also consider that the EIAR is compliant with Article 94 of the Planning and Development Regulations, 2001, as amended.

23.0 Recommendation

Having regard to the foregoing, I recommend that permission for the proposed development be approved, subject to conditions, for the following reasons and considerations as outlined in the Draft Order below.

24.0 Draft Order

24.1. Reasons and Considerations

The Coimisiún reached its decision in accordance with its duties under Section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended, and the requirement to, in so far as practicable, perform its functions in a manner consistent with *inter alia* the Climate Action Plan 2025 and the furtherance of the national climate objective.

And in coming to its decision, the Coimisiún has had regard to the following:

- European legislation, including of particular relevance
  - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.
  - EU Renewable Energy Directive 2009/28/EC which aims to promote the use of renewable energy and amending Directive EU/2023/2413 which aims to speed up the EU's clean energy transition as implemented by European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. 274 of 2025)
  - Directive 2011/92/EU (The EIA Directive) as amended by Directive 2014/52/EU as implemented by Article 94 and Schedule 6 (paragraphs 1 and 2) of the Planning Regulations as amended.
  - Directive 2000/60/EC, the Water Framework Directive and the requirement to exercise its functions in a manner which is consistent with the provisions of the Directive and which achieves or promotes compliance with the requirements of the Directive.
- National and regional planning and related policy, including:
  - National policy with regard to the development of alternative and indigenous energy sources and minimisation of emissions from greenhouse gases, particularly the NPF First Revision 2025 and National Policy Objective 70.
  - Wind Energy Guidelines: Guidelines for Planning Authorities 2006 and the draft guidelines published in 2019.
  - The objectives and targets of the National Biodiversity Action Plan 2023-2030.
- Regional and local planning policy, including:
  - Regional Spatial Economic Strategy for the Eastern and Midland Region;

- Offaly County Development Plan 2021 – 2027.

- Other relevant national policy and guidance documents.
- The nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity.
- The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites.
- The reports of the Planning Authority received in response to same.
- The submissions made on the planning application to the Coimisiún and the applicant responses to the same.
- The report and the recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment and environmental impact assessment.

24.2. **Appropriate Assessment: Stage 1**

The Coimisiún considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European sites. The Coimisiún noted that the proposed wind farm development is not directly connected with or necessary for the management of any European Site and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector. The Coimisiún agreed with the screening exercise carried out by the Inspector.

The Coimisiún completed an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European Sites, taking into account the Screening Report for Appropriate Assessment submitted, and the report and screening assessment completed by the Inspector.

The Coimisiún agreed with the inspector's assessment and conclusion that the European Sites for which there is potential for significant effects is the River Barrow

and River Nore SAC [Site Code: 002162], River Boyne and River Blackwater SAC [Site Code: 002299] and River Boyne and River Blackwater SPA [Site Code: 004232].

The Coimisiún considered that an appropriate assessment of the implications of the proposed development for *the River Barrow and River Nore SAC* [Site Code: 002162], *River Boyne and River Blackwater SAC* [Site Code: 002299] and *River Boyne and River Blackwater SPA* [Site Code: 004232] required further investigation.

24.3. **Appropriate Assessment: Stage 2**

The Coimisiún considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and carried out an Appropriate Assessment of the implications of the proposed windfarm development for European Sites in view of the conservation objectives for *the River Barrow and River Nore SAC* [Site Code: 002162], *River Boyne and River Blackwater SAC* [Site Code: 002299] and *River Boyne and River Blackwater SPA* [Site Code: 004232].

The Coimisiún considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment as well as the report of the Inspector.

In completing the assessment, the Coimisiún considered, the likely direct and indirect impacts arising from the proposed development, both individually and in combination with the other plans and projects, the mitigation measures which were included as part of the current proposal and the Conservation Objectives for these European Sites. In competing the Appropriate Assessment, the Coimisiún accepted and adopted the Appropriate Assessment carried out in the Inspectors report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites Conservation Objectives.

In overall conclusion, the Coimisiún was satisfied that the proposed development, by itself or in combination with other plans or projects, (including all aspects of the entire windfarm project as addressed in the inspector's assessment) would not adversely affect the integrity of any European Site, in view of the Sites' conservation objectives and there is no reasonable scientific doubt as to the absence of such effects.

This conclusion is based on a complete assessment of all aspects of the proposed project, both alone and in combination with other plans and projects of relevance, (including all aspects of the entire windfarm project as addressed in the inspector's assessment) and took into account all submissions received during the course of the application.

24.4. Environmental Impact Assessment (Reasoned Conclusion)

The Coimisiún completed an Environmental Impact Assessment of the proposed development together with the substation, taking into account:

(a) The nature, scale, location and extent of the proposed development;

(b) The Environmental Impact Assessment Report and associated documentation submitted;

(c) The submissions received during the course of the application; and

(d) The Inspector's report

The Coimisiún considered that the Environmental Impact Assessment Report supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Coimisiún considered, and agreed with the Inspectors reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are and would be mitigated as follows:

- **Air Quality and Climate:** The proposed development, in conjunction with other renewable energy projects as cited in the EIAR, would have a significant, positive, cumulative effect on air quality and climate due to the displacing of fossil fuel energy generation (with subsequent improvements in air quality) and the associated displacement of CO_2 and other greenhouse gas emissions.
- **Landscape and Visual Effects:** Visual effect during operation is summarised as follows: Of the 29 No. viewpoint locations assessed, there is one viewpoint (VP11) where visual effects were judged to be 'Significant' and 'Adverse'.

These effects are an inevitable consequence of the introduction of large-scale wind turbines into a lowland landscape. Noting the reversibility of these effects in the decommissioning phase (in the absence of a further planning permission) and in light of the national, regional and local planning policy context, which support renewable energy projects as needed to urgently respond to the climate crisis, these significant negative effects are justified and therefore acceptable.

The Coimisiún completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity would be acceptable. In doing so, the Coimisiún adopted the report and conclusions of the Inspector.

24.5. **Proper Planning and Sustainable Development**

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with the Climate Action and Low Carbon Development Act 2015 (as amended), the National Biodiversity Action Plan 2023-2030, the National Planning Framework, the Eastern and Midland Regional Spatial and Economic Strategy 2019-2031 (RSES), and the provisions of the Offaly County Development Plan 2021 – 2027 (OCDP 2021).

It would comply with European, National, and Regional renewable energy policies and with the provisions of Local policy, would be consistent with the obligations of the Climate Action Plan 2024 and 2025, would not have an unacceptable impact on the character of the landscape and visual amenities of the area, would not have a significant adverse impact on biodiversity, hydrology/hydrogeology, ecology, ornithology or archaeological and cultural heritage of the area, would be acceptable in terms of traffic safety and would make a positive contribution to Ireland's renewable energy and security of energy supply requirements. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

The Coimisiún noted that Variation No. 1 of the OCDP 2021 was adopted on the 20th July 2026. Following the Variation of the Development Plan, the Coimisiún noted that

a portion of the southern section site is now designated a '*Peatland and Nature Corridor'* as per Map 4.9(b) of the OCDP 2021, and noted the related provisions of Objective BLO-28 '*Peatland and Nature Corridors'*.

The Coimisiún further noted the provisions of Section 11 '*Strategic Approach to Wind Energy Development'* of the Wind Energy Strategy (WES) (as varied) which identifies key areas within the county that are '*Open for Consideration for Wind Energy Developments'* with the exception of lands within the '*Peatland and Nature Corridors'* as identified by Objective BLO-28.

The Coimisiún concluded that the proposal represents material contravention of the OCDP 2021, specifically of Objective BLO-28 '*Peatland and Nature Corridors'* and of Section 11 '*Strategic Approach to Wind Energy Development'* of the Wind Energy Strategy (WES).

The Coimisiún also concluded that the proposal will have a significant adverse visual impact from VP11a, and from the road in the immediate vicinity of the location of VP11, and therefore the proposal would represent a material contravention of Objective BLO-25 of the OCDP 2021, which seeks to protect skylines and ridgelines from development where such developments will create significant visual intrusion.

The Coimisiún noted that under Section 37G(6) of the Planning and Development Act 2000, as amended, it may, in determining an application under that section, decide to grant a permission even if the proposed development contravenes materially the Development Plan.

The specific circumstances where permission may be granted notwithstanding a material contravention are set out in Section 37G(6) which provides that;

> *'(6) The Board may decide to grant a permission for development, or any part of a development, under this section even if the proposed development, or part thereof, contravenes materially the development plan relating to any area in which it is proposed to situate the development.'*

Subject to the provisions of Section 37G(6), the proposed windfarm development complies with these provisions based on the proposed windfarm development being of strategic and national importance, based on the Climate Plans and Policy Objectives, National and Regional Objectives and on achieving European and Irish

legally binding renewable energy targets including the 9 GW onshore wind target and achieving 80% of electricity demand from renewable sources by 2030.

The Coimisiún also noted that the OCDP 2021 supports the development of renewable energy in the County, namely Policy CAEP-25 which seeks to encourage and facilitate the production of energy from renewable sources including wind energy, subject to proper planning and environmental considerations; Policy CAEP-37 which recognises the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions; Objective CAEO-03 which seeks to achieve a reasonable balance between responding to government policy on renewable energy and in enabling the wind energy resources of the county to be harnessed in an environmentally sustainable manner, and Objective CAEO-04 seeks to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the County in a manner that is consistent with proper planning and sustainable development of the area.

On the basis of the above, and noting the conclusions reached in the Inspectors report that the proposed development accords with the proper planning and sustainable development and that environmental effects would be acceptable, the Coimisiún was satisfied that, notwithstanding the material contraventions of the OCDP 2021 as identified above, it is appropriate for the Coimisiún to grant permission, taking into account the wider support for wind energy set out in the OCDP 2021 as well as national and regional policy support for onshore wind energy, and the obligations placed on the Coimisiún under Section 15 of the Climate Action and Low Carbon Development Act 2015, as amended. In conclusion on this matter, the Coimisiún was satisfied that the proposed development is in accordance with the proper planning and sustainable development for the area.

24.6. **Recommended Conditions**

1.	The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the planning application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. **Reason:** In the interests of clarity.
2.	The following design requirements shall be adhered to: (a) The wind turbines shall be designed as follows, in accordance with the turbine option assessed in the Environmental Impact Assessment Report and Natura Impact Statement, together with application documentation; • Turbine Tip Height – 185m • Hub Height – 104m • Rotor Diameter – 162m (b) The wind turbines, including masts and blades, shall be finished externally in a light grey colour to be agreed in writing with the planning authority prior to commencement of development. (c) Cables within the site shall be laid underground. (d) The wind turbines shall be geared to ensure that the blades rotate in the same direction. (e) Transformers associated with each individual turbine and mast shall be located either within the turbine mast structure or at ground level beside the mast. **Reason:** In the interest of visual amenity.

3.	The period during which the development hereby permitted may be carried out shall be ten years from the date of this Order. **Reason:** Having regard to the nature and extent of the proposed development, the Coimisiún considered it appropriate to specify a period of validity of this permission in excess of five years.
4.	This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection. **Reason:** In the interest of clarity.
5.	(a) The permission shall be for a period of 35 years from the date of the first commissioning of the windfarm save for the 110kV Substation and underground cable connecting to the National Grid. All structures, including foundations, shall then be removed and the site reinstated unless, prior to the end of that period, planning permission shall have been granted for their retention for a further period. (b) Prior to the commencement of development, a detailed Site Restoration Plan providing for the removal of the turbines and all ancillary structures, and a timescale for its implementation, shall be submitted to and agreed in writing with the planning authority. (c) On full or partial decommissioning or if the wind farm ceases operation for a period of more than one year the windfarm, the turbines and all ancillary structures shall be dismantled and removed permanently from the site. The site shall be restored in accordance with the agreed Site Restoration Plan and all decommissioned structures shall be removed from the site within 12 months of decommissioning. **Reason:** To enable the planning authority to review the operation of the windfarm over the stated time period, having regard to the circumstances then prevailing, and in the interest of landscape restoration upon cessation of the project.

6.	The mitigation measures contained in the submitted Environmental Impact Assessment Report (EIAR) shall be implemented. **Reason:** To protect the environment.
7.	Prior to commencement of development, the developer shall submit to the planning authority a complete schedule of all mitigation, monitoring and enhancement measures. This shall identify who is responsible for the implementation and monitoring of these measures and timescales for implementation and monitoring (where applicable). **Reason**: To protect biodiversity, the environment and the integrity of European sites.
8.	Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a Construction Traffic Management Plan (CTMP) for the construction phase of the development for the written agreement of the planning authority. The CTMP shall incorporate details of the road network to be used by construction traffic including oversized loads, detailed proposals for the protection of bridges, culverts and other structures to be traversed, as may be required. The agreed CTMP shall be implemented in full during the course of construction of the development. Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a Construction Traffic Management Plan (CTMP) for the construction phase of the development for the written agreement of the planning authority. The CTMP shall incorporate details of the road network to be used by construction traffic including oversized loads, detailed proposals for the protection of bridges, culverts and other structures to be traversed, as may be required. The agreed CTMP shall be implemented in full during the course of construction of the development. The plan shall contain a pre-construction survey of haul routes. Within 3 months of the cessation of the end of the public road(s) being used as haul

	routes, a condition survey of the roads, bridges and any other public infrastructure, accompanied by a schedule of repair/ upgrade works shall be carried out at the developers expense by a suitably qualified person. This shall be submitted to, and agreed in writing with the Roads authority within 3 months of the cessation of use of public roads by construction traffic. All agreed works shall be completed at the developers expense within 12 months of the cessation of public roads being used as haul routes. No construction delivery vehicles shall access the site via the northern section of the L5006 and the Trimblestown Bridge on the Grand Canal. The plan shall also contain details of how the developer intends to engage with relevant parties (County Councils, PPP companies etc.) and notify the local community in advance of the delivery of oversized loads. Any proposed works to the national road network to facilitate turbine delivery shall comply with the requirements of TII. The plan shall also contain details of how the developer intends to engage with relevant parties (County Councils, PPP companies etc.) and notify the local community in advance of the delivery of oversized loads. Any proposed works to the national road network to facilitate turbine delivery shall comply with the requirements of TII. **Reason:** In the interest of traffic safety and convenience.
9.	The mitigation measures contained in the submitted Natura Impact Statement (NIS) shall be implemented. **Reason:** To protect the integrity of European sites.
10.	The applicant shall appoint a Community Liaison Officer for all stages of the development who shall be the first point of contact for residents and be responsible for monitoring and reporting of complaints, maintaining a complaints register, addressing complaints and for discharging information in relation to the development to residents. **Reason:** In the interest of amenity and orderly development.

11.	Noise levels generated by the windfarm following commissioning, by itself or in combination with other existing or permitted wind energy development in the vicinity, when measured externally at existing noise sensitive locations, shall not exceed • For the daytime period 7am to 11pm, in quiet environments, where background noise is less than 30dB(A)L90 T10, a maximum noise level of 40dB(A)L90 T10, • For the daytime period 7am to 11pm, where the background noise level exceeds 30dB(A)L90 T10, the greater of 45dB(A)L90 T10, or 5dB(A) above background levels, • For the nighttime period 11pm to 7am, for all noise environments, 43dB(A)L90 T10. Prior to the commissioning of the windfarm, the developer shall submit and agree in writing with the planning authority a Noise Compliance Monitoring Programme (NCMP) for the operational windfarm. The NCMP shall include a Complaints Protocol which outlines procedures to be followed in the event of a justified* complaint relating to noise from the windfarm. The NCMP shall include a detailed methodology for all sound measurements including analysis for Tonal and Amplitude Modulation (AM) characteristics. **Reason:** In order to protect the amenities of existing noise sensitive properties in the vicinity of the development *A justified complaint would typically relate to a noise that, on their review, the relevant Planning Authority considers likely to be sufficiently audible or significant, and attributable to the specific wind farm under consideration.
12.	An updated Construction Environmental Management Plan (CEMP) and Traffic Management plan (TMP) shall be prepared and agreed with relevant County Councils and TII, prior to the commencement of development. The matters to be addressed in the CEMP and TMP relating to national road network maintenance and road safety shall include:

	i. Demonstration that Compliance with TII Publications (Standards) in accordance with relevant TII Publications (Technical) will be required for any work that may impact the national road pavement, structures and infrastructure including drainage. ii. All national road structures on the haul route through all the relevant County Council administrative areas shall be checked by the applicant/developer to confirm their capacity to accommodate any abnormal 'weight' load proposed. Any requirements for 'Exceptional Abnormal Loads' shall be addressed in accordance with TII Publications. iii. The haul route shall be assessed to confirm capacity to accommodate abnormal 'length' loads and any temporary works required are identified. Any damage caused to the pavement of the existing national road due to the turning movement of abnormal 'length' loads (e.g. tearing of the surface course) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development onsite. iv. Any proposed works associated with the haul route on the national road network, including signage, to facilitate construction traffic shall comply with TII Publications and shall be subject to Road Safety Audit as appropriate. Works and traffic management shall ensure the ongoing safety for all road users and prior to any development necessary licenses, approvals or agreements with PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) Companies and local road authorities for the entire haul route shall be in place. **Reason:** In the interest of road safety.
13.	Prior to the commissioning of the windfarm, the developer shall submit for the written agreement of the planning authority details of actions to be taken by the developer in the event of the proposed development causing

	interference with telecommunication signals or television reception. Such actions shall be completed to minimise interference with telecommunication signals and shall be carried out to the written satisfaction of the planning authority at the developer's expense. **Reason:** In the interest of protecting telecommunication signals and residential amenity.
14.	The construction of the development shall be managed in accordance with a Construction Management Plan (CEMP), which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including: a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse; b) Location of areas for construction site offices and staff facilities; c) Details of site security fencing and hoardings; d) Details of on-site car parking facilities for site workers during the course of construction; e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site; f) Measures to obviate queuing of construction traffic on the adjoining road network; g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network; h) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works;

	i) Details of a local community feedback mechanism, where feedback including complaints are received and acted upon by a designated Community Liaison Officer; j) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; k) Details of all services and utilities along the grid connection route/construction haul route and methodology for crossing/diversions. l) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater; m) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; n) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains; o) Works to be carried out in accordance with Inland Fisheries Ireland 'Guidelines on protection of fisheries during construction works in and adjacent to waters'; p) A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be available for inspection by the planning authority, with monitoring on a daily basis of all watercourses in or adjacent to works areas; q) Measures to be implemented to minimise the potential for increased soil/peat stability and erosion of soils, with monitoring of the same. **Reason**: In the interest of amenities, public health and safety and environmental protection.
15.	Site development and building works shall be carried out between the hours of 07.00 to 19.00 Mondays to Fridays inclusive, between 08.00 to 14.00 on Saturdays and not at all on Sundays and public holidays. Deviation from

	these times shall only be allowed in exceptional circumstances where prior written agreement has been received from the planning authority and in accordance with measures outlined in the EIAR. **Reason**: To safeguard the amenity of property in the vicinity.
16.	Drainage arrangements including the attenuation and disposal of surface water shall comply with the requirements of the relevant Section of the Council for such works and services. **Reason**: In the interest of public health and surface water management.
17.	All development shall be carried out in compliance with Uisce Éireann's Standard Details and Codes of Practice. Note that Uisce Éireann does not permit Build Over of its assets. Where the applicant proposes works or build over existing water or wastewater services, the applicant shall have received a written Confirmation of Feasibility (COF) of Diversion(s) from Uisce Éireann prior to any works commencing. **Reason:** To protect the public water and wastewater facilities.
18.	a) Prior to commencement of development and following consultation with the Department of Defence and Irish Aviation Authority, the developer shall submit for written agreement of the planning authority, details of an obstacle warning light scheme which can be visible to night vision equipment. b) In the event negative impacts on future military radar systems, the owner will engage with the Department of Defence and will provide suitable mitigations as soon as practical. c) The developer shall inform the IAA and AirNav Ireland of its intention to commence crane operations with a minimum of 30 days prior notification of their erection. d) Prior to commissioning of the turbines, the developer shall inform the planning authority and the Irish Aviation Authority of the co-ordinates of the as constructed positions of the turbines and the highest point of the turbines (to the top of the blade spin). **Reason:** In the interest of air traffic safety.

19.	**Archaeological Requirements:** 1. All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 12 of the EIAR (date July 2025) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order. 2. The developer shall engage a suitably qualified Archaeologist (licensed under the National Monuments Acts) to carry out a pre-development Archaeological Geophysical Survey and a pre-development Archaeological Test Excavation in areas of proposed ground disturbance and to submit an Archaeological Impact Assessment Report for the written agreement of the Planning Authority, following consultation with the National Monuments Service, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. (a). The Archaeological Geophysical Survey must be carried out under licence from the National Monuments Service or Ministerial Consent (as applies) and in accordance with an approved Method Statement. Having completed the work, the Archaeologist shall submit a written report to the Department and to the Planning Authority describing the results of the Archaeological Geophysical Survey. (b). The archaeologist shall liaise with the National Monuments Service (NMS) to establish, based on the results the Archaeological Geophysical Survey, the appropriate scope of the Archaeological Test Excavation to adequately characterise the character and extent of any potential subsurface archaeological material within the development site. (c). The report on the Archaeological Test Excavation shall include an Archaeological Impact Statement and Mitigation Strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.

	(d). Any further archaeological mitigation requirements specified by the Planning Authority, following consultation with the National Monuments Service, shall be complied with by the developer. (e). No site preparation and/or construction works shall be carried out on site until the Archaeologist's report has been submitted to and approval to proceed is agreed in writing with the Planning Authority. 3. The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 12 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. 4. The Planning Authority and the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. **Reason:** To ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.
20.	The Community Benefit scheme shall be adhered to for the life of the windfarm. The scheme shall be administered in accordance with the RESS Community Benefit Fund Good Practice Principles, 2021, prepared by the Department of the Environment, Climate and Communications. In the event that the developer does not utilise the government's Renewable Energy Support Scheme (RESS), prior to the commencement of development, a community gain proposal shall be submitted to the planning authority for written agreement. In default of agreement, the matter shall be referred to An Coimisiún Pleanála for determination.

	Reason: To ensure that the community living in proximity to the wind farm, benefits from it.
21.	Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Coimisiún Pleanála for determination. **Reason:** In the interest of traffic safety and the proper planning and sustainable development of the area.
22.	Prior to commencement of development, the developer shall lodge with the relevant Planning Authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the relevant Planning Authority, to secure the satisfactory reinstatement of the site upon cessation of the project, coupled with an agreement empowering the relevant Planning Authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the relevant Planning Authority and the developer or, in default of agreement, shall be referred to An Coimisiún Pleanála for determination. **Reason:** To ensure the satisfactory reinstatement of the site
23	The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under Section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the

	planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Coimisiún Pleanála to determine the proper application of the terms of the Scheme. **Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under Section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

_____

Laura Finn
Planning Inspector
21st August 2026

25.0 Appendix 1: Observations

This section of my report sets out a brief summary of the key points raised in the submissions received from Offaly County Council, Prescribed Bodies and Public Observations.

For the convenience of the Coimisiún, this appendix describes a more detailed summary of each submission received on the application and also includes the applicant's response to observations.

25.1. Offaly County Council (OCC) – Chief Executives Report

I highlight to the Coimisiún that since the current application was submitted to ACP, and since the CE made their response to the application as outlined below, Variation No. 1 of the OCDP 2021 was adopted. This has implications for the zoning on a portion of the application site in relation to the Wind Energy Strategy, as I have set out in Section 5.2.3 of this report. I will not repeat that here, but I will point out that the CE's Report is now out-of-date in relation to the current zoning for the site in relation to Wind Energy. A portion of the site is now located as what is described as a 'Peatland & Nature Corridor' which is not considered suitable for wind farms. Nevertheless, I have summarised the PA submission below.

The CE Report sets out the site location and description of the proposed development (Section 2), Key Relevant Policy (Section 3), Relevant Planning History (Section 4), Designations (Designated Areas – Section 5), Public Services (Section 6), Flood Risk Assessment and Water Framework Directive & Associated Regulations (Section 7), Environmental Impact Assessment Report (EIAR) Adequacy (Section 8), Carrying Capacity and Safety of Road Network (Section 9), Environmental Carrying Capacity of the Subject Site and Surrounding Area (Section 10), Reports of Relevant Local Authority Departments (Section 11), Third Party Observations/Submission Submitted to An Coimisiún Pleanála (Section 12), Planning Authority's Assessment and Views (Section 13), Planning Authority's View on Community Gain (Section 14), Development Contribution (Section 15), Bonds (Section 16), Planning Authority's View on Conditions, and Recommendation (Section).

The Coimisiún will note, in the first instance that the Planning Authority (PA) have recommended that **Further Information** is sought in relation to the following issues as summarised below:

25.2. **Principle of Development**

- Site is located within a wider area which the County Wind Energy Strategy (WES) is deemed '*Open for Consideration for Wind Energy Developments'*.
- Development in such areas must demonstrate that the windfarm would not have a negative impact on the residential and visual amenity of the area.
- PA considers in its current format, the proposed development would cause a detrimental impact on the amenities in the area due to the siting of the proposed turbines.

25.3. **Assessment**

- No details given of alternative sites/alternative renewable energy projects.
- No reference to the location of the proposed replacement woodland/FI should be sought.
- Applicant should clarify the area of commercial forestry proposed for removal (both 18ha and 21ha) are referenced.
- 3 no. areas shown in Fig 6.8 Proposed Biodiversity Creation Areas are existing hedgerow.- FI required.
- PA seeks additional information as to the location of the proposed habitat creation areas/identified location for the habitat rewilding area shown in Fig 6.8 is within the centre of the access road for substation area and to Turbines 1-3/Extent of habitat creation area appears very limited given scale of proposed development/matter should be addressed by way of condition.

25.3.1. **Birds**

- Application should provide details of potential enhancement habitat for Merlin, Woodcock and Snipe.

25.3.2. **Noise**

- PA note satisfied that sufficient details on noise and in particular, combined noise generation from the proposed development and existing windfarms in the area have been provided by the applicant.
- Section 10.4.3.4 'Noise from Existing Turbines' – no assessment of cumulative noise impact from Yellow River Windfarm/comprises for 29 no. turbines/must be included in any measurements in order to establish baseline noise levels/FI required.
- Commission must be satisfied that the identified NSL's are suitable and **acceptable.**

- **Reference made to recent High Court Decisions** – PA wishes to highlight the need for a Noise Complaint Monitoring Programme / all required costs to ensure compliance should be burdened on the applicant.

25.3.3. **Cultural Heritage**

- Photomontages required from Ballinla House (Protected Structure) c600m from proposed turbine T3.

25.3.4. **Transportation and Traffic**

- FI sought as per internal reports (summarised in Section 26.3.11 below)/Conditions suggested in the event of a grant of permission.

25.3.5. **Shadow Flicker**

- PA has concerns in relation to the potential impacts of shadow flicker due to the proximity of turbines, in particular T1, T2 and T3.

25.3.6. **Siting of Proposed Turbines/Setback from Dwellings**

- Setback distances have not been provided/mandatory minimum setback has been provided.
- Best practice in the Draft Wind Energy Guidelines refers to a setback distance of 4 times the tip height between a wind turbine and nearest point of the curtilage of any residential property in the vicinity of the proposed development/this would result in a best practice setback of 740m.
- Insufficient justification for proposed setback distances provided/would set an undesirable precedent/likely cause detrimental impact on the residential amenity of these dwellings.

