

Your details

- 1. Appellant's details (person making the appeal) Your full details:
 - (a) Name

Inchamore Wind Designated Activity Company

(b) Address

Inchamore Wind Designated Activity Company C/O Futurenergy Ireland 27/28 Herbert Place Dublin 2 D02 DC97 Ireland

Agent's details

2. Agent's details (if applicable)

If an agent is acting for you, please **also** provide their details below. If you are not using an agent, please write "Not applicable" below.

(a) Agent's name

Shirley Bradley

Planning Appeal Form April 2019

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(b)	Agent's address	ss Jennings O'Donovan & Partners Ltd			
		Finisklin Business Park			
		Sligo			
		Ireland			
		F91 RHH9	-		

Planning Appeal Form April 2019

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Postal address for letters

30 3

3. During the appeal we will post information and items to you or to your agent. For this appeal, who should we write to? (Please tick ✓ one box only.)

You (the appellant) at the	The agent at the address in	1
address in Part 1	Part 2	

Details about the proposed development

4. Please provide details about the planning authority decision you wish to appeal. If you want, you can include a copy of the planning authority's decision as the appeal details.

(a) Planning authority

(for example: Ballytown City Council)

Cork County Council

(b) Planning authority register reference number

(for example: 18/0123)

23/05145

(c) Location of proposed development

(for example: 1 Main Street, Baile Fearainn, Co Ballytown)

Townlands of Inchamore (na hInse Móire), Milleeny (na Millíní) and Derreenaling (an Doirín Álainn), in Co. Cork.

Planning Appeal Form April 2019

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Appeal details

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5. Please describe the grounds of your appeal (planning reasons and arguments). You can type or write them in the space below or you can attach them separately.

Please see the attached.

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Supporting material

8

- **6.** If you wish you can include supporting materials with your appeal. Supporting materials include:
 - photographs,
 - plans,
 - surveys,
 - drawings,
 - digital videos or DVDs,
 - technical guidance, or
 - other supporting materials.

Acknowledgement from planning authority (third party appeals)

7. If you are making a third party appeal, you **must** include the acknowledgment document that the planning authority gave to you to confirm you made a submission to it.

Fee

8. You **must** make sure that the correct fee is included with your appeal. You can find out the correct fee to include in our Fees and Charges Guide on our website.

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Oral hearing request

1

9. If you wish to request the Board to hold an oral hearing on your appeal, please tick the "yes, I wish to request an oral hearing" box below.

Please note you will have to pay an **additional non-refundable fee** of €50. You can find information on how to make this request on our website or by contacting us.

If you do not wish to request an oral hearing, please tick the "No, I do not wish to request an oral hearing" box.

Yes, I wish to request an oral hearing



No, I do not wish to request an oral hearing

NALA has awarded this document its Plain English Mark Last updated: April 2019.



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6226/400/407/002/SB

6th March 2024

The Secretary, An Bord Pleanála, 64 Marlborough Street, Dublin 1, **D01 V902.**

Re: <u>First Party Planning Appeal – Inchamore Wind DAC</u>

Dear Sir/Madam,

On behalf of our client, Inchamore Wind DAC, 27/28 Herbert Place, Dublin 2, D02 DC97, we hereby submit a First Party Appeal against the decision of Cork County Council to refuse planning permission under planning application reference PL 23/05145 on the 9th February 2024 for the below development within the townlands of Inchamore, Milleeny and Derreenaling in Co. Cork:

- 1. A wind farm with an operational lifespan of 35 years (from the date of commissioning of the development).
- 2. The construction of five turbines with an overall ground to blade tip height ranging from 177 m to 185 m inclusive; a rotor diameter ranging from 149 m to 155 m inclusive; and a hub height ranging from 102.5 m to 110.5 m inclusive.
- 3. Construction of permanent turbine hardstands and turbine foundations.
- 4. Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing.
- 5. Installation of a (35-year life cycle) meteorological mast with a height of 110 m and a 4 m lightning pole on top, such that the overall structure height will be 114 m.
- 6. Development of one on-site borrow pit.
- 7. Construction of new permanent internal site access roads and upgrade of existing internal site access roads to include passing bays and all associated drainage infrastructure.
- 8. Development of a permanent internal site drainage network and sediment control systems.
- 9. Construction of a permanent 38 kV electrical substation including a control building with welfare facilities, all associated electrical plant and equipment, parking, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works.
- 10. All associated underground electrical and communications cabling connecting the wind turbines to the on-site wind farm substation.
- 11. Ancillary forestry felling to facilitate construction of the Development.
- 12. All associated site development works including berms, landscaping, and soil excavation.

Directors: D. Kiely, C. McCarthy Regional Director: A. Phelan Consultants: C. Birney, R. Gillan

 Senior
 R. Davis, S. Gilmartin, J. Healy, S. Lee,

 Associates:
 J. McElvaney, T. McGloin, S. Molloy

 Associates:
 B. Coyle, D. Guilfoyle, L. McCormack,

 C. O'Reilly, M. Sullivan
 Company Reg No. 149104

 VAT Reg. No. IE6546504D
 1



Advisory note: A planning appeal was granted by An Bord Pleanála (ABP-317889-23) in relation to the elements of the Project that are within the townland of Derryreag (Dhoire Aimhréidh) Co. Kerry, including the upgrade of the site entrance off the N22 and permanent forest track upgrade works. As a matter of familiarity and efficiency, it is our request that the same planning inspector for ABP-317889-23, Rachel Gleave O'Connor, is provided with this appeal.

The requisite fee of €3,000.00 has been paid to An Bord Pleanála by Credit Card.

Accordingly, we enclose the following documents for your consideration:

- Grounds of Appeal Document
- Completed Planning Appeal Form

We look forward to receiving your formal acknowledgment of this Planning Appeal in due course.

Yours faithfully,

Shirley Bradley

Shirley Bradley For: Jennings O'Donovan & Partners Limited

Encl./



Barrow Street Dublin 4, Ireland D04 TR29 **DXII Dublin** +35316145000 dublin@mhc.ie

An Bord Pleanála 64 Marlborough Street Dublin 1

5 March 2024

Your ref:

Our ref: JAL/34500.287 MHC-33991618-1

Our client: Inchamore Wind DAC

Matter: Windfarm at Inchamore, Coolea, County Cork

Dear Colleagues

We act on behalf of Inchamore Wind DAC.

We confirm that Inchamore Wind DAC has entered into an option for lease in respect of lands comprised in folios 53558 and 32493F County Cork.

The permitted use of the lands to be leased is a habitat management area.

Should you require any further information, please contact Jane Lynch of this office on 01 614 5000.

Yours faithfully

Mason Hayer unan

MASON HAYES & CURRAN LLP

Dublin London

New York

San Francisco

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 Philip Care Cooke, Keelin Cooke, Keeli

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INCHAMORE WIND DAC

GROUNDS OF APPEAL FOLLOWING THE REFUSAL BY CORK COUNTY COUNCIL FOR A RENEWABLE ENERGY DEVELOPMENT WITHIN THE TOWNLANDS OF INCHAMORE (NA hINSE MÓIRE), MILLEENY (NA MILLÍNÍ) AND DERREENALING (AN DOIRÍN ÁLAINN) IN COUNTY CORK.

CORK COUNTY COUNCIL PLANNING APPLICATION REFERENCE PL 23/05145

MARCH 2024

Inchamore Wind DAC,

C/O FuturEnergy Ireland, 27/28 Herbert Place, Dublin 2, Ireland, D02 DC97.



Jennings O'Donovan & Partners Limited,

Consulting Engineers, Finisklin Business Park, Sligo. Tel.: 071 9161416 Fax: 071 9161080 email: info@jodireland.com



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DOCUMENT APPROVAL

PROJECT	Inchamore Wind Farm		
CLIENT / JOB NO	Inchamore Wind DAC	6226	
DOCUM ENTTITLE	Grounds of Appeal Document		

	Prepared by	Reviewed/Approved by
Document	Name	Name
Final	Shirley Bradley	David Kiely
Date	Signature	Signature
5th March 2024	Shirley Bradley	Javid Kiely

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Company Reg No. 149104 VAT Reg. No. IE6546504D



6226/407/SB

INCHAMORE WIND DAC

<u>GROUNDS OF APPEAL FOLLOWING THE REFUSAL BY CORK COUNTY COUNCIL FOR A</u> <u>RENEWABLE ENERGY DEVELOPMENT WITHIN THE TOWNLANDS OF INCHAMORE (NA</u> <u>hINSE MÓIRE), MILLEENY (NA MILLÍNÍ) AND DERREENALING (AN DOIRÍN ÁLAINN) IN</u> <u>COUNTY CORK.</u>

Planning Reference PL 23/05145

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APPENDICES

APPENDIX A: DECISION NOTICE DATED 09/02/2024

APPENDIX B: DEFINED TERMS

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1 INTRODUCTION BACKGROUND TO THE PLANNING APPEAL

1.1 Introduction

Section 1 sets out details of the Development (as defined in **Appendix B**) and the background to the planning appeal. It includes details of the project team and contributors to the planning application.

Section 2 Background to The Planning Appeal.

Section 3 Sets out the planning policy context and details of the land zoning of the Site. **Section 4** Sets out the Applicant's Grounds of Appeal.

Section 5 Concludes why the development should be granted.

1.2 Developer Background

The Applicant and first party appellant is Inchamore Wind DAC, a joint venture between FuturEnergy Ireland and SSE Renewables.

FuturEnergy Ireland (FEI) is a joint venture company owned on a 50:50 basis by Coillte and ESB. The business was established in late 2021 and combines the State's strongest assets and expertise in onshore renewable energy development on behalf of the people of Ireland.

The aim of FEI is to help Ireland deliver on its green energy targets, achieving net zero emissions by 2050, as set out in the Government's Climate Action Plan and legislated for under the Climate Action and Low Carbon Development (Amendment) Act 2021. In this regard, FEI is looking to actively drive Ireland's transition to a low carbon economy by developing 1 GW of wind energy projects by 2030.

FEI is dedicated to developing best-in-class, commercially successful wind farms while maximising the support from local communities. Its wind farm projects have the potential to play a fundamental role in a green economy by creating jobs in rural areas and growing a green industrial sector, while also funding local development for host communities through its community benefit funds.

SSE Renewables is a leading developer, owner and operator of renewable energy in Ireland with a vision to make renewable energy the foundation of a zero-carbon world. The renewable electricity generated at wind farms operated by SSE Renewables across Ireland powers SSE Airtricity, Ireland's largest provider of 100% green energy. The company's onshore portfolio in Ireland comprises 29 windfarms producing nearly 700 MW of renewable generation, including Ireland's largest wind farm, the 174 MW Galway Wind Park.

1.3 Executive Summary

A planning application for a renewable energy Development comprising 5 wind turbines and associated infrastructure / works was received by Cork County Council (PL 23/05145) on 6th June 2023.

This planning application is intrinsically linked to a planning application made to Kerry County Council which was successfully granted on appeal by an Bord Pleanála on 15th February 2024 (An Bord Pleanála Case Reference: PL08.317889, Kerry County Council Planning Reference: 23/646) relating to proposed works at the wind farm site entrance.

Cork County Council (CCC) requested Further Information on 28th July 2023 and issued a decision to refuse planning permission on the 9th February 2024 with two reasons for refusal given which are set out in Section 2 and **Appendix A**.

The first reason for refusal related to a claimed loss of Annex I habitat and further *loss* of existing high value peatland habitat.

Inchamore Wind DAC determined through detailed and informed site design, multiple habitat condition surveys and expert ecological assessment that the Development will not result in negative impacts on Annex I habitats or existing high value peatland, and through habitat restoration both onsite and within the adjacent habitat management area, which is subject to an executed legal agreement between Inchamore Wind DAC and the landowner, a significant positive net gain of 12 ha of high value peatland habitats will be protected and enhanced by the Development.

It is also noted that An Bord Pleanála (ABP) assessed the effects of the Wind Farm Development on wet heath and blanket bog as part of the assessment of planning appeal ABP-317889-23 relating to the upgrade of the wind farm site entrance which was granted permission on 15th February 2024. The ABP Planning Inspector concluded that:

"The significant effect to wet heath and blanket bog habitat will also be adequately compensated through implementation of a Habitat Enhancement Plan for the project."

The second reason for refusal from Cork County Council was based on a decision to refuse planning permission by Kerry County Council (Kerry County Council Planning Reference: 23/646) regarding concerns relating to a right turn from the N22's east-bound climbing lane at the proposed site entrance. The entrance works are located within County Kerry.

There is no proposal to enter the Site by a right turn from a climbing lane on the N22. The proposal is to enter the Site via an existing forest entrance, by a left turn from to N22 only. Vehicles leaving the Site will be via a left turn onto the N22 with right turns precluded. The increased traffic flow will arise during the construction stage and to a limited extent during the decommissioning stage. Very little additional traffic will arise during the operational phase. The application refused by Kerry County Council was subsequently granted permission by An Bord Pleanála on 15th February 2024 (An Bord Pleanála Appeal Reference: ABP-317889-23) with the conclusion of the Inspector's report stating the following:

"I am satisfied from the information submitted with the application and appeal that there would not be adverse impact upon the carrying capacity of the N22 arising from the wind farm project. In addition, no intensification of use of the existing access (that is proposed to be upgraded) will result from operation of the wind farm project. There will be short-term temporary increases in traffic movements over the access during the construction phase that will be appropriately mitigated through the application of measures in a traffic management plan as part of a construction management plan for the project. The proposed development for upgraded access and roads to serve a wind farm project is in accordance with principles set out in the 'Spatial Planning and National Roads; Guidelines for Planning Authorities' 2012, and Objectives KCDP 14-23, 14-29 and 14-30 of the Kerry County Development Plan 2022-2028."

As this reason for refusal was primarily predicated on Kerry County Council's refusal, it can be considered to have no substance now that An Bord Pleanála have granted planning permission for the works.

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BACKGROUND TO THE PLANNING APPEAL

A consultation and scoping exercise was carried out in November 2020 and again in September 2022.

The purpose of the consultation processes was to provide a focus for the EIA by identifying the key issues of relevance. As such, the consultation processes provided an opportunity for consultees to submit comments and to offer information relevant to the preparation of the EIAR. A summary of the responses received from the 35 consultees is included in Table 1.7 of the EIAR and is further detailed in EIAR Appendix 1.1.

Prior to the submission of the planning application, various pre-application discussions and meetings were held between Cork County Council officers and the client team (the Applicant). Pre-planning discussions were held with the planning department on the 17th of November 2022 via MS Teams to discuss a future planning application on the Site.

The planning application was received by Cork County Council on 06th June 2023 under the planning reference PL 23/05145.

Further information was requested by Cork County Council on 28th July 2023. This information was received on 7th December 2023.

Cork County Council issued a decision to refuse planning permission on 9th February 2024 with two reasons for refusal given which are set out below:

REASONS FOR REFUSAL

1. It is considered that the facilitation of this proposal would result in the loss of Annex I Habitat and will lead to the further loss of existing high value peatland habitat. Accordingly, having regard to submitted documents, it is considered that the proposed development would contravene materially development objective BE 15-2 of the Cork County Development Plan 2022 the aim of which is to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The proposal would also contravene materially development objective ET 13-7 of the Cork County Development Plan which states "commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value". 2. A planning application in relation to the elements of the proposed development that are within the functional area of Kerry County Council, was refused by Kerry Council Council (Pl. Ref 23/646) and is currently on appeal to An Bord Pleanála. This application included the upgrade of the site entrance off the N22 and permanent forest track upgrade works on which this proposal depends. It is therefore considered that the proposed development is premature until such time that the applicant can address existing deficiencies in the road network and entrance serving the proposed development in terms of safety and capacity.

2.1 <u>The Development</u>

The Development will consist of:

- A wind farm with an operational lifespan of 35 years (from the date of commissioning of the development).
- The construction of five turbines with an overall ground to blade tip height ranging from 177 m to 185 m inclusive; a rotor diameter ranging from 149 m to 155 m inclusive; and a hub height ranging from 102.5 m to 110.5 m inclusive.
- Construction of permanent turbine hardstands and turbine foundations.
- Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing.
- Installation of a (35-year life cycle) meteorological mast with a height of 110 m and a 4 m lightning pole on top, such that the overall structure height will be 114 m.
- Development of one on-site borrow pit.
- Construction of new permanent internal site access roads and upgrade of existing internal site access roads to include passing bays and all associated drainage infrastructure.
- Development of a permanent internal site drainage network and sediment control systems.
- Construction of a permanent 38 kV electrical substation including a control building with welfare facilities, all associated electrical plant and equipment, parking, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works.
- All associated underground electrical and communications cabling connecting the wind turbines to the on-site wind farm substation.
- Ancillary forestry felling to facilitate construction of the Development.
- All associated site development works including berms, landscaping, and soil excavation.

 Upgrade of existing forest access roads to include passing bays and all associated drainage infrastructure.

A 10-year planning permission and 35-year operational life for the wind turbines and met mast, from the date of commissioning of the entire wind farm is being sought. This reflects the lifespan of modern-day turbines.

A permanent planning permission is being sought for the substation and all associated electrical plant, equipment cabling security fencing and gates, wastewater holding tank, and all ancillary structures and works as these will become an asset of the national grid under the management of ESB & EirGrid and will remain in place upon decommissioning of the wind farm.

The Grid Connection consists of one 38 kV substation (to include one control building with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works)

Permission is not being sought as part of this planning application for a Grid Connection Route or the turning area in Cummeenavrick, however the below was assessed as part of the overall Project in the EIAR:

- All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 38 kV underground cable in permanent cable ducts from the proposed, permanent, on-site substation, in the townland of Inchamore and onto the townlands of Inchamore, Derreenaling, Derryreag, Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge to the existing Ballyvouskill 220 kV Substation in the townland of Caherdowney.
- The construction of a temporary access road off the N22 in the townland of Cummeenavrick to facilitate a 180 degrees turning manoeuvre by construction vehicles and reinstatement at the end of the construction period.

