Our Case Number: ABP-316212-23



DRB Community CLG c/o Noleen Kennedy Grangemore Raharney Co. Westmeath

Date: 15 February 2024

Re: Proposed development of 26 no. wind turbines and associated works.

at the Ballivor Bog Group, Co. Meath and Co. Westmeath.

Dear Sir / Madam,

An Bord Pleanála has received your recent letter in relation to the above mentioned case. The contents of your letter have been noted.

If you have any queries in the meantime, please contact the undersigned officer of the Board or email sids@pleanala.ie quoting the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,

Ashling Doherty
Executive Officer

Direct Line: 01-8737160

PA36

Ashling Doherty

From: Daryl Kennedy < kennedyd7@gmail.com>

Sent: Monday 12 February 2024 11:10

To: SIDS

Subject: Ref 316212-23 FAO Ashling Doherty

Attachments: ABP - BnM 12th Feb 2024 Submission.pdf; JH Response - Marsh Fritillary - Feb

2024.pdf

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Dear Ashling, please find attached observations in relation to the Jan 2024 published Response document from the Applicant, with reference to the above Planning Application.

No fee attached as we have previously made an observation on this planning application.

Regards,

Noeleen Kennedy

Submission to: An Bord Pleanála, 64 Marlborough St, Dublin 1

Person making the submission: Noeleen Kennedy, Grangemore, Raharney, Co. Westmeath.

Submission made on behalf of: DRB Community CLG

Planning Application: Wind Farm Development including 26 turbines and all associated works

Proposed location: Ballivor Bog Group, County Meath and County Westmeath

Planning Applicant: Bord na Móna Powergen LTD.

Submission Case reference: PA25M.316212, as received at ABP 5th April 2023.

First Observations date by DRB Community CLG: June 3rd 2023

Response by Applicant to Observations, as publicised: Jan 22nd 2024

Observations to response by DRB Community CLG: Feb 12th 2024

This submission makes objective observations on the response of the applicant Bord na Mona Powergen LTD, via its contracted Planning & Environmental Consultants group MKO. This response doc is referred to as "BRD" from hereon, in this submission to An Bord Pleanala.

It is the general observation of this submission that 3 weeks is an inappropriate amount of time for members of the public to adequately review and comprehensively respond to Bord na Mona's responses. While Bord na Mona has had the opportunity to engage paid consulants MKO over many months, the impacted communities, being amateur in the very complex area of planning, are afforded just 3 weeks to defend their rights and that of the environment (flora, fauna, ecosystems), which is often without voice in these matters.

Looking at the response document in totality, it is clear that the direction from Bord na Mona to their consultants MKO, is to not change anything with respect to scope and extent of the proposed windfarm, irrespective of the substantive nature of all observations made on the original application.

Subject Matter of this submission and related observations:

(1) Land Ownership

In Section 2.1.19 (pg 64) of the BRD, it is stated that the applicant "confirm that they are either the registered owner of the lands, or the party entitled to be the registered owner, pursuant to dealings pending in the Property Registration."

This submission makes the observation that it is inappropriate to request the planning authority, ABP, to consider a planning application of this scale and impact, when many tracks of land within the Windfarm footprint are not in the applicant's ownership, nor consented by the legal owners for use. Indeed several of the properties are currently the subject of legal proceedings, where the legal owner has contested Bord na Mona's Section claim for adverse possession.

Our submission in June 2023 to the planning application listed out 31 such Folios, as illustrative examples. Bord na Mona, via its response document section 2.1.19, lists 3 folios, which it states:

"it is noteworthy that Folios MH19987F, MH18945 and MH18380 are entirely outside of the Bord na Móna Ownership boundary" This response contends that Bord na Móna are acting disingenuously in their response, as sections of these Folios were within the development footprint and not within the ownership of Bord na Móna, according to the PRAI at time of our June 2023 submission. Bord na Móna took possession of the relevant sections of these Folio in July 2023 and onwards and so our submission was factually correct. Bord na Móna suggesting otherwise is reprehensible.

Nonetheless, this submission reiterates the original points, as remining soundly valid as there are many plots of land within the footprint which are under legal contest between owner (per PRAI) and Bord na Mona:

The Inspector must request that Bord na Mona clarifies in a map and associated table, the areas within the delineated red area for which it is not the legal owner at time of application and amends their planning application accordingly.