25.3.7. **Visual Impact**

- Significant concerns regards the potential impact of the proposed turbines on the local area and residents.
- Absence of an overall map showing all viewpoints.
- Concerns in relation to overall assessment of prominent views/in particular to the east.
- Quality of the submitted photomontages/background appears to be hazy/ordering is out of sequence/VP 11 and 13 are mixed together.
- As a result of the setbacks from existing dwellings, the minimum separation distance between turbines and the existing turbines in the surrounding area, the PA considers the proposed development will have a significant visual impact on the residential amenity of local residents and the wider area.
- The PA refers to dwellings along the local road between the northern and southern sections of the proposed development.
- PA is of the view that these dwellings will be subject to an overbearing impact, specifically from T1, T2, T3 and T4.
- Concerns in relation to the T1, T3, T4 and T5 – potential impact on dwellings.

- Cumulative impact of permitted but not yet constructed wind turbines has not been factored into the LVIA by the applicant/A revised Landscape & Visual Assessment should be provided by the applicant.
- PA considers the layout and/or the number of proposed turbines should be reconsidered.

25.3.8. **Flooding/WFD Compliance**

- Note that an assessment of potential cumulative effects associated with the project and other developments has not been completed as part of the WFD Compliance Assessment.

25.3.8.1. **Civil Engineering/Roads/Traffic and Transport**

- Notes that the Commission is requested to consider/address matters raised by the Local Authority's Road Design and Edenderry Municipal District Engineer in informing its decision on civil engineering matters, in particular roads and safety.
- Local Authority's Roads Section and the Edenderry Municipal District Engineer seek FI in relation to traffic impacts/shortfalls in relation to the applicant's submitted details are required prior to any grant of permission.

25.3.9. **Population and Human Health**

- A map showing all dwellings (existing, granted and under construction) within 2km of the proposed turbine locations should be provided as part of this chapter.
- A map showing all permitted and under construction energy developments within 15km of the subject site should be provided.
- Carbon released from the felling of 21ha of woodland and the provision of materials for the turbine concrete nases and access roads.
- Query the separation distance given for between the subject site and the Charleville Wood SAC (i.e. 'nearly 10km downstream')/This SAC is located c25km southwest of the subject site.
- **Hydrology and Hydrogeology** – PA's Environment and Water Section are satisfied with the findings of the assessment provided by the applicant/recommended conditions.

25.3.10. **Air & Climate**

- Queries the applicant's position that "the proposed development will generate electricity that would otherwise require the burning of fossil fuels". Consideration should also be afforded to alternative renewable energy types.

25.3.11. **Internal Reports**

25.3.11.1. **Edenderry MD (Dated 06/10/2025)**

- FI Required in relation to the following issues;

- Road strengthening proposals at the entrances to the site.
- Surface water measures.
- Measures to prevent deposition/spillage onto the public road/wheel wash facilities.
- Details of passing bays long the L5010.
- Details of temporary turning head at the Ballyfore R402/L5006 junction & entering Ballinla west along the L5010 towards Lumville.
- Details regarding timber to be removed from site.
- Survey of roads and bridges along proposed haul routes.
- Conflicting information in relation to surplus material (retained on site/disposed off site)/potential waste material.
- Details of pre-cast concrete culverts.
- Conditions recommended which cover the issues raised above and also cover the following issues.
- No. 14 – No construction delivery vehicles shall access the site via the northern section of the L2006.
- No. 15 - Visibility site distances.
- No. 16 – Construction Management Plan.
- No 25 (misnumbering here) – Haul Routes.
- No. 26 – Construction sequencing etc.
- Conditions to 27 to 40 as relates to turbine delivery routes.
- Conditions 33 to 40 as relates to Traffic Management (Construction Stage).
- Conditions 45 to 55 as relates to Cable Routes (PA have noted that these works do not form part of the current application).

25.3.11.2. **Roads (Dated 07/10/2025)**

- Proposal is satisfactory subject to FI/Conditions outlined in the District Engineer's Report dated 06/10/2025.

25.3.11.3. **Environment and Water Services (Dated 02/10/2025)**

- No objection subject to conditions. Conditions are as follows:
  1. Mitigation measures in the CEMP.
  2. Mitigation measures in the FRA.
  3. Mitigation measures in Ch 18 of the EIAR.
  4. Statutory consents and licences.
- Conditions numbered 1 to 3 in relation to surface water including disposal of same, buffer zone, in stream works.
- Condition in relation to potential removal of foul sewerage from the site.
- Conditions numbered 1 to 4 in relation to waste management.
- Conditions number 1 to 4 in relation to noise and dust including limitations on noise levels and minimisation of audible tonal or impulsive components.
- Conditions numbered 1 to 2 in relation to hedgerow/woodland and trees.

25.3.11.4. **Senior Executive Architect (dated 7th October 2025)**

- Provide photomontage showing impact (or not) on Ballinla House (Protected Structure/NIAH) – will definitely be visible and should have been mentioned in their description.

25.3.11.5. **Fire Officer (02/10/2025) –**

- No objections to granting of permission.

25.3.12. **Planning Conditions in the Event of ACP Granting Permission –**

OCC have provided conditions to be attached to any grant of permission. Refer to Section 5.6 of this report for details.

25.3.13. **Elected Member Views**

The Elected Members made the following comments in relation to the proposed development:

- **Area Saturated with Renewable Energy** - Concerns were raised that the area of north Offaly is saturated with renewable energy developments and in particular, wind farm developments. The area has contributed significantly to the national green energy effort and it was stressed that all existing energy infrastructure should be taken into account, not just wind energy in the assessment of this application. The North Offaly area ranks fourth nationally for wind energy production and it was questioned when this increasing level of development would cease in this area. Concerns were raised on the accumulated impact of the proposal in addition to existing and permitted windfarms.
- **Setback from Local Homes** - Concerns raised about the location of the proposed development, close to residences and a built-up area (in particular T1 – T4) & the distance between the proposed turbines and nearby homes. It was stated that there is a need for a setback of 750m (or greater) from residential units, in line with best practice and so as to protect residential amenities. Concerns also raised on the impact of proposed Turbine No. 7 and Turbine 5 on residences and a protected structure.
- **Local of Windfarm on Good Agricultural Lands** - Concerns raised on the siting of the proposed development on good agricultural lands.
- **Flood Risk** - Concerns raised that Turbines 1, 2 & 3 are located within a flood risk area and that any flooding could result in financial implications for OCC.
- **Roads** - Concerns raised on the significant impact the development would have on local roads and the potential disruption to residents in the area.
- **Alternatives** - Clarity was sought on the extent to which alternative sites were considered as part of this SID application. and if so, which sites were evaluated.

- **Community Benefit** - The lack of benefit locally in terms of road, local community benefits, etc. was highlighted. The local area is not experiencing any tangible benefits from the various green energy projects.
- **Non-compliance** - It was requested that consideration be given to the applicant's (non) compliance with regard to an existing wind farm which it operates within the county.
- **Scale of Turbines** - The increased size and scale of turbines since the adoption of the Wind Energy Strategy which dates back to 2009 was raised.
- **Need for Updated Guidelines for Wind Energy** - The need for updated Guidelines and regulations was highlighted, so as to ensure compliance.
- **On resolution, the following addendum to be included with the resolution:** *In light of the significant issues raised in the planner's report, with particular reference to proposed Turbine's 1, 2, 3 and 5, this council request that the applicant address each of these issues in detail before An Coimisiún Pleanála makes a decision on this application. It was resolved to send this addendum (recommendation) to the Commission in accordance with Section 37(E)(6) of the Planning & Development Act 2000 (as amended).*

25.4. **Applicants Response**

25.4.1. **Extent of forestry to be cleared**

- 18 ha represents current area of standing commercial forestry on site/21 ha represents the total forestry land use area to accommodate the development.
- Planning applications can be viewed online – locations determined therein.

25.4.2. **Layout/Proximity**

- Layout has been developed in accordance with Wind Energy Development Guidelines (2006) and the Draft Revised Guidelines (2019) including the required separation distances, noise limits, and shadow flicker controls.

25.4.3. **Maps**

- Figure 16.2 – location of residential houses within 10 times the rotor diameter (1.62km).
- Map of permitted and under construction energy developments within 15km – Provided in Figure 2.11.

25.4.4. **Carbon Emissions**

- Fully assessed in Chapter 13 incl Table 13.16/Any renewable energy generation on the current grid will directly displace generation from fossil-fuel-based plant on the national grid.

25.4.5. **Location of Replacement woodland**

- Commitments outlined in Section 2.3.14 of the EIAR.

- **Area of Habitat Creation** – Outlined in Drg. No. 23882-MWP-00-00-DR-C-5426/Fig 6.8 of the EIAR shows rewilding area to the west of the access road.

25.4.6. **Charleville Wood SAC**

- Located 10km downstream from Ballina (Geashill By) Turbine Delivery Route (TDR) turning point that is red lined as part of the Proposed Development.

25.4.7. **Location of Viewpoints/ Cumulative Impact (Visual)**

- Shown in Appendix 11.2.
- Cumulative impact of permitted but not yet constructed wind farms is fully addressed in the LVIA Chapter of the EIAR (Section 11.5.10/Table 11.11).

25.4.8. **Shadow Flicker**

- Applicant has committed to a zero impact from Shadow Flicker on all residential houses as per Chapter 16 of the EIAR.

25.4.9. **Community Gain**

- Will be delivered in compliance with the Renewable Electricity Support Scheme (RESS) Community Benefit Fund Guidelines.

25.4.10. **Amenity Trails**

- No amenity trails are proposed.

25.4.11. **Response to Request for FI**

- Can be dealt with by conditions proposed.

25.4.12. **Surplus Material**

- Surplus soil will be retained and reused on site/unsuitable soil will be removed from the site and disposed of at an appropriately licensed waste facility by an authorised contractor.
- Has responded and commented upon each proposed conditions – see Inspectors report for comment and assessment of same.
- Applicant has committed to Zero Impact from Shadow Flicker on all residential houses as per Chapter 16 Shadow Flicker of the EIAR.

25.4.13. **Community Gain**

- Outlined in Section 5.4.2.3 of the EIAR. Community Benefit Fund will be delivered in full compliance with the Renewable Energy Electricity Support Scheme (RESS) Community Benefit Fund Guidelines – These national requirements determine the breakdown of funding elements and the operational framework for all RESS-supported projects.

25.4.14. **Amenity Trails**

- No amenity trails are proposed for the development.

25.4.15. **Further Information Requests**

- Can be covered as per suggested conditions. In relation to surplus soil, suitable surplus soil arising during the works will be retained and reused onsite in accordance with the construction methodology/where material is deemed unsuitable for reuse onsite, it will be removed from the site and disposed of at a licenced wate facility.

25.4.16. **Proposed Conditions**

- The applicant has responded to each of the conditions as proposed by the PA and has stated that the applicant is satisfy to comply with these requirements.

25.4.17. **Traffic and Transport (Response to the internal report of the District Engineer for the Edenderry Municipal District)**

- Issues raised can be dealt with by condition/proposed conditions provide a clear and enforceable mechanism.
- Applicant can supply the FI information requested with the exception of items (h) (page 53, and (j)(page 54).
- Request that a road and condition survey by addressed by way of planning condition/condition survey should be undertaken close to the commencement of construction.
- EIAR has assessed all potential haul routes/full upgrade schedule will not be known until a supplier is known.
- Construction volumes have been assessed by design engineers/provided in Section 15.4.1.5 of the EIAR.
- Standard heavy vehicle delivery trucks will be used for these deliveries (with the exception of TDR vehicles)/Final detail will only be confirmed once the design and built contractor is appointed.
- Can be addressed by way of an updated Traffic Management Plan/addressed by way of condition 5 of the municipal engineer's report.

25.4.18. **Ornithology**

25.4.18.1. **Merlin & Woodcock**

- A suite of habitat enhancement measures are proposed within EIAR Chapter 6.
- Area pf c3.06 a of the peat deposition area (PDA) will be available for re-establishment of woodland following construction/could be utilised to create suitable habitat for Woodcock and Merlin.

- If it is not used for woodland, planting mix can include bird/willow/Scots pine/provide appropriate structure for Merlin nesting habitat.
- Applicant is satisfied that the mitigation and enhancement measures as set out in the submitted EIAR appropriately address the potential habitat impacts identified.
- No additional measures are proposed.

25.4.18.2. **Snipe**

- Identified effect of displacement relates to areas of recolonising cutover bog located outside of the proposed development site.
- Proposed development site does not contain any habitat potentially suitable for the creation of Snipe breeding habitat.
- Availability of suitable displacement habitat in the locality is abundant/numerous cutover raised bogs in the surrounding area which are undergoing rehabilitation.
- High proportion of those bogs outside predicted zone of disturbance for snipe (500m turbine buffer) comprise suitable habitat for breeding snipe – over 322 ha is likely to be available.

25.4.19. **Landscape and Visual Impact**

- Viewpoint locations are shown on A1 Zone of Theoretical Visibility/also included in Chapter 11 along with Table 11.9/location shown on each photomontage sheet.
- Relevant receptor groups were considered and represented in the visual impact assessment.
- Total of 29 VPs assessed/typical for midlands WFs in Ireland.
- 12 no VPs are contained within the eastern quarters of the study area ranging in distance from 1.1km to 18.1km away.

25.4.20. **Impact on Dwellings**

- Chapter 11 concludes that the visual impacts would not be significant.
- LVIA was prepared in accordance with all relevant guidance and current best practice for wind energy LVIA in Ireland.
- VP 11 and VP 12 were used to examine impact from residencies on local road to the north and south of VP11 and VP12/Section 11.5.4 of the EIAR refers to effects from same/noted the effects at VP 11 and 12 were substantial moderate/just below threshold of a significant effect.
- Proposed turbines comply with the 4 X tip height setback (740m) from non-involved residential properties – as required by the Draft Revised Wind Energy Development Guidelines (2019).
- Residential setbacks have been established on the basis of avoiding significant effects at surrounding residential properties.

25.4.21. **Cumulative Impacts**

- LVIA cumulative impact assessment considered all known existing, permitted and proposed wind farms within the study area/This consisted of five existing developments (Cloncreen, Moanvane, Mount Lucas, Yellow River and Cushaling), one permitted development (Dernacart) and one in-planning wind farm (Drehid).

25.4.22. **Alternatives**

- Chapter 4 of EIAR sets out alternatives/applies industry standard methodology/standard EIAR practice.
- Consideration of alternatives must be reasonable and relevant to the project type/must be proportionate and grounded in what is technically and environmentally feasible for the site.
- Solar farm is not suitable for the Ballinla land/require substantially larger landtake/displace agricultural enterprise.
- Deliver less electricity output per hectare.

25.4.23. **Archaeology and Cultural Heritage**

- Chapter 12 of the EIAR recommends a geophysical survey/DAU concur with this view.
- Chapter 12 considers likely indirect impacts on Recorded Monuments in the vicinity/did not specifically address National Monuments in the wider area as these are at considerable distances from the proposed development/there will be no visual impact on the setting of same as a result of distance/topography and character of the Monuments themselves/a discussion of each of these monuments is included within the submission.
- No statutory or policy requirement that National Monuments be preserved free of all distance modern structures/reference made to wind turbines visible near the Rock of Cashel.

25.4.24. **Water Framework Directive (WFD)**

- WFD Report is contained within Appendix 08-3 of the EIAR/Cumulative impacts area addressed within same/If proposed development does not adversely affect the implementation of the Water Action Plan (WAP) measures then it cannot give rise to cumulative impacts/also assessed in Section 8.6.4 of the EIAR.
- Both the WFD assessment and the EIAR confirm that the project will not contribute to a deterioration of waterbody status.

25.5. Prescribed Bodies

Of the prescribed bodies notified, submissions have been received from the following 5 no. prescribed bodies:

1. HSE – National Environmental Health Service (NEHS)
2. Department of Defence (DOD)
3. Transport Infrastructure Ireland (TII)

4. Dept. of Housing, Local Government and Heritage (DAU)
5. Uisce Éireann (UE) (Irish Water)

A summary of the prescribed bodies submissions is outlined below.

25.5.1. **HSE - National Office for Environmental Health Services**

National Environmental Health Service (NEHS)

NEHS considers likely significant effects within a population and Human Health context that uses a source-pathway-receptor model, based on emissions through environmental media and population exposure. They recommend the Planning Authority follow the Population Health approach when considering public health in their decision making. Reference is made to the 2006 Guidelines/and to the Draft 2009 Guidelines and to the Webster/Rollo V Meenaclogher (Wind) Limited (2024 IEHC 136) 8th March 2024. It should be noted by the Planning Authority that the following 'The HSE 'Position paper on wind turbines and public health' has been withdrawn by the HSE and is under review. Below is a summary of the main points;

- **Ground and Surface Water (Ch 8 of EIAR)** – Concur with conclusions in Chapter 8 if all mitigation is identified and implemented in full.
- **Shadow Flicker (Ch 16 of EIAR)** - proposed zero shadow flicker identified in Chapter 16 of the EIAR should be conditioned if permission is approved.
- **Noise and Vibration (Ch 10 of EIAR)** – Tabulation of the predicted change in the noise environment from the proposed development and the cumulative change in the original baseline noise environment before any wind farm development in the area is the most informative way of reporting the likely effect of operational noise in an EIAR.
- **Guidelines** - Consider the most appropriate criteria for assessing significance of the predicted noise would be consideration of the ENVIRONMENTAL NOISE GUIDELINES for the European Region, 2018 (WHO, 2018)
- Use of the 2006 guidance is resulting in significant volume of complaints from communities exposed to noise from wind turbines post development.
- Position that the absolute noise exposure limits set in the 2006 Guidance do not necessarily protect Public Health in specific development situations is now supported by the judgement referred to above.
- Concern with the 2019 draft guidance by acoustic consultants were concerns due to assessment methodology and not the proposed standards set to protect health.
- Questions the methodology utilised in the EIAR as relates to the assessment of cumulative effects.
- Hours of construction activity should be conditioned.

- NEHS is of the opinion that if the mitigation measures are implemented in full, there is adequate protection of Public and Environmental Health during the proposed construction phase.
- Additional considerations set out including standards for water utilised in the construction compounds, procedures in relation to foul water/site drainage/dust monitoring/minimisation.

25.5.2. **Department of Defence (DOD)**

The Department of Defence (DoD) provided the following observation following consultation with colleagues at Casement Aerodrome:

- The Minister for Defence is responsible for the regulation of military aviation, whereas the Irish Aviation Authority (IAA) is responsible for the safety regulation of civil aviation including aerodromes. The IAA does not have remit for military aviation or installations. Safeguarding of military flight operations and installations is intended to protect both current and future aircraft operations and also to take account of the security requirements associated with some of those operations.
- All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week.
- Obstacle lighting should be incandescent or if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light.
- In the event negative impacts on future military radar systems, the owner will engage with the Department of Defence and will provide suitable mitigations as soon as practical.
- Any Irish Air Corps (IAC) requirements are separate to Irish Aviation Authority (IAA) requirements.

25.5.3. **Transport Infrastructure Ireland (TII)**

- TII issued a response on 16th October 2025. TII recommend consultation with bodies responsible for the roads which will be traversed for the haul route, requirement for a road safety audit for any proposed works, requirement for full assessment of all structures along the haul route. It is set out that TII will rely on the Commission to abide by official policy in relation to development on/affecting national roads as outlined in DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012). Conditions are recommended. See Section 5.10 of this report.

25.5.4. Development Applications Unit (DAU)

25.5.4.1. Archaeology

- Concerns raised in relation to indirect impacts on the setting of National Monuments and Recorded Monuments, as well as cumulative impact to the archaeological and cultural heritage environment. In particular the DAU set out that there are 3 no. National Monuments in the Ownership or Guardianship of the Minister located within c10km of the proposed development site, and 2 no. of same have the potential to be impacted (Grange Castle and Clonin Ring Barrow). A number of other Recorded Monuments within 10km are also referred to.
- Dept. advise advance archaeological test excavation prior to development. Recommend conditions in this regard. See Section 5.10 of this report for details.

25.5.4.2. Nature Conservation

- No issues raised.

25.5.5. Uisce Éireann (UÉ) (Irish Water)

25.5.5.1. Connections to public Infrastructure

- Noted that there are no connections to public water or wastewater as part of the development. Water and wastewater generated by sanitary facilities located in facility buildings will be in stored in foul water holding tanks, and to be emptied by private contractors as need arises.

25.5.5.2. Interactions with Uisce Éireann Assets

- Noted that the proposed cabling infrastructure will likely interact with existing Uisce Éireann assets that are located in the road reserves. Uisce Éireann requires that in such works, its assets are protected during the construction & operation phases of the development, and that the required separation distances are achieved between Uisce Éireann's assets and the underground cable(s) and that any development near assets shall be carried out in compliance with Uisce Éireann's requirements. Where the safety of assets cannot be assured, and where appropriate separation distances cannot be achieved, the applicant shall submit a diversion's enquiry with Uisce Éireann's diversions section prior to the commencement of works.

25.5.5.3. Impact to Public Water Supply

- UE note that a water framework directive assessment was undertaken as part of the projects EIA, which concluded there is negligible scope for adverse hydrological interaction with Uisce Éireann water sources in the vicinity, and Uisce Éireann is satisfied with this Assessment.

25.5.5.4. **Recommended Conditions**

- Conditions have been recommended to ensure the adequate provision and protection of water and wastewater facilities. See Section 5.10 of this report for details.

25.6. **Public Observations**

In total 56 no. public observations were received. The applicant responded to the public observations in a submission dated January 2026. The public observation received may be broadly summarised as follows;

25.6.1. **Adele Kierans**

- Impact on health and wellbeing, particularly in relation to noise.
- Complaints in relation to other wind farms that are operated by Statkraft.
- Relate to noise from turbines and health impacts from noise.
- Cloghan Wind Farm has caused over 200 complaints over 18 months (newspaper article enclosed).
- Independent acoustic consultant report, commissioned by the Communities & Environmental Protection Alliance (CEPA) has found that the Cloghan Wind Farm is not compliant with its permitted noise emissions.
- Offaly County Council has previously issued an enforcement warning letter to Statkraft in relation to the Meenwaun Wind Farm – Continues to operate with residents suffering form noise and health problems as a result.
- Reference is made to the Code of Practice for Wind Energy Development in Ireland (2016) and maintenance of a communication log – developer required to do same.
- Request that the application be refused in line with the Code of Practice mentioned above.
- Encl: Article from Offaly Live dated 6th August 2025; Noise Survey prepared by L Huson & Associates (October 2025).

25.6.2. **Aidan Brereton**

- Developer has a similar wind farm in the County.
- Hugely negative impact on the local area.
- Local residents have lodged a huge amount of complaints in relation to noise pollution and the negative effects of flicker.

25.6.3. **Aishling Doolan**

- House in in very close proximity to the proposed development.
- Concerned about noise from the wind farm (construction/operation).
- Impact on sleeping patterns.

- Impact on mental health.
- Concerned that noise regulations will not be complied with.
- Have been made aware that Statkraft have failed to comply with noise regulations on other developments.
- Impact on wildlife.
- Visual Impacts.

25.6.4. **Alan Hennessy**

- Property is located to the east of proposed windfarm (as per attached map).
- Have not had any communication with any representative of Statkraft.
- Received a generic letter/thanking for feedback/no feedback was ever given.
- Located 0.8km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Impact on ability to build houses for children/families.
- Have been told by Statkraft that the project had been pushed out indefinitely.
- Elderly parent with arthritis/will be impacted by this project.

25.6.5. **Alan Rowan**

- Impact of noise.
- Reference made to Cloncreen Wind Farm located in east Co. Offaly and has been operational since c2022/21 turbines/has become a source of profound distress to residents.
- Have endured persistent low frequency humming, amplitude modulation and tonal noise, particularly during moderate wind conditions at night.
- Has led to sleep deprivation, anxiety, headaches, elevated stress levels.
- FOI requests have revealed dozens of complaints from residents in the vicinity of Cloncreen.
- Extend to nearby sites like Cloghan and Rhode – indicates a county wide crisis in wind farm noise management.
- Queries to the community liaison representative for Cloncreen have gone unanswered.
- No substantive response has been provided, nor has any remedial action been taken such as the deployment of an impartial acoustic consultant as recommended by affected residents' groups like the Communities & Environmental Protection Alliance.

- Failure to address existing issues undermines the applicant's credibility and raises serious doubts about their ability to mitigate similar problems at Ballinla.
- Courts have recognized that wind turbine noise as an actionable private nuisance.
- 2024 High Court ruling – residents were awarded damages for 'unreasonable interference' with their homes' enjoyment.
- Emphasised that noise assessments must consider not only decibel limits but also qualitative factors like tonality and infrasound under the Defra Noise Statutory Nuisance Complaint Methodology.
- Current noise levels from Cloncreen already exceed WHO 2018 guidelines for community noise exposure/enforcement remains lax.
- EIAR fails to convincingly demonstrate that noise impacts will be negligible.
- Reference is made to compliance with the 2006 guidelines – baseline surveys appear limited to short-term measurements during favorable weather, potentially underestimating worst-case scenarios like those experienced at Cloncreen.
- Key shortcomings include:
- **Inadequate receptors mapping** – NSLs are not filly mapped against prevailing wind directions -ignoring how downwind propagation can amplify low-frequency noise over distances greater than modelled.
- **Lack of Cumulative Assessment** – EIAR does not sufficiently analyze cumulative noise from Ballinla alongside Concreen and other nearby installations.
- **Absence of Independent Verification** – no provision for post construction monitoring by a third-party acoustician.
- **Over reliance on predictive modelling** – Tools like WindFarmer software may not capture aerodynamic modulation or terrain effects in the undulating Coolestown landscape.
- Gaps render the noise chapter of the EIAR unfit for purpose.
- Require on-site verification at Cloncreen.
- Impacts on visual amenity in a valued rural setting.
- Potential hydrological disruptions to local peatlands/biodiversity loss for bird species using migratory corridors near River Brosna.
- Community benefit funds do not offset the irreversible intrusion on quality of life.
- Will transform peaceful townlands into industrial zones.
- ACP should:
- Commission an independent review of Cloncreen's noise compliance.
- Required the applicant to submit a revised EAIR with robust cumulative noise modelling and mitigation commitments.
- Convene an Oral Hearing to allow affected parties to present evidence of Cloncreen's impacts.
- Refuse permission unless these steps demonstrate no foreseeable exceedance of noise limits or resident harm.

25.6.6. **Angela Rogers**

- Lives to the east of the proposed wind farm (as per attached map).

- Have not had any communication with any representative of Statkraft/no community engagement or education.
- Located 1.4km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Impact on ability to build houses for children/families.

25.6.7. **BallyM Charolais Herd**

- Objection should be read in conjunction with the objection submitted by Colm and Louise Quinn/reports attached to same.
- BallyM Charolais Herd is a family-owned company and both generations of the family are involved in the day-to-day activities of same.
- Younger generation will assume ownership of BallyM Charolais Herd, Ballymoran Farm and Lumville Stud Farm.
- Concerns raised relate to all of the above locations.
- Windfarm would present a serious threat to the long-term viability and success of these family enterprise.
- Would fundamentally alter the landscape, environmental conditions and the safe working environment.
- Have grown BallyM into one of Ireland's leading pedigree Charolais herds/has achieved national recognition/export internationally.
- Consists of over 300 animals/graze the fields that would be directly affected by the wake effects, noise, environmental changes caused by the proposed Ballinla Wind Farm.
- Animals are very sensitive to changes in environment/small disturbances can impact fertility, behavior and overall health.
- Introduction of wind turbines may cause low-frequency noise, vibration, and altered air movements (wake effects) that could heighten stress levels in breeding animals.
- Could compromise years of careful genetic selection and investment.
- Constant movement of turbine blades, combined with increased noise and visual disturbance may unsettle animals, making handling and breeding more difficult.
- This is not a typical cattle herd/high value pedigree.
- Cannot adopt a 'wait and see' approach.
- No alternative other than to seek a refusal of the proposed development.