A separate application was made to Kerry County Council for Upgrade works on the Turbine Delivery Route as these are located in Co. Kerry and included the following:

 Works at an entrance to an existing forest road accessed off the N22 to include localised widening of the forest road and creation of a splayed entrance, removal of existing vegetation for visibility splays and removal of street furniture to facilitate construction traffic including the delivery of abnormal loads and turbine component deliveries. The application to Kerry County Council was granted permission on appeal by An Bord Pleanála on 15th February 2024 (An Bord Pleanála Appeal Reference: ABP-317889-2

The planning application to Cork County Council was accompanied by the following reports and drawings:

- Planning Application Form
- Letters from Landowners
- Site Notice
- Newspaper Notice
- Planning Statement
- Environmental Impact Assessment Report (EIAR) for the Wind Farm Project which comprehensively assessed the Proposed Development
- Natura Impact Statement
- Drawing schedule and planning application drawings
- LVIA Photomontages

The planning application was supported by inputs from competent experts in their respective field as detailed in EIAR Section 1.9.2 and set out in **Table 2.1**. Experts that contributed to this appeal are also listed in this table.

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Consultants	Principal Staff	EIAR Input	Appeal Input
	Involved in the Project		
Jennings	David Kiely (DK)	Project Management,	Project
O'Donovan &	Seán Molloy (SM)	Scoping and	Management
Partners Limited	Sarah Moore (SME)	Consultation, EIAR	(SB),
	Breena Coyle (BC)	Sections	
	Anthony McCoubrey	• 1: Introduction (SME	Section 4.3
	(AMcC)	& SB)	(DK) (SB)
	John Doogan (JD)	2: Project Description	
	Shirley Bradley (SB)	(SME, SB & SM)	Section 3 (SB)
		3: Alternatives	
		Considered (SME &	
		SB)	
		• 4: Population &	
		Human Health (SME	
		& SB)	
		• 10: Air & Climate	
		(SME & SB)	
		• 13: Material Assets	
		(SME & SB)	
		• 15: Traffic &	
		Transportation (DK,	
		JD & AMcC)	
		16 Major Accidents	
		and Natural	
		Disasters (SME &	
		SB)	
		17 Interactions of the	
		Foregoing (SME &	
		SB)	
Biosphere	Brian Madden	Scoping responses and	
Environmental		Consultation, EIAR	7
Services	With expert	Chapters 5: Terrestrial	
	contributions from John	Ecology &	
Salad Sindersel	Conaghan (Habitat	Chapter 7: Ornithology	

Table 2.1: List of Contributors

Consulting Engineers

Consultants	Principal Staff	EIAR Input	Appeal Input
	Involved in the Project		
	surveys) Tina Aughney		
	(Bat surveys) and		
method and the	Patrick Crushell (Kerry	an angenerment of	
	Slug Surveys)		
	Karen Banks, Jonathon	Care and a loss of the	
and a character start	Dunn	and production	
	& Sinead Clifford (Fehily		
	Timoney - Bird & Bat	a company a company	
1 March 1	surveys)		
EirEco	Paul Mu rphy	Scoping responses and	
Environmental		Consultation, EIAR	
Consultants		Sections	
		6: Aquatic Ecology	
Minerex	Cecil Shine (Chapter	Scopingrespon ses and	
	Review)	Consultation, EIAR	
	Sven Klinkenbergh	Sections	
	(Chapter preparation)	8: Soils & Geology	
	Chris Fennel (Chapter	9: Hydrology &	
The state of the state	preparation)	Hydrogeology	
	Lissa Colleen McClung		
	(Chapter preparation)		
Brendan O'Re'illy,	Brendan OReilly	Scoping responses and	
Noise & Vibration		Consultation, EIAR	
Consultants		Sections 11: Noise	
Limited		(Assessment)	
Irwin Carr	Shane Carr	Scopingre sponses and	
Consulting	- strater -	Consultation, EIAR	
	er ses sins where	Sections	
		11: Noise (Modelling)	
Macro Works	Richard Barker	Scop hg responses and	
	Deal Contractor	Consultation, EIAR	mentruster 3
	Land Constants 1986	Chapter 1 2:LVIA	
John Cronin &	Tony Cummins (Cultural	Scoping responses and	
Associates	Heritage Assessment)	Consultation, EIAR	

 (\cdot)

Jennings O'Donovan & Partners Limited

Consulting Engineers

Sligo

Consultants	Principal Staff	EIAR Input	Appeal Input
	Involved in the Project		
	David Murphy (Field	Chapter14: Cultural	
A State State	surveys)	Heritage	
AI Bridges	David McGrath	Scoping responses and	
	(Telecommunications	Consultation, EIAR	
	Report preparation)	Appendix 13.1	
	Kevin Hayes (Report	Inchamore Wind Farm	
	review)	Telecommunications	
	Patrick Tinney	Impact Study	
	(Modelling)		
	Karla Chagas		
	(Modelling)		
AECOM	N. Dadds (MCIEEM		Annex I
	Principal Ecologist -		Habitats
	Report preparation)		Condition
			Report
	T. Marshall (CEcol		(Appendix C)
	MCIEEM Technical		
	Director – Review,		
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2.2 <u>Site Location and Description</u>

The Appeal Site is located in the townlands of Inchamore, Milleeny and Derreenaling, County Cork. The Development encompasses an approximate area of 169 hectares and is located 5.9 km west of Ballyvourney (Baile Bhuirne), Co. Cork and shares the county boundary between Cork and Kerry. It is 54 km west of Cork City, and 23 km north-east of Kenmare, Co. Kerry.

Planning drawings showing the location of the Development (6226-PL-001 to 6226-PL-401) were included in the planning application to Cork County Council.

The overall Site elevations range from 460 m AOD in the north-western side of the Site to 350 m AOD towards the eastern side of the Site. The Appeal Site is located in a rural setting and housing density in the area is low.



Figure 2.1: Location of the Development

The nearest European site to the Appeal Site is Killarney National Park, Macgillycuddy's Reeks & Caragh River Catchment SAC (site code 000365) which is 1.6 km terrestrial distance northwest at the nearest point. European sites are shown relevant to the Development in **Figures 2.2** below. Hydrology and hydrogeology have been assessed in **Chapter 9** of the EIAR and hydrological links have been assessed in the **Natura Impact Statement**. **EIAR Figures 5.3a**, **5.3b** and **9.7b** show the hydrological connection between the Project and the Killarney National Park, Macgillycuddy's Reeks & Caragh River Catchment SAC.

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Figure 2.2: Extract from NIS showing the Natura 2000 Sites in relation to the Project

2.3 Land uses in the Surrounding Area

The Appeal Site is characterised as comprising commercial forestry and rural, agricultural land. The agricultural land is predominantly utilised for sheep and cattle grazing. The commercial forestry is mainly a crop of Sitka Spruce.

2.4 Planning History relating to the Site

Planning permission was granted by Cork County Council for a meteorological mast (PL 21/05127) in 2021.

3 LEGISLATIVE AND PLANNING POLICY CONTEXT

3.1 Introduction

A Planning Statement was included in the Planning Application which explains how the Development complies with the legislative and planning policy context up to and including 6th June 2023 when the application was submitted to Cork County Council. Since June 2023, a number of international, European and national policies and legislation relating to energy and planning have been updated and a summary of how the Development complies with these newly introduced polices is discussed below.

3.2 International and European Policy and legislation updated since the submission of the planning application in June 2023

United Nations Climate Change Conference

Since the planning application was submitted, the COP 28 took place in January 2024. The COP28 UN Climate Change Conference in Dubai, the United Arab Emirates, was the biggest of its kind and it was particularly momentous as it marked the conclusion of the first 'global stocktake' of the world's efforts to address climate change under the Paris Agreement. Having shown that progress was too slow across all areas of climate action – from reducing greenhouse gas emissions, to strengthening resilience to a changing climate, to getting the financial and technological support to vulnerable nations – countries responded with a decision on how to accelerate action across all areas by 2030. This includes a call on governments to speed up the transition away from fossil fuels to renewables such as the Development in their next round of climate commitments.

Renewable Energy Directive

Given the need to speed up the EU's clean energy transition, the Renewable Energy Directive EU/2018/2001 was revised in 2023 along the lines of the proposed amendments discussed in May 2022. The amending Directive EU/2023/2413 was adopted in November 2023. RED III increases the required share of renewable energy in the European Union's overall energy consumption to 42.5% by 2030, with an additional 2.5% indicative top-up to allow the target of 45% to be achieved. The Development is poised to contribute to meeting the overall EU targets.

3.3 Updated National Policy

Ireland is one of the most "energy import-dependent" countries in the European Union. For the year 2020, Ireland's import dependency was 72%¹ (while an improvement on

¹ Energy in Ireland, 2021 Report. Sustainable Energy Authority of Ireland.

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the previous 2013 figure, Ireland is still one of the most import-dependent countries in the EU), and the SEAI estimates that the cost of all energy imports to Ireland for the year 2018 was approximately €5.0 billion². This makes Ireland particularly vulnerable to future energy crises and fluctuations given its location on the periphery of Europe. The international fossil fuel market is growing increasingly volatile and affected by international politics. It is evident that any steps to reduce dependence on imported fossil fuels will add to financial autonomy and stability in Ireland.

The Development will assist in meeting Ireland's EU targets and combating climate change by providing an estimated Maximum Export Capacity (MEC) of 28-38 MW energy produced by renewable methods, further lessening reliance on energy produced by fossil fuels and energy imports. National policy supports the development of renewable energy projects and projects which enable the development of such (i.e., that which is being appealed).

• Planning Authority's Obligations under the Climate Act 2021, as amended.

Section 15 of the Climate Action and Low Carbon Development Act 2015 (the 2015 Act) was amended by Section 17 of the Climate Action and Low Carbon Development Act (Amendment) 2021 to place further importance on the consideration of Climate Action Plan objectives by planning authorities in their determination of planning decisions. Section 15 was amended as follows:

"(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.".

This text amended section 15 of the 2015 Act which previously required:

15. (1) A relevant body shall, in the performance of its functions, have regard to...

² Energy Security in Ireland, 2020 Report. Sustainable Energy Authority of Ireland.

The change from a requirement to "*have regard to*" various national objectives to a standard where relevant bodies (including planning authorities) must "*perform to functions in a manner consistent with*" the latest national climate action policies, represents a considerable raising of the legal bar.

It is submitted that this obligation is even more pressing where, as detailed in section 12.3 of the Climate Action Plan 2024, there is clearly a profound shortfall in the volume of renewable projects required to support compliance with national transition objectives, carbon budget and sectoral emissions ceilings.

It is respectfully submitted that the Development will, if permitted, be in a position to make a meaningful contribution to the meeting of those targets prior to 2030. In this regard, a grant of permission for the proposed development is practicably possible and will, amongst other things, mitigate greenhouse gas emissions and further the national climate objective. As such, this is consistent with the obligations of a planning authority under the Climate Act 2021.

The Climate Action Plan 2024

The Climate Action Plan 2024 sets out a detailed sectoral roadmap designed to deliver a 51% reduction in greenhouse gas (GHG) emissions by 2030. This requires significant reductions from all sectors. The Plan aims to evaluate in detail the changes that are required in order "to halve our emissions by 2030 and reach net zero no later than 2050, as we committed to in the Programme for Government".

CAP 2024 outlines six vital high impact sectors, of which one is "Renewable Electricity Share", where it intends to increase renewable generation to supply 80% of demand by 2030. The driving force behind this aim is the intention to facilitate a large-scale deployment of renewables that will be critical to decarbonizing the power sector as well as enabling the electrification of other technologies.

The CAP 2024 shows how Ireland is putting climate solutions at the very heart of our social and economic development. Among the most important measures in the plan is a <u>target of 9 GW from onshore wind</u>, 8 GW from solar, and at least 5 GW of offshore wind energy by 2030.

The Plan sets an 80% target for electricity production from renewable sources by 2030 and highlights the need to remove barriers to the development of renewables, including onshore wind. The plan identifies that this will directly reduce emissions but also help with the electrification of other sectors such as transport and heat, reducing emissions

in those sectors too. The plan notes that the transition away from fossil fuels and towards locally generated renewables will improve energy security and Ireland's dependence on imported energy.

The Key Message from CAP 2024 (Chapter 12) with regard to electricity is stated as follows:

"The electricity sector continues to face an immense challenge in meeting its requirements under the sectoral emissions ceiling, as the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification. The deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity is unprecedented and requires urgent action across all actors to align with the national targets".

Section 12.1.3 of the CAP 2024 sets out the scale of the challenge for the electricity sector:

"At a time when the energy system is under severe pressure to ensure security of supply, amid projections of rapid electricity demand growth over the coming decade, the electricity sector has been set one of the smallest carbon budget allocations and the steepest trajectory (-75%) across all sectors. The scale of the challenge to meet the sectoral emissions ceiling is immense and requires policies to be moved from an 'end of decade' target trajectory towards a 'remaining carbon budget' target".

Section 12.3 outlines the projections for the energy sector. The CAP 2024 clearly outlines the need to accelerate the deployment of renewable energy:

"Given that the programme of large-scale offshore wind deployment is expected to be realised towards end decade, deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets. This requires a major upscaling and accelerating in current deployment of renewables, particularly onshore wind.

As an example, the historical average deployment of onshore wind installed capacity connected between 2008 and 2020 inclusive was ~280 MW per annum from 19 projects (with an annual maximum of 612 MW). To achieve the necessary emissions abatement, an approximately eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030".

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In short, CAP 2024 (approved by Government on 20 December 2023 but is subject to SEA and AA) builds on CAP 23 and highlights the national obligation to increase (deployment of renewables including onshore wind to meet our legally binding sectoral emissions targets. In this regard, it stresses and makes abundantly clear that the rate of required renewable deployment is unparalleled and must be circa eight times faster in the period 2024 - 2030 than the historical average.

In support of the CAP 24 objectives (as articulated in Chapter 12 of this document), the Development will contribute to the de-carbonisation of the Irish electricity network by producing between 28 - 33 MW of renewable electricity, contributing to the Government's 80% renewable electricity target by 2030. This will help to mitigate climate change by reducing the emissions related to energy production and will help to decarbonise multiple sectors.

4 GROUNDS OF APPEAL

4.1 <u>The Decision and Reason for the Decision</u>

Planning permission was refused by Cork County Council on two grounds (see Decision Notice – **Appendix A)**.

4.2 Reason for Refusal No. 1

It is considered that the facilitation of this proposal would result in the loss of Annex I Habitat and will lead to the further loss of existing high value peatland habitat. Accordingly, having regard to submitted documents, it is considered that the proposed development would contravene materially development objective BE 15-2 of the Cork County Development Plan 2022 the aim of which is to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The proposal would also contravene materially development objective ET 13-7 of the Cork County Development Plan which states "commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".

Addressing Reason for Refusal No. 1

Introduction:

Inchamore Wind DAC determined through detailed and informed site design, multiple habitat condition surveys and expert ecological assessment that the Development will not result in negative impacts on Annex I habitats or existing high value peatland. Indeed, the Development will enhance peatlands through habitat restoration both onsite and within the adjacent habitat management area, which is subject to an executed legal agreement between the Inchamore Wind DAC and the landowner. A significant positive net gain of 12 ha of high value peatland habitats will be protected and enhanced by the Development.

On 28 July 2023 Cork County Council issued a Request for Further Information (RFI) on planning application 23/05145 (Inchamore Wind Farm planning application), with point 1 of the request relating to Annex I habitats and habitats of high natural value. Inchamore Wind DAC submitted a detailed habitat conditions assessment completed by AECOM (in addition to the comprehensive ecological flora surveys completed to inform the EIAR) as part of the response to Cork County Council on 6th December 2023. For convenience purposes this habitat conditions report has been enclosed within this appeal as **Appendix C**.

As noted within Table 5.5 of Chapter 5 of the EIAR Volume II and Table 6 in the NIS, the Development is not located within a Natura 2000 Site (SPA's and SAC's), N atu Heritage Area (NHA's) or proposed Natural Heritage Area and will not adversely impact any such site. The Development will also not result in significant impacts on peatlands and other wetland habitats or sites and locations of significant ecological value in the County, or those babitats of special conservation significance as listed in Volume 2 of

County, or those habitats of special conservation significance as listed in Volume 2 of the Cork County Development Plan as discussed below and illustrated in the Annex I habitat condition report provided in **Appendix C**.

The Development is located in an area deemed "Open to Consideration" for onshore commercial wind development within the Cork County Development Plan 2022 and in compliance with County Development Plan Objectives BE 15-2 and 13-7, will not result in significant adverse effects on ecological sites or habitats of European, national or local importance.

To inform the grounds of appeal to Refusal Reason 1, Inchamore Wind DAC seek to highlight the following issues:

- 1. The minimal loss of Annex I habitat and high value peatland
- 2 Lack of cumulative effects on Annex I habitats or peatlands of high ecological value
- 3 The restoration proposals being put forward to protect, maintain and restore Annex I habitat and habitats of biodiversity value both within the Appeal site and in the adjacent Habitat Enhancement Plan Area
- 4 Development within peatland habitats and consideration of Annex I of Directive 92/43/EEC, the Habitats Directive and it's approach to habitats outside of Special Areas of Conservation (SACs)

1 The minimal loss of Annex I habitat and high value peatland

As discussed in detail below, the loss of recorded Annex I habitats onsite such as H4010 wet heath and H7130 blanket bog arising from the proposed Inchamore Wind Farm are not considered significant even at a local level, and losses to H7130* blanket bog are not considered significant beyond the local vicinity.

The areas and proportions of affected Annex I habitats, and totals within the red line boundary of the Development, are shown in Table 4.1 below. The affected areas have been derived from an intersection of the GIS habitat data (as used for the maps shown in **Appendix C**) with the infrastructure footprint.