This submission contends that it is a waste of the Inspector and ABP reviewers, the Board (of ABP) as well as taxpayer's money, to complete a detailed assessment of this planning application in the knowledge that tracts of land within the proposed windfarm footprint may never be legally owned by, nor possibly ever consented for use to, Bord na Mona or its subsidiaries, for the development of an Industrial Windfarm.

(2) Substitute Consent.

Bord na Mona (majority landowner of the Ballivor Bog Group) has applied to An Bord Pleanala on a number of occasions over recent years for Substitute Consent; it seeks/will seek to regularise the planning status of the historic peat extraction activity on those lands. It has been unsuccessful to date, whether having withdrawn the application, been declared as an invalid application or granted (May 2020) and consequently quashed (May 2021) by the High Court.

As stated in Section 2.2.21 of BRD, Pg 66, the applicant proposes to continue the process of applying for Substitute Consent. An Bord Pleanala must ensure that the Exceptional Circumstances condition is very clearly met, with respect to retrospective Environmental Impact Assessment for the industrial harvesting of the Ballivor Bogs group, and potential retention permission granted, before making a decision on this application.

(3) Wind Energy Guidelines

Section 2.2.21 (Planning) of the BRD seeks to portray the applicant as adhering to sections of the current Wind Energy Guidelines, through the choosing of singular context sections such as "Aesthetically tall turbines would be most appropriate" in "flat peatland" areas, per DoEHLG (2006) guidelines".

However, the situation remains that 26 turbines of 200m height will utterly dominate what is a flat open landscape with clear visibility from great distances. Adding the currently consented and additional 9 x 185m Bracklyn turbines, plus associated windmasts, then the cumulative visually impact is utterly dominant. The cumulative windfarm footprint is surrounded on all sides by relatively densely populated rural residences, including most notably Ballivor a highly populated centre at a distance of 2.5km from the site, with a population of ca. 1800. Raharney at a distance of 3.3km with a population centre of ca. 250; Delvin at 5km with a population centre of ca. 750.

Once again, we reiterate the following, which has not been adequately taken into account:

Pg. 45 of the 2006 WEDG, Section 6.8 - Height: "Turbine height is critical in landscapes of relatively small scale, or comprising features and structures such as houses, and must be carefully considered so as to achieve visual balance and not to visually dominate." The area of this proposed development is very clearly a landscape of relatively small scale. Furthermore, the Wind Energy Development Guidelines latest draft of December 2019, although not yet formally in place, does represent the consolidated view of 1000's of submissions over several years and includes the following in relation to Landscape Character Assessment:

"Landscape character is the distinct, recognisable and consistent pattern of elements that occur in a particular landscape and how these are perceived.

The sensitivity of a landscape is a measure of its ability to accommodate change or intervention, without suffering unacceptable effects to its character. Differing landscapes, based on their sensitivity, have the capacity to absorb different levels of development."

Taking the above into consideration, this submissions requests that the planning Inspector have due regard to the proposed development scale and impact on resident's amenities and associated human activities. This is not a sparsely populated area.

(4) Prescribed bodies notifications

It is noteworthy that a number of prescribed bodies which were notified of the original planning application ABP 316212 / 23, appear not to have been notified of the Applicant's response as published in Jan 2024 e.g. OPW, HSE, NPWS, CRU. This observation is based on a review of the Prescribed letters section of the response document.

The inspector must ensure that all prescribed bodies are notified and a period of time designated for corresponding review and response. As alluded to in the following section, as an illustrative example, the OPW submitted observations in relation to this proposed windfarm in June 2023 which are significant and must be adequately addressed by the Applicant.

(5) Visual Impact.

The OPW submitted observations in June 2023, concluding that the body is "very concerned about the impact on protected panorama views from the internationally significant cultural landscapes of Loughcrew/Slieve na Calliagh and the Hill of Tara" and "is very concerned about the visual impact on the rooftop views from Trim Castle".

The Hill of Ward viewpoint has not been adequately addressed e.g. the screening mitigation which has been proposed in the response document is not physically accurate and in any case is not a sustainable solution e.g. Ash tree coverage which is known to be a vulnerable tree species due to Ash dieback. The inspector should satisfy himself/herself on the future visual impact simply through the present-day clear visibility of the windmast which is in place and at half the height of the proposed turbines.