- Have attached a current health report from our Veterinary surgeon/will serve a reference point for assessing any subsequent changes/report concludes that there is concern about the effect the wind farm development will have on the. herd.
- Impact on wildlife including several protected species/regular sightings and nesting activity have been recorded for long-ear owls and kestrels.
- Also, pheasants, rabbits, hares, badgers and foxes.
- Established mature trees provide foraging, nesting and shelter habitats.
- Risk of habitat disruption and displacement.
- Impact on health/spend large amount of time outdoors/ will be in close proximity to the proposed turbines.
- Noise flicker and shadow exposure.
- Cumulative impact of the development/impact on mental wellbeing.
- Lands lies within high nature value grassland (HNV).
- Impacts at construction stage and operational stage could impact on drainage, wind/turbulence patterns.
- Reduction in biodiversity, soil health.
- HNV grassland is recognised under national and EU policy as farmland of special value for nature conservation and sustainable agriculture.
- **Doden River, which flows into the River Barrow, is an SAC** – due to its importance a as a spawning habitat for fish.
- **River traverses our forestry lands at Ballymoran Farm** – now lies within the area proposed for the siting of the wind turbines.
- Had previously sought to do maintenance and cleaning works on the river - not permitted because of the presence of protected spawning fish.
- **Risk to this watercourse** – sedimentation, water runoff, vibration impacts – impact on spawning habitat – wider ecological integrity of Dodon River System.
- **Impact on forestry** – damage to woodland, root systems, soil stability and drainage patterns.
- **Impact on local wind patterns** – affecting tree growth, stability and moisture balance.
- **Impact of noise levels on wildlife** – bats, birds.
- Applicants had little or no knowledge of groundwater wells at consultation meeting – lands are served by groundwater wells.
- Primary source of water for agricultural operations.
- Impact of wind turbines on same.
- Long term cumulative impacts on groundwater stability.
- Baseline water quality and yields should be undertaken.
- Protection measures in place – no information to show this has been done.
- Protected under the WFD and Groundwater Directive.
- EC (Water Policy) Regulations 2003.
- Any works should be subject to detailed hydrogeological assessment and continuous monitoring to ensure full compliance with regulatory protections.
- Lack of community engagement/inadequate community engagement.
- Visual effect.
- Impact of red lights, wake, Impact on equine stock and Impact on ability to build houses.

25.6.8. **Bill Dunne**

- Property location is indicated on map. I note that no map was attached to the submission.
- Have not had any communication with any representative of Statkraft/no community engagement or education.
- Located 1.2km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Impact on ability to build houses for children/families.

25.6.9. **Bord Na Mona (BNM)**

- Proposed planning application for Ballinla Wind Farm is bounded closely to the south, east and west by BNM lands.
- BNM would like to highlight an area of concern to ACP/ concerns as outlined above regarding the application of the Wind Energy Guidelines 2006 and the proximity of turbines to its landbank.
- **OCDP 2021, Wind Energy Strategy** has designated a large proportion of eastern Offaly as an area deemed 'Open for consideration for Wind Energy development'. The land proposed for the Ballinla Wind Farm and extensive group of BNM's landbank to both the east, south and west of the proposed Wind Farm lies within this designation.
- According to Section 5.13 of the Wind Energy Development Guidelines (DoEHLG, 2006), to protect adjoining land wind energy development potential and requirements for optimal performance "a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance". This was further clarified by the Department of Environment, Heritage and Local Government (DEHLG) Circular Letter PD 6/16 that "rotor blades are to be measured according to rotor diameter, and that a distance of not less than two rotor blades is therefore equivalent to two rotor diameters".
- The proposed maximum rotor diameter for Ballinla Wind Farm is 158.7m for all turbines. Best practice dictates a set-back of 317.4m (158.7m x 2) from each turbine to the adjoining land. Three turbines (T5, T6 and T7) are closer than the best practice guidance detailed above. Furthermore, (T5, T6 and T7) are within fall distance of BNM landbank, which creates a risk to BNM owned land during the operational life of the Wind Farm if consented. Please find attached drawing no: BNM_PG_25_19_01_ which demonstrates the turbine locations, an

indicative 317.4m buffer applied around the turbines and the distance from the turbines to BNM landholding.
- Respectfully request the consenting authority seeks clarification if required and to apply the guidance in a consistent manner with respect to the proposed development.
- Encl: Map entitled 'Ballina Proposed Wind Farm – Proximity to BNM Landbank'.

25.6.10. **Brendan O'Neill**

- Property location is indicated on map (map is attached).
- Have not had any communication with any representative of Statkraft/no community engagement or education.
- Located c1km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.11. **Brid Lynam**

- Land is only 200m from the nearest turbine.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.

25.6.12. **Carol Gowran**

- Concerns regarding health and wellbeing, noise, vibration and shadow flicker.
- Whether EIAR adequately addresses these issues in accordance with EU and WHO health protection standards.
- Absence of any formal baseline health assessment.
- Undertaking an independent baseline study of the community's health.
- In line with the precautionary approach recommended by WHO – Environmental Noise Guidelines and the Department of Health in April 2014 (states letter enclosed – I note that no letter was attached to the submission).
- Requirements of the EIA Directive – Cannot be limited to simple noise or shadow flicker measurements – requires a systematic Health Impact Assessment addressing potential physiological and psychological effects.

- Failure to include a proper HIA would therefore constitute non-compliance with both EU and WHO guidance on environmental assessment and health protection.

25.6.13. **Christopher Pentony**

- Have not had any communication with any representative of Statkraft.
- Located c2km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.14. **Ciaran Tyrrell**

- Have not had any communication with any representative of Statkraft.
- Property is located to the south of Turbines 1, 2 and 3 and to the north of Turbines 4, 5, 6 and 7.
- Only c. 1km from Turbines T3, T4 and T5.
- Located between both site entrances and immediately to the west of one of the site entrances to the southern section of the proposed Wind Farm.
- Substation is located to the northwest.
- Severely impacted at both the construction and operational phases of this project.
- Are uniquely impacted.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife/woodland.
- Impact on ability to build houses for children/families.
- Local road network is entirely unsuitable for this type of project.

- Lack of engagement.

25.6.15. **Cllr. Claire Murray-Smale & others (9 signatures)**

- Concerns regarding health and wellbeing, noise, vibration and shadow flicker.
- Whether EIAR adequately addresses these issues in accordance with EU and WHO health protection standards.
- Absence of any formal baseline health assessment.
- Undertaking an independent baseline study of the community's health.
- In line with the precautionary approach recommended by WHO – Environmental Noise Guidelines and the Department of Health in April 2014 (refers to enclosed letter).
- **Requirements of the EIA Directive** – Cannot be limited to simple noise or shadow flicker measurements – requires a systematic Health Impact Assessment addressing potential physiological and psychological effects.
- Failure to include a proper HIA would therefore constitute non-compliance with both EU and WHO guidance on environmental assessment and health protection.
- Encl: Letter to HSE requesting a Baseline Health Assessment with 19 no. signatures.

25.6.16. **Colm Quinn and Family**

- Should be read in conjunction with submission from LCIEA Ltd, and BallyM Charolais Herd and attached technical report by Martin Lavelle, BE. MBA, FIEI, C.ENG
- Have outlined health issues, as a result of the Cloncreen Wind Farm, to the applicant
- House is situated c2kms from Cloncreen Wind Farm
- Impact on sleep/disturbance from noise/light flicker
- Impact on employment/ability to work
- Nearest turbine located c850 from home/200-250m from the farm.
- Risk that effects experienced could be intensified by this proposed development.
- Family has health issues that are exacerbated by low frequency noise and shadow flicker/vibration/noise lack of rest/environmental disturbance.
- Home is a Protected Structure (Reg No. 14911022).
- Would impact on amenity and comfort of the home.
- Wake effect can cause temp drops of up to 3 degrees/inability to improve insulation on the Protected Structure.
- Home is not referenced in report (318203)/other built heritage features in the area were.
- Impact on long-eared owls, kestrels.
- Habitat disruption.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Red light at nighttime/cumulative impact of existing red lights.

- Concerns regarding the wake effect on/impact on equine stock.
- Impact on ability to build houses for children/families.
- Encl: Map;
- Submission prepared by Martin Lavelle, BE.MBA, FIEI, C.ENG
  This is summarised below:
- Is not SID – output is 23.3MW or less – other factor can also reduce output
- Carbon Savings not realised/also lowering of temp.
- **Separation distances** – do no comply with guidelines.
- Noise assessment is not sufficient – (grid distances/separation distances, lack of noise and wake model, infrasound/seismic effects/nuisance.
- No health data provided – compliance with WHO 2018 Standard and 37dBa
- **Design envelope** – failure to provide detail.
- **Land ownership issues re grid connection** - ref Dromoda Windfarm (ROI ltd) V Cremins/third party consent for hedge cutting.
- Impact on property values/recent high court decision ignored/Supreme court decision in Australia/pre-2016 reports have no relevance – turbines were much smaller/reference to Central America not relevant.
- **Traffic issues** - local road access/restricted roads/traffic count data/road sight distances/safety audit/nature of roads/no TIA /no condition survey.
- Impact on birds included Greenland White Fronted Geese migration path from Iceland to Wexford Slobs/impact on habitats.
- Impacts on bats.
- Collision risks – risk assessment insufficient.
- Adverse impacts from blade failure.
- Impact on drinking water as a result of landslide or underground coalmine collapse.
- Wake effect on downwind lands – no data included.
- Lower crop yields.
- Noise due to turbulent air.
- Increased noise due to bearings wear.
- Impact on cattle/horses.
- Impacts on insects.
- Seismic effect on frogs/worms and herbivores/badgers.
- Impacts on human and animal health.
- Peat drying effects from wake/road foundation drainage – increased carbon emissions.
- Landslide potential.
- Pollution of watercourses.
- Habitat restoration ignored.
- Health and Safety concerns in relation to adjoining properties – failure to comply with survival speed of 57 kph.
- Breaches of precautionary principle.
- Proximity to residential cluster.
- Height of turbines.
- Proximity.
- Lack of screening.

- Concentration of windfarms.
- Presence of a stud farm and bull breeding farm.
- Orientation of amenity garden areas.
- Location of turbines at a high elevation than the dwellings.
- Available of alternative turbine locations.
- Adverse impact on residential amenity.
- Overdevelopment.
- In-combination and cumulative effects.
- Reference made to French case law.
- Reference made to Derryadd- Sweetman v ABP – [2021] IEHC 390 /Balscadden IEHC 586/Crodfton [2024] IESC 12.
- Summary of same – issues include design envelope.
- Noise contours – shown have been shown for 37 dBa and 25 dBa /overlapping cumulative map shown (p28).
- Has not demonstrated alternative grid connection proposals/impact on future road maintenance/TII raised concerns at scoping stage.
- Impact on ecosystems and wildlife.
- Impact on wind resources and weather.
- Private appropriation of public lands.
- Landscape visual impacts.
- Health impacts.
- Reference is made to Australian Parliament Select Committee on Wind Turbines – Health Issues from windfarms.
- **Email from Mr. George O'Connor** – Statkraft discussing issues raised at meeting of 5th September - and response to same.
- Review of EIAR included and errors/deficiencies/typos within same are highlighted.
- Incl: 440 vehicles per day at construction stage not 198 (Ref 3.11.1 of EIAR).
- Response to Ornithology chapter (potential review by Ecology) – Bird Collision data from 2003 is not acceptable – wind turbine size has increased – up to date models are available.
- Noted in the EIAR that the proposed wind farm will likely give rise to a measurable reduction in the distribution and abundance of birds locally within the site.
- **Flooding** – contamination of ground water/impact on private water supply schemes.
- Ground levels and peat probes.
- Will increase flood risk to lands to the east/change in contours.
- Fault line passing through site.
- Noise – No sound power levels are provided for infrasound at less than 20 Hz level.
- Have been refused access to the modelling software.
- Reference to IEHC136 0 – low frequency noise impact/AM impact.
- Potential significant impact of noise has not been adequately assessed.
- Impact of substation- blasting or rock breaking at the borrow pit.
- **Landscape** – serious concerns re visual in particular neighboring houses located to the east and north-east.

- **Visual impact of substation** – elevated location/in-combination effect.
- Noise impact including on Protected Structures.
- **Air and Climate** – HGV flows warrant a quantitative assessment will change by more than 200 AADT/no of construction vehicles per day.
- Wake effects not included.
- **Operational impacts** – do not account for need for backup fossil fuel – carbon usage to upgrade grid/temperature drop.
- **Traffic and Transport** – road widths insufficient
- Capacities quoted in Table 15.2 are no relevant to regional roads of widths less than 7m.
- **Shadow Flicker** – level of exposure for House No. 46 is very significant/incorrect grid reference/model not provided.
- **Mitigation** – measures to reduce the risk of pollution to groundwater are inadequate/failed to identify fault traversing the site.
- No fire safety risk assessment was provided.
- An assessment of interactions cannot be carried out.
- Deficiencies in the data provided – landscape visual effects, noise, archaeology and separation distances.
- Papers/Legal judgements quoted and summarised/commented upon.
- **Roads** – substandard roads to accommodate development.
- Insufficient/incorrect separation distances.
- **Response to Noise Report** – set out from p278.
- Birds set out from p290 – EU judgement - discussion of various bird species.
- Encl: HSE submission for similar application to Clare County Council.
- Reference made to Inspector's Report 310788-21/310789-21 – extract from same included.
- Included is FI Request from ACP in relation to Laurclavagh Windfarm –319307-24 (not yet decided) which includes issues of potential encroachment onto third party lands/impact of grid connection on road maintenance/impact on bats/wake effects on biodiversity/shadow flicker/noise and vibration/wake effects/use of SF6 gas/impacts on equine businesses.
- FI request 320089-24 (Clonberne) – not yet decided = issues related to shadow flicker/noise; wake effects/habitat loss & passing bays/haul routes/hedgerow removal.
- Reference made to developer's alleged non-compliance on other site including Clonghan Wind Farm and Meenwaun Wind Farm.
- Reference made to submitted Noise Report (L Huson) – included in Appendix 1.
- PA cannot rely on enforcement mechanisms to protect resident health.
- Absence of an HIA.
- Included is a Peer Review of Proposed Ballinla Wind Farm Planning Application [rebuttal of Chapter 10).

25.6.17. **Cora McMahon**

- Have not had any communication with any representative of Statkraft.
- Located c2.5km from the nearest turbine.

- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.18. **Damien Walsh**

- Have not had any communication with any representative of Statkraft.
- Receive planning permission for a new house to replace existing house/will be looking directly at Turbines 4, 6 and 7.
- Proximity will result in additional costs of construction/will need to improve sound insulation and other items.
- Own a fleet of buses/familiar with the area/a resident and significant employer.
- Construction phase will cause problems for bus routes.
- Located c1.5km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Ground level of the turbines is lower than my site and will result in reflection being closer to eye level and exacerbate flicker.

25.6.19. **Daniel Kavanagh**

- EIAR is deficient in its assessment of significant effects on human health, biodiversity and residential amenity.
- Reference made to relevant EU and Irish Legislation.
- Failure to incorporate Health Impact Assessment into the EIAR – is non-compliant with WHO standard.
- Failure to assess impacts on protected fauna, including swans and birds of prey/an on key commercial interest.
- Ornithological assessment fails to demonstrate conclusively that collision mortality rates will remain within acceptable limits.
- Failure to assess wake effect on equine industry.
- **Impact on residential amenity** – T4 is located at a critical proximity of c. 700m from dwelling – Attached Appendix B: Turbine Buffer Map- impact is significant due to:

- **Shadow flicker** – reliance on potential future mitigation – not a legally binding condition of the planning permission – assessment of shadow flicker impacts inadequate and purely speculative.
- **Visual proliferation** – scale and number of turbines, combined with others in the surrounding area/cumulative visual impact/impact on landscape.
- Absence of verifiable baseline health assessment/undermines the precautionary principle.
- Reserve the right to commission and independent and verifiable baseline health study of immediate area.
- Applicant's history of non-compliance with planning conditions at a separate development is a material consideration when assessing the likelihood of compliance with any conditions attached to this proposed permission.
- Reference is made to Noise Survey Report prepared by Huson & Associates (attached as Appendix A) – relates to Cloghran Wind Farm – states that Cloghran Wind Farm is not compliant with its permitted noise emissions.
- Will sterilise future residential development potential/cannot build a house for children or family.
- Reduction in amenity, value and desirability of land for future residential use.
- Insufficient community engagement.
- ACP cannot lawfully grant planning permission for the proposed development.
- Alternatively required the applicant to submit an independent Health Impact Assessment, a robust Ornithological Impact Assessment, and binding, enforceable mitigation protocols for shadow flicker.
- Encl: Noise Survey Report, Turbine Buffer Map.

25.6.20. **David and Collette Staunton**

- Lack of communication/engagement.
- Family business is built around home/entirely based around horse.
- Built up a successful business that includes breeding horses/selling them to Europe/training horses to draw carriages on public road/horses are then supplied to Killarney, Dublin and the Aran Islands/one of very few horse trainers in Ireland.
- Also provide a horse livery service for children after school/horse and carriage service for weddings and funerals.
- Have first-hand experience of horses being scared and spooked by turbines/when blades are erected and turning/creates danger/also threatens livelihood.
- Closest turbines are only 1.2km to 1.5km away.
- Prevailing wind is likely to heighten the risk of this occurring.
- Impact of wake effect.
- House was designed to fit into the landscape/now surrounded by structures that will tower over us/50 times the height of house.
- Front of the house is entirely glass/flicker and reflection are very real concerns/red warning lights are a concern also.
- Will not be able to build houses for children and families.
- Encl: Map, Photographs.

25.6.21. **Derek Veitch**

- Property consists of family house and Ringfort Stud/Equine vet by profession.
- Breed thoroughbred foals/accommodates mares who are ready to foal.
- Lack of engagement with Statkraft.
- One of the turbines is located as close as 800m.
- Any turbines within 1000m has been shown to put horses at significant risk.
- Insurers refuse to insure stud farms within 1000m of wind turbines.
- If insurance was void, would have to take direct action against the company and Board members who caused the removal of farm horse insurances.
- Impact on horses from vibrations, shadow flicker and noise.
- Average farm has a noise level of 30-45 decibels/with the presence of turbines within 1000m it increases to 50-70 decibels.
- Once noise levels go above 50 decibels it triggers 'fight or flight' in houses.
- Intermittent nature of noise.
- Mares, pregnant mares and newborn foals are very sensitive to noise and light sensitivity.
- Equine industry is worth over 2 billion to the Irish economy.
- Ireland is the third largest producer of thoroughbred foals in the world.
- UK's Secretary of State has refused permission for 9 turbines, partly as a result of impact on nearby equine businesses.
- Reference is made to the report of the Planning Inspector on the case, where impacts on horses are raised as a concern.
- It has been shown that horses have evolved to enable a prompt detection of potential danger/unexpected noises cause rapid flight reactions/most easily scared by noise that arises outside their field of vision/horses can pick up sound at a lower level and at greater distance than that detected by humans – range of hearing is greater to higher frequencies >33kHz while the range for humans is 20 kHz.
- Can cause sever accidents for horse and rider/handler.
- Risk of accidents is increased.
- Can impact on food intake, growth, production rates/phycology and behaviours.
- An Bord Pleanála (2025) reported that of the 69 energy cases reviewed in the period 2023-2024 several; were refused as a result of proximity to stud farms.
- ABP 23-225138 – 07-111 – Tipperary Co. Co. refused permission for biogas/biodiseal production facility due to proximity to horse training establishment/reference is made to the Inspector's report on same.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine stock.
- Impact on ability to build houses for children/families.

25.6.22. **Doris Kelly**

- Have not had any communication with any representative of Statkraft.
- Located c3km from the nearest turbine.

- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.23. **Dr. Miriam Walsh**

- Lack of engagement/consultation.
- Property located to the south of Turbines 1, 2 and 3 and to the north of Turbines 4, 5, 6 and 7.
- Severely impact at both construction and operational phases.
- Noise impact.
- Shadow Flicker, in particular from Turbine No. 4.
- Prevailing winds will carry noise from the turbines to the south.
- Concern over visibility of red warning lights.
- Wake effect, and impact on family, and wildlife including foxes, badgers, pine martin, barn owls, swallows, bats and honeybees.
- Property was never examined for bats/maternity roost in the attic/effect on same has not been assessed.
- Future development of landholding will be sterilized.
- Encl: Map showing location of property.

25.6.24. **Eilish and Peter Snr Doolan**

- Live across from the proposed wind farm.
- Slightly higher than the land on the wind farm site.
- Noise travels from that direction to our home.
- Concern in relation to noise.
- Just outside the 1km radius/area has around 50 houses/have not modern insulation/sound proofing etc.
- Comments of the local area representative for the windfarm were not sufficient.

25.6.25. **Elaine Rogers and Michael Collins**

- Property is located as per the attached map.
- Have not had any communication with any representative of Statkraft.
- Located c1.4km from the nearest turbine.

- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.
- Encl: Map

25.6.26. **Finbarr Cullen**

- Have not had any communication with any representative of Statkraft.
- Located in close proximity to the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.27. **Frances Crowley**

- Property is located as per the attached map.
- Consists of family dwelling house, family dwelling house, horse stables, horse walker, lunging arena, horse gallop, and c.100 acres of grazing land.
- Have a number of thoroughbred racehorses on the farm as well as other horses.
- One of the turbines will be as close as 1.8km from our land.
- Impact on horses.
- Impact on horses from vibrations, shadow flicker and noise.
- Average farm has a noise level of 30-45 decibels/with the presence of turbines within 1000m it increases to 50-70 decibels.
- Once noise levels go above 50 decibels it triggers ‘fight or flight’ in horses
- Intermittent nature of noise.

- Mares, pregnant mares and newborn foals are very sensitive to noise and light sensitivity.
- Ireland is the third largest producer of thoroughbred foals in the world.
- UK's Secretary of State has refused permission for 9 turbines, partly as a result of impact on nearby equine businesses.
- Reference is made to the report of the Planning Inspector on the case, where impacts on horses are raised as a concern.
- It has been shown that horses have evolved to enable a prompt detection of potential danger/unexpected noises cause rapid flight reactions/most easily scared by noise that arises outside their field of vision/horses can pick up sound at a lower level and at greater distance than that detected by humans – range of hearing is greater to higher frequencies >33kHz while the range for humans is 20 kHz.
- Can cause sever accidents for horse and rider/handler.
- Risk of accidents is increased.
- Can impact on food intake, growth, production rates/phycology and behaviours
- An Bord Pleanála (2025) reported that of the 69 energy cases reviewed in the period 2023-2024 several; were refused as a result of proximity to stud farms.
- ABP 23-225138 – 07-111 – Tipperary Co. Co. refused permission for biogas/biodiseal production facility due to proximity to horse training establishment/reference is made to the Inspector's report on same.
- Concerns regarding the wake effect on animals/impact on equine stock/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Red light at nighttime/cumulative impact of existing red lights.
- Impact on ability to build houses for children/families.

25.6.28. **Gary McNamara**

- Have not had any communication with any representative of Statkraft.
- Located in close proximity to the nearest turbine/impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.29. **Gerard Buckley and Others**

- Live beside Cloghan Wind Farm.
- Have experienced significant issues – shadow flicker.
- Noise and vibration at all hours of the day and night.
- Constant hum and vibration/impact on sleep/headaches/tiredness.
- Responses to complaints have been disappointing.
- OCC has promised to carry out independent noise monitoring but this is till tbc.
- Wind industry isn't answerable to anyone.
- The PA should take full account of the lived experiences of people already affected by nearby wind farms
- No development should proceed until it can be demonstrated beyond doubt that neighbouring residents will be fully protected from noise, vibration, shadow flicker and EMF.
- Windfarm developments must not come at the expense of local's health.
- Refuse development until all existing complaints have been resolved.

25.6.30. **Gordon Kelly**

- Have not had any communication with any representative of Statkraft.
- Live c3km from the nearest turbine/impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.31. **James Lowry**

- Have not had any communication with any representative of Statkraft.
- Live c1km from the nearest turbine/impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.32. **James McKeown**

- Have not had any communication with any representative of Statkraft.
- Some lands only 300m from the nearest turbine/significant portion within the 1km buffer/all of it within 2km.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Have a dairy herd of 145 cows.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Red light at nighttime/cumulative impact of existing red lights.
- Impact on family.
- Concerns regarding the wake effect on animals/impact on livestock/equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Significant health concerns.
- Lack of engagement.
- Encl: Map

25.6.33. **Joan and Nicholas Gover**

- Development is grossly inappropriate for this location.
- Significant negative impacts on the local community, environment, personal health and wellbeing.
- Generic consultation/promised a meeting which never happened.
- North Offaly has a disproportionately high number of wind energy developments relative to other regions in Ireland.
- Unbalanced concentration of industrial scale energy infrastructure.
- Impact on landscape/rural character.
- Impact on residential amenity.
- Home is 1.45km from T5/impact of noise effects/cumulative noise effects.
- Have medical conditions that heighten sensitivity to vibration, pressure changes and noise/vulnerable to physical and psychological effects associated with wind turbine developments.
- Impacts on habitats, flora and fauna.
- Impact on habitat fragmentation and disturbance of local wildlife/negative impact on the land and animals
- Concerns regarding the wake effect on animals/impact on livestock/equine industry in the area/impact on wildlife.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Impact of red lights/one such red light is within view 6.6km away.

- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.34. **John and Caroline McLoughlin**

- Live c1.2km from the nearest turbine/impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Operate a working farm/impact on grass growth/overall health and welfare of livestock.
- Impacts on kestrels, swans, pheasants, barn owls, pine martens, Irish Hare
- Impact on air quality and/or temperature.
- Increased construction traffic/large vehicles – impact on road safety.
- Medical condition that result in heighted sensitivity to noise, light and temperature.
- Triggered by stress/lack of sleep/changes in weather/temperature.
- Impact on ability to build houses for children/families.
- Lack of engagement.
- Encl: Map

25.6.35. **John Costello**

- Have not had any communication with any representative of Statkraft.
- Limited timeframe to make application.
- Live c1.2km from the nearest turbine/impact of noise and shadow flicker.
- Prevailing winds will carry noise towards property.
- Concerns regarding the wake effect/proximity to 3 turbines to the west, 1 to the southwest.
- Red light at nighttime.
- Future planning applications may be objected to by the wind farm and/or refused by the planning authority.
- Lack of engagement.
- Encl: Map

25.6.36. **Keith Stafford**

- Have not had any communication with any representative of Statkraft.
- Live c2km from the nearest turbine.

- Concerned regarding noise impacts/cumulative noise impact/prevailing winds will carry noise towards property/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Red light at nighttime/cumulative impact of existing red lights.
- Impact on ability to build houses for children/families.