 Table 4.1. Areas and proportions of Annex I habitats within infrastructure footprint

 (i.e. within which all site works will occur) and red line boundary

Annex I habitat	Area in footprint of proposed infrastructure (ha)	Area in red line boundary (ha)	Proportion inside footprint	Proportion outside footprint	Condition of habitat within the footprint of proposed infrastructure
H4010	1.71	13.59	12.6%	87.4%	Unfavourable Inadequate
H7130	1.34	10.54	12.7%	87.3%	Unfavourable Bad
H7130*	0.36	11.86	3.0%	97.0%	Favourable

The condition of the habitats on the Inchamore Wind farm site were re-surveyed in July 2023 and assessed in the condition report prepared by AECOM (**Appendix C**) using the criteria and terminology set out in Perrin et al. (2014) – the terminology used for Annex I habitats across the European Union (EU) as a whole, in which the term 'structure and functions' corresponds to current condition³ and is categorised as Favourable, Unfavourable Inadequate and Unfavourable Bad.

The Annex I and peatland habitats recorded onsite in July 2023 were predominantly:

- H4010 Northern Atlantic wet heaths with *Erica tetralix*
- H7130* Blanket bog (the '*' indicates priority Annex I habitat) where intact and active (with peat-forming species), and
- H7130 Blanket bog (non-priority) where degraded and inactive (lacking such species).

Of the five proposed turbines on the site, only T1 and T3 are located in open moorland where wet heath and blanket bog were recorded, as shown on Figure 1 in the enclosed habitat conditions report. Turbine T2 is located within WD4 Conifer Plantation. All other

³ The term 'overall conservation status' takes account of area change and 'future prospects' as well as 'structure and functions' and is therefore not equivalent to current condition at the time survey.
parts of the proposed wind farm footprint are in coniferous forestry plantation dominated by Sitka spruce, *Picea sitchensis*, mostly established but also including recent plant in the vicinity of the access track between proposed turbines T2 and T3.

The Development avoided as much as possible any habitats of high ecological value and Annex I habitats onsite. As listed above in Table 1, the Development completely avoided areas of H4010 Wet Heath and H7130 Blanket Bog in favourable condition and minimised the development footprint in areas of unfavourable habitats to ensure 87.4% of unfavourable H4010 and 87.3% of unfavourable H7130 within the site were avoided as can be seen on Figures 1 and 2 of **Appendix C**. 97% of H7130* Blanket bog within the wind farm site was avoided by the Development design with the large areas assessed as being in a favourable condition in the west and north of the site being completely avoided as shown on Figure 1 of **Appendix C**.

Habitats Condition:

Inchamore Wind DAC commissioned AECOM to complete detailed habitat surveys of the wind farm during July 2023 using the criteria and terminology set out in Perrin et al. (2014) – the terminology used for Annex I habitats across the European Union (EU) as a whole, in which the term 'structure and functions' corresponds to current condition and is categorised as Favourable, Unfavourable Inadequate and Unfavourable Bad. Inchamore Wind DAC disagrees with the following statement made by the Cork County ecologist on page 4 of the Planner's Report on the Further Information dated 08/02/2024:

"The assertion that the peatland / wetland habitats to be impacted by the proposal, particularly those identified as Annex 1 habitats, namely H4010 wet heath and H7130 blanket bog, are unremarkable and of very low ecological value as they occur outside the bounds of a special area of conservation is not a sound argument, particularly given that the submitted EIAR has assessed same to be of County Importance, which is fundamentally a contradiction."

The assessment of Annex I habitat completed did not place a singular focus on location outside a special area of conservation as the sole defining factor of ecological value. Habitat condition and subsequent current ecological value was determined using the Perrin et al. (2014) methodology discussed above to determine the existing condition of Annex I habitats onsite. It must be noted at this point that while the habitats within the proposed wind farm development may meet some, or all, of the criteria for classification under the Annex I system, it does not automatically indicate that they all that meet the

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definition / classification under Annex I and are all of the same extent and quality. To fully assess the actual condition of Annex I habitats onsite, the ecologists focused on three main factors:

- Area of the habitat within the site and surrounding region;
- Future prospects of the habitat to improve or worsen given existing land uses such as agriculture, turf cutting and burning, and
- Structure and functions (Perrin et al, 2014)³ of the habitat itself in relation to positive condition indicating factors such as the presence of peat-forming bogmosses and hare's-tail cottongrass *Eriophphorum vaginatum* for H7130 Blanket bog and the abundance of cross-leaved heath *Erica tetralix*, heather *Calluna vulgaris*, grasses, sedges and Sphagnum bog-mosses for H4010 Northern Atlantic wet heaths with *Erica tetralix*.

Therefore, the statement made by the county ecologist that value of habitat was only determined based on its location outside a special area of conservation is not correct.

The results of the multi-faceted Annex I habitat condition assessment completed on the Inchamore wind farm site determined that all the H4010 wet heath is in Unfavourable Inadequate condition, largely as a result of an insufficiency of positive indicator species and over-abundance of purple moor-grass *Molinia caerulea*. Although this may be natural on localised steeper slopes, over-grazing generally appears to be the key issue.

The H7130* Blanket bog (priority habitat) present within Inchamore Wind Farm site is in Favourable condition, while the H7130 Blanket bog (non-priority habitat) present is in Unfavourable Bad condition. These occupy about half of the blanket bog resource in the site respectively. The H7130* passed all condition criteria at all assessment stops with very few and minor exceptions, hence categorisation as Favourable.

The H7130 is in very poor condition. H7130 is in exceptionally poor condition in the vicinity of proposed turbine T3 where remaining peat 'islands' are subject to drying and in the intervening ground much of the peat has been removed down to bedrock.

Lack of effect on Annex | habitats

A map showing the Annex I habitats in the Inchamore Wind Farm site superimposed with the proposed infrastructure footprint is provided in Figure 1 in **Appendix C**. Figure 2 of the Appendix shows the current condition ('structure and functions') of the Annex I habitats. The only parts of the proposed infrastructure that impact upon Annex I habitats are (listed from north to south):

- The hardstand for the proposed turbine T3 and short stretches of the southward access tracks the affected Annex I habitat comprises badly degraded H7
 Blanket bog, and a very small amount of peripheral H7130* blanket bog as the track heads westwards;
- The hardstand for proposed turbine T1 and connecting access track the affected Annex I habitat comprises H4010 wet heath, and a small amount of H7130* blanket bog; and,
- A short stretch (approximately 30 m) of the access track connecting to the hardstand for the proposed turbine T2 – the affected Annex I habitat comprises a very small amount of H4010 wet heath. The hardstand for the proposed turbine T2 is located within WD4 conifer plantation, not an Annex I habitat.

Lack of impacts on H4010 Northern Atlantic wet heaths with Erica tetralix

The affected H4010 wet heath is in the vicinity of the proposed turbine T1. The area that will be lost is small (1.71 ha), the majority of this habitat within the red line boundary will remain (87.4%). All of the H4010 within the redline, including at T1, is in <u>Unfavourable Inadequate condition</u> (with unfavourably low species diversity) which much reduces its current ecological value.

H4010 wet heath is also a common habitat in the uplands of the local area and wider region – inspection of aerial photography clearly shows similar mixed wet heath and blanket bog over large areas to the north, west and east of the proposed Inchamore Wind Farm site, such that there are likely to be several hundred hectares of H4010 wet heath within 5 km and much more beyond. There is no Special Area of Conservation (SAC) in this area, therefore none of the H4010 wet heath is a Qualifying Interest (QI) of a European site, and consequently it is not subject to legal protection under the Habitats Directive 92/43/EEC (as amended). H4010 is not a priority Annex I habitat, thus not considered to be in danger of disappearance.

The Annex I habitat list was intended to be used as a guide for selection of SACs, and one of the criteria for that purpose is that the habitat in question is an outstanding example of habitat in (for Ireland) the Atlantic biogeographic zone. No SAC was designated in this area, and was not likely to have been, given that this wet heath is unremarkable and certainly not an 'outstanding example' of wet heath in Ireland. For these reasons, the affected H4010 wet heath at the proposed Inchamore Wind Farm site is not of particular note or value.

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In view of the above-described lower quality of the existing H4010 wet heath, its unremarkable nature, its frequency in the uplands of the area, and the small amount affected, the loss of H4010 wet heath to the proposed wind farm cannot be considered significant at even a local level.

Lack of impacts on H7130 Blanket bog (non-priority)

The area of H7130 blanket bog that would be lost is also small (1.34 ha), and again the majority within the red line boundary would remain (87.3%). The affected H7130 is in the vicinity of proposed turbine T3, and as already mentioned it is in very poor condition, with islands of standing peat that are subject to drying. Peat-forming bog-mosses and hare's-tail cottongrass *Eriophphorum vaginatum* are practically absent. The larger islands of remaining peat are at the northern end of this H7130 some distance from the Development footprint and will be unaffected by the Development.

The turbine T3 and hardstand and a very small amount of access track is situated at the southern end of this zone of H7130 in the most degraded area with the least standing peat. What peat remains is mainly in narrow islands that can easily be seen on aerial photography. As noted in the habitat condition report enclosed in **Appendix C**, the vegetation outside the peat islands is not bog vegetation and is only included within the H7130 because it clearly was bog in the past and together with the isolated peat islands represents an obvious degraded bog entity. Other unaffected H7130 (and far superior H7130*, see below) occurs within the red line boundary but outside the development footprint further to the west, and aerial photography indicates that further bog occurs to the north and in several other substantial areas amongst the hills within 5 km.

The H7130 at Inchamore is not a Qualifying Interest of a European site and is consequently not subject to legal protection. It is not a priority Annex I habitat, thus not considered to be in danger of disappearance. No SAC was designated in this area for H7130, and was not likely to have been, given the severe degradation of this H7130 and that it is very far from an 'outstanding example' of blanket bog in Ireland. For these reasons, the affected H7130 blanket bog at Inchamore is without doubt of very low ecological value.

In view of the above-described very low quality of the existing H7130 blanket bog, the frequency of unaffected blanket bog (of better quality) both within the red line boundary and beyond it in the nearby area, and the small amount affected, the loss of severely degraded H7130 blanket bog to the proposed wind farm cannot be considered significant at even a local level.

Lack of impacts on H7130* Blanket bog (priority)

This is the only one of the affected Annex I habitats that is in favourable condit i However, the only infrastructure impacting it is a small part of the hardstand for the proposed turbine T1. Losses to H7130* priority blanket bog are only 0.36 ha, and 97% of the H7130* priority blanket bog within the red line boundary will remain. The affected H7130* mainly comprises part of a small outlying patch of bog on flatter ground amongst wet heath at turbine T1, narrowly connected to but higher than the much more extensive intact H7130* blanket bog to the east, outside of the development footprint. There will also be very small loss of H7130* at the extreme southern edge of the large 'blanket' of H7130* bog east of T1, where it merges with wet heath and/or is adjacent to a large drainage ditch separating the bog from conifer plantation. A second large 'blanket' of H7130* between turbines T1 and T2 will be entirely unaffected as can be seen on the Figures produced in the Annex I Habitat Condition report provided in **Appendix C**.

Aerial photography indicates that further bog, likely including H7130*, occurs commonly outside the red line boundary in the surrounding upland environment, with areas of similar appearance nearby and further afield, often showing attempts at drainage. The H7130* at Inchamore is not a Qualifying Interest of a European site and is consequently not subject to legal protection. Although it is a priority Annex I habitat, it is clearly abundant (and very largely unaffected by the Development) within the red line boundary and, as mentioned, likely to occur in other bog that appears common in the surrounding uplands. No SAC was designated in this area for H7130* – this is no doubt because the H7130* here is part of the wider blanket bog extent half of which is severely degraded (as discussed above), and neither the total bog extent nor the structure and composition are sufficiently notable to warrant SAC designation, thus this H7130* is not an 'outstanding example' of blanket bog in Ireland.

Given the minor extent of H7130* loss within a small outlying patch of bog, the retention of 97% of the H7130* within the red line boundary including two large extents of continuous H7130* in good condition, the common presence of blanket bog in the surrounding uplands, and that blanket bog at Inchamore is not of SAC quality or extent, the very small loss of H7130* to the proposed wind farm is not considered significant beyond the local vicinity.

The Development will have minimal impact on habitats which have been classified as being of very low ecological value (H1730 blanket bog) or not of particular note or value (H4010 wet heath). The minimal loss of 0.36 ha of H7130* priority blanket bog is not

considered significant beyond the local vicinity and must be considered against the 12 ha of net gain of Annex I habitats and high value peatlands habitats both in favourable and unfavourable condition that the Development will deliver as discussed below.

As discussed in detail above, the losses of the proposed Inchamore Wind Farm to H4010 wet heath and H7130 blanket bog are not considered significant even locally, and losses to H7130* blanket bog are not considered significant beyond the local vicinity. As such, the Development will not result in significant impacts on such habitats, or those habitats of special conservation significance as listed in Volume 2 of the Plan and is therefore compliant with Cork County Development Plan Objective 15-2. Chapter 13 of the County Development Plan includes the Wind Energy Strategy and Objective 13-5 Wind Energy Projects, which supports a plan led approach to wind energy development in County Cork through the identification of areas for wind energy development:

"The aim in identifying these areas is to ensure that there are minimal environmental constraints, which could be foreseen to arise in advance of the planning process......b) On-shore wind energy projects should focus on areas considered 'Acceptable in Principle' and 'Areas Open to Consideration' and generally avoid "Normally Discouraged" areas as well as sites and locations of ecological sensitivity."

The Development is located within an area designated as 'Open to Consideration' under County Development Plan Objective ET 13-7 which states, where relevant to RFI Point 1, that commercial wind energy development is open to consideration where proposals can avoid adverse impacts on:

"Natura 2000 Sites (SPA's and SAC's), Natural Heritage Areas (NHA's), proposed Natural Heritage Areas and other sites and locations of significant ecological value."

The Development is located in an area deemed "Open to Consideration" for onshore commercial wind development and in compliance with County Development Plan Objectives BE 15-2 and 13-7, will not result in significant adverse effects on ecological sites or habitats of European, national or local importance.

2 Lack of cumulative effects on Annex I habitats or peatlands of high ecological value

The Development will not result in significant cumulative effect on Annex I habitats or peatlands of high ecological value and Inchamore Wind DAC wholly disagrees with the following statement made on page 4 of the of the Planner's Report on the Further Information dated 08/02/2024:

"Furthermore, as laid out in this office primary report, the proposed Gortyrahilly Wind Farm Strategic Infrastructure Development for the construction of 14 No. turbine, som 4.95 km south of Inchamore Wind Farm by the same developer and within the county, will if granted in its proposed current form result in the loss of 28ha of Annex I listed habitats i.e. wet heath, dry heath, outcropping silicious rock and blanket bog. As such, considering same, while also noting the considerable wind energy developments granted and under consideration just over the Cork / Kerry border, the potential cumulative loss and/or further degradation of these vital and ecological valuable habitats could and should be considered significant."

Firstly, it is noted that Gortyrahilly Wind DAC submitted further information to An Bord Pleanála (ABP) on 29th September 2023 in relation to application number ABP314602-22 which included the results of an Annex I habitat condition survey report completed in July 2023. The survey report refined habitat mapping in the vicinity of the proposed wind farm footprint and most notably recorded that the area of H4010 wet heath that will be lost due to the proposed wind farm development is 17.85 ha, significantly lower than the 28 ha stated by the County ecologist. The reasons why this figure is lower than previously reported are detailed in the RFI response and include:

- Recent conversion of wet heath (and bog) to agricultural pasture beside proposed turbine T9 and to small extent elsewhere (such as near proposed turbine T8);
- The refinement of habitat mapping to better detail and delineate areas of non-Annex I habitat (primarily acid/marshy grassland, but also including mapping of existing access tracks) amongst wet heath; and
- The occurrence in several areas of wet heath as a mosaic component (sometimes a very minor one) in habitat mosaics that include non-Annex I habitats (again, primarily acid/marshy grassland).

The Gortyrahilly habitat survey and condition assessment also confirmed that wet heath within the development site is variable in quality, and many areas are not in good condition. The Gortyrahilly Development also includes a 9.5 ha Habitat enhancement Plan which will enhance and protect existing areas of blanket bog (Annex I habitat) and areas of wet heath, dry heath and siliceous rock (all Annex I habitats) within the wind farm site, a detail omitted in the statement by the county ecologist above.

The minimal loss of Annex I habitat and high value peatland in the Inchamore wind farm site discussed above and the 12 ha of positive net gain of upland bog habitats containing

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both Annex I and non-Annex I habitats to be implemented by Inchamore Wind DAC as discussed further below will ensure no significant impacts will occur on upland bog habitats when assessed singularly or from a cumulative perspective with other wind farm developments such as Gortyrahilly wind farm (ABP314602-22).

3

The restoration proposals being put forward to protect, maintain and restore Annex I habitat and habitats of biodiversity value both within the Appeal Site and in the adjacent Habitat Enhancement Plan Area

The Development will result in the minimal loss of 0.36 ha of priority blanket bog as discussed above and 3 ha of wet heath and blanket bog, both of which have been assessed as being in unfavourable/inadequate and poor conditions respectively.

The Development has been designed, as shown on Figure 1 in **Appendix C** to avoid Annex I habitats and peatland habitats, (even those of low ecological value throughout the Wind farm site) where possible and to also identify habitat restoration opportunities onsite to offset any minor potential habitat loss. Opportunities primarily involve the permanent felling of trees around those turbines in forestry which will provide 5 ha of H4010 open habitat which is likely, at least in the vicinity of proposed turbine T2 (where there is wet heath immediately adjacent to the existing plantation and no significant change of slope), to develop into H4010 wet heath, which would constitute a significant net gain in habitat area. Indeed, it is very likely, given the apparent prevalence of wet heath on open sloping ground in this area, that much of the forestry plantation was planted on wet heath, especially in the turbine T2 vicinity. This re-created wet heath will not be subject to livestock grazing and will therefore be capable of generating into higher quality wet heath than currently exists on the open moorland, with better coverage of heather species. Given that the plantation at turbine T2 was probably planted on H4010 wet heath, this can be seen as restoration.