It is extremely disappointing that the response from Bord na Mona, via MKO, does not address the OPW's recommendation that for "world Heritage properties" such as Loughcrew & Hill of Tara, that "World Heritage Impact Assessment toolkits have not been employed", noting that the Hill of Tara is a monument of "Outstanding Universal Value". Loughcrew, a National Monument in State Care and of "sufficient landscape heritage merit to warrant...an application for international designation by UNESCO". The Hill of Tara in on the UNESCO World Heritage Tentative list (among The 6 Royal Sites of Ireland).

It is noteworthy that the proposed Bord na Mona turbines will be higher than the Slieve na Calliagh, the highest hill in Meath. Bord na Mona's (MKO) response in Section 2.1.1, pg 11, Landscape and Visual Effects on Very High Sensitivity Cultural Heritage Sites, states that if a windfarm developer were to avoid visual impact from universally important cultural heritage sites, then "such a principle would eliminate vast areas of the Irish Landscape from the development of wind energy". This suggests that any and all negative impacts on the landscape are to be deemed acceptable.

An Bord Pleanala subscribing to this approach to planning would be wholly unacceptable and this submission requests the Inspector and the Board to consider very carefully the visual impacts of a cumulative 35 turbine windfarm, plus anemometers. Ref ABP 09.PA0041, Element Power as Applicant. Section 12.0 Recommendations, point 5.

The Hill of Uisneach requires similar visual impact assessment.

As covered in our submission of June 2023, the developer and indeed An Bord Pleanala, must consider alternative reviewable energy projects, including off-shore wind and less visually impactful energy infrastructure.

(5) GHG Emissions (Carbon Release)

Section 2.1.9 of the BRD focuses on Carbon Release. This submission appreciates the correction of the "typo in Chapter 10 Air & Climate", amending Carbon Savings from "per annum" to "over its lifetime".

The BRD goes on to briefly cover the "carbon loss calculation methodology" as used, but fails to address the substantive matter of our group's submission i.e. lack of clarity on carbon calculations, lack of a clear layout of data associated with each carbon generating element e.g. cabling, rock, sand, concrete, turbine components, transportation, car parks, substation build, reinforcement steel etc.

The original application provides summary figures in Appendix 10-1, but not a clearly laid out "walk-through" of those figures e.g. and as previously observed, Appendix 10-1 BALLIVOR WIND FARM CARBON CALCULATIONS" quotes a figure of 14.28 Kg Co2/MWh as the "Lifecycle Emissions" of the windfarm using 4.5MW turbines, but with no clarity of how that figure was arrived at.

A development of this scale requires absolute clarity around the merits of the endeavour. Hence it is incumbent on the applicant to lay out the calculations, so they can be independently assessed. Otherwise citizens are disenfranchised of their full right to participate in the planning process.

It remains the contention of this entity (DRB Community CLG) that the calculations presented and consequently the justification for this industrial energy development cannot be trusted at face value, due to lack of clarity, and the Inspector must seek to correct..

(6) Roads and Traffic

The Response document has not adequately dealt with our observations made. It seeks to portray minimal impact on the local roads and environment by focussing responses on narrow events such as Turbine component movements or concrete foundation pours. This submission requests that the Bord considers the totality of the 90,000 HGVs using over a 2 year period and at minimum reduces significantly the size of the proposed windfarm. The Inspector should also consider the construction overlap of the consented Bracklyn windfarm which has not yet commenced construction.

The response document in Section 2.1.17 references just one school and not the many schools of the area which will experience very significant traffic and associated safety concerns. The response document states as follows: "One measure that may be considered would be to minimise the HGV deliveries made to and from the site at the start and end of the school day". The obvious lack of commitment to addressing community concerns is extremely disappointing.

(7) Bord na Mona environmental responsibility

We observed previously that the original application was lacking in its identification of wind farms within a nominal (BnM designated) 25km zone of influence in that it advised that there were no wind energy developments within 25km of the proposed development. This was incorrect as Cloncreen and Cloncant windfarms are both located within 25km of the Proposed Development Site and are not referenced throughout when assessments were being carried out. Section 2.1.14 of the response document does not adequately deal with this. The application now needs to consider Yellow River Windfarm which is under construction.