25.6.37. **LCIEA Ltd**

- Property is located as per attached map.
- Should be read in conjunction with the objection by Colm and Louise Quinn/Reference is made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Wind farm would present a serious threat to the long term viability and succession of this family enterprise.
- Property consists of a Stud Farm which includes 3 No. Dwelling Houses, 2 of which are for staff accommodation, horse stables, sand arena, horse walker, veterinary room, lunging ring, feed room and reception room.
- Soil (grey brown podzolic) is ideal for horse to graze.
- HNV grassland.
- Farm support mature trees/landscaping/wildlife included protected species long eared owls/kestrels.
- Pheasants, rabbits, hares, badgers and foxes.
- Impact on health/spend large amount of time outdoors/ will be in close proximity to the proposed turbines.
- Noise flicker and shadow exposure/wake effects.
- Cumulative impact of the development/impact on mental wellbeing.
- Lands lies within high nature value grassland (HNV).
- Impacts at construction stage and operational stage could impact on drainage, wind/turbulence patterns.
- Reduction in biodiversity, soil health.
- HNV grassland is recognised under national and EU policy as farmland of special value for nature conservation and sustainable agriculture.
- Stud Farm has bred winners of over 41 Group 1 races.
- Lack of engagement.
- One of the turbines will be located as close as 300m to the farm/any turbines within 1000m of bloodstock will put them at significant risk.
- Insurance impacts.
- Applicants had little or no knowledge of groundwater wells at consultation meeting – lands are served by groundwater wells.
- Primary source of water for agricultural operations.
- Impact of wind turbines on same.
- Long term cumulative impacts on groundwater stability.
- Baseline water quality and yields should be undertaken.
- Protection measures in place –
- No information to show this has been done.

- Protected under the WFD and Groundwater Directive.
- EC (Water Policy) Regulations 2003.
- Any works should be subject to detailed hydrogeological assessment and continuous monitoring to ensure full compliance with regulatory protections.
- Impact on horses from vibrations, shadow flicker and noise.
- Average farm has a noise level of 30-45 decibels/with the presence of turbines. within 1000m it increases to 50-70 decibels.
- Once noise levels go above 50 decibels it triggers 'fight or flight' in houses.
- Intermittent nature of noise.
- Mares, pregnant mares and newborn foals are very sensitive to noise and light sensitivity.
- Ireland is the third largest producer of thoroughbred foals in the world.
- UK's Secretary of State has refused permission for 9 turbines, partly as a result of impact on nearby equine businesses.
- Reference is made to the report of the Planning Inspector on the case, where impacts on horses are raised as a concern.
- It has been shown that horses have evolved to enable a prompt detection of potential danger/unexpected noises cause rapid flight reactions/most easily scared by noise that arises outside their field of vision/horses can pick up sound at a lower level and at greater distance than that detected by humans – range of hearing is greater to higher frequencies >33kHz while the range for humans is 20 kHz.
- Can cause sever accidents for horse and rider/handler.
- Risk of accidents is increased.
- Can impact on food intake, growth, production rates/phycology and behaviours
- An Bord Pleanála (2025) reported that of the 69 energy cases reviewed in the period 2023-2024 several; were refused as a result of proximity to stud farms.
- ABP 23-225138 – 07-111 – Tipperary Co. Co. refused permission for biogas/biodiseal production facility due to proximity to horse training establishment/reference is made to the Inspector's report on same.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine stock.
- Impact on ability to build houses for children/families.

25.6.38. **Lorcan Hickey**

- Home is located c1.3km to the south-east of turbines 4,5,6 and 7 (See appendix 1).
- **Tip height of 185m** – turbines will be highly visible/will dominate both the local skylines and unobstructed views to the west of property.
- Blade motion, aviation lighting, glint and glare will materially diminish residential amenity/quiet enjoyment of land.
- Screening cannot mitigate impact.
- Cumulative visibility with Cloncreen.

- Impact of shadow flicker/reference is made to the Irish Wind Energy Development Guidelines.
- receptor number 128 appears to be allocated to my property. The results show the max per-day figure of 0.51 h/exceed the 30-minute benchmark. Although the receptor is below the annual total of 30 hours, home is still modelled to receive 61 days of flicker with peaks above 30 min/day.
- The EIAR also states they modelled Ballin la with the nearby Cloncreen Wind Farm within the same assessment parameters and claim "zero cumulative shadow flicker impacts on the identified receptors". Results for this portion of the study are presented as a general statement and not data in tabular form. The EIAR Conclusion relies on a "zero shadow flicker" operational policy however it is unclear how "zero" is achieved and if accepted, it must be conditioned and auditable.
- Risk of annoyance/distraction/headaches/nuisance.
- Home lies between noise monitoring stations C and D.
- Noise may be higher than the model predicts.
- Only general cumulative monitoring with Cloncreen Wind Farm.
- Lacks receptor specific verification.
- Experiences at Cloghan.

25.6.39. **Martin Kierans**

- Impact on local residents health and wellbeing, in relation to noise and amenity
- High concentration of windfarms in North Offaly.
- Proposed development would encircle parts of the community and local amenities.
- Would impact on Grand Canal/natural amenity/introduce industrial noise source
- Loss of amenity/impact on mental health.
- Many complaints in relation to the Cloghan Wind Farm/over 200 complaints over 18 months.
- Enforcement warning letter issues.
- Reference is made to the Code of Practice for Wind Energy Development in Ireland (2016) and maintenance of a communication log – developer required to do same.
- Request that the application be refused in line with the Code of Practice mentioned above.

25.6.40. **Matt Harris**

- Have not had any communication with any representative of Statkraft.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- 49 wind turbines in the immediate area/17 in full view from property/closest is 1250m away.
- Proposed turbines are 15m taller than existing turbines.
- Will mean there are turbines at both the front and back of the house.
- Will not be living beside a windfarm/will be living inside a windfarm.
- Located 1250m from the nearest proposed turbine.

- impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Area cannot be expected to carry more than its fair share.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.41. **Maura E Moore (C/O John Moore)**

- Have not had any communication with any representative of Statkraft.
- Land is located c300m from the nearest turbine.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Red light at nighttime/cumulative impact of existing red lights.
- Encl: Map

25.6.42. **Michael McNamee**

- Have not had any communication with any representative of Statkraft.
- Located is located c1.4km from the nearest turbine.
- impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.
- Encl: Map

25.6.43. **Norah Jones Healion and Brian Healion**

- Have not had any communication with any representative of Statkraft.
- Some lands only 500m from the nearest turbine/significant portion within the 1km buffer/all of it within 2km.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.

- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Red light at nighttime/cumulative impact of existing red lights.
- Impact on family.
- Concerns regarding the wake effect on animals/impact on livestock/equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Significant health concerns.
- Encl: Map

25.6.44. **Padraic Keating and Maria Rogers**

- Promised a meeting with Applicant which never happened.
- Home is 1.4km from nearest turbine/Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Red light at nighttime/cumulative impact of existing red lights.
- Impact on family.
- Concerns regarding the wake effect on animals/impact on livestock/equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Encl: Map

25.6.45. **Patrick Evans**

- Live 3km from project.
- Can see Edenderry power station from back garden.
- Can see the 21 turbines of the Clongreen Windfarm/and the Mountlucas wind farm which is 7km west
- Impact on grand canal/greenway.
- Visual impact.
- Land is dry, well drained agricultural land.
- Owner has no local interest in the consequences of the project/no local perspective of the noise and aesthetic pollution.
- 21 ha of forestry will need to be felled to complete the project.

25.6.46. **Paul and Fiona Bergin**

- Have not had any communication with any representative of Statkraft.
- Received a generic letter/thanking for feedback/no feedback was ever given.

- Located 1.2km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.
- Impact on health and wellbeing.
- Encl: Map

25.6.47. **Paula Lalor**

- Have not had any communication with any representative of Statkraft.
- Received a generic letter/thanking for feedback/no feedback was ever given.
- Located c5km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts.
- Prevailing winds will carry noise towards property.
- Cold air produced will impact on tillage enterprise.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on turkey flock.
- Impact on ability to build houses for children/families.
- Lack of engagement.

25.6.48. **Peter Doolan**

- Family and farm is next door to the proposed development/house is at the 1km buffer.
- Impact on environment/farmers.
- Land/Use of Land/Activities covered by ACRES and other environmental schemes.
- Habitats are under pressure from wind farms/Impacts of T1, T2 and T3.
- Environmental Assessment is inadequate/survey /monitoring points were not sufficient/did not allow sightlines.
- Impact of noise/will have an impact on sleep.

25.6.49. **Richard Mangan**

- Have not had any communication with any representative of Statkraft.
- Located c1km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/Prevailing winds will carry noise towards property/reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area.
- Impact on ability to build houses for children/families.
- Encl: Maps x 2

25.6.50. **Robert Bergin and Dr Maureen Byrne**

- Keep cattle/nearest turbine is T5/all of the farm is within 1450 of T5/nearest boundary is 900m from T5.
- Impact of shadow flicker/land is situated north-east of T5.
- Approx half of the farm is located within 1600m of T4 which is located southwest of this land.
- All of the land will be subjected to shadow flicker from 2 different turbines, for substantial periods of the day/particularly during October to April.
- Impact on animals and health and welfare.
- Impacts at construction stage/noise/traffic/dust – was impacts from Yellow River Wind Farm.
- Impacts on road safety.
- Will cause damage to roads- construction of Yellow River Wind Farm caused damage to road/two bridge collapses/road closed for 5 months.
- Impact on environment – construction of the Yellow River Wind Farm resulted in removal of thousands of mature trees and hedgerows.
- Replacement planting is insufficient.
- Enormous excavations for each turbine – subsequent release of carbon.
- Hundreds of tonnes of contrate/enormous quantities of steel for foundations.
- Turbines are not carbon neural/do not provide clean, green energy.
- At risk of becoming obsolete.
- Impact on landscape.
- Wind turbine components cannot be recycled.
- Can see 23 of the 29 Yellow River Wind Farm Turbines/Large section of the Mount Lucas Wind Farm and the Cloncrane Wind Farm.
- Several other wind farms in the area – Walsh Island and the Derrties.
- Large solar farm being installed in Rhode Village/One due in Greenhills.
- Othe development in the area.

- Impacts of noise. Red aviation lights.
- Impact on property value.
- Impacts on bats and birds.
- Records of 3 sea eagles killed by Donegal wind turbines between October 2024 and May 2025.
- Northeast area of Offaly is home to buzzards, barn owls, long-eared owls and peregrine falcons.
- Whooper Swans/Mute Swans – flight lines for both species coincide with the proposed Ballinla Wind Farm.
- Old, active badge sett on grounds in Lumville – putting badger colony and cattle at risk of TB infection.

25.6.51. **Sean and Mary Bergin**

- Have not had any communication with any representative of Statkraft.
- Received a generic letter/thanking for feedback/no feedback was ever given.
- Located c700-800m from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on humans/animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/families.
- Lack of engagement.
- Enc: Map

25.6.52. **Sergio Silva and Alan Smith**

- Have not had any communication with any representative of Statkraft.
- Located c1km from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds/4 turbines in front of home/extends the flicker impact to a much wider area/sun sets behind house
- Impact of red light at nighttime
- Concerns regarding noise impacts/cumulative noise impacts/Prevailing winds will carry noise towards property/have 2 dogs which are very sensitive to noise
- Windows will need to be upgraded to triple glazing
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Impact on ability to build houses for children/family.

- Encl: Map

25.6.53. **Teresa Cave**

- Communication with Statkraft was disrespectful and insulting.
- Property is located to the south of Turbines 1, 2 and 3 and to the north of Turbines 4, 5, 6 and 7.
- Located between both site entrances and immediately to the east of one of the site entrances to the southern section of the proposed Wind Farm.
- Substation is located to the northwest.
- Severely impacted at both the construction and operational phases of this project.
- Are uniquely impacted.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife/woodland.
- Impact on ability to build houses for children/families/in the process of spitting property for this very purpose.
- Local road network is entirely unsuitable for this type of project.

25.6.54. **The Association of Irish Racecourses**

- Impact of the proposed development on the horse racing and breeding industries.
- Wind farm lies in an area where horses of significant value are reared and trained.
- Impacts of noise, vibration and flicker.
- Impact on foals/animal health.
- Impact on rural landscape.

25.6.55. **Thomas and Sarah Spollen**

- Have not had any communication with any representative of Statkraft/revived a generic letter.
- Located c700-800m from the nearest turbine.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.

- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/Prevailing winds will carry noise towards property.
- Impact of red light at nighttime.
- Concerns regarding the wake effect on animals/impact on equine industry in the area/impact on wildlife.
- Impact on ability to build houses for children/family.
- Encl: Map

25.6.56. **Wesley Carter**

- Owns c. 300 acres in the immediate vicinity of the proposed turbines.
- Some lands only just in excess of 1.5km from T2 and T3.
- Lands have extensive road frontage therefore development potential.
- Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds.
- Visual effects/proliferation of turbines in the immediate surrounding area.
- Area cannot be expected to carry more than its fair share.
- Concerns regarding noise impacts/cumulative noise impacts/reference made to Peer Review of Proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates.
- Prevailing winds will carry noise towards property.
- Red light at nighttime/cumulative impact of existing red lights.
- Concerns regarding the wake effect on animals/livestock/impact on equine industry in the area/impact on tillage farm.
- Impact on ability to build houses for children/families.
- Have not had any communication with any representative of Statkraft/no community engagement or education.
- Encl: Map

25.7. Applicant Response to Submissions Received – Summary

The applicant responded to submissions received by ACP in a report entitled 'Response to Observations (ACP-323579-25) Ballinla Wind Farm' dated January 2026. Refer to Section 4 of the Response Report which addresses issues raised by members of the public. I have summarised the responses in the following section of my report under the various topics.

25.7.1. Consultation/Engagement

- Appendix 12 sets out the Community Engagement Report/Extensive Engagement over a 2-year period.

- Recognises that some individuals may not have been available/may not have engaged with the materials.
- Consultation strategy was fully aligned with national best practice.
- Negative statements attributed to the Community Engagement Team do not reflect the applicant's documented record of engagement.

25.7.2. **Human Health**

- Human Health has been assessed in accordance with the EPA Guidelines on the Information to be contained within Environmental Impact Assessment Reports (2022) and NEHS practice – using a population health approach rather than an assessment of individual medical outcomes.
- Draws date from 2022 Census/presents a general health profile of the receiving environment.
- No likely significant adverse effects on health are predicted.
- Noise and shadow flicker are addressed in the relevant technical chapters.
- EIAR reflects the wider scientific literature which has not established a causal link between wind farm operation and direct adverse health outcomes.

25.7.3. **Vibration**

- EIAR demonstrates that the proposed development is unlikely to result in any significant vibration impact on either humans or animals, either at construction or operational phases.
- Notwithstanding, mitigation measures are outlines in Section 10.7.1 in order to further minimise any potential effects.

25.7.4. **Landscape and Visual**

- The proposed turbines will be visible within a broad scale rural landscape setting where they may be prominent in some instances/due to the slender form and set back distances from roads and residences, they do not appear overbearing or spatially dominant within views.
- Height is consistent with the height of turbines being proposed and consented within the last 5 years.
- A number of WF applications have been granted within turbines at or in excess of 200m.
- No significant effects outlined in the LVIA chapter.
- In accordance with the CDP, the receiving landscape is predominantly 'low' landscape sensitivity designation.
- Area is 'Open for Consideration' for wind energy development.
- No scenic designations (routes/views) within 5km of the site.
- Wind turbines are not an industrial feature.

25.7.5. **Shadow Flicker**

- Applicant has adopted a company- wide zero shadow flicker policy.

- Goes beyond the requirements of the 2006 Wind Energy Guidelines, the Draft Revised Guidelines and the OCDP 2021.
- Turbines will be programmed to shut down automatically whenever the specific conditions for shadow flicker at any dwelling are met.
- These controls are a well-established and routinely implemented mitigation measures for wind energy developments in Ireland and internationally.
- Shadow flicker has been comprehensively assessed in the EIAR.
- Is a predictable and quantifiable phenomenon.
- Results in EIAR confirm that potential shadow flicker is below the 30 hours per annum threshold at all but one residential receptor and below the 30-minute per day threshold at all residential locations.
- Potential health effects associated with shadow flicker have also been fully considered.
- Informed by HSE Position Paper (2007) – acknowledged that this is not withdrawn as per the HSE submission.
- Reference made to UK Department of Energy and Climate Change evidence review – no scientific evidence linking shadow flicker to adverse health effects/confirmed that modern modelling and mitigation systems are effective.

25.7.6. **Red Lights at Night**

- Requirement for a red light is mandated by the Irish Aviation Authority/is a legal requirement.
- Turbines will be fitted with medium-intensity red obstacle lights (2000 candelas) equipped with baffles to direct light skywards.
- Will be a cumulative effect as a result of other wind farms.
- Represents an intensification of an existing effect rather than a new visual effect
- Site is located 2km from Edenderry/number villages, dwellings, agricultural, business structures in the area.
- Area is not a remote sparsely populated area/or a dark sky reserve.
- Cumulative visual effects have been assessed in the EIAR as well as the potential effects of red lights may have on bats and birds.

25.7.7. **Biodiversity**

- Concerns raised are fully address in the EIAR.
- In relation to bats, all accessible structures, trees within the relevant areas were surveyed by licensed ecologists.
- Precautionary approach was applied where roosts could not be inspected (on private property).
- With mitigation measures in place, no significant effect on bat populations are predicted.
- **Badgers** – surveys undertaken for the EIAR confirm that no badgers setts occur within the proposed development site/nearest set is 150m from the closest element of the proposed development.
- EIAR concludes that badgers will not be affected /no mitigation required.
- **Vegetation Loss** – Fully quantified/reinstatement and habitat creation strategy set out in the EIAR.

- Net habitat balance is set out EIAR.
- All affected habitats are reinstated or replaced in line with best practice and deliver long-term ecological enhancement.

25.7.8. **Ornithology**

- Concerns have been addressed in the EIAR/Long-eared owl was not detected during survey but was noted as being present within the surrounding hinterland.
- Kestrel is assessed in detail in EIAR/Long-term slight to moderate residual disturbance/displacement and barrier effects were identified.
- Whooper Swans and other species associated with the River Brosna corridor – extensive vantage point surveys and flight activity monitoring were undertaken/Collision Risk Model was prepared in accordance with current guidance.
- Assessment concludes that predicted collision risk is low and not significant.
- No key migratory corridors intersecting the turbine layout.
- Greenland White Fronted Geese (Migration Paths/Sites Used By/Exclusion zone) – Surveys did not record any observations of Greenland White Fronted Goose traversing the flight activity study area.
- Data indicates that the species migrates through the wider region – some but not all migration paths may traverse the wider area.
- Note limitations in the data presented within the relevant submission.
- Data shows the main migration route of the Greenland White-fronted Goose is located further west/south-west of the proposed development.
- 'Barrier' presented by other windfarms includes significant gaps.
- EIAR does not identify the potential for cumulative barrier effects.
- Wintering sites in Co. Westmeath lies to the north-west of the proposed development.
- As such proposed development would not be traversed by geese wintering on these sites.
- Percival (2003) has not been used to calculate actual collision risk for target species/has been calculated using the current NatureScot model (Band/NatureScot, 2024).
- Reduction in distribution and abundance of birds – A decline in abundance is not explicitly stated for any species other than snipe, and this refers to a decline in abundance within 500m of turbines, rather than an absolute decline.
- May be displacement of other species – effects are not significant.
- EIAR Inadequate – The relevant submission does not identify any tangible issues relating to the ornithological assessment.
- Mortality Rates/Collison Risk – Best practice guidance utilised to determine collision rates/no defined 'acceptable limits'/assessed against population size and background mortality rates/no significant effects identified/Curtailment measures proposed for nocturnal migratory species, as a contingency.
- Barn Owl – No evidence of barn owl activity or occupation of the Proposed Development was recorded during surveys.
- Nature Focused Farm Management – no basis to suggest impact on farm located over 500m from T2/no direct or indirect effects will occur/buffer is greater than 500m.

- **Adequate Viewpoints/Sightlines** – Adequate sightlines were determined utisilsing best practice guidance.

25.7.9. **Geology and Hydrogeology**

- EIAR addresses all relevant aspects.
- No deep peat deposits or peatland habitats are present/site is generally flat with no evidence of historical landslides or instability/Peat Stability Risk Assessment is included in Appendix 9.
- EIAR confirms there are no fault lines within the proposed development site/feature referred to in the submission is a section line on the GSI mapping not a fault.
- No impact on groundwater abstractions will occur.
- EIAR and CEMP set out measures to prevent pollution/with said measures in place, EIAR concludes that the risk of groundwater contamination is imperceptible.
- Concerns regarding increased flooding or altered groundwater flows are not supported by the baseline data/FRA and EIAR demonstrate that the proposed development is at low risk of flooding, will not increase flood risk elsewhere/incorporate best practice drainage and water protection measures.

25.7.10. **Heritage**

- Ballymoran House was assessed within the EIAR/Typo acknowledged/no significant adverse effects on same.
- Pre-app report referred to is not of relevance/function was to determine if proposed development was SID and whether an EIAR is required.

25.7.11. **Traffic and Transport**

- TTA was submitted/presented in EIAR Chapter 15.
- Works in relation to passing bays will be carried out under road opening licenses in accordance with standard road improvement practices.
- No significant effects identified/CEMP set out measures to further minimize impacts on road users.
- Sightlines have been provided as per Planning Authority Guidelines.
- Road safety audits and structural assessments not required at EIAR stage/carried out post consent.
- All relevant landowner consents have been submitted.

25.7.12. **Equine Effects**

- Available evidence is that WFs do not displace livestock farming or adversely affect the welfare or productivity of domesticated animals.
- Reference made to studies that discount theory that noise and movement of turbines annoy or stress wildlife and livestock/lack of effects/animals quickly become habituated to the disturbance.
- More disturbed by road noise.

- Noise levels are below that which results in stress responses, with reference to a study on same.
- Turbine noise is consistent/turbine start up is gradual rather than abrupt/do not cause startle responses.
- Noise from turbines may be also masked by other sounds in the environment.
- Guidance from the British Horse Society (May 2025) reaffirms that there is no evidence of long-term behavioral or welfare impacts.
- The nearest turbines are located north of the nearest neighboring equine farm/no impact of shadow flicker on this stud
- No reduction in dairy production is expected to occur/existing dairy herd on site will remain in the fields immediately adjacent to the turbines

25.7.13. **Wake Effect**

- Peer reviewed studies show that wake effects on temperature are extremely small, fractions of a degree and generally less than 1 degree.
- Occurs only under specific atmospheric conditions.
- Primarily an engineering consideration affecting turbine performance and not an environmental receptor impact.
- No scientific evidence that wake effects impact on animal behavior, welfare or physiology.
- Do not have an noticeable impact on surrounding environment.
- Do not have an impact on human health/effects are generally imperceptible after a few hundred meters/do not impact on fabric of buildings.
- Under the EIA Directive only significant environmental effects on receptors must be assessed/wake related temperature or microclimate changes are not recognised as an environmental receptor impact in Irish or EU Guidance.

25.7.14. **Future Development**

- Development of WFs do not preclude or sterilise the potential for future residential development in County Offaly.
- Development of rural housing supported within the CDP.
- CDP states that WFs must be compatible with other land uses.
- Does not prohibit residential development in proximity to turbines, provided standard planning criteria are met.

25.7.15. **Property Values**

- Addressed in Section 5.4.1.1 of the EIAR/concludes that there is no substantiated basis for widespread or systematic property value impacts arising from wind farm developments.

25.7.16. **Wind Take and Distance to Adjoining Lands**

- Have been engaging with landowners to understand concerns/happy to explore a cooperation agreement should any future plans for wind energy come forward on adjoining lands.

- Wind Energy Guidelines do not require developers to safeguard the future use of adjoining lands for wind energy/reference to 'two rotor blades' is a design optimization consideration rather than a prescriptive control or mechanism to reserve development capacity for third parties.
- Similar issues have previously been considered by the Commission, including in ABP Ref PL19.244053.
- Note reference to Circular letter PD 6/06 – This circular is not listed on the Department's Official Register, was not issued under Section 28 of the Planning and Development Act 2000 and does not have binding status/it predates the 2006 Guidelines.
- Acknowledge concerns raised regarding turbines being within 'fall distance' of certain landholdings/no policy in relation to fall distance.
- Structural safety is addressed through turbine certification, engineering standards and building control regime.

25.7.17. **Strategic Infrastructure Development (SID)**

- Proposed development was determined to qualify as SID though the statutory determination process issued under 28th November 2024.
- Basis for this decision is due to the potential MW generating capacity of the proposed development being above 50MW/decision is not made using an estimated energy generation level on a specific wind condition day.

25.7.18. **Land Ownership/Consent**

- All works within the red-lined public road area lie within lands under the control of the public authority, which includes the full extent of the public road/works will proceed under license from the roads authority.

25.7.19. **Oversail by Wind Turbines during delivery**

- The standard in law for trespass is over sail by a fixed object to the ground such as a building, tree or crane and not an object in passing.

25.7.20. **Noise and Vibration**

- Appendix 1 of the Response Report contains a detailed response to Noise and Vibration issues and is prepared by AWN Consulting Ltd.
- **Cumulative Assessment** - Appendix 10-2 of the EIAR concludes that it is not necessary to include Yellow River Wind Farm in a cumulative assessment. Notwithstanding, this was included in the assessment/Appendix 10-7 sets out the predicted cumulative noise contour/ clearly be seen that the proposed development, Cloncreen, Mountlucas, along with Yellow River wind farms are includes in the noise predictions.
- **Background Noise Levels** – should not include noise from any operational wind turbines.
- Demonstrated in Appendix 10-2 that the contribution of turbine noise from the Yellow River Wind Turbines is not significant.

- **Noise Complaint Monitoring Programme** – prior the commissioning of the wind farm, the developer will submit a Noise Complaint Monitoring Programme to the Planning Authority for written agreement.
- Common practice to commence surveys within six months of a wind farm being commissioned.
- Best practice guidance will be taken into account.
- **WHO Environmental Noise Guidelines** – Recommendations within same are rated as either 'Strong' or 'Conditional' - recommendations in relation to wind turbines are 'conditional' as it is stated that quality of evidence used for the WHO is stated as being 'Low'.
- Potential for increased uncertainty due to the parameter used by the WHO for assessment of exposure (i.e. Lden), which is acknowledged may be a poor characterisation of wind turbine noise and may limit ability to observe associations between wind turbine noise and health outcomes, as stated within the WHO Guidelines.
- The conditional WHO recommended average noise exposure level (i.e. 45 dB Lden), if applied as a target noise exposure, should done with caution, given the above.
- **43 bB(A) Contour** – This is illustrated in Appendix 10-7.
- **Infrasound** – Discussed in Section 10.3.2.5 on page 10-13 – no significant effects from same/reference is also made to the Institute of Acoustics Statement in Respect of Wind Farm Noise Assessment (December 2024) which states that that absolute levels are well below those reported to trigger physiological health effects, based on peer reviewed research to date.
- **Noise Modelling Software** – Software is licencesd for use by AWN – it cannot be shared with third parties/Software used is DGMR iNoise Enterprise, V 2024.2.1/Sufficient information to enable a third party to undertake an independent noise assessment.
- **Noise Sensitive Location Coordinates** – Submission refers to a figure in the Shadow Flicker Assessment – 16.2 – which uses a separate numbering system for NSLs to the noise assessment /no exaggeration of distances.
- **Amplitude Modulation** – AM is assessed in detail in Section 10.3.2.5 if the EIAR/Comments therein remain valid/Mitigation measures are proposed in Section 10.7.1.2 of the EIAR.
- **Webster/Rollo V Meenaclogher Case** – referred to an operational wind farm where the distances to the nearest NSL were much less than those to the nearest NSL in this instance/outcome of that case was specific to the circumstances of that site, and should not be considered representative of wind farms in general.
- **Construction Noise and Vibration** - Criteria for construction vibration are set out in Section 10.3.2.4 of the EIAR/No significant noise and vibration impacts at the NSL's.
- Noise from rock breaking and piling has been taken into account.
- Construction methods do no include blasting/no borrow pits proposed.
- NSLs downwind – Noise assessment in the EIAR is based on a scenario that each NSL is downwind of all wind turbines – presents a worst-case scenario in line with best practice guidance.