As for the wet heath, account should be taken of the opportunities afforded by the proposed wind farm to benefit H7130 blanket bog. Whether or not burning has previously taken place on the degraded bog, burning will not be permitted within the constructed wind farm for obvious reasons. However, the main way in which H7130 will benefit is by using the relatively small amount of peat that will be removed during construction to infill some of the gaps amongst the remaining peat islands or expanding their edges, particularly in the northern part of the relevant H7130 (north of turbine T3) where there is more remaining standing peat.

The Development seeks to deliver over 5ha of habitat restoration onsite to address the very small loss of 3.4 ha as discussed in Table 4.1. The Developer has also executed legal agreement with the owner of 10.8 ha of peatland bog habitats located directly west of the wind farm site (shown on Plate 4.1 below) which form the habitat enhancement plan area described in EIAR Appendix 5.5, and thus has the necessary legal standing to implement same.

The habit enhancement plan aims to protect and enhance areas of local biodiversity value and features of the County's ecological network in compliance with Cork County Development Plan Objective BE 15-2 and is focused on the protection of existing high value blanket bog habitat and the restoration of blanket bog in lesser condition (due to overgrazing and subsequent peat erosion) which the Development will enhance over the lifetime of the wind farm.



Plate 4.1: Location of the Habitat Enhancement Area

As described in EIAR Appendix 5.5, the habitat enhancement plan will implement management measures including the following:

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- A ban on livestock grazing from April to August;
- A ban on turf cutting, and
- Perimeter fencing of the 10.8 ha folio to be maintained.

The plan will protect the 2.7 ha area of intact blanket bog in the north east of the plan area (shown on Plate 4.2 below) which occurs on deep, wet peat which has been classified as being of high ecological value with Equivalent EU Annex I Habitat – Blanket bog (7130). The prescribed management measures to be implemented by the Development will ensure this intact blanket bog continues to improve and develop into pristine habitat without the threat of grazing and turf cutting for the lifetime of the wind farm.



Plate 4.2 View of deep, wet blanket bog on flat ground in the north-east of the Habitat enhancement plan area.

The northern and western sections of the plan area contain an area of 3.95 of eroding blanket bog which are dominated by eroding/bare peat (Plate 3 below) with the equivalent EU Annex I Habitat being Heavily eroded Blanket bog (7130) which the project ecologist assessed as being of low ecological value at present. The cover of vegetation in these areas is typically less than 30% with *Eriophorum angustifolium*, mat grass (*Nardus stricta*), heath rush (*Juncus squarrosus*) and the moss *Racomitri un lanuginosum* providing the bulk of the vegetative cover. This erosion is due to intensive sheep grazing in recent decades.



Plate 4.3. View of eroding blanket bog dominated by bare peat along the northern boundary of the habitat enhancement plan area.

The southern portion of the enhancement plan area is dominated by old cutover peat surfaces which generally have a very shallow (<20 cm), cover of peat remaining, with a stony subsoil visible in places. In general, the cover of bare peat/subsoil is in the range of 5 to 20%. The vegetation is generally dominated by mat grass (*Nardus stricta*) with frequent heath rush (*Juncus squarrosus*), many-flowering bogcotton, deer grass (*Trichophorum germanicum*) and velvet bent (*Agrostis canina*) which the Development ecologist assessed as being of low ecological value at present.

The Development will prevent further grazing, turf cutting and drainage within the 8.1 ha of eroding blanket bog and cutover peat to avoid peat erosion and will safeguard and monitor these habitats for the duration of the Development.

It must also be highlighted that An Bord Pleanála assessed the effects of the Wind Farm Development on wet heath and blanket bog as part of the assessment of planning appeal 317889-23 relating to the upgrade of the wind farm site entrance which was granted permission on 15th February 2024. As the location of the site entrance works was located within the Kerry Conty Council (KCC) authoritative area, these works were subject to a separate planning application to KCC (KCC reference 23/646) lodged on 6th June 2023. The application was refused by KCC and successfully appealed by Inchamore Wind DAC. In the assessment of the appeal, An Bord Pleanála assessed the whole wind farm project and not just the site access works in the KCC authoritative area as stated in section 7.1 of the Planning Inspector's report for appeal 317889-23 dated 18th December 2023:

"It should be noted that while the proposed development subject to this appeal concerns access road modifications / road upgrades, it also forms part of a wider wind farm renewable energy project (current application with Cork County Council for the main wind farm site ref. 23/5145). Intended grid connection works also form part of the wind farm project, albeit noting that the grid connection does not form part of any current planning application / appeal proposals. Therefore, I have undertaken an assessment of the overall environmental impacts of the project as a whole within my AA and EIA in sections 8 and 9 below."

The Planning Inspector's report included a comprehensive assessment of potential effects on biodiversity as a result of the Development including all elements of the wind farm applied for in planning application 23/515 to Cork County Council, with section 9.38 concluding the following:

"I concur with the conclusions reached in the EIAR with respect to biodiversity, including aquatic species and ornithology, as summarised here, with slight to moderate significant negative residual effect identified relating to bats and birds, and significant adverse impact resulting from the loss of wet heath and blanket bog habitat. The impact upon bats and birds would not be at a population level, and appropriate mitigation and monitoring measures are outlined in the EIAR to combat this effect. <u>The significant effect</u> to wet heath and blanket bog habitat Enhancement Plan for the project.

Inchamore Wind DAC determined that the Development will result in minimal impacts on Annex I habitats and habitats of high ecological value within the wind farm Site. In line with the conclusions of the Planning Inspector discussed above, the implementation of the habitat enhancement plan and those enhancement measures proposed onsite will actively protect high value peatland habitat and restore lower value boglands over the lifetime of the Development, in support of Objective BE 15-2 of the Cork County Development Plan 2022 Part C discussed above. Therefore, Inchamore wind DAC have demonstrated that the concerns listed in with Reason Refusal 1 for the loss of such habitats are not valid.

Development within peatland habitats and consideration of Annex I of Directive 92/43/EEC, the Habitats Directive and it's approach to habitats outside of Special Areas of Conservation (SACs)

It is noted within the Cork County Council Planner's Report on Further Information Assessment that the Cork County Ecologist sets out the rational for the omission of the 2 no. proposed wind turbines, T1 and T3. It is submitted that the Cork County Ecologist goes beyond what is required under the Cork County Development Plan 2022 and attempts to establish an impractical standard of development restriction on peatland of all types of condition and protection status which is inconsistent with accepted conservation practice. For example, the county ecologist makes the following statement on page 5 of the Planner's Report on further Information Assessment:

"Therefore, as per this offices pre-planning advice and that laid out in the further information request, <u>no such development shall take place on intact peatland habitats</u>, <u>degraded peatland habitats or any habitats of high ecological value</u>."

It should be noted that Objective BE 15-2 of the Development Plan Part C seeks to: "Protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. This includes rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands as well as coastal and marine habitats. It particularly includes habitats of special conservation significance in Cork as listed in Volume 2 of the Plan."

Volume 2 of the Cork County Development Plan 2022 -2028 lists habitats of special conservation significance in Cork. Listed habitats, which have Annex I equivalents and are located within or adjacent to the Development footprint as discussed above include:

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- Sligo
- Wet heath HH3 Equivalent EU Annex 1 Habitat Northern Atlantic wet heaths with Erica tetralix (4010), and
- Upland blanket bog PB2 Equivalent EU Annex 1 Habitat Blanket bog (7130

Objective BE15-2 seeks to protect and enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network, however the county ecologist wrongly suggests that the Objective restricts development on peatland habitats and degraded peatland habitats regardless of their ecological value, condition or legal protection. For example, as mentioned above, the H7130 at Inchamore is not a Qualifying Interest of a European site, is consequently not subject to legal protection and is not a priority Annex I habitat considered to be in danger of disappearance. No SAC was designated in this area for H7130, and was not likely to have been, given the severe degradation of this H7130 and that it is very far from an outstanding example' of blanket bog in Ireland. For these reasons, the affected area of 1.3 ha of H7130 blanket bog at Inchamore where the proposed Turbine T3 is located is without doubt of very low ecological value. Despite this the county ecologist has assessed this area of the site as having significant ecological value and as a result, determined that development within it would contravene Objective 15-2. Similar can be applied to the location of Turbine T1 within a small area of H4010 wet heath (1.7 ha) at the proposed Inchamore Wind Farm site which is not of particular note or value. H4010 wet heath is also a common habitat in the uplands of the local area and wider region. In view of the lower quality of the existing H4010 wet heath, its unremarkable nature, its frequency in the uplands of the area, and the small amount affected, the loss of H4010 wet heath to the proposed wind farm cannot be considered significant at even a local level. The request by the County ecologist to remove Turbine T1 from its proposed location is therefore not accepted by Inchamore Wind DAC.

The statement by the county ecologist that development on peatland habitats and degraded peatland habitats regardless of their ecological value, condition or legal protection should be restricted, is not adopted elsewhere. At a National Level, Appendix 4 of both the June 2006 Planning Guidelines for Wind Energy and 2019 Draft Revised Wind Energy Development Guidelines outline 'Best Practice for Wind Energy Development in Peatlands'. It is of note that these do not preclude wind energy proposals in peatland areas, rather they outline construction guidelines to reduce impacts.

It is also of note that other Local Authorities do not preclude wind energy outright on peatlands, instead having regard to potential impacts, in line with the national level wind energy guidelines.

For example, Section 3.4.1 of Chapter 3 of the 2021 - 2027 Offaly County Development Plan recognises:

"Offaly's extensive area of peatlands also offer considerable potential to accommodate the needs of the emerging and early deployment technologies for renewable energy and future energy storage on a regional scale such as data centres and battery energy storage."

This is further supported by Policy CAEP-16 of the 2021 - 2027 Offaly County Development Plan. Similarly, from a review of other Development Plans in Ireland (Donegal, Mayo, Galway), it is noted that they do not appear to specifically preclude wind developments from areas of peat, and instead require the inclusion of a Peat Stability Assessment with wind energy proposals. It is noted that the external consultant appointed by Cork County Council to assess the Site Investigation Report & Peat & Subsoil Stability Risk Assessment provided for the Project determined that the "*proposed development will not give rise to any significant risk of peat slip and will have no significant impacts on surface or groundwater*". It is the view of Inchamore Wind DAC that the Cork County Ecologist refers to an impractical standard of development with accepted conservation practice and outwith the aims of county Development Plan Objective BE15-2.

The consideration of the likely significant effects of the development on such habitat and the decisions whether to grant planning permission for the Development must also not elevate the status of peatland habitats and Annex I habitat beyond the purpose and intention of the Habitats Directive. This is particularly so when weighing these conservation objectives with the pressing need for projects such as the Development, which are essential for Ireland to meet its EU and international commitments to address climate change, reduce greenhouse gas emissions and decarbonise its economy by 2050.

The Habitats Directive does not afford Annex I habitat strict protection, this is reserved for Annex IV species. The system for protecting Annex I habitat (for example peatlands) is the identification and designation of SAC's in a balanced way to achieve the

conservation of these habitats in a balanced way having regard to wider "economic, social and cultural requirements" (Art 2(3)).

In the first instance, we would highlight that the proposed wind farm site remains designated as an area where wind energy is open to consideration on the Cork County Council Wind Strategy Map. Accordingly, it is submitted that the request to remove a number of turbines due to their location is not in accordance with the Policies and Objectives of the Development Plan.

Annex I of Directive 92/43/EEC, the Habitats Directive, identifies certain habitats which are considered to be in need of conservation. The Directive sets out the nature of the protection to be afforded these species and establishes a regime for their protection which involves the identification and designation of Special Areas of Conservation (SAC's). The identification of SAC's for advancing the Directives conservation objectives must be undertaken in a balanced way so as to further the conservation of these habitats having regard to wider "economic, social and cultural requirements" (Art 2(3)).

Outside of these SACs Member States must "endeavour, where they consider it necessary,... to encourage the management of features of the landscape which are of major importance for wild fauna and flora" being features which "by virtue of their linear and continuous structure... or their function as stepping stones are essential for the migration, dispersal and genetic exchange of wild species" (Art 10).

The Development is not located within an SAC.

It is evident from the condition assessment provided in **Appendix C** that the Annex I habitat present on the Development site is in a poor condition and lacking in peat-forming species. These areas of habitat are also very fragmented, non-contiguous pockets and could not be regarded as being of major importance or essential for the migration, dispersal and genetic exchange of wild species (Art 10).

Ireland's Climate commitments are affirmed in the Climate Action and Low Carbon Development (Amendment) Act, 2021 which commits Ireland to reach a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). To enable the achievement of these binding commitments, the 2021 Act requires the Government to put in place a Climate Action Plan (CAP) setting out the key actions required for delivery. The current CAP, Climate Action Plan 2023 and the

incoming COP 2024, highlights the central role electrification will play in the decarbonisation of other sectors including transport, heating, and industry, sets a ambitious 80% target for electricity production from renewable sources by 2030 and identifies the need to remove barriers to the development of renewables, including onshore wind.

In all the circumstances, given the condition and fragmented nature of the Annex I habitat present on the site of the Development and the negligible area of habitat to be impacted, it is appropriate and consistent with Government and EU policy to grant permission for the Development.

In all the circumstances, given the condition and fragmented nature of the Annex I habitat present on the site of the Development, the very small area of habitat loss and the projected net gain in Annex I habitat over the life of the project, the Development will not have a significant effect on Annex I habitat.

Conclusion

Inchamore Wind DAC has clearly demonstrated that the Development will result in minimal impacts on Annex I habitats and habitats of high ecological value within the wind farm site. In line with the conclusions of the An Bord Pleanála Planning Inspector discussed above, the implementation of the habitat enhancement plan and those enhancement measures proposed onsite will actively protect high value peatland habitat and restore lower value boglands over the lifetime of the Development, in support of Objective BE 15-2 of the Cork County Development Plan discussed above. Therefore, Inchamore wind DAC have demonstrated that the concerns listed in with Reason Refusal 1 for the loss of such habitats are not valid.

4.3 Reason for Refusal No. 2

A planning application in relation to the elements of the proposed development that are within the functional area of Kerry County Council, was refused by Kerry County Council (PI. Ref 23/646) and is currently on appeal to An Bord Pleanála. This application included the upgrade of the site entrance off the N22 and permanent forest track upgrade works on which this proposal depends. It is therefore considered that the proposed development is premature until such time that the applicant can address existing deficiencies in the road network and entrance serving the proposed development in terms of safety and capacity.

Addressing Reason for Refusal No. 2

Kerry County Council refused planning permission (PI. Ref 23/646) for the elements of the Project within the lands of County Kerry, namely upgrade works to the site entrance off the N22 and permanent upgrade works to forest tracks. Cork County Council acknowledged that this refusal was appealed (ABP-317889-23) to An Bord Pleanála.

The Decision by Cork County Council to refuse planning permission based on the abovementioned reason is no longer applicable for the following reasons:

- <u>The Decision (ABP-317889-23) of An Bord Pleanála dated 15th February 2024 was</u> to Grant permission for this application.
- An Bord Pleanála were satisfied from the information submitted with the application and appeal that there would not be adverse impact upon the carrying capacity of the N22 arising from use of the existing access from/onto the N22 during construction or operation (or decommissioning) of the wind farm project.
- An Bord Pleanála were satisfied that with respect to the volume of use of the existing access from the N22, no intensification would be experienced during operational phase. While an increase in traffic movements over the access would be experienced during construction, this would be short-term, and will be appropriately mitigated through the application of measures in a traffic management plan as part of a construction management plan for the project.
- Such temporary disruption caused by construction works is an inevitable consequence of development, which can be controlled with the application of mitigation as is proposed in the current appeal, to contain effect to within acceptable parameters.
- An Bord Pleanála state that it would be prohibitive to the delivery of benefits from renewable energy generation on the wider wind farm site, without this temporary short-term disruption, and the inspector concurred with the appellant that planning policies with respect to the intensification of traffic use over access points on national roads are not targeting construction works per se, as illustrated through precedent schemes referenced in the appeal grounds.
- An Bord Pleanála were therefore satisfied that the proposed works subject of Kerry County Council Planning Application (Planning Reference 23/646) and Planning Appeal to An Bord Pleanála (Reference ABP-317889-23) for the upgraded access and roads to serve a wind farm project are in accordance with principles set out in the 'Spatial Planning and National Roads; Guidelines for Planning Authorities' 2012, and Objectives KCDP 14-23, 14-29 and 14-30 of the Kerry County Development Plan 2022-2028.

As a result of the foregoing, it can be determined that the Cork County Council decision to refuse planning permission for the Development is no longer applicable and as suce the second reason for refusal provided by Cork County Council can be considered no longer applicable.

4.4 Additional items stated in the Cork County Council Planner's Report

Aside from the two reasons of refusal, Inchamore Wind DAC note the following criticisms within the Planner's report on Further Information assessment dated 8th February 2024 which were not put forward as reasons for refusal but contained statements which Inchamore Wind DAC is not in agreement with:

In relation to the response provided to RFI point 3 relating to potential impacts on White Tailed Eagle, the following was stated in the Planner's Report:

"While the level of concern by the Ecology section is not significant enough to warrant the recommendation of a refusal of this application on the basis of the potential implications it could have on the species population in the county and beyond, it is the opinion of the ecology section that a fluid response is required in respect of the mitigation measures to be implemented at the wind farm should permission be granted. This fluid response e.g. temporary shutdown of turbines during recorded periods of increased usage by species of conservation significance, will be subject to ongoing robust monitoring and not to the extent as listed in the submitted EIAR i.e. VP surveys in Years 1, 2, 3, 5, 10 and 15 and Collision searches / carcass searches in Years 1, 2, 3, & 5 of the operational phase of the wind farm."