25.7.21. **NEHS Comments**

- British Standard BS 4142:2014+AI:2019 Methods for rating and assessing industrial and commercial sound (BS-4142), is not applicable to the assessment of wind turbines as the assessment of wind turbine noise falls within the scope of other standards and guidance as discussed in detail in Section 10.3.1.2 of the EIAR.
- **Use of Lower Fixed Thresholds** - Section 10.5.2 of the EIAR presents the rationale for using 40 dB LA9o as the lower threshold and is in line with the applicable guidelines.
- A lower threshold pf 40dB is commonly adopted for similar developments that have been granted permission by ABP (now ACP) and LA's/examples set out therein.
- Assessment confirms that baseline noise levels were considered when evaluating potential impacts and setting appropriate operational noise criteria/methodology is consistent with applicable guidelines/best practice guidance.
- **Draft Wind Energy Guidelines 2009** – Refer to a Dail Statement made in June 2025 that the current 2006 Wind Energy Development Guidelines remain in force.
- If updated Wind Energy Development Guidelines are published during the application process, can be addressed by way of condition or by the provision of additional information.
- **Effects on Horses** – It is not correct that a wind turbine produces noise levels of 50-70 decibels at a distance of 1km.
- Predicted noise at the dwelling houses on the adjacent stud farm are predicted to be 37.6 dB L_{A90} (H087) and 38.2 dB L_{A90} (H473).
- Noise contours show that the predicted wind turbine noise levels across much of the stud farm are in the range of 35 to 40 db L_{A90} increasing to 43 dB L_{A90} in a limited area northwest of the land.

25.7.22. **Response to Huson and Associates Report**

- **AM** - AM has been considered in the EIAR in line with best practice.
- **Guidelines and Criteria** – Applicable guidelines for noise assessment are presented in detail in Section 10.3.2.5 of the EIAR/rationale for noise criteria is presented in detail in Section 10.5.2 of the EIAR/fully in accordance with current guidance.
- Draft update to ETSU-R-97 is a UK consultation document and is not applicable to wind energy assessments in Ireland.
- **Noise modelling** – Inputs and parameters are used in the assessment presented in Appendices 10-4 and 10-5 of the EIAR/predicted turbined noise levels presented in the EIAR are calculated in full accordance with ISO 9613-2 and in full accordance with IOA GPG and in line with best practice guidance.
- Change to the baseline noise environment – Criteria for setting turbine noise limits is outlined in Section 10.3.2 of the EIAR.
- Baseline noise level at D014 at 9 m/s is 38 dB L_{A90} as shown in Table 10-14 of the EIAR not 17 dB (A) as stated in submission.

- Low Frequency Noise – Has been fully considered in the EIAR in Section 10.3.2.5.

Table 25.1 Planning Authority Submission and Applicant's Response	
Planning Authority (PA) Submission	**Applicants Response**
Biodiversity	
• No reference to the location of the proposed replacement woodland/FI should be sought. • Applicant should clarify the area of commercial forestry proposed for removal (both 18ha and 21ha) are referenced • 3 no. areas shown in Fig 6.8 Proposed Biodiversity Creation Areas are existing hedgerow- FI required. • PA seeks additional information as to the location of the proposed habitat creation areas/identified location for the habitat rewilding area shown in Fig 6.8 is within the centre of the access road for substation area and to Turbines 1-3/Extent of habitat creation area appears very limited given scale of proposed development/matter should be addressed by way of condition.	• 18ha represents current area of standing commercial forestry on site/21 ha represents the total forestry land use area. • Commitments outlined in Section 2.3.14 of the EIAR. • **Area of Habitat Creation** – Outlined in Drg. No. 23882-MWP-00-00-DR-C-5426/Fig 6.8 of the EIAR shows rewilding area to the west of the access road. • **Charleville Wood SAC -** Located 10km downstream from Ballina (Geashill By) Turbine Delivery Route (TDR) turning point that is red lined as part of the Proposed Development.
Ornithology	
Planning Authority Submission	**Applicants Response**
• Application should provide details of potential enhancement habitat for Merlin, Woodcock and Snipe	**Ornithology - Merlin & Woodcock** • A suite of habitat enhancement measures are proposed within EIAR Chapter 6. • Area pf c3.06 a of the peat deposition area (PDA) will be available for re-establishment of woodland following construction/could be utilised to create suitable habitat for Woodcock and Merlin. • If it is not used for woodland, planting mix can include bird/willow/Scots pine/provide appropriate structure for Merlin nesting habitat. • Applicant is satisfied that the mitigation and enhancement measures as set out in the submitted EIAR appropriately address the potential habitat impacts identified. • No additional measures are proposed. **Snipe** • Identified effect of displacement relates to areas of recolonising cutover bog located outside of the proposed development site.

	• Proposed development site does not contain any habitat potentially suitable for the creation of Snipe breeding habitat. • Availability of suitable displacement habitat in the locality is abundant/numerous cutover raised bogs in the surrounding area which are undergoing rehabilitation. • High proportion of those bogs outside predicted zone of disturbance for snipe (500m turbine buffer) comprise suitable habitat for breeding snipe – over 322 ha is likely to be available.
Noise	
Planning Authority Submission	**Applicants Response**
• PA not satisfied that sufficient details on noise and in particular, combined noise generation from the proposed development and existing windfarms in the area have been provided by the applicant • Section 10.4.3.4 'Noise from Existing Turbines' – no assessment of cumulative noise impact from Yellow River Windfarm/comprises for 29 no. turbines/must be included in any measurements in order to establish baseline noise levels/FI required • Commission must be satisfied that the identified NSL's are suitable and acceptable • Reference made to recent High Court Decisions – PA wishes to highlight the need for a Noise Complaint Monitoring Programme / all required costs to ensure compliance should be burdened on the applicant.	• Appendix 1 contains a detailed response to Noise and Vibration issues and is prepared by AWN Consulting Ltd. • **Cumulative Assessment** – Appendix 10-2 of the EIAR concludes that it is not necessary to include Yellow River Wind Farm in a cumulative assessment. Notwithstanding, this was included in the assessment/Appendix 10-7 sets out the predicted cumulative noise contour/ clearly be seen that the proposed development, Cloncreen, Mountlucas, along with Yellow River wind farms are includes in the noise predictions. • **Background Noise Levels** – should not include noise from any operational wind turbines. • Demonstrated in Appendix 10-2 that the contribution of turbine noise from the Yellow River Wind Turbines is not significant. • Noise Complaint Monitoring Programme – prior the commissioning of the wind farm, the developer will submit a Noise Complaint Monitoring Programme to the Planning Authority for written agreement. • Common practice to commence surveys within six months of a wind farm being commissioned.
Cultural Heritage	
Planning Authority Submission	**Applicants Response**
Photomontages	
• Photomontages required from Ballinla House (Protected Structure) c. 600m from proposed turbine T3.	The EIAR submitted with the application includes a full Cultural Heritage assessment in accordance with the EPA (2022) EIAR Guidelines, and the Architectural Heritage Protection Guidelines for Planning Authorities.
Transportation and Traffic	
• FI sought as per internal reports (detailed in Table 3 of applicants response) Conditions suggested in the event of a grant of permission.	See response to PA's Internal Reports below.

• Notes that the Commission is requested to consider/address matters raised by the Local Authority's Road Design and Edenderry Municipal District Engineer in informing its decision on civil engineering matters, in particular roads and safety. • Local Authority's Roads Section and the Edenderry Municipal District Engineer seek FI in relation to traffic impacts/shortfalls in relation to the applicant's submitted details are required prior to any grant of permission.	
Residential Amenity including Shadow Flicker, Siting of Turbines, Setback from Dwellings/Visual Impact	
Planning Authority Submission	**Applicants Response**
• Setback distances have not been provided/mandatory minimum setback has been provided. • Best practice in the Draft Wind Energy Guidelines refers to a setback distance of 4 times the tip height between a wind turbine and nearest point of the curtilage of any residential property in the vicinity of the proposed development/this would result in a best practice setback of 740m. • Insufficient justification for proposed setback distances provided/would set an undesirable precedent/likely cause detrimental impact on the residential amenity of these dwellings. **<u>Visual Impact</u>** • Significant concerns regarding the potential impact of the proposed turbines on the local area and residents. • Absence of an overall map showing all viewpoints. • Concerns in relation to overall assessment of prominent views/in particular to the east. • Quality of the submitted photomontages/background appears to be hazy/ordering is out of sequence/VP 11 and 13 are mixed together. • As a result of the setbacks from existing dwellings, the minimum separation distance between turbines and the existing turbines in the surrounding area, the PA considers the proposed development will have a significant	• Layout has been developed in accordance with Wind Energy Development Guidelines (2006) and the Draft Revised Guidelines (2019) including the required separation distances, noise limits, and shadow flicker controls. • **Maps -** Figure 16.2 – location of residential houses within 10 times the rotor diameter (1.62km) • Map of permitted and under construction energy developments within 15km – Provided in Figure 2.11 • Location of Viewpoints/ Cumulative Impact (Visual) - Shown in Appendix 11.2 • Cumulative impact of permitted but not yet constructed wind farms is fully addressed in the LVIA Chapter of the EIAR (Section 11.5.10/Table 11.11) • **Shadow Flicker -** Applicant has committed to a zero impact from Shadow Flicker on all residential houses as per Chapter 16 of the EIAR • **Landscape and Visual Impact -** Viewpoint locations are shown on A1 Zone of Theoretical Visibility/also included in Chapter 11 along with Table 11.9/location shown on each photomontage sheet • Relevant receptor groups were considered and represented in the visual impact assessment • Total of 29 VPs assessed/typical for midlands WFs in Ireland • 12 no VPs are contained within the eastern quarters of the study area ranging in distance from 1.1km to 18.1km away • **Impact on Dwellings -** Chapter 11 concludes that the visual impacts would not be significant

visual impact on the residential amenity of local residents and the wider area. • The PA refers to dwellings along the local road between the northern and southern sections of the proposed development . • PA is of the view that these dwellings will be subject to an overbearing impact, specifically from T1, T2, T3 and T4. • Concerns in relation to the T1, T3, T4 and T5 – potential impact on dwellings. • Cumulative impact of permitted but not yet constructed wind turbines has not been factored into the LVIA by the applicant/A revised Landscape & Visual Assessment should be provided by the applicant • PA considers the layout and/or the number of proposed turbines should be reconsidered.	• LVIA was prepared in accordance with all relevant guidance and current best practice for wind energy LVIA in Ireland. • VP 11 and VP 12 were used to examine impact from residencies on local road to the north and south of VP11 and VP12/Section 11.5.4 of the EIAR refers to effects from same/noted the effects at VP 11 and 12 were substantial moderate/just below threshold of a significant effect. • Proposed turbines comply with the 4 X tip height setback (740m) from non-involved residential properties – as required by the Draft Revised Wind Energy Development Guidelines (2019). • Residential setbacks have been established on the basis of avoiding significant effects at surrounding residential properties. • **Cumulative Impacts** - LVIA cumulative impact assessment considered all known existing, permitted and proposed wind farms within the study area/This consisted of five existing developments (Cloncreen, Moanvane, Mount Lucas, Yellow River and Cushaling), one permitted development (Dernacart) and one in-planning wind farm (Drehid).
Flooding/WFD Compliance/ Hydrology and Hydrogeology	
• Note that an assessment of potential cumulative effects associated with the project and other developments has not been completed as part of the WFD Compliance Assessment. • Hydrology and Hydrogeology – PA's Environment and Water Section are satisfied with the findings of the assessment provided by the applicant/recommended conditions.	• WFD Report is contained within Appendix 08-3 of the EIAR/Cumulative impacts area addressed within same/If proposed development does not adversely affect the implementation of the Water Action Plan (WAP) measures then it cannot give rise to cumulative impacts/also assessed in Section 8.6.4 of the EIAR. • Both the WFD assessment and the EIAR confirm that the project will not contribute to a deterioration of waterbody status.
Population & Human Health	
• A map showing all dwellings (existing, granted and under construction) within 2km of the proposed turbine locations should be provided as part of this chapter. • A map showing all permitted and under construction energy developments within 15km of the subject site to be provided.	• Figure 16.2 – location of residential houses within 10 times the rotor diameter (1.62km). • Map of permitted and under construction energy developments within 15km – Provided in Figure 2.11.
Air & Climate	
• Queries the applicant's position that "the proposed development will generate electricity that would otherwise require	• Any renewable energy generation on the current grid will directly displace generation from fossil-fuel-based plant on the national grid.

the burning of fossil fuels". Consideration should also be afforded to alternative renewable energy types. • Carbon released from the felling of 21ha of woodland and the provision of materials for the turbine concrete nases and access roads.	A mix of renewables are required to achieve Ireland's climate targets. • The carbon losses due to the proposed project are fully assessed in Chapter 13 Air and Climate, Table 13-16 in the EIAR outlines the losses due to felling and turbine construction.
Other Issues	
• Community Gain • Amenity Trails • Surplus Material • Further Information Requests (General) • Proposed Conditions (General) • Alternatives	• **Community Gain -** Will be delivered in compliance with the Renewable Electricity Support Scheme (RESS) Community Benefit Fund Guidelines. • Outlined in Section 5.4.2.3 of the EIAR. Community Benefit Fund will be delivered in full compliance with the Renewable Energy Electricity Support Scheme (RESS) Community Benefit Fund Guidelines – These national requirements determine the breakdown of funding elements and the operational framework for all RESS-supported projects. • **Amenity Trails** - No amenity trails are proposed. • **Response to Request for FI** - Can be dealt with by conditions proposed. • **Surplus Material** - Surplus soil will be retained and reused on site/unsuitable soil will be removed from the site and disposed of at an appropriately licensed waste facility by an authorised contractor. • Has responded and commented upon each proposed conditions – see Inspectors report for comment and assessment of same. • Applicant has committed to Zero Impact from Shadow Flicker on all residential houses as per Chapter 16 Shadow Flicker of the EIAR. • **Further Information Requests -** Can be covered as per suggested conditions. In relation to surplus soil, suitable surplus soil arising during the works will be retained and reused onsite in accordance with the construction methodology/where material is deemed unsuitable for reuse onsite, it will be removed from the site and disposed of at a licenced wate facility. • **Proposed Conditions -** The applicant has responded to each of the conditions as proposed by the PA, and has stated that the applicant is satisfy to comply with these requirements. • **Alternatives -** Chapter 4 of EIAR sets out alternatives/applies industry standard methodology/standard EIAR practice.

	• Consideration of alternatives must be reasonable and relevant to the project type/must be proportionate and grounded in what is technically and environmentally feasible for the site. • Solar farm is not suitable for the Ballinla land/require substantially larger landtake/displace agricultural enterprise. • Deliver less electricity output per hectare.
Planning Authority's Internal Reports	
Edenderry MD (Dated 06/10/2025)	
• FI Required in relation to the following issues. • Road strengthening proposals at the entrances to the site • Surface water measures. • Measures to prevent deposition/spillage onto the public road/wheel wash facilities. • Details of passing bays long the L5010. • Details of temporary turning head at the Ballyfore R402/L5006 junction & entering Ballinla west along the L5010 towards Lumville. • Details regarding timber to be removed from site. • Survey of roads and bridges along proposed haul routes. • Conflicting information in relation to surplus material (retained on site/disposed off site)/potential waste material. • Details of pre-cast concrete culverts. • Conditions recommended which cover the issues raised above and also cover the following issues. • No. 14 – No construction delivery vehicles shall access the site via the northern section of the L2006. • No. 15 - Visibility site distances. • No. 16 – Construction Management Plan. • No 25 (misnumbering here) – Haul Routes. • No. 26 – Construction sequencing etc. • Conditions to 27 to 40 as relates to turbine delivery routes. • Conditions 33 to 40 as relates to Traffic Management (Construction Stage). • Conditions 45 to 55 as relates to Cable Routes (PA have noted that these works	• Issues raised can be dealt with by condition/proposed conditions provide a clear and enforceable mechanism. • Applicant can supply the FI information requested with the exception of items (h) (page 53, and (j)(page 54). • Request that a road and condition survey by addressed by way of planning condition/condition survey should be undertaken close to the commencement of construction. • EIAR has assessed all potential haul routes/full upgrade schedule will not be known until a supplier is known. • Construction volumes have been assessed by design engineers/provided in Section 15.4.1.5 of the EIAR. • Standard heavy vehicle delivery trucks will be used for these deliveries (with the exception of TDR vehicles)/Final detail will only be confirmed once the design and built contractor is appointed. • Can be addressed by way of an updated Traffic Management Plan/addressed by way of condition 5 of the municipal engineer's report.

do not form part of the current application).	
Roads (Dated 07/10/2025)	
• Proposal is satisfactory subject to FI/Conditions outlined in the District Engineer's Report dated 06/10/2025	As per response above.
Environment and Water Services (Dated 02/10/2025)	
• No objection subject to conditions. Conditions are as follows: • Mitigation measures in the CEMP • Mitigation measures in the FRA • Mitigation measures in Ch 18 of the EIAR • Statutory consents and licences • Conditions numbered 1 to 3 in relation to surface water including disposal of same, buffer zone, in stream works • Condition in relation to potential removal of foul sewerage from the site • Conditions numbered 1 to 4 in relation to waste management • Conditions number 1 to 4 in relation to noise and dust including limitations on noise levels and minimisation of audible tonal or impulsive components. • Conditions numbered 1 to 2 in relation to hedgerow/woodland and trees	Report and conditions are noted.
Senior Executive Architect (dated 7th October 2025)	
• Provide photomontage showing impact (or not) on Ballinla House (Protected Structure/NIAH) – will definitely be visible and should have been mentioned in their description.	The EIAR submitted with the application the EIAR submitted with the application includes a full Cultural Heritage assessment in accordance with the EPA (2022) EIAR Guidelines, and the Architectural Heritage Protection Guidelines for Planning Authorities.
Fire Officer (02/10/2025)	
• No objections to granting of permission	No comment/response to same.

Table 25.2 – Submissions from Prescribed Bodies	
Population and Human Health	
HSE - National Office for Environmental Health Services **National Environmental Health Service (NEHS)**	**Applicant's Response**
• NEHS considers likely significant effects within a population and Human Health context that uses a source-pathway-receptor model, based on emissions through environmental media and population exposure.	• Human Health has been assessed in accordance with the EPA Guidelines on the Information to be contained within Environmental Impact Assessment Reports (2022) and NEHS practice – using a population health approach rather than

• Recommended that the Planning Authority follow the Population Health approach when considering public health in their decision making. • Reference is made to the 2006 Guidelines/and to the Draft 2009 Guidelines. • Reference is made to the Webster/Rollo V Meenaclogher (Wind) Limited (2024 IEHC 136) 8th March 2024. • It should be noted by the Planning Authority that the following 'The HSE 'Position paper on wind turbines and public health' has been withdrawn by the HSE and is under review.	an assessment of individual medical outcomes. • Draws date from 2022 Census/presents a general health profile of the receiving environment. • No likely significant adverse effects on health are predicted. • Noise and shadow flicker are addressed in the relevant technical chapters. • EIAR reflects the wider scientific literature which has not established a causal link between wind farm operation and direct adverse health outcomes.
Water	
• Concur with conclusions in Chapter 8 if all mitigation is identified and implemented in full.	• Noted.
Shadow Flicker	
• Proposed zero shadow flicker identified in chapter 16 of the EIAR should be conditioned if permission is given for the development.	• Applicant has adopted a company- wide zero shadow flicker policy. • Goes beyond the requirements of the 2006 Wind Energy Guidelines, the Draft Revised Guidelines and the OCDP 2021. • Turbines will be programmed to shut down automatically whenever the specific conditions for shadow flicker at any dwelling are met. • These controls are a well-established and routinely implemented mitigation measures for wind energy developments in Ireland and internationally. • Shadow flicker has been comprehensively assessed in the EIAR. • Is a predictable and quantifiable phenomenon. • Results in EIAR confirm that potential shadow flicker is below the 30 hours per annum threshold at all but one residential receptor and below the 30-minute per day threshold at all residential locations. • Potential health effects associated with shadow flicker have also been fully considered. • Informed by HSE Position Paper (2007) – acknowledged that this is not withdrawn as per the HSE submission. • Reference made to UK Department of Energy and Climate Change evidence review – no scientific evidence linking shadow flicker to adverse health

	effects/confirmed that modern modelling and mitigation systems are effective.
Noise and Vibration	
• Use of BS4142 methodology to predict background noise levels. • Tabulation of the predicted change in the noise environment from the proposed development and the cumulative change in the original baseline noise environment before any wind farm development in the area is the most informative way of reporting the likely effect of operational noise in an EIAR. • Consider the most appropriate criteria for assessing significance of the predicted noise would be consideration of the ENVIRONMENTAL NOISE GUIDELINES for the European Region, 2018 (WHO, 2018). • Use of the 2006 guidance is resulting in significant volume of complaints from communities exposed to noise from wind turbines post development. • Position that the absolute noise exposure limits set in the 2006 Guidance do not necessarily protect Public Health in specific development situations is now supported by the judgement referred to above. • Concern with the 2019 draft guidance by acoustic consultants were concerns due to assessment methodology and not the proposed standards set to protect health. • Questions the methodology utilised in the EIAR as relates to the assessment of cumulative effects. • Reference is made to the Webster/Rollo V Meenaclogher Case. • Hours of construction activity should be conditioned. • NEHS is of the opinion that if the mitigation measures are implemented in full there is adequate protection of Public and Environmental Health during the proposed construction phase. • Additional considerations set out including standards for water utilised in the construction compounds, procedures in relation to foul water/site drainage/dust monitoring/minimisation.	• British Standard BS 4142:2014+AI:2019 Methods for rating and assessing industrial and commercial sound (BS-4142), is not applicable to the assessment of wind turbines as the assessment of wind turbine noise falls within the scope of other standards and guidance. • Appendix 10-8 of the EIAR presents tabulated result of the turbine noise predictions and assessment review at all NLSs assessed. The criteria for setting turbine noise limits is outlined in Section 10.3.2 of the EIA. • Section 10.4.2 describes the methodology used for the background noise survey, which was conducted in accordance with the guidance provided in the IOA GPG. • Table 10-15 of the EIAR discusses the applicable criteria and proposes operation noise limit for the wind turbines, which have been set with reference to the baseline noise environment at surrounding NSLs. • The assessment confirms that baseline noise levels were considered when evaluating potential impacts and setting appropriate operational noise criteria. The methodology adopted is consistent with applicable guidelines (2006 WEDGs) and best practice guidance (IOA GPG). • WHO Environmental Noise Guidelines – Recommendations within same are rated as either ‘Strong’ or ‘Conditional’ - recommendations in relation to wind turbines are ‘conditional’ as it is stated that quality of evidence used for the WHO is stated as being ‘Low’. • Potential for increased uncertainty due to the parameter used by the WHO for assessment of exposure (i.e. L_{den}), which is acknowledged may be a poor characterisation of wind turbine noise and may limit ability to observe associations between wind turbine noise and health outcomes, as stated within the WHO Guidelines. • The conditional WHO recommended average noise exposure level (i.e. 45 dB L_{den}), if applied as a target noise exposure, should done with caution, given the above.

	• Webster/Rollo V Meenaclogher Case – referred to an operational wind farm where the distances to the nearest NSL were much less than those to the nearest NSL in this instance/outcome of that case was specific to the circumstances of that site and should not be considered representative of wind farms in general. • Draft WEDG 2019 - Section 10.3.5 comments on the Draft Wind Energy Guidelines - current 2006 Wind Energy Development Guidelines remain in force.
Department of Defence (DOD)	
Aviation	
• The Minister for Defence is responsible for the regulation of military aviation, whereas the Irish Aviation Authority (IAA) is responsible for the safety regulation of civil aviation including aerodromes. The IAA does not have remit for military aviation or installations. Safeguarding of military flight operations and installations is intended to protect both current and future aircraft operations and also to take account of the security requirements associated with some of those operations. • All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week. • Obstacle lighting should be incandescent or if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light. • In the event negative impacts on future military radar systems, the owner will engage with the Department of Defence and will provide suitable mitigations as soon as practical. • Any Irish Air Corps (IAC) requirements are separate to Irish Aviation Authority (IAA) requirements.	Noted and agreed.
Transport Infrastructure Ireland (TII)	
Traffic/Haul Routes	

• TII issued a response on 16th October 2025. TII recommend consultation with bodies responsible for the roads which will be traversed for the haul route, requirement for a road safety audit for any proposed works, requirement for full assessment of all structures along the haul route. It is set out that TII will rely on the Commission to abide by official policy in relation to development on/affecting national roads as outlined in DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012). Conditions are recommended.	Applicant is satisfied to comply with the requirements of TII and that the applicant has no observations to make on the conditions as proposed by TII.
Development Applications Unit (DAU)	
Archaeology/Architectural Heritage	
DAU Submission	**Applicants Response**
• Concerns raised in relation to indirect impacts on the setting of National Monuments and Recorded Monuments, as well as cumulative impact to the archaeological and cultural heritage environment. In particular the DAU set out that there are 3 no. National Monuments in the Ownership or Guardianship of the Minister located within c10km of the proposed development site, and 2 no. of same have the potential to be impacted (Grange Castle and Clonin Ring Barrow). A number of other Recorded Monuments within 10km are also referred to. • Dept. advise advance archaeological test excavation prior to development. Recommend conditions in this regard. See Section 5.6 of this report for details.	• **Archaeological investigations** – Level of investigation is acknowledged by the application – Satisfied that the AIA is sufficient. • **Cumulative Impact** – Evaluated in Section 12.5.4 of the EIAR. • The applicant has confirmed that they are satisfied to comply with the conditions proposed by the DAU and have no observations to make on same.
Uisce Éireann (UÉ)	
DAU Submission	**Applicants Response**
• Submission notes that there are no connections to public water or wastewater as part of the development. • Noted that the proposed cabling infrastructure will likely interact with existing Uisce Éireann assets that are located in the road reserves. Uisce Éireann requires that in works shall be carried out in compliance with Uisce Éireann's requirements. • Note that a water framework directive assessment was undertaken as part of the projects EIA, which concluded there is negligible scope for adverse hydrological interaction with Uisce Éireann water	The applicant has responded to state that the observations of Uisce Éireann are noted and agreed (where relevant). The applicant has no observations to make on the conditions as drafted.

sources in the vicinity, and Uisce Éireann is satisfied with this Assessment. • Conditions have been recommended to ensure the adequate provision and protection of water and wastewater facilities.	

Table 25.3 – Third Party Observations and Applicant's Response	
Population and Human Health	
Observers Submission	**Applicants Response**
• EIAR is deficient in its assessment of significant effects on human health, biodiversity and residential amenity. • Impact on health and wellbeing, particularly in relation to noise. • Impact on mental health. • Offaly County Council has previously issued an enforcement warning letter to Statkraft in relation to the Meenwaun Wind Farm – Continues to operate with residents suffering form noise and health problems as a result. • Has led to sleep deprivation, anxiety, headaches, elevated stress levels. • Whether EIAR adequately addresses these issues in accordance with EU and WHO health protection standards. • Absence of any formal baseline health assessment. • Undertaking an independent baseline study of the community's health • In line with the precautionary approach recommended by WHO – Environmental Noise Guidelines and the Department of Health in April 2014 • Requirements of the EIA Directive – Cannot be limited to simple noise or shadow flicker measurements – requires a systematic Health Impact Assessment addressing potential physiological and psychological effects. • Failure to include a proper HIA would therefore constitute non-compliance with both EU and WHO guidance on environmental assessment and health protection. • Impact on drinking water with reference to landslide/coalmines.,	• Human Health has been assessed in accordance with the EPA Guidelines on the Information to be contained within Environmental Impact Assessment Reports (2022) and NEHS practice – using a population health approach rather than an assessment of individual medical outcomes. • Draws data from 2022 Census/presents a general health profile of the receiving environment. • No likely significant adverse effects on health are predicted. • Noise and shadow flicker are addressed in the relevant technical chapters. • EIAR reflects the wider scientific literature which has not established a causal link between wind farm operation and direct adverse health outcomes.
Noise and Vibration, Shadow Flicker	
Observers Submission	**Applicants Response**
Noise	
Noise • Impact on health and wellbeing, particularly in relation to noise. • Complaints in relation to other wind farms that are operated by Statkraft,	**Noise and Vibration** • Appendix 1 contains a detailed response to Noise and Vibration issues and is prepared by AWN Consulting Ltd.

• Relate to noise from turbines and health impacts from noise, • Cloghan Wind Farm has caused over 200 complaints over 18 months (newspaper article enclosed), • Independent acoustic consultant report, commissioned by the Communities & Environmental Protection Alliance (CEPA) has found that the Cloghan Wind Farm is not compliant with its permitted noise emissions. • Offaly County Council has previously issued an enforcement warning letter to Statkraft in relation to the Meenwaun Wind Farm – Continues to operate with residents suffering from noise and health problems as a result. • Reference is made to the Code of Practice for Wind Energy Development in Ireland (2016) and maintenance of a communication log – developer required to do same. • Request that the application be refused in line with the Code of Practice mentioned above. • Impact on sleeping patterns. • Impact on mental health. • Concerned that noise regulations will not be complied with. • Concerns regarding noise impacts/cumulative noise impacts. • Prevailing winds will carry noise towards certain properties. • Reference made to Cloncreen Wind Farm located in east Co. Offaly and has been operational since c2022/21 turbines/has become a source of profound distress to residents • Have endured persistent low frequency humming, amplitude modulation and tonal noise, particularly during moderate wind conditions at night. • Has led to sleep deprivation, anxiety, headaches, and elevated stress levels. • FOI requests have revealed dozens of complaints from residents in the vicinity of Cloncreen. • Extend to nearby sites like Cloghan and Rhode – indicate a county wide crisis in wind farm noise management.	• **Cumulative Assessment** – Appendix 10-2 of the EIAR concludes that it is not necessary to include Yellow River Wind Farm in a cumulative assessment. Notwithstanding, this was included in the assessment/Appendix 10-7 sets out the predicted cumulative noise contour/ clearly be seen that the proposed development, Cloncreen, Mountlucas, along with Yellow River wind farms are includes in the noise predictions. • **Background Noise** Levels – should not include noise from any operational wind turbines. • Demonstrated in Appendix 10-2 that the contribution of turbine noise from the Yellow River Wind Turbines is not significant. • **Noise Complaint Monitoring Programme** – prior the commissioning of the wind farm, the developer will submit a Noise Complaint Monitoring Programme to the Planning Authority for written agreement. • Common practice to commence surveys within six months of a wind farm being commissioned. • Best practice guidance will be taken into account. • WHO Environmental Noise Guidelines – Recommendations within same are rated as either 'Strong' or 'Conditional' - recommendations in relation to wind turbines are 'conditional' as it is stated that quality of evidence used for the WHO is stated as being 'Low' • Potential for increased uncertainty due to the parameter used by the WHO for assessment of exposure (i.e. L_{den}), which is acknowledged may be a poor characterisation of wind turbine noise and may limit ability to observe associations between wind turbine noise and health outcomes, as stated within the WHO Guidelines. • The conditional WHO recommended average noise exposure level (i.e. 45 dB L_{den}), if applied as a target noise exposure, should done with caution, given the above. 43 bB(A) Contour – This is illustrated in Appendix 10-7. • **Infrasound** – Discussed in Section 10.3.2.5 on page 10-13 – no significant effects from same/reference is also made to the Institute of Acoustics Statement in Respect of Wind Farm Noise Assessment (December 2024) which states that that absolute levels are well below

• Queries to the community liaison representative for Cloncreen have gone unanswered. • No substantive response has been provided, nor has any remedial action been taken such as the deployment of an impartial acoustic consultant as recommended by affected residents' groups like the Communities & Environmental Protection Alliance. • Failure to address existing issues undermines the applicant's credibility and raises serious doubts about their ability to mitigate similar problems at Ballinla. • Courts have recognized that wind turbine noise as an actionable private nuisance. • 2024 High Court ruling – residents were awarded damages for 'unreasonable interference' with their homes' enjoyment. • Emphasised that noise assessments must consider not only decibel limits but also qualitative factors like tonality and infrasound under the Defra Noise Statutory Nuisance Complaint Methodology. • Current noise levels from Cloncreen already exceed WHO 2018 guidelines for community noise exposure/enforcement remains lax. • EIAR fails to convincingly demonstrate that noise impacts will be negligible. • Reference is made to compliance with the 2006 guidelines – baseline surveys appear limited to short-term measurements during favorable weather, potentially underestimating worst-case scenarios like those experienced at Cloncreen. **<u>Key shortcomings include</u>** • Inadequate receptors mapping – NSLs are not filly mapped against prevailing wind directions -ignoring how downwind propagation can amplify low-frequency noise over distances greater than modelled. • Lack of Cumulative Assessment – EIAR does not sufficiently analyse cumulative	those reported to trigger physiological health effects, based on peer reviewed research to date. • **Noise Modelling Software** – Software is licenced for use by AWN – it cannot be shared with third parties/Software used is DGMR iNoise Enterprise, V 2024.2.1/Sufficient information to enable a third party to undertake an independent noise assessment. • **Noise Sensitive Location Coordinates** – Submission refers to a figure in the Shadow Flicker Assessment – 16.2 – which uses a separate numbering system for NSLs to the noise assessment /no exaggeration of distances. • Amplitude Modulation/ – AM is assessed in detail in Section 10.3.2.5 if the EIAR/Comments therein remain valid/Mitigation measures are proposed in Section 10.7.1.2 of the EIAR. • Webster/Rollo V Meenaclogher Case – referred to an operational wind farm where the distances to the nearest NSL were much less than those to the nearest NSL in this instance/outcome of that case was specific to the circumstances of that site and should not be considered representative of wind farms in general. • Construction Noise and Vibration - Criteria for construction vibration are set out in Section 10.3.2.4 of the EIAR/No significant noise and vibration impacts at the NSL's. • Noise from rock breaking and piling has been taken into account. • Construction methods do no include blasting/no borrow pits proposed. • NSLs downwind – Noise assessment in the EIAR is based on a scenario that each NSL is downwind of all wind turbines – presents a worst-case scenario in line with best practice guidance. • NEHS Comments. • British Standard BS 4142:2014+AI:2019 Methods for rating and assessing industrial and commercial sound (BS-4142), is not applicable to the assessment of wind turbines as the assessment of wind turbine noise falls within the scope of other standards and guidance as discussed in detail in Section 10.3.1.2 of the EIAR. • Use of Lower Fixed Thresholds - Section 10.5.2 of the EIAR presents the rationale for

noise from Ballinla alongside Concreen and other nearby installations. • Absence of Independent Verification – no provision for post construction monitoring by a third-party acoustician • Over reliance on predictive modelling – Tools like WindFarmer software may not capture aerodynamic modulation or terrain effects in the undulating Coolestown landscape. • Gaps render the noise chapter of the EIAR unfit for purpose. • Require on-site verification at Cloncreen. • Impacts on visual amenity in a valued rural setting. • Potential hydrological disruptions to local peatlands/biodiversity loss for bird species using migratory corridors near River Brosna. • Community benefit funds do not offset the irreversible intrusion on quality of life. • Will transform peaceful townlands into industrial zones. ACP should: • Commission and independent review of Cloncreen's noise compliance. • Require the applicant to submit a revised EAIR with robust cumulative noise modelling and mitigation commitments. • Convene an Oral Hearing to allow affected parties to present evidence of Cloncreen's impacts. • Refuse permission unless these steps demonstrate no foreseeable exceedance of noise limits or resident harm • Concerns regarding noise impacts/cumulative noise impacts/ reference made to Peer Review of proposed Ballinla Wind Farm Planning Application prepared by Huson & Associates. • Noise may be higher than the model predicts. • Only general cumulative monitoring with Cloncreen Wind Farm. • Lacks receptor specific verification. • Experiences are Cloghran.	using 40 dB LA9o as the lower threshold and is in line with the applicable guidelines. • A lower threshold pf 40dB is commonly adopted for similar developments that have been granted permission by ABP (now ACP) and LA's/examples set out therein. • Assessment confirms that baseline noise levels were considered when evaluating potential impacts and setting appropriate operational noise criteria/methodology is consistent with applicable guidelines/best practice guidance. • Draft Wind Energy Guidelines 2009 – Refer to a Dail Statement made in June 2025 that the current 2006 Wind Energy Development Guidelines remain in force • If updated Wind Energy Development Guidelines are published during the application process, can be addressed by way of condition or by the provision of additional information. **Vibration** • EIAR demonstrates that the proposed development is unlikely to result in any significant vibration impact on either humans or animals, either at construction or operational phases. • Notwithstanding, mitigation measures are outlines in Section 10.7.1 in order to further minimise any potential effects. • Criteria for construction vibration are set out in Section 10.3.2.4 of the EIAR/No significant noise and vibration impacts at the NSL's • Noise from rock breaking and piling has been taken into account. • Construction methods don't include blasting/no borrow pits proposed.

• Just outside the 1km radius/area has around 50 houses/have not modern insulation/sound proofing etc [Eiilish Doolan]. • Windows will need to be upgraded to triple glazing. • Noise assessment is not sufficient – (grid distances/separation distances, lack of noise and wake model, infrasound/seismic effects/nuisance. • In-combination and cumulative effects. • Reference made to French case law. • Reference made to Derryadd-Sweetman v ABP – [2021] IEHC 390 /Balscadden IEHC 586/Crodfton [2024] IESC 12. • Summary of same – issues include design envelope. • Noise contours – shown have been shown for 37 dBa and 25 dBa /overlapping cumulative map shown (p28). • Reference made to developer's alleged non-compliance on other site including Clonghan Wind Farm and Meenwaun Wind Farm. • Reference made to submitted Noise Report (L Huson) – included in Appendix 1. **<u>Vibration</u>** • Concerns raised regarding vibration impacts. • Impact of substation- blasting or rock breaking at the borrow pit.	
Shadow Flicker	
• Concerns raised regarding negative effects of shadow flicker. • Impact of shadow flicker/understand that turbines can be turned off to avoid such effects/can only rely on hope that this would be done in the event development proceeds. • Impact on residential amenity – T4 is located at a critical proximity of c. 700m from dwelling. • Reliance on potential future mitigation – not a legally binding condition of the planning permission – assessment of shadow flicker impacts inadequate and purely speculative.	• Applicant has adopted a company- wide zero shadow flicker policy. • Goes beyond the requirements of the 2006 Wind Energy Guidelines, the Draft Revised Guidelines and the OCDP 2021. • Turbines will be programmed to shut down automatically whenever the specific conditions for shadow flicker at any dwelling are met. • These controls are a well-established and routinely implemented mitigation measures for wind energy developments in Ireland and internationally. • Shadow flicker has been comprehensively assessed in the EIAR. • Is a predictable and quantifiable phenomenon.

• Front of the house is entirely glass/flicker and reflection are very real concerns. • Exceeds the 30-minute benchmark for one property. Although the receptor is below the annual total of 30 hours, home is still modelled to receive 61 days of flicker with peaks above 30 min/day. • No Cumulative data in tabular form. The EIAR Conclusion relies on a "zero shadow flicker" operational policy however it is unclear how "zero" is achieved and if accepted, it must be conditioned and auditable. • Impact of shadow flicker/land is situated north-east of T5 • Impact on farm located within 1600m of T4 which is located southwest of this land/all of the land will be subjected to shadow flicker from 2 different turbines, for substantial periods of the day/particularly during October to April. • Health impacts related to shadow flicker. • **Shadow Flicker** – level of exposure for House No. 46 is very significant/incorrect grid reference/model not provided. • Ground levels at one receptor will result in reflection being closer to eye level and exacerbate flicker. • Have experienced significant issues of shadow flicker as a result of Cloncreen Wind Farm.	• Results in EIAR confirm that potential shadow flicker is below the 30 hours per annum threshold at all but one residential receptor and below the 30-minute per day threshold at all residential locations. • Potential health effects associated with shadow flicker have also been fully considered. • Informed by HSE Position Paper (2007) – acknowledged that this is not withdrawn as per the HSE submission. • Reference made to UK Department of Energy and Climate Change evidence review – no scientific evidence linking shadow flicker to adverse health effects/confirmed that modern modelling and mitigation systems are effective.
Landscape and Visual/Residential Amenity/Siting of Turbines	
Observers Submission	**Applicants Response**
• Surrounded by structures that will tower over us/50 times the height of [observer's] house • Concerns in relation to visual impacts • Impacts on visual amenity in a valued rural setting • Proliferation of turbines in the immediate surrounding area. • One observer has received planning permission for a replacement house/will be looking directly at Turbines 4, 6 and 7. • Cumulative impact of Edenderry power station, 21 turbines of the Clongreen Windfarm and Mountlucas wind farm	• The proposed turbines will be visible within a broad scale rural landscape setting where they may be prominent in some instances/due to the slender form and set back distances from roads and residences, they do not appear overbearing or spatially dominant within views • Height is consistent with the height of turbines being proposed and consented within the last 5 years. • A number of WF applications have been granted within turbines at or in excess of 200m. • No significant effects outlined in the LVIA chapter.

which is 7km west from one particular property. • Impact on Grand Canal/greenway. • Height of turbines/ Tip height of 185m – turbines will be highly visible/will dominate both the local skylines and unobstructed views to the west of one particular property. • Lack of screening. • In-combination and cumulative effects. • Overdevelopment • Landscape – serious concerns re visual in particular neighboring houses located to the east and north-east. • Visual impact of substation – elevated location/in-combination effect. **Siting of Turbines** • Concerns in relation to the proximity of turbines to residential dwellings. • A number of properties are located between turbines (i.e. turbines are located both to the north and south of the dwellings). • EIAR is deficient in its assessment of significant effects on residential amenity.. • Unbalanced concentration of industrial scale energy infrastructure. • Impact on landscape/rural character. • Visual effects/proliferation of turbines in the immediate surrounding area. • 49 no. wind turbines in the immediate area/17 no. in full view from property/closest is 1250m away. • Deficiencies in the data provided – landscape visual effects, separation distances.	• In accordance with the CDP, the receiving landscape is predominantly 'low' landscape sensitivity designation. • Area is 'Open for Consideration' for wind energy development. • No scenic designations (routes/views) within 5km of the site. • Wind turbines are not industrial features.
Biodiversity/Ornithology/Water Quality/Soils	
Observers Submission	**Applicants Response**
• EIAR is deficient in its assessment of significant effects on biodiversity • Impacts at construction stage and operational stage could impact on drainage • Potential hydrological disruptions to local peatlands/biodiversity loss for bird species using migratory corridors near River Brosna • Failure to assess impacts on protected fauna, including swans and birds of prey/an on key commercial interest	• Biodiversity • Concerns raised are fully address in the EIAR • In relation to bats, all accessible structures, trees within the relevant areas were surveyed by licensed ecologists • Precautionary approach was applied where roosts could not be inspected (on private property) • With mitigation measures in place, no significant effect on bat populations are predicted

• Ornithological assessment fails to demonstrate conclusively that collision mortality rates will remain within acceptable limits. • Reduction in biodiversity, soil health. • HNV grassland is recognised under national and EU policy as farmland of special value for nature conservation and sustainable agriculture. • Impact of the wake effect on animals. • Impact on wildlife including foxes, badgers, pine martin, barn owls, swallows, bats and honeybees. • Impact on pine martens, Irish Hare. • Impacts on bats. • [Observers] property was never examined for bats/maternity roost in the attic/effect on same has not been assessed. • Impacts on habitats, flora and fauna. • Impact on habitat fragmentation and disturbance of local wildlife/negative impact on the land and animals. • Old, active badger sett on grounds in Lumville – putting badger colony and cattle at risk of TB infection • Impacts on insects. • Seismic effect on frogs/worms and herbivores/badgers. • Peat drying effects from wake/road foundation drainage – increased carbon emissions. • Landslide potential.	• Badgers – surveys undertaken for the EIAR confirm that no badgers setts occur within the proposed development site/nearest set is 150m from the closest element of the proposed development. • EIAR concludes that badgers will not be affected /no mitigation required. • Vegetation Loss – Fully quantified/reinstatement and habitat creation strategy set out in the EIAR. • Net habitat balance is set out EIAR. • All affected habitats are reinstated or replaced in line with best practice and deliver long-term ecological enhancement. **Ornithology** • Nature Focused Farm Management – no basis to suggest impact on farm located over 500m from T2/no direct or indirect effects will occur/buffer is greater than 500m. • Adequate Viewpoints/Sightlines – Adequate sightlines were determined utisilsing best practice guidance. • Geology and Hydrogeology. • EIAR addresses all relevant aspects. • No deep peat deposits or peatland habitats are present/site is generally flat with no evidence of historical landslides or instability/Peat Stability Risk Assessment is included in Appendix 9. • EIAR confirms there are no fault lines within the proposed development site/feature referred to in the submission is a section line on the GSI mapping not a fault. • No impact on groundwater abstractions will occur. • EIAR and CEMP set out measures to prevent pollution/with said measures in place, EIAR concludes that the risk of groundwater contamination is imperceptible.
Water Quality (Geology and Hydrogeology)	
Observers Submission	**Applicants Response**
Surface Water • Impact on Dondon River, which flows into the River Barrow, is an SAC – due to its importance a as a spawning habitat for fish. • River traverses our forestry lands at Ballymoran Farm – now lies within the area proposed for the siting of the wind turbines.	• The EIAR provides a comprehensive assessment of the geological and hydrogeological environment, based on detailed desk study, multiple site walkovers, GSI datasets, Teagasc soils mapping, quaternary sediment mapping, and targeted geotechnical investigations. Chapter 9 (Land and Soils) and Chapter 8 (Water) together address all relevant aspects of geology, soils, groundwater, hydrology and slope stability.

• **Risk to this watercourse** – sedimentation, water runoff, vibration impacts – impact on spawning habitat – wider ecological integrity of Dodon River System. • Impact on forestry – damage to woodland, root systems, soil stability and drainage patterns. • Impact of noise levels on wildlife – bats, birds. • Pollution of watercourses. • **Flooding** – contamination of ground water/impact on private water supply schemes. • Ground levels and peat probes. • Will increase flood risk to lands to the east/change in contours. **<u>Groundwater</u>** • Impact on groundwater wells. • Primary source of water for agricultural operations. • Impact of wind turbines on same. • Long term cumulative impacts on groundwater stability. • Baseline water quality and yields should be undertaken. • Protection measures in place. • No information to show this has been done. • Protected under the WFD and Groundwater Directive. • EC (Water Policy) Regulations 2003. • Any works should be subject to detailed hydrogeological assessment and continuous monitoring to ensure full compliance with regulatory protections. • **Mitigation** – measures to reduce the risk of pollution to groundwater are inadequate/failed to identify fault traversing the site.	• The EIAR confirms that the site is predominantly underlain by limestone bedrock, specifically the Edenderry Oolite Member, with areas of Waulsortian Limestone and Lucan Formation along the grid route. The quaternary sediments comprise a mix of cut-over raised peat and limestone-derived till, with peat occurring only in shallow, localised pockets. • No deep peat deposits or peatland habitats are present. The site is generally flat, with no evidence of historical landslides or instability. A full Peat Stability Risk Assessment is included in Appendix 9, which concludes that the risk of peat failure is negligible. • Regarding the "fault line" referenced in one submission, the EIAR confirms that there are no mapped geological faults within the Proposed Development site. The feature referred to in the submission is a section line on the GSI mapping, not a fault. This is a common misinterpretation of GSI symbology. The nearest mapped faults lie outside the development area and have no hydrological or geotechnical relevance to the proposed works. • The hydrogeological assessment in Chapter 8 demonstrates that the site is underlain by a locally important limestone aquifer, with groundwater flows typical of the region. The development footprint avoids karst features, swallow holes, springs or areas of high groundwater vulnerability. • The EIAR confirms that no private wells are located within the zone of influence of the proposed works, and that the separation distances, soil cover and construction methodologies ensure that no impact on groundwater abstractions will occur. • Potential construction-phase risks, such as sediment mobilisation, accidental spills, or concrete contamination, are fully addressed through the EIAR and CEMP, which includes strict controls on fuel storage, refuelling, silt management, drainage design and pollution prevention. These measures follow EPA, IFI and Coillte guidelines and are standard for wind farm developments. With these measures in place, the EIAR concludes that the risk of groundwater contamination is imperceptible. • Concerns regarding increased flooding or altered groundwater flows are not supported

	by the baseline data. The detailed assessment contained in Chapter 8 Hydrology and Hydrogeology, supported by the Flood Risk Assessment (Appendix 8-2). The FRA and EIAR demonstrate that the Proposed Development is at low risk of flooding, will not exacerbate flood risk elsewhere, and incorporates standard best-practice drainage and water-protection measures to ensure compliance with the Planning System and Flood Risk Management Guidelines. • In summary, the EIAR provides a robust and evidence-based assessment of geology and hydrogeology. The proposed mitigation measures ensure that the development will not give rise to significant effects on soils, geology or hydrogeology. • The Water Framework Directive Report is contained in the EIAR in Appendix 08-3. It is stated in Section 7 page 33 that cumulative impacts have been assessed. The conclusion of the cumulative impact assessment is included as Section 8.4 Potential Impact on Water Action Plan (WAP) Programme of Measures of the WFD Report. The WAP is the Local Authority Waters Programme's statutory programme of measures for all waters within the catchment. • It identifies all existing industries and activities that pose a risk to water quality and forms the baseline against which cumulative pressures are evaluated. As long as a Proposed Development does not adversely affect the implementation of the WAP measures, it cannot give rise to cumulative impacts in combination with existing pressures in the catchment. Section 8.4 clearly outlines that the Proposed Development will not have an adverse effect on the implementation of the WAP measures. This is the conclusion of the cumulative impact assessment under the WFD. • Notwithstanding the above, cumulative impact on all waters including the identified WFD waterbodies within the catchment are again assessed in a cumulative manner in the EIAR Chapter 8 Section 8.6.4 which evaluates the Proposed Development in combination with other existing and permitted projects. This assessment similarly

	concludes that no significant cumulative hydrological or hydrogeological effects will arise. • The Proposed Development has been fully assessed for cumulative impact on the WFD waterbodies within the catchment. Both the WFD Assessment and the EIAR confirm that the project will not contribute to deterioration of waterbody status, will not compromise the achievement of WFD objectives, and will not interact cumulatively with other pressures in the area.
Ornithology	
Observers Submission	**Applicants Response**
• Impacts on birds. • Lack of a robust Ornithological Impact Assessment. • Impacts on kestrels, swans, pheasants, barn owls, long eared owl. • Records of 3 sea eagles killed by Donegal wind turbines between October 2024 and May 2025. • Northeast area of Offaly is home to buzzards, barn owls, long-eared owls and peregrine falcons. • Whooper Swans/Mute Swans – flight lines for both species coincide with the proposed Ballinla Wind Farm. • Impact on birds included Greenland White fronted Geese migration path from Iceland to Wexford Slobs/impact on habitats. • Habitat restoration ignored. • Response to Ornithology chapter – Bird Collision data from 2003 is not acceptable – wind turbine size has increased – up to date models are available.	• Concerns have been addressed in the EIAR/Long-eared owl was not detected during survey but was noted as being present within the surrounding hinterland. • Kestrel is assessed in detail in EIAR/Long-term slight to moderate residual disturbance/displacement and barrier effects were identified. • Whooper Swans and other species associated with the River Brosna corridor – extensive vantage point surveys and flight activity monitoring were undertaken/Collision Risk Model was prepared in accordance with current guidance. • Assessment concludes that predicted collision risk is low and not significant. • No key migratory corridors intersecting the turbine layout. • Greenland White Fronted Geese (Migration Paths/Sites Used By/Exclusion zone) – Surveys did not record any observations of Greenland White Fronted Goose traversing the flight activity study area. • Data indicates that the species migrates through the wider region – some but not all migration paths may traverse the wider area. • Note limitations in the data presented within the relevant submission. • Data shows the main migration route of the Greenland White-fronted Goose is located further west/south-west of the proposed development. • 'Barrier' presented by other windfarms includes significant gaps. • EIAR does not identify the potential for cumulative barrier effects.