Inchamore Wind DAC seek to highlight as per the RFI submission that there is no evidence from the bird surveys carried out for the Project that white-tailed eagles are attracted to, or indeed utilise, the Inchamore Wind Farm site. There were only two recorded very brief flights of white-tailed eagle during three years of bird surveys at Inchamore, (surveys which exceeded standard requirements), and at most ten seconds of one of these flights was within the 'flight activity survey area' and at the very edge of it. Collision risk would be at a similar or lower magnitude (i.e., near zero) to that calculated for common buzzard, which has broadly similar flight behaviour and occurred for 93 seconds within the 'flight activity survey area'. There is also no evidence of a nest site within at least 5 km of Inchamore, nor of any roost site nearby, nor is there any evidence that Inchamore is on a regular flight path between such sites and foraging grounds, thus there is no basis for concluding any risk from these factors. Consequently, there is no evidence from the bird surveys, carried out for the Project that white-tailed eagles are attracted to, or indeed utilise, the proposed Inchamore Wind Farm site.

Combined with the proposed precautionary mitigation of carrying out inspections for and removing dead sheep in the wind farm area by the wind farm operator (carrion being a major foraging resource for white-tailed eagle and the most likely reason that one might enter the wind farm), it is reasonable to conclude that risk to white-tailed eagle from the proposed Inchamore Wind Farm is negligible, and that further revised assessment is not necessary.

Since the risk to white-tailed eagle from the proposed Inchamore Wind Farm is nearzero, there is considered to be no pathway for in-combination impacts to arise with other plans or projects.

In relation to the response provided to RFI point 4 relating to potential barrier effect on avian species and the issue of nocturnal migration the following was stated in the Planner's Report:

"The response provided has again not fully addressed the requests of the Ecology Office as relayed to the applicant at both pre-planning and the further information stage. Firstly, the request to undertake a nocmig (Nocturnal Migration / Nocturnal flight call (NFC)) survey of the site was to help inform a robust assessment of any likely implications the proposed development may have of migratory birds as knowing the proportion of migrating birds flying through and/or stopping over in an area helps clarify their relative risk for collision with wind turbines and potential displacement effects.

As stated in the RFI received by Cork County council on 7th December 2023, Inchamore Wind DAC determined that it is improbable that a significant barrier effect could arise from the proposed Inchamore Wind Farm. This applies during both daytime and nocturnal migration and is in particular due to the small size of the wind farm (five turbines only) and the extensive turbine-free zones around it.

Inchamore Wind DAC determined through onsite ornithological surveys that there is no evidence of local bird movements, through or to Inchamore Wind Farm, between foraging and roosting or nesting sites. Neither was any desk study evidence found to suggest that Inchamore is on a key migration route for birds. As noted by the European Commission (2011 *Wind energy developments and Natura 2000*. European Commission, Luxembourg), there are few migratory species for which a barrier effect might be significant, and given the small size of the proposed Inchamore Wind Farm with significant turbine-free zones around it, the initial likelihood that migrating birds would be subject to barrier effect is low even without further considerations. In the unlikely event

that migratory species (whose journeys are typically hundreds or thousands of kilometres) encountered such a small wind farm and chose to avoid it, only a trivial detor around it would likely be taken, with negligibly greater energy expenditure.

It is also noted that standard NatureScot guidance for assessment of ornithological impacts by wind farm (SNH, 2017) does not prescribe nocturnal surveys except in particular situations such as presence of owls or nightjar *Caprimulgus europaeus* (of which there is no evidence at Inchamore), where coastal night-time activity might occur (which is not relevant to Inchamore) and where other important species may be present especially qualifying species of Special Protection Areas (of which there is also no evidence at Inchamore).

In view of the above, it is concluded that there is no likelihood of a significant barrier effect on any local or migratory bird movements by the proposed Inchamore Wind Farm. The above points and this conclusion apply to both daytime and nocturnal migration, and as a result it is also considered that nocturnal migration surveys are unjustified.

4.5 <u>Consultation Responses and Third Party Observations</u>

The Appellant has carefully considered the third-party representations and representations submitted by Statutory Consultees and Non-Statutory Consultees to Cork County Council during its consideration of the planning application. There were six submissions received by Cork County Council during the course of the planning application.

No submissions were received from members of the public on the planning application.

The representations are summarised in Table 4.2.

The TII submission was carried through into refusal reason No. 2 by Cork County Council. This has been addressed in Sections 3 and 4.3.

Submitted by	Submission date	Submission content	Response
Irish Aviation Authority	22/06/2023	the applicant should engage with Kerry Airport to undertake aeronautical safety assessment to confirm that the proposed wind farm and associated cran es woult	Kerry Airport were conta cted on 12 th November 2020, 22 nd November 2022 and 13 th February

Table 4.2: Summary	of Representations
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Submitted by	Submission date	Submission content	Response
		have no impact on instrument flight procedures and communication, navigation and surveillance equipment	 2023. A response was received on 8th March 2023. Communication specialists, Ai Bridges were commissioned to undertake an aviation impact assessment of the operational phase of the Project, which is detailed in EIAR Appendix 13.3. 1. The development does not impact or increase current published operating minima associated with Kerry Airport. 2. There is no impact on the current published MSA's associated with Kerry Airport. 3. The construction phase has been assessed and the Development will not impact on aviation safety. In the event that planning permission is granted for the Project, the Irish Aviation Authority will be contacted prior to the commencement of any works for consultation. All items raised by the IAA were considered during the design process and are addressed in EIAR Chapter 13: Material Assets.
Department of Defence	30/06/2023	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. If LED or other lighting types are used, should be 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.	Obstacle lighting to the specification of the Department of Defence will be used on selected turbines within the Development. Obstruction lighting elsewhere in the wind farm will be of a pattern that will allow the hazard to be identified and avoided by aircraft in flight. Construction lights used will be incandescent or of a type visible to Night Vision Equipment. Obstruction lighting fitted to obstacles will emit light at the near Infra-Red (IR) range of the electromagnetic spectrum specifically at or near 850 nanometres (nm) of wavelength. Light intensity will be of similar value to that emitted in the visible spectrum of light.

Consulting Engineers

Submitted by	Submission date	Submission content	Response
		All works are carried out in accordance with the IFI "Guidelines on protection of fisheries during construction works in and adjacent to waters".	All works will be carried out in accordance with the IFI "Guidelines on protection of fisheries during construction works in and adjacent to waters".
Inland Fisheries Ireland	04/07/2023	Contaminated (suspended solids, hydrocarbon, cement products etc) construction runoff must be collected and disposed of in a manner so that pollution of surface waters cannotoccur. On commencement and for the duration of construction a daily ongoing inspection programme of surface waters in the vicinity of the site should be undertaken, with any escape of contaminants notified immediately to IFI. There is no physical interference with the bed or bank of any watercourse without prior consultation with IFI. All watercourse instream works should be carried out in the dry. Instream works are limited to the period July to September inclusive. Provision is made for the advance removal and relocation of fish stocks by means of electro-fishing as necessary when instream works occur. All new or upgraded watercourse crossings (bridges/culverts), in fish bearing waters, are constructed in a manner the permits the free passage of fish both at the construction phase and upon completion. The works upon completion should not, because of design or construction, represent an obstacle to fish passage. IFI should be notified on completion of works at each crossing point to ensure the works meet fishery requirements. In terms of grid connection ducting, unless shown to be unavoidable watercourse crossing should be carried out by non-invasive means such as spanning or directional	All site drainage will be directed through either sediment traps, settlement ponds and/or buffered drainage outfalls to ensure that total suspended solid levels in all waters discharging to any watercourse will not exceed 25 mg/L. This is detailed in Chapter 2. Project Description and Chapter 9 Hydrology and Hydrogeology. Construction phase drainage propo sed can be seen in the Surface Wate r Management Plan as part of Appendix 2.1 Construction Environmental Management Plan. IFI will be consulted with prior to any works commencing on the Development. Instream works wil be carried out in dry weather/season. Instream works will be limited to the time period of July to September, inclusive. During instream works, provisions will be made for the advance removal and relocation of any fish stocks by means of electrofishing as necessary. All water crossings as part of the Development will be clear span bridges and will avoid permanent disruption to the stream beds and banks, protecting fishery habitats. This is further detailed in Chapter 2: Project Description.

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Consulting Engineers

Submitted by	Submission date	Submission content	Response
		drilling. Open trenching of watercourses must be a measure of last resort. Where open trenching of watercourses occurs the bed and banks of the crossing point should be reinstated to pre- works condition.	
National Office for Environment al Health Services	10/07/2023	 Assessment of the principle and description of the project The Environmental Health Service (EHS) is satisfied that the EIAR provides an adequate description of the proposed project. Assessment of Public Consultation and the Non- Technical Summary (NTS) The EHS is satisfied that the Non- Technical Summary provides an adequate description of the proposed development and the potential impacts on human health. The EHS recommends that the local community have access to a feedback mechanism where feedback including complaints are received and acted upon by a designated person such as the Community Liaison Officer. Issues may arise during each of the phases of the proposed development and not just Shadow Flicker during operations. Issues that may affect human health include Shadow Flicker, Air Quality, including Dust during construction, Noise and Vibration, Climate (both Mitigation and Adaptation), Hydrology and Hydrogeology and the Risk of Accidents/Natural Disasters. Assessment of Description of the Physical Environment. - Shadow Flicker - The Environmental Health Service (EHS) recommends the adoption of the 'blade shadow control system on the proposed turbines' as indicated in the EIAR as a minimum condition of planning to 	The recommendations of the EHS to provide a platform for the community to engage with a CLO will be implemented. A compliments and complaints register will be prepared and maintained throughout the construction, operational and decommissioning phases of the Project. A dedicated project website was launched (https://inchamorewindfarm.ie/) and provides updates to the public regarding the progress of the Project. A 'blade shadow control system on the proposed turbines' as indicated in the EIAR as a minimum condition of planning to deliver an avoidance of shadow flicker at sensitive receptors will be implemented. A CEMP has been prepared and included as EIAR Appendix 2.1. Soil stability will be monitored post construction. Mitigation measures described in EIAR Chapter 9 of the EIAR for all phases of the proposed development, Construction, Operation and Decommissioning but particularly during Construction will be implemented in full. Water monitoring will be cognisant of local sensitive receptors.

Submitted	Submission	Submission content	Response
by	date		W is to be a big of
		deliver an avoidance of shadow	will continue to be su bjed
		flicker at se hsitve receptors.	Deliau implemented by
		Soils and Coology The EUS	Coillto with the
		- Solis and Geology - The ERS	Dovelopment not
	Lastre mail	Construction Environmental	impacting on the use of
		Management Plan (CEMP) for the	forestry for reasons of
		construction phase that minimises	health gain
	PAGE DE MAR	the potential for increased stability	fiourit guilt
		issues and the erosion of soils.	A Major Accidents and Natural
		Following construction and during	Disasters chapter has been
	2018-31-31/23	operations soil stability should be	prepared as part of the EIAR
		monitored.	(Chapter 16) which takes into
			account the changing climate.
	The second second	- Hydrology and Hydrogeology -	
		The EHS recommends the full	Construction activities will be
		application of the mitigation	limited to normal working times
		measures described under	during weekdays and Saturdays,
		Chapter 9 of the EIAR for all	with no activities on Sundays and
		phases of the proposed	Public Holidays, with the exception
		development, Construction,	of large transport loads as
	1 Martin Martin	Operation and	aescribea in the EIAR.
	and the second second	Decommissioning but particularly	The notantial effects on Troffic and
	He Summer	during Construction. The EHS is	The potential effects on Trainc and
	1	outside the houndaries of the site	Project have been identified and
		primarily in the village of	fully assessed and detailed in the
warmen ha	ing contractives	Ballyyourney that includes private	FIAR and CEMP Please see
	the state waget	water supplies for domestic	FIAR Chapter 15: Traffic and
and the second	105 (79 B) (17 B)	settings and commercial food	Transport and Management Plan
SALASSE BUT AND	ist activity ist	businesses/manufacturers.	7: Traffic Management Plan of
	合社 (四位)名(6)	Ongoing monitoring of water	Appendix 2.1: Construction
	1.1.1	quality should be conscious of	Environmental Management Plan
tool an average and	N ROOM DRANDO	these sensitive receptors.	(CEMP).
1.5 2.4 17 1. P		- Air Quality/Climate - The EHS	Risks from fires has been
		recommends that the mitigation of	assessed in EIAR Chapter 16:
		greenhouse gas emissions go	Major Accidents and Natural
		beyond those given in the EIAR.	Dsasters.
		The development should aim to	
a home me ben bede	a part aller	utilise zero emissions or low	
		emissions plant and machinery	
the event from the	All the March 14 Part	development including the	
	A Choirt Making	appretional phase	
		operational phase.	
the Restorated in the	the section is	Opportunities should be sought to	
PROPAGATION OF	Presento la Af	sequester carbon on site. As	
	1.12	outlined in the HSE scoping report	
NAME AND A DECK	1 April 10 and	of December 2020 opportunities to	
	The second	support health and well-being for	
and which had the	and since the second	staff and the general public within	
	Participa - Participa	the proposed development could	
	a centra siero d	be explored.	
	A second second		
		The EHS further recommends that	
		Adaptation to or the Building of	
		Resilience to climate change is	
		specifically addressed under the	Declaration and state and filmers and a second

Jennings O'Donovan & Partners Limited

Submitted	Submission date	Submission content	Response
		subject of climate. This will overlap with other sections in the context of major accidents such as forest fires, but the risks need to be identified and assessed in terms of probability and severity and followed up with measures to adapt.	
		- Noise and Vibration - The EHS recommends that construction activities are limited to normal working times during weekdays and Saturdays, with no activities on Sundays and Public Holidays, with the exception of large transport loads described in the EIAR. As described under public consultation the local community should have access to a feedback/complaints mechanism direct to the Community Liaison Officer if issues around noise and vibration arise during any of the	
		proposed development's phases. - Traffic and Transport - The EHS wishes to highlight that the N28 road is currently undergoing an upgrade and according to Cork County Council will be completed in 2030. These works may have an impact on the Turbine Delivery Route effects and should be noted.	
		- Major Accidents and Natural Disasters - The EHS recommends that the risk of fire is adequately addressed and that mitigation measures are put in place to limit the risk of fire and limit the effect of a forest fire if one were to start and take hold.	
Transport Infrastructure Ireland	24/07/2023	The application is at variance with official policy in relation to control of development o/affecting national roads, as outlined in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012). TII notes that the subject application relies on a proposed access to the N22, national	Please refer to Section 4.3.
		primary road, within the administrative jurisdiction of Kerry County Council. Such an access proposal at the location where a 100kph speed limit applies, by	

Submitted by	Submission date	Submission content	Response
		Itself, or by the precedent whicha	
		would adversely affect the	
		operation and safety of the	
		national road network for the	
		- The proposal, ifapproved, would	
		create an adverse im pact on the	
		permitted speed limit applies and	
		would, in the Authority's opinion,	
		be at variance with the foregoing	
		of frontage development on	
		national roads.	
		-The proposed development,	
		the maximum speed limit applies,	
		would endanger public safety by	
		obstruction of road users due to	
		the movement of the extra traffic	
		generated.	
		inappropriate standards which are	
		not in accordance with those set	
		out in the DoECLG Spatial Planning and National Roads	
		Guidelines for Planning Authorities	
		(January, 2012) and TII Publications and concentration	
	A DE LA COMPANY	serious road safety risk for road	
		users on this high speed section of	
		have not been mitigated in the	
		application documentation	
		submitted.	
		TII is seriously concerned that the	
		subject application relies on an	
		the provisions of official policy and	
		the objective to safeguard the	
		satety of all road users. This matter	
		any decision on the subject	
		a pplication reliant on suchaccess.	
		information submitted in	
Transport	40/40/0000	connection with the above	
Intrastructure Ireland	12/12/2023	planning application, I wish to advise that the Authority's position	
		remains as set out in our letter of	
	the state of the	24-Jul- 2023.	

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CONCLUSION

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The Development will contribute to supplying the demand for renewable energy, which in the context of the ongoing climate emergency is an urgent Irish national priority that must be given significant weight given the wealth of supporting national and international policy.

Having regard to the energy targets set out in The Climate Action Plan 2024, the obligations on planning authorities under the Climate Action and Low Carbon Development (Amendment) Act 2021 and planning policy and guidance presented and assessed within this appeal (Section 3), it is imperative that renewable energy developments, such as the appeal proposal, are granted planning permission without delay.

The Applicant would like to underline that sustainability can be defined as a balance of social, economic and environmental factors, in this regard it is clear that the appeal proposal can be viewed as 'sustainable' and as such the Development adheres to the core principles of the National Planning Framework which have a 'presumption in favour of sustainable development'.

The whole ethos of the Development is to promote clean, green energy in accordance with the objectives of the latest Climate Action Plan. This renewable energy project will, when delivered, off set an estimated 72,597 to 80,580 tonnes of CO_2 per annum equal to over 2.5 million tonnes of CO_2 over 35 years.

Having regard for the NIS and the clarified points held herein, it has been demonstrated that the Project alone, or in combination with any other plan or project, will not result in significant adverse effects to the conservation objectives of any European Site.

Inchamore Wind DAC has clearly demonstrated that the Development will result in minimal impacts on Annex I habitats and habitats of high ecological value within the wind farm site. The Development is located in an area deemed "Open to Consideration" for onshore commercial wind development within the Cork County Development Plan 2022 and in compliance with County Development Plan Objectives BE 15-2 and 13-7, will not result in significant adverse effects on ecological sites or habitats of European, national or local importance.

The implementation of the habitat enhancement plan and those enhancement measures proposed onsite will actively protect high value peatland habitat and restore lower value boglands over the lifetime of the Development, in support of Objective BE 15-2 of the Cork County Development Plan discussed above. Therefore this appeal has demonstrated that the concerns listed in Reason Refusal 1 regarding the loss of such habitats are not valid.

The Applicant contends that the local authority decision to refuse planning permission for the Development in relation to potential road safety and congestion impacts is no longer applicable as discussed above in section 4.3.