	• Wintering sites in Co. Westmeath lies to the north-west of the proposed development. • As such proposed development would not be traversed by geese wintering on these sites. • Percival (2003) has not been used to calculate actual collision risk for target species/has been calculated using the current NatureScot model (Band/NatureScot, 2024). • **Reduction in distribution and abundance of birds** – A decline in abundance is not explicitly stated for any species other than snipe, and this refers to a decline in abundance within 500m of turbines, rather than an absolute decline. • May be displacement of other species – effects are not significant. • **EIAR Inadequate** – The relevant submission does not identify any tangible issues relating to the ornithological assessment. • **Mortality Rates/Collison Risk** – Best practice guidance utilised to determine collision rates/no defined 'acceptable limits'/assessed against population size and background mortality rates/no significant effects identified/Curtailment measures proposed for nocturnal migratory species, as a contingency. • **Barn Owl** – No evidence of barn owl activity or occupation of the proposed development was recorded during surveys.
Public Consultation	
Observers Submission	**Applicants Response**
• Have not had any communication with any representative of Statkraft. • Received a generic letter/thanking for feedback/no feedback was ever given. • Lack of engagement. • Comments from the local area representative for the windfarm were not appropriate. • Promised a meeting with Applicant which never happened.	• Appendix 12 sets out an Community Engagement Report/Extensive Engagement over a 2-year period. • Recognises that some individuals may not have been available/may not have engaged with the materials. • Consultation strategy was fully aligned with national best practice. • Negative statements attributed to the Community Engagement Team do not reflect the applicant's documented record of engagement.
Cultural Heritage & Archaeology	
Observers Submission	**Applicants Response**
• Home is a Protected Structure (Reg No. 14911022) • Would impact on amenity and comfort of the home.	• Ballymoran House was assessed within the EIAR/Typo acknowledged/no significant adverse effects on same. • Pre-app report referred to is not of relevance/function was to determine if

• Wake effect can cause temp drops of up to 3 degrees/inability to improve insulation on the Protected Structure. • Home is not referenced in report (318203)/other built heritage features in the area were.	proposed development was SID and whether an EIAR is required.
Traffic and Transport	
Observers Submission	**Applicants Response**
• Located between both site entrances and immediately to the west of one of the site entrances to the southern section of the proposed Wind Farm • Local road network is entirely unsuitable for this type of project • Own a fleet of buses/familiar with the area/a resident and significant employer • Construction phase will cause problems for bus routes • Traffic issue s- local road access/restricted roads/traffic count data/road sight distances/safety audit/nature of roads/no TIA /no condition survey • Traffic and Transport – road widths insufficient • Capacities quoted in Table 15.2 are not relevant to regional roads of widths less than 7m. • Roads – substandard roads to accommodate development. • Will cause damage to roads-construction of Yellow River Wind Farm caused damage to road/two bridge collapses/road closed for 5 months.	• Traffic and Transport • TTA was submitted/presented in EIAR Chapter 15. • Works in relation to passing bays will be carried out under road opening licenses/in accordance with standard road improvement practices. • No significant effects identified/CEMP set out measures to further minimize impacts on road users. • Sightlines have been provided as per Planning Authority Guidelines. • Road safety audits and structural assessments not required at EIAR stage/carried out post consent. • All relevant landowner consents have been submitted.
Impact on Horses/Cattle	
Observers Submission	**Applicants Response**
• **Cattle -** BallyM Charolais Herd is a family-owned company and both generations of the family are involved in the day-to-day activities of same. • Concerns raised relate to BallyM Charolais Herd, Ballymoran Famr and Lumville Stud Farm • Wind farm would present a serious threat to the long term viability and success of these family enterprises • Consists of over 300 animals/graze the fields that would be directly affected by the wake effects, noise, environmental changes caused by the proposed Ballinla Wind Farm	• Available evidence is that WFs do not displace livestock farming or adversely affect the welfare or productivity of domesticated animals. • Reference made to studies that discount theory that noise and movement of turbines annoy or stress wildlife and livestock/lack of effects/animals quickly become habituated to the disturbance. • More disturbed by road noise. • Noise levels are below that which results in stress responses, with reference to a study on same. • Turbine noise is consistent/turbine start up is gradual rather than abrupt/do not cause startle responses.

• Animals are very sensitive to changes in environment/small disturbances can impact fertility, behavior and overall health. • Introduction of wind turbines may cause low-frequency noise, vibration, and altered air movements (wake effects) that could heighten stress levels in breeding animals • Constant movement of turbine blades, combined with increased noise and visual disturbance may unsettle animals, making handling and breeding more difficult • Cannot adopt a 'wait and see' approach • No alternative other than to seek a refusal of the proposed development • Have attached a current health report from our Veterinary surgeon/will serve a reference point for assessing any subsequent changes/report concludes that there is concern about the effect the wind farm development will have on the herd. • Impact on equine industry in the area. • **Horses -** Have firsthand experience of horses being scared and spooked by turbines/when blades are erected and turning/creates danger/also threatens livelihood. • Impact on horses from vibrations, shadow flicker and noise. • Average farm has a noise level of 30-45 decibels/with the presence of turbines within 1000m it increases to 50-70 decibels. • Once noise levels go above 50 decibels it triggers 'fight or flight' in houses. • Intermittent nature of noise. • Mares, pregnant mares and newborn foals are very sensitive to noise and light sensitivity. • Equine industry is worth over 2 billion to the Irish economy • Ireland is the third largest producer of thoroughbred foals in the world. • UK's Secretary of State has refused permission for 9 turbines, partly as a result of impact on nearby equine businesses. • Reference is made to the report of the Planning Inspector on the case, where	• Noise from turbines may be also masked by other sounds in the environment. • Guidance from the British Horse Society (May 2025) reaffirms that there is no evidence of long-term behavioral or welfare impacts. • The nearest turbines are located north of the nearest neighboring equine farm/no impact of shadow flicker on this stud. • No reduction in dairy production is expected to occur/existing dairy herd on site will remain in the fields immediately adjacent to the turbines.

impacts on horses are raised as a concern. • It has been shown that horses have evolved to enable a prompt detection of potential danger/unexpected noises cause rapid flight reactions/most easily scared by noise that arises outside their field of vision/horses can pick up sound at a lower level and at greater distance than that detected by humans – range of hearing is greater to higher frequencies >33kHz while the range for humans is 20 kHz • Can cause sever accidents for horse and rider/handler. • Risk of accidents is increased. • Can impact on food intake, growth, production rates/phycology and behaviours. • An Bord Pleanála (2025) reported that of the 69 energy cases reviewed in the period 2023-2024 several; were refused as a result of proximity to stud farms. • ABP 23-225138 – 07-111 – Tipperary Co. Co. refused permission for biogas/biodiseal production facility due to proximity to horse training establishment/reference is made to the Inspector's report on same. • Wind farm would present a serious threat to the long-term viability and succession of this family enterprise. • Property consists of a Stud Farm which includes 3 No. Dwelling Houses, 2 of which are for staff accommodation, horse stables, sand arena, horse walker, veterinary room, lunging ring, feed room and reception room. • Soil (grey brown podzolic) is ideal for horses to graze. • Stud Farm has bred winners of over 41 Group 1 races. • Lack of engagement. • One of the turbines will be located as close as 300m to the farm/any turbines within 1000m of bloodstock will put them at significant risk. • Insurance impacts. • Average farm has a noise level of 30-45 decibels/with the presence of turbines within 1000m it increases to 50-70 decibels.	

• Once noise levels go above 50 decibels it triggers 'fight or flight' in houses. • Intermittent nature of noise. • Impact of the proposed development on the horse racing and breeding industries. • Wind farm lies in an area where horses of significant value are reared and trained. • Impacts of noise, vibration and flicker. • Impact on foals/animal health.	
Development Potential/Wind Take	
Observers Submission	**Applicants Response**
• Proposed planning application for Ballinla Wind Farm is bounded closely to the south, east and west by Bord na Mona (BNM) lands • BNM would like to highlight an area of concern to ACP/ concerns as outlined above regarding the application of the Wind Energy Guidelines 2006 and the proximity of turbines to its landbank • OCDP 2021, Wind Energy Strategy has designated a large proportion of eastern Offaly as an area deemed '*Open for consideration for Wind Energy development'*. The land proposed for the Ballinla Wind Farm and extensive group of BNM's landbank to both the east, south and west of the proposed Wind Farm lies within this designation. • According to Section 5.13 of the Wind Energy Development Guidelines (DoEHLG, 2006), to protect adjoining land wind energy development potential and requirements for optimal performance "a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance". This was further clarified by the Department of Environment, Heritage and Local Government (DEHLG) Circular Letter PD 6/16 that "rotor blades are to be measured according to rotor diameter, and that a distance of not less than two rotor blades is therefore equivalent to two rotor diameters" • The proposed maximum rotor diameter for Ballinla Wind Farm is 158.7m for all turbines. Best practice dictates a set-	**<u>Wind Take/Distance to Adjoining Lands</u>** • Have been engaging with landowners to understand concerns/happy to explore a cooperation agreement should any future plans for wind energy come forward on adjoining lands. • Wind Energy Guidelines do not require developers to safeguard the future use of adjoining lands for wind energy/reference to 'two rotor blades' is a design optimization consideration rather than a prescriptive control or mechanism to reserve development capacity for third parties. • Similar issues have previously been considered by the Commission, including in ABP Ref PL19.244053. • Note reference to Circular letter PD 6/06 – This circular is not listed on the Department's Official Register, was not issued under Section 28 of the Planning and Development Act 2000 and does not have binding status/it predates the 2006 Guidelines. • Acknowledge concerns raised regarding turbines being within 'fall distance' of certain landholdings/no policy in relation to fall distance. • Structural safety is addressed through turbine certification, engineering standards and building control regime.

back of 317.4m (158.7m x 2) from each turbine to the adjoining land. Three turbines (T5, T6 and T7) are closer than the best practice guidance detailed above. Furthermore, (T5, T6 and T7) are within fall distance of BNM landbank, which creates a risk to BNM owned land during the operational life of the Wind Farm if consented. Please find attached drawing no: BNM_PG_25_19_01_ which demonstrates the turbine locations, an indicative 317.4m buffer applied around the turbines and the distance from the turbines to BNM landholding. • Respectfully request the consenting authority seek clarification if required and to apply the guidance in a consistent manner with respect to the proposed development.	
Other Matters	
Observers Submission	**Applicants Response**
<u>Development Potential</u> • Will not be able to build houses for children and families. • Future planning applications may be objected to by the wind farm and/or refused by the planning authority.	• Development of renewable energy infrastructure, including wind farms, does not preclude or sterilise the potential for future residential development in County Offaly. • CDP does not prohibit residential development in proximity to turbines, provided that standard planning criteria, such as visual impact, noise thresholds, and separation distances, are met.
• Red light at nighttime	• Requirement for a red light is mandated by the Irish Aviation Authority/is a legal requirement. • Turbines will be fitted with medium-intensity red obstacle lights (2000 candelas) equipped with baffles to direct light skywards. • Will be a cumulative effect as a result of other wind farms. • Represents an intensification of an existing effect rather than a new visual effect. • Site is located 2km from Edenderry/number villages, dwellings, agricultural, business structures in the area. • Area is not a remote sparsely populated area/or a dark sky reserve. • Cumulative visual effects have been assessed in the EIAR as well as the potential effects of red lights may have on bats and birds.
• Water Framework Directive	• As per response to PA Submission.
• Property Values	• Addressed in Section 5.4.1.1 of the EIAR/concludes that there is no substantiated basis for widespread or systematic property

	value impacts arising from wind farm developments.
• 2024 High Court Rulings/Webster/Rollo v Meenaclogher (Wind) Limited	• As per response to PA Submission.
• Wake Effect and Temperature Variations	• Peer-reviewed studies show that wake temperature changes are extremely small, typically fractions of a degree and generally less than 1 °C, and occur only under specific atmospheric conditions. • Wake Effects are not a source of environmental, agricultural, equine, or human-health impact.
• Separation distances	• As per response to PA submission above.
• Alternatives including alternative grid connection proposals	• As per response to PA submission above.
• Operational impacts – do not account for need for backup fossil fuel – carbon usage to upgrade	• As per response to PA submission above.
• SID Designation	• Proposed development was determined to qualify as SID though the statutory determination process issued under 28th November 2024. • Basis for this decision is due to the potential MW generating capacity of the proposed development being above 50MW/decision is not made using an estimated energy generation level on a specific wind condition day.
• Landownership/Consent	• All works within the red-lined public road area lie within lands under the control of the public authority, which includes the full extent of the public road/works will proceed under license from the roads authority.
• Oversail by Wind Turbines during delivery.	• The standard in law for trespass is over sail by a fixed object to the ground such as a building, tree or crane and not an object in passing.

26.0 Appendix 2 – Appropriate Assessment Screening Determination (Stage 1)

Screening for Appropriate Assessment - Test for likely significant effects

Step 1: Description of the project and local site characteristics

Case file: ABP 323579-25	
Brief Description of Project	
• Proposed windfarm development of 7 no. Turbines, 110kV substation and associated works.	
Brief description of development site characteristics and potential impact mechanisms	
• It is proposed to construct 7 no. Turbines, 110kV substation, access roads, tracks, landscaping and forestry felling (c. 21ha), underground cabling, excavations and all associated site works. • **Spoil Management:** Excavated material (c. 84,700m³) will be reused or deposited in a designated spoil area with engineered containment. • **Surface Water Management:** Implementation of a drainage system with clean and dirty water separation, settlement ponds, and interceptor channels to protect water quality. • The proposed windfarm requires multiple watercourse crossings, including 4 no. crossings of EPA-registered streams within the proposed windfarm site. These will be implemented using one clear-span bridge and three culverts. Additionally, 9 no. field drains in the northern section and 4 no. forestry drains in the southern section will be crossed using bottomless and box culverts respectively. • The proposed works allow for the delivery of oversized components to the site, temporary works on sections of the public road network and private lands along the turbine delivery route on the L-5006 and the junction of the R-402 and R-420. • Includes for an underground grid connection cable connecting the proposed onsite substation to the national electricity grid via the Philipstown 110kV substation located in the townland of Ballykilleen, Co. Offaly. The cabling will be located within the public road corridor or existing tracks for its entire length. The total length of the proposed GCR is c. 8km. • The Proposed GCR crosses one EPA registered watercourse (Leitrim Stream) and one rail crossing. • A detailed description of the proposed development is provided in Section 2.0 of the Inspectors report and detailed specifications of the proposal are provided in the applicants AA Screening Report / NIS and other planning documents provided by the applicant.	
Screening report	Yes
Natura Impact Statement	Yes
Relevant submissions	
• **Planning Authority** – The Planning Authority have queried the separation distance given between the subject site and the Charleville Wood SAC (i.e. 'nearly 10km downstream'}. The PA note that this SAC is located c. 25km ('as the crow flies'} southwest of the subject site. No other concerns in relation to Appropriate Assessment are raised.	

- **Prescribed Bodies** – No Prescribed Bodies have raised concerns in relation to Appropriate Assessment including Department of Housing, Local Government and Heritage Nature Conservation (DAU).
- **Public Submissions** – An observer has raised concerns in relation to impacts on surrounding surface waters noting the linkages to the River Barrow and River Nore SAC, and potential impacts on spawning habitat for fish.
  I note that observers have raised more general issues in relation to water quality, and biodiversity although not in the specific context of Appropriate Assessment. I have considered these concerns in the relevant sections of this report.

Step 2. Identification of relevant European sites using the Source-pathway-receptor model

8 no. European sites were identified as being located within a potential zone of influence of the proposed development as detailed in the table below;

1. The Long Derries, Edenderry SAC;
2. Raheenmore Bog SAC;
3. River Boyne and River Blackwater SAC;
4. River Boyne and River Blackwater SPA;
5. River Barrow and River Nore SAC;
6. Lough Ennell SPA;
7. Slieve Block Mountains SPA;
8. Charleville Wood SAC.

1. European Site (code)
The Long Derries, Edenderry SAC (Site code: 000925)[34]
Qualifying interests (summary) Link to conservation objectives (NPWS)
• Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] (NPWS 11th November 2021) - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000925.pdf
Distance from Proposed Development
c. 7.6km west of the subject site
Ecological Connections
None identified. As stated in the AA Screening Report, the proposed site boundary is located outside the boundary of the SAC and there is no potential for direct effect. The SAC is designated for terrestrial habitat including dry grasslands and scrubland facies on calcareous substrates. The proposed site is located within a separate WFD River Sub Basin, WFD Sub catchment and WFD Catchment and therefore there is no potential for indirect significant effect via surface water pathways. There is no impact pathway linking the proposed development site to the SAC.
Consider further in screening Y/N
No – As per reasoning above.

2. European Site (code)
Raheenmore Bog SAC (000582)
Qualifying interests (summary) Link to conservation objectives (NPWS)
• Active raised bogs [7110]

[34] I note the AA Screening Report has quoted the incorrect Site Code in Table 8 (000825).

- Degraded raised bogs still capable of natural regeneration [7120]
- Depressions on peat substrates of the Rhynchosporion [7150]

(NPWS 02 Nov 2015)- https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000582.pdf

Distance from Proposed Development

c. 9.8km west of the site.

Ecological Connections

None. The proposed site boundary is located outside the boundary of the SAC and there is no potential for direct effects. This SAC is designated for 3 no. peatland habitats. The proposed site is located within a separate WFD River Sub Basin, WFD Sub catchment and WFD Catchment. There is no potential for indirect significant effects via surface water pathways. There is no pathway linking the proposed site to the SAC. No pathway for likely significant effect on this Natura 2000 Site was identified, and, therefore, the site is not located within the Likely ZOI and is not considered further in this assessment.

Consider further in screening Y/N

No – As per reasoning above.

3. European Site (code)

Lough Ennell SPA (004044)

Qualifying Interests (summary) Link to conservation objectives (NPWS)

Species

- Pochard (Aythya ferina) [A059]
- Tufted Duck (Aythya fuligula) [A061]
- Coot (Fulica atra) [A125]
- Wetland and Waterbirds [A999]

Habitat

- Wetland and Waterbirds [A999]

(NPWS 28th May 2024)

Distance from Proposed Development

c. 19.8km northwest of site

Ecological Connections

None. The proposed site boundary is located outside the boundary of SPA and there is no potential for direct effect. Designated for 3 no. species of wintering waterfowl, including Pochard, Tufted Duck and Coot and for Wetland habitat and associated Waterbirds. The proposed site is located c. 19.8km northwest of Lough Ennell SPA which is outside the core foraging range of the Coot, Tufted Duck and Pochard. Additionally, no large waterbodies suitable for waterbird species are present on site. Indirect impacts on the SCI habitat 'Wetlands' can be ruled out due to the absence of hydrological connectivity, the buffering distance of c. 19.8km between the proposed site and the SPA, and the absence of a complete source-pathway-receptor chain. No pathway for likely significant effects on this Natura 2000 Site is identified.

Consider further in screening Y/N

No – As per the reasoning above.

4. European Site (code)

Slieve Bloom Mountains SPA (004160)

Qualifying interests (summary) Link to conservation objectives
• Hen Harrier (Circus cyaneus)[A082] (NPWS 23rd September 2022)- https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004160.pdf
Distance from proposed development
c.25.3km south-west
Ecological connections
None. The Proposed Development boundary is located outside the boundary of SPA and there is no potential for direct effect. • Designated for Hen Harrier. • Outside of feeding range of Hen Harrier (max 10km) • Indirect impacts on this SCI species can be ruled out due to distance and the absence of a complete source-pathway-receptor chain.
Consider further in screening Y/N
No – As per reasoning above.

5. European Site (code)
Charleville Wood SAC (Site Code: 000571)
Qualifying interests (summary) Link to conservation objectives (NPWS)
• Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016] (NPWS 11th November 2021) - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000571.pdf
Distance from Proposed Development
c. 9.5km west of Ballina (Geashill By) TDR node
Ecological Connections
The SAC is located c. 9.5km west of the Ballina (Geashill By) TDR node, with the nearest watercourse (Annagharvey Stream) situated c. 140m from the TDR works. The SAC supports specialised wet woodland and mollusc habitats which is not present within or adjacent to the proposed site. No suitable habitat for Vertigo moulinsiana was identified within the study area. Works in this area are temporary and confined to surface vegetation clearance and at grade surface modifications with no instream works or significant ground disturbance proposed near sensitive habitats. Given the intervening distance, lack of hydrological connectivity, and absence of suitable habitat, there is no plausible pathway for significant effects. No pathway for likely significant effects on this Natura 2000 Site was identified, and, therefore, the site is not located within the Likely ZOI and is not considered further in this assessment.
Consider further in screening Y/N
No – As per reasoning above.

6. European Site (code)
River Boyne and River Blackwater SAC (002299)
Qualifying Interests (summary) Link to conservation objectives (NPWS)
• Alkaline fens [7230]

- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- Lampetra fluviatilis (River Lamprey) [1099]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]

(NPWS 03rd December 2021) - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002299.pdf

Distance from Proposed Development

c. 17km north of the site

Ecological Connections

Designated for alluvial forests, alkaline fens, river lamprey, salmon and otter. Lamprey, Salmon and Otter are mobile species which could utilise waterbodies within the locality. Applying the precautionary principle, there is potential for indirect species disturbance/displacement impacts via potential impairment of water quality via hydrological link between the proposed site and the SAC, located c. 25km downstream.

Consider further in screening Y/N

Yes – Due to hydrological link identified above.

7. European Site (code)

River Boyne and River Blackwater SPA (004232)

Qualifying Interests (summary) Link to conservation objectives (NPWS)

- Kingfisher (Alcedo atthis) [A229]

(NPWS 02 July 2024) - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004232.pdf

Distance from Proposed Development

c. 17km north of the site

Ecological Connections

Designated for Kingfisher. Applying the precautionary principle there is potential for indirect species disturbance or displacement impacts via potential impairment of water quality via hydrological link between the proposed site and the SPA, located c. 25km downstream.

Consider further in screening Y/N

Yes – Due to hydrological link identified above.

8. European Site (code)

River Barrow and River Nore SAC (002162)

Qualifying interests (summary) Link to conservation objectives (NPWS)

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Reefs [1170]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Mediterranean salt meadows (Juncetalia maritimi) [1410]
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]

- European dry heaths [4030]
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]
- Petrifying springs with tufa formation (Cratoneurion) [7220]
- Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]
- Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]
- Austropotamobius pallipes (White-clawed Crayfish) [1092]
- Petromyzon marinus (Sea Lamprey) [1095]
- Lampetra planeri (Brook Lamprey) [1096]
- Lampetra fluviatilis (River Lamprey) [1099]
- Alosa fallax fallax (Twaite Shad) [1103]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]
- Vandenboschia speciosa (Killarney Fern) [6985]

(NPWS 06th June 2025) - https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf

Distance from Proposed Development
c. 11.2km south of the site
Ecological Connections
Designated for terrestrial habitats, Killarney Fern, Otter, anadromous fish species, and freshwater invertebrates. Applying the precautionary principle there is potential for indirect species disturbance/displacement impacts via potential impairment of water quality via hydrological link between the proposed site and the SAC, located c. 30km downstream.
Consider further in screening Y/N
Yes – Due to hydrological link identified above.

Step 3. Describe the likely effects of the project (if any, alone or in combination) on European Sites

There will be potential direct and indirect impacts on the 3 no. European Sites that have been screened in during all stages of the development. Hence, sources of impact generated by the construction, operation and decommissioning of the development and likely significant effects which require further consideration are detailed in the table below.

Screening Matrix

Possibility of significant effects (alone) in view of the conservation objectives of the site
Site Name
River Barrow and River Nore SAC
Impacts
• Water quality. • Habitat loss or alteration. • Habitat or species fragmentation. • Disturbance and/or displacement of species.

Effects
• Waterborne pollution of qualifying or supporting aquatic habitats during construction and operation, particularly via the Leitrim Stream and Figile River which are hydrologically connected to the SAC. • Alteration of hydrological regimes due to earthworks, drainage installation, and spoil deposition, potentially affecting downstream aquatic habitats. • Disturbance or displacement of qualifying species such as Otter, Atlantic Salmon, Brook Lamprey, and white clawed crayfish due to noise, vibration, and human activity during construction or impairment of water quality. • Habitat fragmentation or degradation of riparian corridors used by mobile aquatic species, particularly at watercourse crossings.
Likelihood of significant effects from proposed development (alone):
Yes
If no, is there likelihood of significant effects occurring in combination with other plans or projects?
N/A

Possibility of significant effects (alone) in view of the conservation objectives of the site
Site Name
River Boyne and River Blackwater SAC
Impacts
• Water quality. • Habitat loss/alteration. • Habitat or species fragmentation. • Disturbance and/or displacement of species.
Effects
• Waterborne pollution of qualifying or supporting aquatic habitats from construction activities along the northern portion of the grid connection route, which drains to the Kinnafad Stream and ultimately to the River Boyne. • Hydrological disruption due to trenching and directional drilling near sensitive aquatic features and potentially affecting downstream aquatic habitats. Disturbance/displacement of qualifying species such as Otter, Atlantic Salmon, River Lamprey or Kingfisher due to noise, vibration, and human activity during construction or impairment of water quality. • Habitat fragmentation or degradation of riparian corridors used by mobile aquatic species, particularly at watercourse crossings. • Collision mortality on Whooper Swans.
Likelihood of significant effects from proposed development (alone):
Yes
If no, is there likelihood of significant effects occurring in combination with other plans or projects?
N/A

Possibility of significant effects (alone) in view of the conservation objectives of the site
Site Name
River Boyne and River Blackwater SPA
Impacts
• Water quality.

• Habitat loss/alteration. • Habitat or species fragmentation.
Effects
• Waterborne pollution of qualifying or supporting aquatic habitats from construction activities along the northern portion of the grid connection route, which drains to the Kinnafad Stream and ultimately to the River Boyne. • Hydrological disruption due to trenching and directional drilling near sensitive aquatic features and potentially affecting downstream aquatic habitats.
Likelihood of significant effects from proposed development (alone):
Yes
If no, is there likelihood of significant effects occurring in combination with other plans or projects?
N/A

Step 4. Conclude if the proposed development could result in likely significant effects on a European site

Following an examination of the proposed development and the likely impacts arising from construction and operation, it has been concluded that, in the absence of mitigation, there is potential for likely significant effects, or significant effects cannot be ruled out at this stage, on the following European sites:

- River Barrow and River Nore SAC (002162).
- River Boyne and River Blackwater SPA (004232).
- River Boyne and River Blackwater SAC (002299).

Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result significant effects on River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).

Collision Risk – Whooper Swan

I note that the AA Screening Report has cited the potential for collisions risk in relation to the Whooper Swan.

The applicants NIS notes the detection of some migratory movements through the area, while observations from visual surveys confirm the presence of a dispersed and mobile wintering population in the region. While there are a number of SPAs in the wider region which include Whooper Swan as an SCI, none occur in proximity to the proposed site, with the closest (Lough Derravarragh SPA) located c. 32km northwest, and 3 no. other SPAs located to the northwest and west at distances ranging from c. 34km to c. 50km from the site. Considering the direction of arrival for wintering whooper swans coming from Iceland is from the north, swans migrating to winter at these SPAs would be unlikely to traverse the proposed site en-route.

For Whooper Swans travelling further south, there are no defined links with SPAs due to the larger distances to other SPAs and the fact that numerous non-SPA wintering populations are dispersed throughout the country.

It is also noted that a population of wintering Whooper Swan is associated with the River Boyne and River Blackwater SAC (Site Synopsis, NPWS, 2014), although Whooper Swan is not listed as a specific Qualifying Interest of the SAC.

The applicants NIS states that although Whooper Swan are not a QI for the River Boyne and River Blackwater SAC, the presence of a wintering whooper swan population associated with the River Boyne and River Blackwater SAC is noted in the site synopsis and as a result collision mortality on Whooper Swans is considered and appraised on a precautionary basis.
Collision risk has been appraised on a precautionary basis, following guidance outlined in Percival (2003, 2007). Scientific literature indicates low collision mortality rates for Whooper Swans, even at sites with high transit activity. For example, Fijn et al. (2012) recorded only one fatality among 1,664 transit flights through operational wind farms. Similarly, Hötker et al. (2006) reported a single Whooper Swan fatality across 46 wind farms in eight countries. Recommended avoidance rates from Scottish Natural Heritage (SNH, 2010) are 99.5%, suggesting high micro-avoidance of turbines.
The NIS further notes that Radar-based studies (Desholm & Kahlert, 2005) have shown that macro-avoidance rates during nocturnal periods are comparable to or higher than those observed during daylight, indicating effective avoidance behaviour even under low visibility conditions. Based on these findings, the predicted collision risk for Whooper Swan is 0.01 individuals per year. This equates to approximately 0.000% of national population, 0.002% county population and 0.029% local population.
Given the low predicted collision risk, the high avoidance rates documented in peer-reviewed literature, and the limited scale of disturbance, it is concluded beyond reasonable scientific doubt that the proposed development will not result in adverse effects on the integrity of the River Boyne and River Blackwater SAC in relation to Whooper Swan.

I am satisfied there will be no significant impact on Whooper Swans due to the low predicted collision risk as summarised above.
However, I concur with the applicant's findings that other impacts identified as outlined above could be significant in terms of the stated conservation objectives of the SPA and SACs.

Screening Determination - Finding of Likely Significant Effects

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects on the

River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299) in view of the conservation objectives of a number of qualifying interest features of those sites.