The Development is in compliance with local plan and national planning policies. The support for such infrastructure is outlined in various strategic plans. We respectfully contend that planning permission should be granted for the Development for the reasons set out above.

APPENDIX A:

DECISION NOTICE DATED 09/02/2024

Appendix

March 2024



CORK COUNTY COUNCIL PLANNING & DEVELOPMENT ACTS, 2000 – 2010

NOTIFICATION OF DECISION TO REFUSE TO GRANT

Reference No. in Planning Register 23/05145

Inchamore Wind Designated Activity Company C/O Jennings O'Donovan Finisklin Business Park Sligo Ireland F91 RHH9



In pursuance of the powers conferred upon it by the above mentioned Act the Council of the County of Cork has by Order dated 09/02/2024 decided to REFUSE to grant Permission

For the development of land namely;

We, Inchamore Wind Designated Activity Company, intend to apply for permission for a tenyear planning permission for a renewable energy development. The entirety of the renewable energy development constitutes the provision of a five-turbine wind farm and all associated works on land in both Counties Cork and Kerry. The development for will consist of : 1) a wind farm with an operational lifespan of 35 years (from date of commissioning of the development), 2) the construction of five turbines with an overall ground to blade tip height ranging from 177m to 185m inclusive; a rotor diameter ranging of 149m to 155m inclusive; and a hub height ranging from 102.5m to 110.5m inclusive, 3) construction of permanent turbine hardstands and turbine foundations, 4) Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing. 5) installation of a (35-year life cycle) meteorological mast with a height of 110m and a 4m lightning pole on top, such that the overall structure will be 114m, 6) development of an onsite borrow pit, 7) construction of a new permanent internal site access roads to include passing bays and all associated drainage infrastructure. 8) development of a permanent internal site drainage network and sediment control systems. 9) construction of a permanent 38 kV electrical substation including a control building with welfare facilities, all associated electrical plant and equipment, parking security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works, 10) all associated underground electrical and communications cabling connecting the wind turbines to the onsite wind farm substation, 11) ancillary forestry felling to facilitate construction of the development, 12) all associated site development works including berms, landscaping, and soil excavation. Advisory note: A planning application is being lodged with Kerry County Council in relation to the elements of the project that are within the townland of Derryreag (Dhoire Aimhréidh) Co.Kerry, including the upgrade of the site entrance off the N22 and permanent forest track upgrade works. The planning application will be accompanied by an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS).

Tá sé beartaithe againne, inchamore Wind Cuideachta Ghníomhaíochta Ainmnithe, iarratas adhéanamh ar Chead maidir le cead pleanála deich mbliana d'fhorbairt fuinnimh in-athnuaite. Is ionann an fhorbairt fuinnimh in-athnuaite ina hiomláine agus feirm ghaoithe cúig thuirbín a sholáthar agus na hoibreacha gaolmhara go léir ar thailte I gContaetha Chorcaí agus Chiarraí. Beigh an fhorbairt comhdhéanta de: 1) Feirm ghaoithe le saolré oibriúcháin 35 bliain (ó dháta coimisiúnaithe na forbartha), 2) Tógáil cúig thuirbín le aired iomlán ó thalamh go barr an lann le ó 177m go 185 san áireamh; trastomhas rótar ó 149m go 155m san áireamh; agus aired moil ó 102.5m go 110.5m san áireamh, 3) Tógáil cruasheatán tuirbíní, 4) Tógáil príomhshuíomh tógála sealadach amháin le hoifigí suímh shealadacha ghailmhara, limistéir pháirceála agus fálú slándála, 5) Suiteáil crann meisteareolaíochta (saolré 35 bliana) a bheidh

110 méadar ar aired agus cuaillle tintrí 4m ar a bharr, sa tslí is go mbeidh aired foriomlán se 114 méadar ag an struchtúr, 6) Forbairt sloc iasachtaí amháin ar an láthair, 7) Tógáil buanbhóithre rochtana inmheáncha nua don láithreán agus uasghrádú ar bhóithre rochtana inmheánacha láithreacha chun cúinsí pasála agus an bonneagar draenála gaolmhar go léir a áireamh. 8) Forbairt líonra inmheánach draenála suímh buan agus córais rialathe dríodair, 9) fostáisiún buan leictreach 38kV a thógáil lena n-áirítear foirgneamh rialaithe le háiseanna leasa, gach gléasra agus trealamh leictreach gaolmhar, páirceáil, fálú slándála agus geataí, gach cábla faoi thalamh a bhaineann leis, umar coinneála fuíolluisce, agus gach struchtúr agus oibreacha coimhdeacha, 10) Gach cáblaí leictreacha agus cumarsáide faoi thalamh a nascann na tiurbíní gaoithe le fostáisiún na feirme gaoithe ar an látair, 11) Leagan foraoiseachta coimhdeach chun tógáil agus oibriú na Forbartha a éascú, 12) Gach obair forbartha láithreáinn lena n-áirítear beirm, tírdhreachtú agus tochailt ithreach. Nóta Comhairleach : Tá iarratas pleanála á chur isteach chuig Comhairle Contae Chiarraí maidir leis na gnéithe den tionscadal atá laistigh de bhaile fearainn Dhoire Aimhréidh igCo.Chiarraí, lena n-áirítear uasghrádú ar an mblealach isteach chuig an suíomh ón N22 agus oibreacha buan-uasghrádaithe riain fhoraoise. Beidh Tuarascáil ar Mheasúnú Tionchair Timpeallachta (TMTT) agus Ráiteas Tionchair Natura (NIS) ag gabháil leis an iarratas pleanála.

At: Inchnamore / na hInse Móire, Milleeny / na Millíní, Derreenaling / an Doirín Álainn, Co.Cork /Co.Chorcaí

In accordance with the plans and particulars submitted by the applicant

On: 06/06/2023, as amended on 07/12/2023

For the reasons set out in the Schedule attached hereto.

An appeal against a decision of the Planning Authority may be made to An Bord Pleanála by any authorised person before the EXPIRATION of the period of FOUR WEEKS beginning on the day of the giving (i.e. Date of Order) of the decision of the Planning Authority.

Signed on behalf of the said Council

Cde Baraid

Cathal de Baróid Administrative Officer

Date: 09/02/2024

SEE NOTES ATTACHED

Please note that pursuant to S.34 (3) of the Act, the Planning Authority has had regard to submissions or observations received in accordance with these Regulations.

In accordance with Article 20, site notice shall be removed on receipt of this Notification.

FINAL SCHEDULE

No.	Reason
1	It is considered that the facilitation of this proposal would result in the loss of Annex I Habitat and will lead to the further loss of existing high value peatland habitat. Accordingly, having regard to submitted documents, it is considered that the proposed development would contravene materially development objective BE 15-2 of the Cork County Development Plan 2022 the aim of which is to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. This proposal would also contravene materially development objective ET 13-7 of the Cork County Development Plan which states "commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".
2	A planning application in relation to the elements of the proposed development that are within the functional area of Kerry County Council, was refused by Kerry County Council (Pl. Ref 23/646) and is currently on appeal to An Bord Pleanála. This application included the upgrade of the site entrance off the N22 and permanent forest track upgrade works on which this proposal depends. It is therefore considered that the proposed development is premature until such time that the applicant can address existing deficiencies in the road network and entrance serving the proposed development in terms of safety and capacity.



Contact Details Contact details table

Address

Phone Fax International Phone International Fax

Email Addresses

Normal Planning Appeals and all other appeals Strategic Housing Development applications or pre-applications Strategic Infrastructure Development applications or pre-applications Viewing decided case files or requesting copies of documents on decided case files 64 Marlborough Street, Dublin 1, D01 V902 (01) 858 8100 or Lo-call 1890 275 175 (01) 872 2684 +353 1 858 8100 +353 1 872 2684

appeals@pleanala.ie

strategichousing@pleanala.ie

sids@pleanala.ie

publicaccess@pleanala.ie

Communications General queries

communications@pleanala.ie bord@pleanala.ie

Opening Hours

Monday Tuesday Wednesday Thursday Friday Saturday Sunday Public holidays, Good Friday and certain other days

9.15am - 5.30pm Closed Closed

We are open throughout the day and we do not close for lunch.

On certain other days when our office is closed, we will notify the public that we are closed. However, due to exceptional circumstances this might not always be possible. If you are unsure if our office will be open before you visit, please check our website www.pleanala.ie, telephone 01 858 8100 or Lo-Call 1890 275 175 before you travel.

How do I make an appeal Checklist

1.	You must put your appeal in writing (either typed or handwritten), you can use this form to assist – but there is no official form required.
2.	You must clearly state your own name and address. If someone is acting for you, like a planning agent they must clearly state their own name and address as well as your name and address.
3.	You must give us enough details to allow us to identify the application you wish to appeal. Examples of the details we accept are: a copy of the planning authority decision, or
	the name of the planning authority and the planning register reference number (for example: Ballytown City Council, 23719/18)
•	You must provide your planning grounds of appeal (reasons and arguments) for your appeal and any items you wish to support your grounds of appeal.
	If you are a third party, you must include the written acknowledgement given to you by the planning authority to confirm it received your submission or observation at planning application stage. We can also accept a convolt the acknowledgement
	You must pay the correct fee.
	You must make your appeal within 4 weeks from the date that the planning authority has made its decision:
	You must post your appeal to : The Secretary, An Bord Pleanála, 64 Marlborough Street, Dublin 1, D01 V902, or deliver it in person to a member of An Bord Pleanála staff at our office during office hours - Monday to Friday from 9.15am to 5.30pm. Please note that the security staff in our office cannot accept appeals.

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How much does it cost?

The cost of an appeal depends if you are making a first party appeal or a third party appeal.

You can pay fees by several methods and see the list below, however contact An Bord Pleanála for further details and information.

Further information

- Make a planning appeal
- Make an observation on a planning appeal
- Make an application for leave to appeal
- Make an oral hearing request
Fees: Planning Appeals

All freip you find the see for what you want to appeal or want to do

First partya ppeals ansi di aldev alder al s Youwant to appeal the decision of a planning authority on an application you lodged with it. The appeal does not include retention; AL 220 The appeal does not relate to commercial development; and Theappeal or application does not include an EIAR or NIS. You want to appeal the decision of a planning authority on an application you lodged with it. A2 The appeal does not include retention; €220 Theappeal does not relate to commercial development; and The appeal or application does include an EIAR or NiS. bu want to appeal the decision of a planning authority on an application you lodged with it. AB The appeal does not include retention; 1,500 The appeal does relate to commercial development; and The appeal or a ppication does not include an EIAR or NIS. Youwant to appeal the decision of a planning authority on an application you lodged with it. Theappeal does not include retention; A4 €3000 Theappeal does relate to commercial development; and The appeal or ap plication does include an EIAR or NIS. You want to appeal the decision of a planning authority on an application you lodged with it. The appeal does include retention; A5 €660 Theappeal does not relate to commercial development; and The appeal or application does not include an EIAR or NIS. You want to appeal the decision of a planning authority on an application you lodged with it. A6 The appeal does include retention; €660 The appeal does not relate to commercial development; and The appeal or a pplication does include an EIAR or NIS. You want to appeal the decision of a planning authority on an application you lodged with it. Theappeal does include retention; A7 £4.5D The appeal does relate to commercial development; and The appeal or a pplication does not include an EIAR or NIS. fertion 25 and sertion 29 of the Planning and Development Arts -55 You want to appeal only against conditions requiring financial A8 contributions that have been imposed by a special contribution €220 scheme.

Dr Yo	elieve the terms of a Development Contribution Scheme or	
Suj pro apj	oplementally bettery planning authority, so conditions have been openly applied by the planning authority, so conditions have been oblied in error to a decision.	

..

Appeals on the decision of a planning authority on a proposed development other than the who made the original planning application.

Ders	on or organisation who made the one	Fee .
	You made an observation or submission to the planning authority on You made an observation want to appeal the decision of the	€220
A9	planning authority.	

leave to appeal	Fee
 leave to appeal the planning authority's	€110
 A10 decision. You submitted a leave to appeal request to An Bord Pleanála. The	€110
All Board has granted your request following this decision.	

Reduced appeal fee	
in the list of organisations that qualify for a reduced appeal	€110
A12 fee (see the list).	

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A13 currently with An Bord Pleanála.	uced fee (see
You are on the list of organisations that quality to	ning appeal No fee
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mission on a copy of an appeal or appeal documents sent to you by An Bord

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Oral hearing request

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E) an	har and no requires .					12200
ALE	You want to request that An	Bord Pleanála	holds an c	oral hearing	on a	1
	planning a ppeal.				€50	 .)

Other appeals under the Planning and Developments Acts

	ealagainsi The Monking of a digits tambing scheme in a Hege development zone (Sar)	
A17	You want to make an appeal against the making of a draft planning scheme in an SDZ.	€220

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	A1 0	Youwant to make an appeal on a licens ing decision for an appliance,	
l	A18	public road (æction 254 licence).	E220

医 公里	readour and there is the arrivation and the weight on the Arts	
110	You want to make an appeal on a matter that has not been	
AT3	described here.	Please contact us

Re ferras

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Substitute consent

XA of the Plenning and Levelopment Acts	E3,000
· · · · · · · · · · · · · · · · · · ·	lfa previous permission was

	-	set aside by a
r		Court decision,
		there is no fee.
		Same application
		fee as would be
	the for substitute consent.	paid to planning
SC2	You want to apply for subcases	authority.
	the under section 1770.	€50

SC3 You want to request an oral hearing under sectio

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Sconing an EIAR	
Neopulation State	£5,000
Q1 You want An Bord Pleanala to scope an Erro	

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following a request from An Bord Pleanáia

cub	mission of an EIAR or NIS following a reque	Er.
	The second	€1,500
P1	You are submitting an EIAR following a request from us and it relates	€1,500 .
P2	to a proposed commercial development.	€220
Р3	not relate to a proposed commercial development.	

Organisations or individuals who pay reduced fees on appeals or referrals, and no fees on observations or submissions

(b) A body referred to in article 28 or 137 of the Planning and Development Regulations

2001, as amended, for example:

A local or planning authority

Certain ministers of Government

An Chomhairle Ealaion

Fáilte Ireland

Shannon Free Airport Company Limited

- An Taisce
- The Heritage Council
- A regional authority
- Inland Fisheries Ireland
- Waterways Ireland
- Irish Aviation Authority
- An airport operator
- CIÉ
- Commission for Railway Regulation
- Transport Infrastructure Ireland (TII)
- National Transport Authority
- Environmental Protection Agency (EPA)

- Health Service Executive (HSE)
- Commission for Regulation of Utilities
- Údarás na Gaeltachta
- The Health and Safety Authority (HSA)
- Irish Water
 - (c) The Royal Irish Academy
 - (d) A State authority, for example:
- A minister of the Government
- The Commissioners of Public Works (OPW)
 (e) A Transboundary State that is a member of the European Union other than Ireland or a party to the Transboundary Convention.
 (f) A development agency, for example:
- The Industrial Development Agency (Ireland)
- Enterprise Ireland
- The Shannon Free Airport Development Company Limited
- Údarás na Gaeltachta
- The National Building Agency
- The Grangegorman Development Agency
- A local authority
 - (g) Any other person prescribed by the Minister for the purposes of Part IX of the Planning and Development Act 2000¹

² Section 169 of the Planning and Development Act 2000 covers the making of planning schemes for strategic development zones. Under article 179 of the Planning and Development Regulations 2001, a regional authority whose area includes a draft strategic development zone planning scheme and a planning or local authority whose area is within or adjacent to the strategic development zone site(s) are designated as prescribed authorities for section 169 of the Planning and Development Acts.

Note- The An Bord Pleanála above information is included by Cork County Council with planning decisions for information purposes only and you are advised to contact An Bord Pleanála directly with regard to queries about the appeals process, costs, timelines etc.

APPENDIX B:

DEFINED TERMS

March 2024

APPENDIX B - DEFINED TERMS

Term	Definition
Redline Boundary	Refers to thedevelopment redline planning boundary. It is the boundary line of all works to be completed as part of the Development and is shown on the planning drawings accompanying this EIAR.
Appeal Site	Refers to all land that falls within the Redline Boundary
Development	Refers to all elements of works described in the planning application form (Cork County Council Planning Reference:23/05145) and public notices.
Project	Refers to all associated infrastructure required for the wind farm to be functional, such as the turbines, site access roads, temporary construction compound, Turbine Hardstands, Turbine Foundations, meteorological mast, Turbine Delivery Route and the Grid Connection Route assessed by the EIAR.
Turbine Delivery Route	Refers to the proposed turbine delivery route from Ringaskiddy Port to the site entrance on the N22.
Grid Connection Route	Refers to the proposed route of connecting to the national grid via Ballyvouskill 220 kV substation.

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APPENDIX C:

HABITAT CONDITIONS REPORT

Appendix

March 2024





Annex I Habitat Condition Report

FuturEnergy Ireland

October 2023

Delivering a better world

Quality information

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Revision History

Revision	Revision date	Details	Authorised	Name	Position
0	14 August 2023	Original	тм	Tony Marshall	Technical Director
1	21 September 2023	Text added regarding proximity of habitats to infrastructure	ТМ	Tony Marshall	Technical Director
2	09 October 2023	Additional text added regarding location of H6230 outside the red line	ТМ	Tony Marshall	Technical Director

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1. Introduction

1.1 Background

AECOM was appointed by FuturEnergy Ireland Development Designated Activity Company ('FuturEnergy Ireland') to carry out a survey of the condition of Annex I habitats¹ at the proposed location of Inchamore Wind Farm, Co. Cork, approximately 5 km north-west of Ballyvourney.

The surveyed area (the 'Site') encompasses the part of the red line boundary of the proposed Inchamore Wind Farm containing Annex I habitats. This encompasses open moorland in the western part of the red line boundary, the remainder being occupied by coniferous forestry plantation. The altitude range of the Site is approximately 400-460 m, incorporating the shallow- to moderately-sloping south-eastern aspect of Knockbwee. The Site, as defined by the limits of the condition assessment survey, is depicted by the extent of the Annex I habitats shown in Figure 1 in Appendix A.

1.2 Summary description of the Site

Figure 1, showing a map of the Annex I habitats subject to condition assessment, is provided in Appendix A. Figure 2 in Appendix A shows the condition of the surveyed Annex I habitats. Condition monitoring data are given in Appendix B.

The Annex I vegetation in the Site comprises wet heath and blanket bog, which occupy approximately 13.59 ha and 22.32 ha, respectively, of the open moorland part of the red line boundary. The wet heath is H4010 North Atlantic wet heaths with *Erica tetralix*, and the blanket bog is approximately 40% H7130 Blanket bog and 60% H7130* priority Blanket bog (priority H7130* is considered active through presence of peat-forming species). Within the open moorland area, there are also patches and strips of non-Annex I acid and marshy grassland, frequently with purple moor-grass *Molinia caerulea*, mainly on ridges but occasionally more extensively. Purple moor-grass also tends to dominate the wet heath. An extremely small amount of H6230 Species-rich *Nardus* grassland was noted amongst more typical acid/marshy grassland. The proposed access track between proposed turbines T2 and T3 passes through recent conifer plantation on former open moorland; other recent conifer plantation on former pasture is present on lower slopes adjacent to the established conifer plantation.

Some parts of the blanket bog are extensive and in good condition, but other extensive parts are heavily degraded, in particular by peat cutting, in places down to the bedrock and leaving 'islands' of standing peat (particularly visible on aerial photography in the vicinity of proposed turbine T3). Where the proposed wind farm falls upon blanket bog, the greatest impact is on such heavily degraded bog.

1.3 NPWS Article 17 data

The National Parks and Wildlife Service (NPWS) Article 17 data include a polygon covering the majority of the Site, classed as H4060 Alpine and subalpine heath. However, no H4060 was found during either the original wind farm habitat survey or this Annex I condition assessment survey. Heath in the Site corresponds to H4010 North Atlantic wet heaths with *Erica tetralix*, and rarely H4030 European dry heaths, and there are significant areas of H7130/H7130* Blanket bog. H4060 is a montane habitat type that typically occurs at higher altitude than the Site.

¹ Habitats in this Report preceded by an alphanumeric code in the format 'Hxxxx' are Annex I habitats. These are habitats of European Community interest listed in Annex I of *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna* (the 'Habitats Directive'). In summary, habitats of Community interest are those that: i) are in danger of disappearance in their natural range, ii) have a small natural range, or iii) are outstanding examples of habitats in (for Ireland) the Atlantic biogeographic zone. 'Priority Annex I habitat' (shown with an asterisk, e.g. H7130*) means that i) is considered to apply and there is a particular responsibility to conserve it owing to the large proportion of its range within the EU.

2. Methodology

2.1 Field survey

The survey was carried out on foot on 10 July 2023 by an AECOM habitat specialist with extensive experience of upland as well as lowland habitats. The weather during the survey was dry and there were no hinderances to the survey.

Condition of Annex I habitat was recorded by making observations at various points during a walk through the habitat and recording the relevant condition criteria in a tablet using a semi-automated spreadsheet. The location of condition assessment points was judged by the surveyor to obtain condition data representative of the vegetation in question in that particular area (rather than sampling atypical or transitional patches). The condition criteria were as described in Perrin *et al.* (2014).

Where this detailed Annex I condition assessment found any habitat differences from the original habitat survey, the differences were mapped as far as possible with the aid of aerial photography and a GPS-enabled tablet running ESRI FieldMaps. In these cases, vegetation stands considered to be homogenous were assigned Annex I or non-Annex I Fossitt habitat types. The Annex I habitats are those listed in Annex I of the EC Habitats Directive, with guidance on interpretation provided in European Commission (2013). The Fossitt habitat types are those described in Fossitt (2000). Vegetation types can occur in patches too small to map amongst more extensive communities, or in complexes that cannot be feasibly mapped within a reasonable timescale, and in these cases mosaic polygons were used, or target notes for extremely small habitats. The aerial imagery assisted with identification and separation of vegetation patches. Notes on habitat features were recorded using ESRI FieldMaps.

2.2 Digitising

Field data recorded in ESRI FieldMaps were subsequently imported into ESRI ArcMap. The habitat maps provided in Figures 1 and 2 were finalised using ESRI ArcMap, with reference to the field mapping, tablet target notes and aerial photography.

The GIS habitat polygons were assigned attributes for Fossitt habitat type, Annex I habitat type and Annex I condition, as well as a comment field used where considered appropriate to give descriptive information. The GIS habitat dataset was produced as a feature class within a file geodatabase, which automatically provides unique identifier, polygon area and polygon perimeter attributes. A check was carried out for errors such as small gaps and slivers, missing attributes or non-standard / incorrect attributes.

For this project, since several polygons contained mosaics of more than one Annex I type, or mosaics of Annex I habitat(s) with non-Annex I habitats, a 'Proportions' attribute has been provided which gives estimated proportions of the components in the Annex I attribute. For example, "H4010 / non-Annex I" in the Annex I attribute, and "75/25" in the proportions attribute, indicates that H4010 has an estimated cover of 75%, and non-Annex I habitat 25%, in that polygon.

Having more than one Annex I habitat in some polygons also creates a complication in the GIS data for the 'Structure and Functions' and 'Overall Conservation Status' attributes, since the status of each constituent Annex I habitat is not necessarily the same. For this reason, 'Structure and Functions' and 'Overall Conservation Status' contain abbreviations of the standard status terms separated by slashes, which apply to the respective Annex I habitats in the Annex I attribute. The abbreviations are: F = Favourable, UI = Unfavourable Inadequate and UB = Unfavourable Bad. For example, "H4010 / H4030" in the Annex I attribute, and "UB / F" in the status attributes, indicates that H4010 has been assigned Unfavourable Bad status, and H4030 Favourable status, in that polygon.

23 Nomenclature

This Report gives the scientific name of vascular plants on first mention of a species, following Stace (2019), and thereafter common names only (except in the Appendices where scientific names are used for brevity). English names of bryophytes and lichens are not well known therefore only scientific names have been used for these in all cases, following Atherton *et al.* (2010) for bryophytes, and Hodgetts (1992) for *Cladonia* spp. lichens.

2.4 Limitations

It is not possible to walk over every square metre of a site. The surveyor employed professional experience to judge where their survey route would best be laid to identify possible changes of condition and vegetation, using

aerial photography combined with factors such as angle of slope, aspect, texture and hue of vegetation, and occurrences of features such as streams and rock outcrops, all of which can indicate changes of vegetation type or condition. This is normal for such habitat surveys and is not considered to significantly limit the findings. However, it should be noted that some small habitats that are easily hidden by other vegetation and/or not clear from aerial photography may have gone undetected.

The boundaries between habitats in more natural situations can be gradual rather than sharp. In such cases, the surveyor made a best professional judgement as to where the boundary should be placed. In particular, wet heath and blanket bog commonly grade into each other. If known peat depths from a peat probing survey should indicate peat of 0.5 m or more in areas classed as wet heath (or, generally, any open habitat), then those areas of deeper peat should be regarded as blanket bog; conversely, if known peat depths are less than 0.5 m in areas classed as blanket bog, then those areas of shallower peat should be regarded as wet heath.

The farther south-west corner of the red line boundary was not closely inspected owing to time constraints and because it is distant from any proposed infrastructure. This corner of the open moorland was only viewed from a distance. No part of the conifer plantation was entered, including narrow forest rides.

3. Condition of Annex Ihabitats

Figure 1, showing a map of the Annex I habitats subject to condition assessment, is provided in Appendix A. Figure 2 in Appendix A shows the condition of the surveyed Annex I habitats. Condition monitoring data are given in Appendix B.

In the below descriptions of habitat condition, 'structure and functions' and overall conservation status are rated as Favourable, Unfavourable Inadequate or Unfavourable Bad (as per Perrin *et al.*, 2014). For overall conservation status, account is taken of 'area' and 'future prospects' in addition to 'structure and functions', in particular whether the state of the habitat is likely to be maintained or improved, or could realistically degrade in condition or area within twelve years.

It is important to note that overall conservation status is often unfavourable even if 'structure and functions' is not, owing to unfavourable 'future prospects' arising from existing pressures or a realistic potential for them (since these habitats are not in protected sites or otherwise subject to conservation management, and indeed are frequently subject to existing adverse impacts). However, there is often potential for 'future prospects' to be rendered favourable by appropriate management (for example, under a habitat management plan). Consequently, 'structure and functions', which equates to current habitat condition, is much more important for the purposes of this Report.

3.1 H4010 Northern Atlantic wet heaths with Erica tetralix

H4010 wet heath within the red line boundary is almost invariably in poor condition, mainly as a result of overgrazing, although past burning cannot be ruled out.

3.1.1 H4010 at and near proposed turbine T1

The wet heath in the vicinity of proposed turbine T1 itself is of low quality. Of two stops close to turbine T1, one failed on insufficient cover of ericoids as well as complete absence of cross-leaved heath *Erica tetralix* within 20 m, and whilst the other passed all criteria it was noted that cross-leaved heath was extremely sparse. A third stop in the vicinity of the proposed access track where it meets the T1 platform similarly failed on insufficient ericoids. Although there is occasional sphagnum, and other characteristic species such as deergrass *Trichophorum germanicum*, the moss *Racomitrium lanuginosum* and rarely bog asphodel *Narthecium ossifragum*, there is in general an overabundance of dense purple moor-grass, as well as an under-representation of ericoids. Consequently, this area of wet heath is in **Moderate** condition. Considering conservation status as per Perrin *et al.* (2014), 'structure and functions' is considered to be **Unfavourable Inadequate**. 'Future prospects' is uncertain (grazing levels would probably continue similarly, but might increase) therefore also Unfavourable Inadequate. Therefore overall conservation status is **Unfavourable Inadequate**.

Shortly to the north-east of proposed turbine T1 (beyond the infrastructure footprint), on slightly higher uneven ground, there is a separate small patch of wet heath beside the fence delineating the county border. Although cross-leaved heath is similarly rare here, heather *Calluna vulgaris* is frequent (although all short, suggestive again of some over-grazing), and there is abundant deergrass and frequent pleurocarpous moss (particularly *Hylocomium splendens* and *Rhytidiadelphus loreus*). The latter suggests a transition towards dry heath however the deergrass is indicative of wet heath. An assessment stop in this patch passed all criteria. Consequently, this area of wet heath is in **Good** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Favourable**. 'Future prospects' is uncertain (grazing levels would probably continue similarly, but might increase) and therefore considered Unfavourable Inadequate. Therefore overall conservation status is **Unfavourable Inadequate**.

Note that the area of wet heath in the footprint of proposed turbine T1 is slightly reduced by the occurrence on an east-west steep bank of non-Annex I acid/marshy grassland.

There is another wider east-west steeper bank south-west of T1 (beyond the infrastructure footprint), on which similar non-Annex I acid/marshy grassland occurs in mosaic with very poor quality wet heath with very insufficient to absent ericoids. Wet heath in this mosaic is evidently in **Poor** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Bad**, which leads (irrespective of 'area' and 'future prospects') to an overall condition status of **Unfavourable Bad**.

3.1.2 H4010 near proposed turbine T2

Proposed turbine T2 is located within a block of established conifer plantation and does not itself impact upon existing wet heath. The proposed access track leading up to turbine T2 crosses the southern narrow end of a small triangle of wet heath. Of three condition assessment stops in this wet heath, one passed all criteria (this was located near the north-east corner of this patch of wet heath, where condition is better) but the other two failed on either insufficient ericoid cover or complete absence of cross-leaved heath within 20 m. Again, there is frequently an overabundance of dense purple moor-grass at the expense of other species. Consequently, this area of wet heath is in **Poor** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Inadequate**. Given abundant recent conifer planting on adjacent former open moorland 'Future prospects' is considered uncertain and therefore also Unfavourable Inadequate. Therefore overall conservation status is **Unfavourable Inadequate**.

3.1.3 Other H4010

Other wet heath occurs more distantly from infrastructure between proposed turbines T1 and T2, within the red line boundary but well beyond the infrastructure footprint. This is described below.

The higher parts are a mosaic with patches of non-Annex I acid/marshy grassland, often indicating localised heavier grazing on less damp ground. About 80% of this area is wet heath, which is locally relatively diverse with, for example, occasional carnation sedge *Carex panicea*, flea sedge *Carex pulicaris* and heath milkwort *Polygala serpylifolia*, and rarely bog pimpernel *Anagallis tenella*. Of three assessment stops in this area, two passed all criteria. However, the other failed on complete absence of cross-leaved heath within 20 m, and at those that passed all criteria it was noted that the occurrence of cross-leaved heath within 20 m was either atypical or that it was extremely sparse, and occasional heather was also noted to be all very short. These factors strongly suggest significant over-grazing. Consequently, this area of wet heath is in **Moderate** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Inadequate**. Given abundant recent conifer planting on adjacent former open moorland, and some uncertainty over future grazing levels, 'future prospects' is considered uncertain and therefore also Unfavourable Inadequate. Therefore overall conservation status is **Unfavourable Inadequate**.

The remaining wet heath within the red line boundary is located towards the far south-western corner of the open moorland area. This area includes the site of an existing met mast. Two condition stops were taken in the nearer parts, and owing to time constraints and distance from proposed infrastructure, the more distant parts of this area were viewed at a distance. One of the condition assessment stops passed all criteria and the other failed on insufficient ericoid cover and too much common bent *Agrostis capillaris*. The latter is a negative indicator that may result from over-grazing but could to some extent also be natural in some areas where transitional to drier vegetation. Over-grazing and insufficiency of ericoids appeared to be common in this area, with viewed vegetation towards the south-west appearing particularly short. Raised knolls and ridges in this area are subject to heavier grazing and are especially poor. For these reasons, condition of this wet heath is considered **Poor**, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Bad**, which leads (irrespective of 'area' and 'future prospects') to an overall condition status of **Unfavourable Bad**.

3.2 H7130/H7130* Blanket bog

Very degraded H7130 with little remaining peat occurs within the footprint of proposed turbine T3. The footprint of proposed turbine T1 affects a small amount of H7130*, and the proposed access track between T1 and T3 affects an extremely small amount of H7130* as well as a little degraded H7130.

3.2.1 H7130* at proposed turbine T1

The platform for proposed turbine T1 partly impinges upon a smaller pocket of H7130* situated on locally gentlysloping ground amongst and grading to wet heath. There is occasional *Sphagnum papillosum* in this area, more commonly *Sphagnum capillifolium*. There is also frequent *R. lanuginosum*, cross-leaved heath and common cottongrass *Eriophorum angustifolium*, and bog asphodel is more or less constant and locally frequent. Hare's-tail cottongrass *Eriophorum vaginatum* is present but rare here. Otherwise the species composition is similar to the surrounding wet heath, although deergrass is more abundant. Two condition stops in this small pocket of bog passed all criteria. A very small isolated patch of H7130* shortly south-west of T1 also passed all criteria, and although hare's-tail cottongrass and *Sphagnum papillosum* were not seen, there is a slight hummock and hollow topography and *Sphagnum cuspidatum* (characteristic of wet conditions) is occasional. Therefore condition is **Good**, and 'structure and functions' as per Perrin *et al.* (2014) is **Favourable**. Given the evident over-grazing of adjacent wet heath, it is not certain that this would not extend to and degrade this bog, therefore 'future prospects' is Unfavourable Inadequate, and overall conservation status is **Unfavourable Inadequate**.

3.2.2 H7130* between proposed turbines T1 and T3

There is an extensive and true 'blanket' of blanket bog on flat to gently-sloping ground between proposed turbine T1 and T3. This has a slight southerly aspect where sloping. The proposed access track between T1 and T3 very slightly impinges upon the very edge of this H7130* bog, where it grades into wet heath and/or is vulnerable to drying effects from a very large east-west drainage ditch (that separates the artificial and abrupt southern edge of this bog from the new conifer plantation to the immediate south). Closer to T3, this intact H7130* changes to heavily degraded H7130 bog – this is discussed separately in the next section below.

S. papillosum varies from occasional to abundant in this area, supplemented by S. capillifolium, and in places there is occasional to frequent hare's-tail cottongrass. There are variable amounts of bog asphodel, and often the characteristic liverwort *Pleurozia purpurea* can be found. Of five condition stops carried out in this blanket bog, four passed all criteria; the other failed a single criterion for overabundance of purple moor-grass. Overall, this bog is considered to be in **Good** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Favourable**. Although a large part of this area appears to be fenced off from livestock, there is no guarantee that this would be maintained, nor that further large-scale peat extraction as has taken place in the heavily degraded bog directly to the east would not extend to this area, and particularly owing to the latter, 'future prospects' is considered Unfavourable Bad, therefore overall conservation status is also **Unfavourable Bad**.

3.2.3 H7130 at and near proposed turbine T3

A large part of the proposed platform for proposed turbine T3 sits on the southern part of this area of degraded bog (although the majority is beyond and uphill of the T3 platform). The bog in this area, as mentioned above, is heavily degraded by large-scale peat extraction, to the extent that bedrock or stony ground is visible in large areas without peat, leaving strips and 'islands' of standing peat.

The southern part of this area is particularly poor. The strips and 'islands' of standing peat can be easily seen on aerial photography. These are particularly prone to drying when they are thin, as is the case in the immediate vicinity of T3. The intervening vegetation is not bog vegetation, but rather a developing vegetation on stony ground that resembles but poorly fits heath and acid grassland, with species such as mat-grass *Nardus stricta*, heath rush *Juncus squarrosus* (a species that commonly occurs on disturbed acidic upland ground), short heather, deergrass and the moss *Hypnum jutlandicum*. Since there is some remaining standing peat, and the area has clearly been subject to extreme peat extraction, the habitat is degraded blanket bog corresponding to H7130, but it must be emphasised that a very large proportion of the extant habitat lacks peat and is not peat bog vegetation. This bog is very clearly in extremely **Poor** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Bad**, which leads (irrespective of 'area' and 'future prospects') to an overall condition status of **Unfavourable Bad**.