It is therefore determined that Appropriate Assessment (Stage 2) under Section 177V of the Planning and Development Act 2000 of the proposed development is required.

27.0 Appendix 3 – Appropriate Assessment (Stage 2)

Table 27.1 Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section.

Introduction (Stage 2 Assessment)

The following is an Appropriate Assessment based on the conclusion of the AA Screening in Appendix 2 of this report, that the proposed development is likely to have a significant effect on 3 no. European Designated sites, River Barrow and River Nore Special Area of Conservation (SAC) (002162), River Boyne and River Blackwater Special Protection Area (SPA) (004232) and River Boyne and River Blackwater SAC (002299). 'alone' in respect of effects associated with construction and operation, specifically the risk of suspended solids and pollutants being released into the watercourses, which are hydrologically linked to the European Sites and potential disturbance on otter.

The following section of my report provides a summary matrix for the 3 no. European Sites identified, providing details of the location of SACs or SPA sites in relation to the proposed windfarm site. I provide a description of the relevant European Sites from the site synopsis on the NPWS website and provide an identification of the relevant qualifying features that could be impacted from each of the European Sites. I then assess the potential impacts on the qualifying interests and whether mitigation measures are required to protect the European Sites.

This assessment has had regard to relevant guidance including:

- Office of the Planning Regulator (OPR) (2021) AA Screening for Development Management: OPR Practice Note PN01
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites. Methodological guidance on Article 6(3) and 6(4) of the Habitats Directive 92/43/EC. EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC
- Department of Environment, Heritage and Local Government (2010) AA of Plans and Projects in Ireland – Guidance for Planning Authorities
- NPWS (2010) AA under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V [or S 177AE] of the Planning and Development Act 2000 (as amended) are considered fully in this section.

Taking account of the preceding screening determination, the following is an appropriate assessment of the implications of the proposed development of Ballinla Wind Farm comprising of 7 no. wind turbines in Co. Offaly in view of the relevant conservation objectives of River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).
The information relied upon includes the following:

- 'Screening for Appropriate Assessment Report and Natura Impact Statement' (August 2025)
- Environmental Impact Assessment Report (and Associated Appendices) (August 2025)
- National Parks and Wildlife Service Website (www.npws.ie)

Submissions/Observations
As per Appendix 2: AA Screening

- River Barrow and River Nore SAC (002162);
- River Boyne and River Blackwater SAC (002299); and
- River Boyne and River Blackwater SPA (004232)

Summary of Key issues that could give rise to adverse effects (from screening stage):

(i) Water quality.
(ii) Habitat loss/alteration.
(iii) Habitat or species fragmentation.
(iv) Disturbance and/or displacement of species.

Surface Water quality degradation (and subsequent effects on QI habitats and species)

Section 5.1.1 of the NIS states that the River Barrow and River Nore SAC (Site Code: 002162), the River Boyne and River Blackwater SAC (Site Code: 002299) and the River Boyne and River Blackwater SPA (004232) have been screened-in for AA due to hydrological connectivity via the Leitrim Stream and Kinnafad Stream, respectively. It is noted that these watercourses provide indirect pathways through which pollutants could potentially affect the qualifying aquatic habits and species of these SACs/SPA, notwithstanding the downstream distance to the Natura 2000 sites (between c. 25km and 30km).

The River Barrow and River Nore SAC is designated for a range of aquatic and riparian features, including Atlantic Salmon, White-Clawed Crayfish, Lamprey species and Alluvial Forests.

The River Boyne and River Blackwater SAC supports qualifying interests such as River Lamprey, Salmon, Otter and Alkaline Fens.

The River Boyne and River Blackwater SPA, is designated for Kingfisher, which requires high quality aquatic habitats to support its prey resource.

During the construction phase, activities such as excavation, vegetation clearance, watercourse crossings and soil deposition pose a risk of introducing pollutants into surface water pathways.

Alteration of Hydrological Regimes

Section 5.1.2 of the NIS states that construction activities have the potential to alter surface and subsurface hydrological regimes, which could affect downstream aquatic habitats and qualifying species.

In relation to the River Barrow and River Nore SAC, the NIS states that groundwater-dependant habitats such as petrifying springs, alluvial forest and watercourses with *anunculion fluitantis* and *Callitricho-Batrachion* vegetation could be affected by subsurface hydrological regimes, noting that such features are vulnerable to changes in water flow, sediment transport and nutrient cycling.

Similarly, qualifying interests of the River Boyne and River Blackwater SAC that could be affected include Alkaline Fens, Alluvial Forests, as well as Salmon, Lamprey species, White-Clawed Crayfish, Otter and Kingfisher.

In-situ and Ex-situ Habitat loss/alteration. Habitat or species fragmentation.
There is no spatial overlap between the subject site and any Natura 2000 site; therefore, there will be no landtake and no direct habitat loss or alteration impacts within any Natura 2000 site. There is potential for indirect species disturbance or displacement due to in-situ or ex-situ habitat loss.

Disturbance and/or displacement of Qualifying Aquatic and Riparian Species
The River Barrow and River Nore SAC, the River Boyne and River Blackwater SAC and the River Boyne and River Blackwater SPA (004232) have been screened-in for AA due to the presence of qualifying aquatic and riparian species that are sensitive to disturbance, including Atlantic Salmon, Brook and River Lamprey, White-Clawed Crayfish, Otter and Kingfisher.
Field surveys recorded otter spraint along the Leitrim River, confirming the presence of this species within the study area, although no holts, couches or breeding/resting sites were identified. Notwithstanding, there is potential for construction activities to disrupt commuting and foraging routes. In addition, instream noise and vibration could affect fish behaviour and spawning success, particularly for salmonids and lamprey species, noting one brook lamprey was recorded during field surveys.

I have considered potential impacts on qualifying habitats and species associated with The River Barrow and River Nore SAC (Site Code: 002162), The River Boyne and River Blackwater SAC (Site Code: 002299) and The River Boyne and River Blackwater SPA (004232) with reference to information within the NIS, and as available on the NPWS website.

Site Synopsis
1. River Barrow and River Nore SAC
With reference to the Site Synopsis on the NPWS Website, the SAC lies within 8 no. counties and comprises almost the entire freshwater element of the Barrow River and Nore Rivers, and their tributaries, stretching as far upstream as the Slieve Bloom Mountains. It also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford.

2. River Boyne and River Blackwater SAC

This site comprises the freshwater element of the River Boyne as far as the Boyne Aqueduct, the Blackwater as far as Lough Ramor and the Boyne tributaries including the Deel, Stoneyford and Tremblestown Rivers. These riverine stretches drain a considerable area of Meath and Westmeath, and smaller areas of Cavan and Louth.

3. River Boyne and River Blackwater SPA

The River Boyne and River Blackwater SPA is a long, linear site that comprises stretches of the River Boyne and several of its tributaries. Most of the site is in Co. Meath, but it extends also into Counties Cavan, Louth and Westmeath. The site is an SPA under the E.U. Birds Directive of special conservation interest for Kingfisher.

Site Specific Conservation Objectives

Site-specific conservation objectives have been set by the NPWS for the Qualifying Interests (QI's) for which the above Natura 2000 sites are designated. Table 27.2 below is an assessment of whether the potential impacts identified above could adversely affect the integrity of the above Natura 2000 sites having regard to the attributes, measures, and targets that would be expected to define the favourable conservation condition of the QIs of the above Natura 2000 sites and makes reference to the NIS and to the NPWS website.

Table 27.2 – Potential Adverse Effects

Qualifying Interest features likely to be affected	**Conservation Objectives** **Targets and attributes (summary)**[35]	**Potential Adverse Effects**
River Barrow and River Nore SAC		
Estuaries (1130)	Maintain favourable Conservation Condition. Targets include but not limited to: The permanent habitat area is stable or increasing, subject to natural processes	Significant impacts unlikely noting location of habitat which is at least 90 km south-east of from the site (and a greater distance downstream of the site)
Mudflats and sandflats not covered by seawater at low tide (1140)	Maintain favourable Conservation Condition. Target is the permanent habitat area is stable or increasing.	Significant impacts unlikely noting location of habitat which is at least c100km south-east of the site, (and a greater distance downstream of the site)

[35] See https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf for full text of same.

Salicornia and other annuals colonizing mud and sand [1310]	To maintain the favourable conservation condition Target is area stable or increasing, subject to natural processes	Significant impacts unlikely noting location of habitat which is at which is at least c100km south-east of the site, (and a greater distance downstream of the site)
Atlantic salt meadows [1330]	To restore the favourable conservation condition Target is area stable or increasing, subject to natural processes, including erosion and succession.	Significant impacts unlikely noting location of habitat which is at which is at least c100km south-east of the site, (and a greater distance downstream of the site)
Mediterranean salt meadows [1410]	To restore the favourable conservation condition Target is area stable or increasing, subject to natural processes, including erosion and succession.	Significant impacts unlikely noting location of habitat which is at which is at least c100km south-east of the site, (and a greater distance downstream of the site)
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	Maintain favourable Conservation Condition Target is no decline, subject to natural processes.	As per information on the NPWS website, the full distribution of this habitat and its sub-types is unknown. The NIS cites potential for impacts on aquatic habitats (although does not cite this habitat specifically). Notwithstanding, and applying the precautionary approach, there is a potential hydrological link to same via the Leitrim and Kinnefad Streams. The proposed project has the potential to result in the degradation of water quality within watercourses located downstream with a potential adverse effect on this habitat.
European dry heaths [4030]	To maintain the favourable conservation condition Target is no decline in habitat distribution from current habitat distribution	No. Documentation on the NPWS website indicates that this habitat occurs on steep, free-draining, river valley sides especially the Barrow and tributaries in the foothills of the Blackstairs Mountains which are located at least 80km south-east of the proposed project site. There is also possible habitat at Ballyhack, Co. Wexford which is in excess of 100km from the site. Given said distance, and its terrestrial nature, there is no potential for impacts.
Hydrophilous tall herb fringe communities	To maintain the favourable	As per information on the NPWS website, the distribution of this habitat is unknown. Notwithstanding, and applying the precautionary

of plains and of the montane to alpine levels [6430]	conservation condition Target is no decline in habitat distribution	approach, there is a potential hydrological link to same via the Leitrim and Kinnefad Streams. The proposed project has the potential to result in the degradation of water quality within watercourses located downstream with a potential adverse effect on this habitat.
Petrifying springs with tufa formation (Cratoneurion) [7220]	To maintain the favourable conservation condition Target is habitat area stable of increasing, subject to natural processes.	The NPWS website states that the extent of this habitat is unknow. Notwithstanding, and as cited in the NIS, the proposed the proposed project has the potential to result in the alteration of hydrological regimes, which could impact on groundwater dependant habitats such as petrifying springs, noting same are water flow, sediment transport, and nutrient cycling.
Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (91A0)	Restore favourable conservation condition. No decline in habitat distribution.	No. This habitat type is mapped at locations c. 100km south of the proposed project, north and south of the confluence of the River Nore and the River Barrow. The NPWS notes that there may be other areas not surveyed. Notwithstanding, considering the separation distance of the known locations of thus Annex I habitat and considering also the terrestrial nature of same, there is no potential for impacts.
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (91E0)	Restore favourable conservation condition. No decline in habitat distribution.	The NPWS website indicates that there are pockets of this habitat distributed over a larger geographical area, although it is also indicated that there may be unmapped areas. as cited in the NIS, the proposed the proposed project has the potential to result in the impacts on water quality and impacts on the hydrological regime, both of which could impact on habitats such as alluvial forests.
Killarney Fern [1421]	Maintain favourable Conservation Condition Targets, includes but not limited to, no decline in distribution.	According to the NPWS website, this species type is located at least 95km south of the proposed project. Considering the separation distance of the Annex I species and its terrestrial nature, there is no potential for impacts (direct or indirect) from the proposed project.
Reefs [1170]	Maintain favourable Conservation Condition Target is the permanent area of habitat is stable or increasing, subject to natural processes	This habitat type is located c. 120 km South-east of the proposed project. Considering the separation distance of the Annex I habitat there is no potential for impacts.
Desmoulin's Whorl Snail [1016]	Maintain favourable Conservation Condition	Data illustrates that Desmoulin's whorl snail is located c. 80km south-east of the proposed project near the River Barrow. There is another location indicated which is not downstream of the site and therefore there is no hydrological

	Target is no decline in the distribution of occupied sites.	connection to same. Notwithstanding, and applying the precautionary approach, there is a potential hydrological link via the Leitrim and Kinnefad Streams. **Water Quality/Hydrological Alteration** The proposed project has the potential to result in the degradation of water quality within watercourses located downstream with a potential adverse effect on this species.
Freshwater Pearl Mussel [1029]	To restore the Favourable conservation condition Target relates factors such as distribution and population size at 3 no. sites as well as factors such as habitat extent and condition.	NPWS data illustrates that Freshwater Pearl Mussel is located at 2 no. sites c. 85 km south-east of the proposed project near the River Barrow (referred to as Mountain and Ballymurphy) as well as another location that is not downstream of the site (Nore). Notwithstanding, and applying the precautionary approach, there is a potential hydrological link to the downstream sites via the Leitrim and Kinnefad Streams. **Water Quality/Hydrological Alteration** The proposed project has the potential to result in the degradation of water quality within watercourses located downstream with a potential adverse effect on the Ballymurphy and, Mountain freshwater pearl mussel populations, downstream from the project site.
White-clawed Crayfish [1092]	To maintain the favourable conservation condition Targets include no reduction in distribution from baseline.	Yes. NPWS indicates species present throughout the SAC. **Water Quality/Hydrological Alteration** The proposed project has the potential to result in the degradation of water quality and aquatic habitat. Potential for negative impacts having regard to the conservation objectives for this species. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Sea Lamprey [1095]	To restore the favourable conservation condition Targets include no decline in extent and distribution of spawning habitat.	Yes. Species limited to lower stretches due to artificial barriers. However, the proposed project has the potential to result in the degradation of water quality and aquatic habitat downstream of the site. **Water Quality/Hydrological Alteration** The degradation of water quality on the main Barrow channel downstream of the proposed project, can reduce the availability of suitable

		habitat and would constitute an adverse effect on the integrity of the site. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Brook Lamprey [1096]	To restore the favourable conservation condition Targets include no decline in extent and distribution of spawning beds.	Yes. There is potential for this species to be present within the locality of the site (noting 1 no. record of same was recorded in the Study Area, although it was concluded that same did not indicate a viable population, due to stream conditions) and downstream within the SAC. **Water Quality/Hydrological Alteration** The proposed project has the potential to result in the degradation of water quality downstream of the site. The degradation of water quality can reduce the availability of suitable habitat and would constitute an adverse effect on the integrity of the site. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
River Lamprey [1099]	To restore the conservation condition. Targets include no decline in extent and distribution of spawning beds.	Yes. There is potential for this species to be present within the locality of the site and downstream within the SAC. **Water Quality/Hydrological Alteration** The proposed project has the potential to result in the degradation of water quality downstream o of the site. The degradation of water quality can reduce the availability of suitable habitat and would constitute an adverse effect on the integrity of the site. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Twaite Shad *Alosa fallax*	Restore favourable conservation condition. Target include no decline in the extent and distribution of spawning habitat.	Yes. While the NPWS notes that artificial barriers can limit species to lower stretches, regular breeding has been confirmed in the River Barrow. As such there is potential for this species to be present downstream within the SAC, **Water Quality/Hydrological Alteration** A degradation in water quality could lead to a reduction in availability of suitable habitat and would constitute an adverse effect on the integrity of the site.

		Disturbance Disturbance/displacement due to noise, vibration, and human activity during construction.
Atlantic Salmon *Salmo salar (only in fresh water)* (1106)	Restore favourable conservation condition. Targets include no decline in number and distribution of spawning redds due to anthropogenic causes	Yes. While the NIS notes that the Leitrim Stream was considered unsuitable for Salmon spawning. However, the Field Study notes that salmonoids were found at Site 10 (Leitrim River) and Site 12 (Esker Stream) (Section 4.2.3.4.4.2 of the NIS refers). As such, Salmon may occur downstream of the proposed project site. **Water Quality/Hydrological Alteration** A reduction in water quality has the potential to negatively impact suitable spawning habitats. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Otter [1355]	Restore favourable conservation condition. Target includes no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass.	Yes. Field surveys recorded otter spraint along the Leitrim River, confirming the presence of this species within the study area. Otter may occur within the locality and also upstream and downstream of proposed project site, and within water bodies within the hydrological pathway from the proposed project. Degradation in water quality can impact fish and other aquatic species, result in a decline in available feeding resources for otter, negatively impacting the local population of otter within the SAC. **Disturbance** There is potential that the proposed construction works may result in the disturbance of otter when foraging or commuting nearby temporary construction lighting may be required outside of daylight hours during the construction works. Direct lighting on a holt or along river corridor may disturb otter within the area. There is therefore potential for impact on this species, and adverse effects on the integrity of the site.

Qualifying Interest features likely to be affected	Conservation Objectives Targets and attributes (summary)[36]	Potential adverse effects
River Boyne and River Blackwater SAC (002299)		
Alkaline fens [7230]	To maintain favourable conservation condition Habitat area stable or increasing, subject to natural processes.	As per the NPWS website, alkaline fen has not been mapped in detail for River Boyne and River Blackwater SAC and thus the exact total current area of the qualifying habitat in the SAC is currently unknown, although there are a number of documented sites. As such, such there is potential for this habitat to be present downstream within the SAC. **Water Quality/Hydrological Alteration** The NIS notes that such habitats are sensitive to sedimentation and nutrient enrichment, and hydrological alteration. A degradation in water quality could therefore lead to a reduction in availability of suitable habitat and would constitute an adverse effect on the integrity of the site.
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore favourable conservation condition. Targets include but are not limited to Habitat area stable or increasing, subject to natural processes.	The NPWS website indicates that there is an area of this habitat mapped in a 2 no. locations, Grove Island and Yellow Island (located c. 67km north-east of the site) although it is also indicated that there may be unmapped areas. As cited in the NIS, the proposed the proposed project has the potential to result in the impacts on water quality and impacts on the hydrological regime, both of which could impact on habitats such as alluvial forests. **Water Quality/Hydrological Alteration** The NIS notes that such habitats are sensitive to sedimentation and nutrient enrichment, and hydrological alteration. A degradation in water quality could therefore lead to a reduction in availability of suitable habitat and would constitute an adverse effect on the integrity of the site.
Lampetra fluviatilis (River Lamprey) [1099]	Restore favourable conservation condition. Targets include Mean density of brook/river larval lamprey	There is potential for this species to be present downstream within the SAC. **Water Quality** The proposed project has the potential to result in the degradation of water quality downstream of the site. The degradation of water quality can

[36] For full text, see https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002299.pdf

	in sites with suitable habitat more than 5/m²	reduce the availability of suitable habitat and would constitute an adverse effect on the integrity of the site. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Salmo salar (Salmon) [1106]	Restore favourable conservation condition. Targets include no decline in number and distribution of spawning redds due to anthropogenic causes	Yes. While the NIS notes that the Leitrim Stream was considered unsuitable for Salmon spawning. However, the Field Study notes that salmonoids were found at Site 10 (Leitrim River) and Site 12 (Esker Stream) (Section 4.2.3.4.4.2 of the NIS refers). As such, Salmon may occur downstream of the proposed project site. **Water Quality/Hydrological Alteration** A reduction in water quality has the potential to negatively impact suitable spawning habitats. **Disturbance** Disturbance/displacement due to noise, vibration, and human activity during construction.
Lutra lutra (Otter) [1355]	Maintain favourable conservation condition. Target includes no significant decline in distribution of extent of terrestrial, marine and freshwater habitat or couching sites, holts and fish biomass.	Yes. Field surveys recorded otter spraint along the Leitrim River, confirming the presence of this species within the study area. Otter may occur within the locality and also upstream and downstream of proposed project site, and within water bodies within the hydrological pathway from the proposed project. **Water Quality** Degradation in water quality can impact fish and other aquatic species, result in a decline in available feeding resources for otter, negatively impacting the local population of otter within the SAC. **Disturbance** There is potential that the proposed construction works may result in the disturbance of otter when foraging or commuting nearby temporary construction lighting may be required outside of daylight hours during the construction works. Direct lighting on a holt or along river corridor may disturb otter within the area There is therefore potential for impact on this species, and adverse effects on the integrity of the site.

Qualifying Interest features likely to be affected	Conservation Objectives Targets and attributes (summary)[37]	Potential adverse effects
River Boyne and River Blackwater SPA (004232)		
Kingfisher (Alcedo atthis) [A229]	To maintain the favourable conservation condition Targets include, but are not limited to: **Water Quality** - Both biotic (i.e. Q-value) and abiotic indices reflect overall good-high quality status Forage spatial distribution, extent, abundance and availability - Sufficient number of locations, area of suitable forage habitat and available forage biomass to support the population target	**Water Quality** The proposed project has the potential to result in the degradation of water quality downstream of the site. The degradation of water quality could adversely affect the water quality status and also reduce available forage biomass.

Mitigation Measures and Conditions

Section 6 of the NIS sets out Mitigation Measures. I note that Mitigation Measures are also set out in Section 5.1 of the NIS. At construction stage and decommissioning stages, best practice construction measures will be implemented in relation to pollution risk, sediment management and management of surface runoff rates and volumes, with these measures also set out in the CEMP (As included in Appendix 3 of the NIS). Measures include but are not limited to:

Emergency Procedures

- Use of Spill Kits on the event of a leak or a spill, removal of contaminated soil from the site.

Surface Water Management

- Swales and filter drains to intercept and convey runoff
- Check dams and level spreaders to reduce flow velocity and promote infiltration
- Settlement ponds and silt traps to capture suspended solids before discharge
- Clean water will be diverted around work areas to prevent contamination
- No direct discharges to watercourses; all outflows will be via vegetated dispersion channels

[37] For full text, see https://www.npws.ie/protected-sites/spa/004232

Instream Works

- Adherence to relevant guidelines [i.e. IFI (2016), TII (2008), and CIRIA C648 (2006)] Ecological Clerk of Works to oversee works
- Use of silt fences and sediment controls
- Use of precast concrete culvert to minimise stream disturbance

Pollution Control

- 20m buffer around EPA mapped watercourses/limited access only for essential works
- Use of double silt fencing
- Spoil and stockpiles located away from drainage systems and regrading to prevent runoff
- Appropriate handling of hydrocarbons, appropriate storage for fuel and oils and appropriate management of cementitious materials.

Hydrological and Hydrogeological Flow

- Site specific surface water management system including the use of swales, filter drains, check dams, levels spreaders and settlement ponds
- Use of HDD for sensitive crossings (Leitrim Steam and Bord na Móna rail track)/drill paths set at least 1.5m below the watercourse to avoid interaction with shallow aquifers or groundwater dependant ecosystems.
- Groundwater levels will be monitored throughout construction and dewatering practices adjusted as needed

Riparian Habitat Protection

- Vegetation will be retained where possible/reinstated using native species following construction
- Works adjacent to riparian zones fenced off/use of silt fences and geotextile membranes
- Monitoring of habitat condition

Monitoring Measures

- EcOW will oversee sensitive works and conduct water quality monitoring
- Monitoring will be intensified during high-risk activities
- Records will be maintained and made available to the Planning Authority

Disturbance/Displacement of Qualifying Aquatic and Riparian Species (Section 5.1.3 of the NIS refers)

- Directional lighting – all site lighting will be fitted with cowls and directed away from riparian zones to prevent light spill into sensitive habitats
- Noise suppression including the use of EC-complaint machinery
- Scheduling of work outside sensitive periods for aquatic species
- Retention of riparian features

Operational Phase Measures

- Noting that the potential effects identified at Stage 1 (Screening) and at Stage 2 (AA) all relate to construction stage activities, no operational stage mitigation measures are proposed.

Assessment of issues that could give rise to adverse effects view of conservation objectives

With respect to each of the matters addressed below I note that the Planning Authority, nor the Department of Housing, Local Government and Heritage has not raised any concerns in respect of issues that could give rise to adverse effects on the European site in view of its conservation objectives.

(i) Water quality degradation

There is potential for overland flow of construction and decommissioning stages for silt/pollutants from the project site to enter into local surface water bodies, and subsequently into the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299). This could result in indirect habitat loss or deterioration as well as a potential reduction in density of a number of qualifying aquatic species, as set out in the table above.

This above mechanism has the potential to undermine the respective SSCO attribute and targets in relation to the relevant QI species cited above, and QI habitats which may be impacted by a decline in water quality. This mechanism could have also result in an indirect effect on Otter populations resulting from impacts on fish biomass available and/or distribution. This has the potential to undermine the respective SSCO attribute and target in relation to the decline of couching sites and holts, fish biomass available and/or distribution.

The NIS sets out a range of mitigation measures to minimise the risk of sediments and pollutants entering surrounding surface water bodies and I am satisfied same would prevent adverse effects on the integrity of the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).

(ii) Alteration of the Hydrological Regime

At construction and decommissioning stages, there is the potential for alteration of hydrological regimes due to watercourse crossings, land re-profiling and drainage modifications, including surface water and groundwater flows, which could impact on surface water, and groundwater dependant habitats such as noting same sensitive to water flow, sediment transport, and nutrient cycling, as well direct and indirect impacts on qualifying QI aquatic species, and indirect impacts as otter, as a result of reduced biomass availability.

This above mechanism has the potential to undermine the respective SSCO attribute and targets in relation to the relevant QI species cited above, and QI habitats which may be impacted by such alteration of the hydrological regime. This mechanism could have also result in an indirect effect on Otter populations resulting from impacts on fish biomass available and/or distribution. This has the potential to undermine the respective SSCO attribute and target in relation to the decline of couching sites and holts, fish biomass available and/or distribution.

The NIS sets out a range of mitigation measures to minimise the risk of said alteration of hydrological flows, and I am satisfied same would prevent adverse effects on the integrity of

the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).

(iii) Disturbance (Aquatic Species/Otter)
For the reasons previously cited, the proposed project could result in disturbance to aquatic species and otter. As such the proposed development, the potential to undermine the respective SSCO attribute and targets in relation to said QI species.

The NIS sets out a range of mitigation measures, to minimise the risk of said disturbance and I am satisfied same would prevent adverse effects on the integrity of the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).

In-Combination effects
Section 5.1.6 of the NIS considers 'In-Combination' Effects. A review of relevant plants and projects was carried out, including permitted and proposed developments, as described in Table 6 of the NIS (Section 4.3). This includes other windfarm developments in the wider area. In combination effects with relevant plans and projects are ruled out within the NIS.

I am satisfied that in-combination effects have been assessed adequately in the NIS. I am satisfied that the applicant has demonstrated satisfactorily that no significant residual effects will remain post the application of mitigation measures and there is therefore no potential for in-combination effects.

Findings and Conclusions
The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans or projects, will not adversely affect the integrity of the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).

Based on the information provided, and submissions made, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299) as considered in the NIS. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented and conditioned if permission is granted.

Reasonable Scientific Doubt
I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity
The proposed development will not affect the attainment of the Conservation objectives of the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299) in view of the conservation objectives of the sites, and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS, all associated material submitted including further information and submissions/observations, I consider that adverse effects on site integrity of the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- A detailed assessment of construction, operational and decommissioning impacts.
- The effectiveness of the mitigation measures proposed.
- The inclusion of planning conditions to ensure the application of these measures.
- The proposed development will not affect the attainment of conservation objectives for the River Barrow and River Nore SAC (002162), River Boyne and River Blackwater SPA (004232) and River Boyne and River Blackwater SAC (002299).