The more north-western parts of this zone of degraded bog include some larger 'islands' of standing peat in which two other condition stops were taken, all criteria were passed. However, no 'good' peat forming species (such as *S. papillosum* or hare's-tail cottongrass) were noted at these condition stops, and there are still areas of removed peat down to bedrock, in which another condition assessment expectedly failed multiple criteria. Therefore on professional judgement this north-western part of the degraded bog is also considered to be in **Poor** condition, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Bad**, which leads (irrespective of 'area' and 'future prospects') to an overall condition status of **Unfavourable Bad**.

3.2.4 H7130/H7130* between proposed turbines T1 and T2

There is a large irregularly-shaped area of intact H7130* between proposed turbines T1 and T2. Although within the red line boundary, none of this bog is within the infrastructure footprint and most is far beyond it, and substantially lower than the T1 platform. Surprisingly, despite the presence of obvious drainage ditches through the deep peat of parts of this bog, and obvious cut edges along the western edge from previous peat-cutting, all four condition stops in this area (including two near ditches) passed all criteria. *S. papillosum* is constant at low to moderate cover, with *S. capillifolium*, *R. lanuginosum*, *Pleurozia purpurea*, bog asphodel and cross-leaved heath all present throughout. Therefore condition is **Good**, and 'structure and functions' as per Perrin *et al.* (2014) is **Favourable**. Given the present ditches, whose effect may become more evident with a warming climate if left unblocked, and more obviously the threat of further peat-cutting, 'future prospects' is considered Unfavourable Bad, and overall conservation status is therefore **Unfavourable Bad**.

A northern spur of this bog (also not within the infrastructure footprint) exhibited an overabundance of purple moor-grass, thus condition is **Moderate**, and 'structure and functions' as per Perrin *et al.* (2014) is **Unfavourable Inadequate**. For the same reasons given in the previous paragraph, overall conservation status is **Unfavourable Bad**.

West of the above-described intact H7130*, there is a similarly-sized area of heavily degraded H7130. Again, although within the red line boundary, this degraded bog is not within the infrastructure footprint and most is far beyond it, and substantially lower than the T1 platform. Not all of this was closely inspected owing to time constraints and distance from proposed infrastructure, however the area is self-evidently in very poor condition. It is not completely certain whether some vegetation in this area is degraded bog from which peat has previously been extracted or whether some parts lacked peat in the first place. Other parts nearer the intact H7130* have some remnant peat and are more clearly degraded bog. Two condition assessments in this area failed on insufficient positive indicators, too much common bent and too much drainage. Although the criterion for bryophyte/lichen cover passed, this hides the fact that the contributing bryophytes were pleurocarpous mosses that are common in acid grassland and heath, and not on their own indicative of bog, and other acid grassland species are also present. There are artificial drains in this area and a worn vegetated access track, presumably to facilitate previous peat-cutting. Ericoids are sparse such that even if some parts of this area did not form from peat extraction but were originally wet heath, they are also in poor condition under wet heath criteria, suffering from over-grazing with some patches more akin to low quality acid grassland. This area is clearly in Poor condition, and 'structure and functions' as per Perrin et al. (2014) is Unfavourable Bad, which leads (irrespective of 'area' and 'future prospects') to an overall condition status of Unfavourable Bad.

3.3 H6230 species-rich Nardus grassland

An extremely small area, amounting to a few square metres, of moderately species-rich acid grassland with a slight mesotrophic/basic influence was noted approximately 15 m west of the proposed platform for turbine T1 (beyond the infrastructure footprint). This is on a longer bank of otherwise typical and species-poor acid/marshy grassland. It is indicated with a label on Figure 1. Typical acid grasses of upland areas here include mat-grass, common bent, sheep's-fescue Festuca ovina and viviparous fescue Festuca vivipara, but there is also abundant carnation sedge and frequent eyebright Euphrasia officinalis agg., and occasional associates include common dog-violet Viola riviniana, heath grass Danthonia decumbens, flea sedge and self-heal Prunella vulgaris. The flea sedge and abundance of carnation sedge suggest a slight basic influence, and self-heal is a more mesotrophic species. The vegetation appears to broadly fit either UG2c or UG2e as per Perrin et al. (2014), which are considered in Perrin et al. (2014) to be referrable to Annex I H6230. The full name of H6230² indicates that to be considered as this Annex I habitat, the relevant vegetation must be 'in a mountain area' and on siliceous rock. Both of these criteria are satisfied in this case. A condition assessment carried out for this very small patch in its entirety failed on having a species count of less than 25 species. In other words, this very small stand is unremarkable and in Moderate condition (although it does not currently seem subject to particular adverse influences and may be naturally unremarkable). 'Structure and functions' as per Perrin et al. (2014) is therefore Unfavourable Inadequate, and since it is possible that degradation by heavier overgrazing could occur at any time (given general current overgrazing in the area), 'future prospects' is Unfavourable Bad and thus overall condition status Unfavourable Bad.

A second small but larger patch of similar vegetation was noted between proposed turbines T1 and T2, approximately 170 m north of the latter and just outside the red line boundary (see Figure 1). This was not closely inspected, being outside the survey area, but was noted to contain abundant eyebright and rarely fairy flax *Linum catharticum*, the latter indicative of some base enrichment. It would almost certainly fail the H6230 criteria since it appeared less diverse than the above-described example.

² The full name is: Species-rich *Nardus* grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe)

4. Other ob servations / comments

4.1 Existing pressures on Annex I habitats and potential for improvement with a wind farm

Existing pressures on Annex I habitats are significant over large parts of this Site. The area is in general overgrazed, and this is ultimately the root cause of condition criteria failure in many cases. There is also very badly degraded blanket bog in the vicinity of proposed turbine T3, and towards the south-west of the red line boundary. Some of the bog that is in good condition contains drainage ditches, and these are likely to be causing a degree of drying and associated degradation (for example, by reducing suitability for sphagnum species that prefer wetter conditions). Although no sign was seen of burning, it is possible that the shortage of ericoids in some wet heath, and the common over-dominance of purple moor-grass, are partly the result of past burning in addition to overgrazing. At least a small amount of wet heath has also been lost to the new conifer plantation.

A consented wind farm would immediately prevent burning of wet heath, which cannot take place near wind farm infrastructure for obvious reasons. There is potential to improve the condition of areas of Annex I wet heath by suitable habitat management, such as a more favourable grazing regime. However, on this Site the more obvious possibilities for habitat improvement concern blanket bog:

There is potential for partial restoration of the heavily degraded H7130 blanket bog in the vicinity of proposed turbine T3. Turbine T3 is situated on the southern part of this degraded H7130, and although there has been excessive peat removal down to bedrock, some peat will be removed during construction. This removed peat could be translocated to the northern end of this degraded bog, north-west of turbine T3, to expand and buffer the existing 'islands' of standing peat which are partly H7130*. Small amounts of peat removed during construction of proposed turbine T1 and the intervening access track could also be placed at the same translocation area. This would expand and buffer existing peat 'islands', whilst also reducing the small loss of blanket bog habitat to construction, and potentially allowing expansion of H7130* in the currently degraded area.

As with all such peat translocation, the surface acrotelmic peat including existing vegetation would need to be removed in sections separately from underlying deeper catotelmic peat, and these layers would need to be replaced in the same order at the translocation site. Given the extent of stoney ground without peat in this degraded bog area, and proximity to turbine T3, this suggestion appears straightforward to achieve, and there appears to be sufficient space on stoney ground for short-term storage of acrotelmic peat whilst catotelmic peat is first moved into position (this suggestion assumes that the slope of the translocation area and nature of peat to be moved are suitable, without, for example, risk of peat slides).

There are obvious drainage ditches cut through the intact H7130* blanket bog south-east of proposed turbine T1. Although this bog is currently in overall good condition, it may not remain that way with the ditches in place and considering also the possible effects of a warmer climate, and condition would almost certainly be improved in the short-term by blocking these ditches (for example, by creating wetter conditions for sphagnum species that need this). It may be possible to fill the ditches with some of the peat removed during construction, or to create peat blocks with immediately adjacent peat, as is commonly carried out in peatland restoration. Alternatively, plastic piling blocks that are also used in peatland restoration can be cheaply installed and last indefinitely.

As with other wind farms where turbines are proposed in forestry in upland areas, creation of permanent turbine clearance areas in the forestry provide opportunities for establishment of new wet heath. That wet heath (and perhaps in places bog) was the likely vegetation type prior to tree planting, and is likely to form upon removal of trees (with ditch blocking if necessary), is demonstrated by the presence of wet heath immediately adjacent to the south-west plantation, and by the presence of vegetation resembling disturbed wet heath in parts of the recently-planted conifer plantation. Wet heath that establishes in turbine clearance areas within forestry would not be in a livestock grazing area, with grazing largely limited to that of deer, and consequently there would be higher potential for better quality wet heath to develop that is not overgrazed.

4.2 Naturalness of some unfavourable habitat

The term 'Unfavourable' implies that improvement in condition is possible. Whilst this is certainly the case over large parts of the wet heath at this site, and is possible at degraded bog, in localised instances it may not be. For example, on localised more steeply sloping ground, wet heath is liable to be drier with less wet heath species than on more moderate slopes. Such habitat is often transitional to others, and failure of certain condition criteria in such cases is at least partly natural.

5. References

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Appendix A Figures





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Appendix B Condition monitoring data

Unless otherwise stated, the extent over which the condition criteria for Annex I habitats in the following tables are assessed is indicated as follows:

- plain text = assessed in quadrat area;
- bold = assessed over wider surrounding area; and,
- bold italic = assessed over both of the above extents.

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H4010 North Atlantic wet heaths with Erica tetralix

Condition criterion:	Stop:	1	2	3	4	5	6	7	8	9	10	11	12
		Just r	Just north-east of T2		Betw. T1 & T2, in zone		E. of	NE of T1	At T1		NW of	' T2	
Erica tetralix present in 20 m radius		Pass	Pass	Fail	Pass	Fall	Pass	Pass	Pass	Pass	Fail	Pass	Pass
* At least 50% cover positive indicators		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
At least 10% cover Cladonia / Sphagnum / Racomitrium lanuginosum / pleurocarpous moss		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
At least 15% cover ericoids / Empetrum nigrum		Fail	Pass	Pass	Pass	Pass	Pass	Fall	Pass	Pass	Fail	Fall	Pass
<50% cover dwarf shrubs		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<1% cover TOGETHER Agrostis capillaris, Holcus lanatus, Phragmites australis, Pteridium, Ranunculus repens		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass
<1% cover non-native species	1.1	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<20% cover trees/scrub		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<10% cover Pteridium aquilinum / Juncus effusus		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<10% crushed/broken/pulled-up sphagnum		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<33% ericoid / E, nigrum / Myrica gale shoots browsed		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
No burning into bryophyte/lichen layer or bare peat		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Page
** No burning of sensitive areas		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pase	Page	Page 1
<10% cover disturbed bare ground		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Paee	Pase	Page
10% drainage by cutting/ditches/tracking/trampling		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

* Positive vascular indicators = Eriophorum angustifolium, Trichophorum germanicum, Calluna, Erica tetralix, Myrica, Potentilla erecta, Carex spp., Rhychospora spp., Schoenus spp., Drosera spp., Narthecium, Pedicularis spp., Polygala spp., Salix repens, Succisa.

Positive bryophyte/lichen indicators = Sphagnum spp., pleurocarpous mosses, Pleurozia, Breutelia, Diplophyllum albicans, non-crustose lichens.

** Sensitive areas = slopes >1 in 3, gully sides, areas with abundant bryophytes/lichens or pools etc, <10 m from watercourses, <50 m from drains, >400 m altitude, severely wind-clipped vegetation, and soils <5 cm deep.

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H7130/H7130* Blanket bog

Condition criterion: Sto	p: 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Betw. T1/T2	H7130	* betwee	n T1 and	d T3 Heavily degraded H7130 at and near T3				near T3	Betw. At T1 T1 / T3			SW of Degraded T1 H7130 S. of		ied S. of T1	
* At least 7 positive indicator species	Pass	Pass	Pass	Pass	Pass	Fall	Pass	Pass	Fall	Fall	Pass	Pass	Pass	Pass	Fall	Fall
At least 10% cover bryophytes/lichen (excluding Sphagnum falla	x) Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<75% cover EACH Calluna, Eriophorum vaginatum, Molinia, Trichonhorum germanicum, Schoenus, Eleocharis multicaulis	Fail	Pass	Fall	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<1% cover TOGETHER Agrostis capillaris, Holcus lanatus, Phragmites australis, Pteridium, Ranunculus repens	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fall	Fall
<1% cover non-native species	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<10% cover trees/scrub	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<10% crushed/broken/pulled-up sphagnum	Pass	Pass	Pass	Pass	Pass	* Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<33% ericoid. Empetrum nigrum or Myrica gale shoots browsed	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
No burning into bryophyte/lichen layer or bare peat	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
** No burning of sensitive areas	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
<10% cover disturbed bare ground	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Fall	Fall	Pass	Pass	Pass	Pass	Pass	Pass
<10% drainage by cutting/ditches/tracking/trampling	Pass	Pass	Pass	Pass	Pass	Fall	Pass	Pass	Fail	Fall	Pass	Pass	Pass	Pass	Fall	Fail
<5% cover erosion guilles/areas within bog mosaic	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Fall	Fall	Pass	Pass	Pass	Pass	Pass	Pass

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AECOM 13

Condition criterion: Stop	: 17	18	19	20
	H7130)* betwee	en T1 and	i T2
* At least 7 positive indicator species	Pass	Pass	Pass	Pass
At least 10% cover bryophytes/lichen (excluding Sphagnum fallax) Pass	Pass	Pass	Pass
<75% cover EACH Calluna, Eriophorum vaginatum, Molinia, Trichophorum germanicum, Schoenus, Eleocharis multicaulis	Pass	Pass	Pass	Pass
<1% cover TOGETHER Agrostis capillaris, Holcus lanatus, Phragmites australis, Pteridium, Ranunculus repens	Pass	Pass	Pass	Pass
<1% cover non-native species	Pass	Pass	Pass	Pass
<10% cover trees/scrub	Pass	Pass	Pass	Pass
<10% crushed/broken/pulled-up sphagnum	Pass	Pass	Pass	Pass
<33% ericoid, Empetrum nigrum or Myrica gale shoots browsed	Pass	Pass	Pass	Pass
No burning into bryophyte/lichen layer or bare peat	Pass	Pass	Pass	Pass
** No burning of sensitive areas	Pass	Pass	Pass	Pass
<10% cover disturbed bare ground	Pass	Pass	Pass	Pase
<10% drainage by cutting/ditches/tracking/trampling	Pass	Pass	Pass	Pass
<5% cover erosion gullies/areas within bog mosaic	Pass	Pass	Pass	Pass

* Positive vascular indicators = Eriophorum angustifolium, Eriophorum vaginatum, Trichophorum germanicum, Calluna, Erica tetralix, Vaccinium myrtillus, Empetrum nigrum, Myrica, Rhynchospora spp., Schoenus spp., Drosera spp., Narthecium, Menyanthes, Andromeda, Carex bigelowii, Pedicularis spp., Pinguicula spp., Polygala spp.

Positive bryophyte/lichen indicators = Sphagnum spp., Pleurozia, Odontoschisma, Racomitrium lanuginosum, Breutelia, Diplophyllum albicans, Scapania gracilis, non-crustose lichens. ** Sensitive areas = slopes >1 in 3, gully sides, areas with abundant bryophytes/lichens or pools etc, <10 m from watercourses, <50 m from drains, >400 m altitude.

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H6230 Species-rich Nardus grassland on siliceous substrates in mountain areas

Condition criterion: Stop	: 1
	~15 m W of T1
>6 TOGETHER of * high quality + ** general indicators	Pass
* >1 (base-rich) or >0 (base-poor) high qual indicator	Pass
At least 25 species per relevee	Fail
<1% cover non-native species	Pass
<10% EACH Arrhenatherum, Dactylis glomerata, Holcus Ianatus, Lolium perenne, Cirsium arv./vulg., Rumex obtusi./crispus., Jacobaea, Urtica dioica, Ranunculus repens, Juncus effusus, Eriophorum angustifolium/vaginatum, Narthecium.	Pass
<20% cover TOGETHER of above negative indicators	Pass
Max 10% cover Sphagnum spp.	Pass
Max 25% cover Polytrichum spp.	Pass
Max 5% cover scrub, heath and bracken	Pass
Forb:graminoid ratio 20-90%	Pass
At least 25% sward 5-50 cm tall	Pass
Max 20% cover of litter	Pass
<10% cover disturbed bare ground	Pass
<20 m ² serious grazing/disturbance in vicinity	Pass

<20 m² serious grazing/disturbance in vicinity

* BASE-RICH indicators (for UG1c/UG2c ~ CG10/U5c/some richer U4): Thymus, Lotus corniculatus, Linum, Campanula rotundifolia, Conopodium, Alchemilla officinalis agg., Primula vulgaris, Prunella vulgaris, Antennaria, Lysimachia nemorum, and the moss Ctenidium molluscum.

* BASE-POOR indicators (for UG1e/UG2e ≈ U4/U5 where richer but not basic as above): Viola riviniana/canina, Danthonia, Lathyrus linifolius, Pseudorchis, Carex caryophyllea/pilulifera

** General indicators: Agrostis capillaris, Anthoxanthum odoratum, Festuca ovina, Nardus, Galium saxatile, Potentilla erecta, Carex binervis, Luzula campestris/multiflora, Polygala serpyllifolia, Veronica officinalis, and the mosses Hylocomium splendens and Rhytidiadelphus loreus/squarrosus.

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AECOM 15