(8) Biodiversity – Marsh Fritillary

Although the response document confirms the Marsh Fritillary as a Key Ecological Receptor, this submission assesses its general response as inadequate. The response from MKO seeks to portray risk to habitat and population of this legally protected species, as per original application. This submission calls for a refusal of planning permission due to its certain impact on the Marsh Fritillary butterfly. Ref related response from butterfly expert Jesmond Harding for additional information.

This submission calls for a complete and through lifecycle study of the Marsh Fritillary butterfly by a verifiably independent expert group (not funded by the develop) across this entire area.

(9) Impact on Biodiversity

We reiterate our original points in this area, as Bord na Mona's response document continues in the same approach of its original EIAR i.e. highly subjective assessments with all mitigations favouring the proposed development.

We continue to be very concerned with the potential impact on the Stoneyford River & River Deel and consequently on the neighbouring SAC and SPA of the Boyne and Blackwater Rivers. Ref ABP 09.PA0041, Element Power as Applicant. Section 12.0 Recommendations, point 14.

In relation to Badgers, this submission questions the veracity of the survey data e.g. just 3 badger setts detected. The inspector should reference Biodivesity Ireland or the Dept of Agriculture for extensive Sett maps for accurate and alternative views on badger populations.

Note other SPAs and NHAs in the immediate area for impact consideration: Molerick Bog NHA, Mount Hevy SAC, Royal Canal SAC/SPA.

(10) Loss of Habitats

This submission objects once again in the strongest terms to the destruction and loss of habitats as described through the EIAR, including tracts of Poor Fen and of Ancient woodland at Clondalee More (Oak & Hazel, a unique landscape feature of the area). The ancient woodland contains plant species which are indicators of such centuries old established woodland e.g. wood anemone, lords

and ladies, bluebell, wood sorrel, and pignut. Wood anemone is considered above all as an indicator of long continuity of woodland on the site. It is likely that woodland on the southern edge of Ballivor Bog, and close to the proposed Turbine no. 8, is very ancient given that it was located on an island in the bog as indicated in the 1840s OS maps. To lose such an historically important habitat in part or in full is entirely unacceptable. ABP must consider this in the strongest terms possible.

Bord na Mona's response document shows little regard for the retention of habitats and this submission observes that all suggested mitigations are in favour of the proposed development and not the environment.

(11) Proximity to residential dwellings

This submission reiterates what it previously stated in regards to turbine separation distances from homes.

The 2019 Draft guidelines direct that a "setback distance for visual amenity purposes of 4 times the tip height should apply between a turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development".

As previously stated, the following examples of separation distances are less than 800m: Turbine T3 (665983, 752965) vs House 180; Ref. Turbine T14 (663474, 757496) vs House no. 83. Separation distances <800m in each case. Turbine T7 (665928, 751694) is similarly <800m from the curtilage of the nearest home.

The response document does not deal adequately with this observation at any point.

The inspector must ensure that an independent separation distance measurement be conducted between proposed turbine locations and residential property curtilages, such that 2019 Guidelines can be met if and when implemented.

(12) Community consultation.

The response from the developer in relation to Community Consultation is inadequate. At its core, consultation with impacted communities seeks input and responds in a way that satisfactorily addresses, in whole or in part, the concerns expressed. The approach by Bord na Mona has been consistent in that it has either ignored the concerns or sought to rationalise why those expressed concerns are not valid, resulting in no change or compromise to proposes plans. Such an approach will never win support from a community.

(13) Shadow Flicker

Section 2.1.6 does not adequately address the concerns of people living next to the proposed windfarm, in that no shadow flicker should be experienced on people's homes or properties.

(14) Consideration of Reasonable Alternatives

The response document does not respectfully address our submitted observations in relation to alternatives, such as off-shore wind energy development. The cumulative impact of the Bord na Mona and Bracklyn windfarms on the amenity of the area, the negative environmental impact as well the very significant impact on views to, from and between sites of enormous historical significance is an unacceptable price to pay vs reasonable alternatives such as Off-shore wind, Solar developments, Biomass cultivation etc.

The "do-nothing" alternative of carbon sequestration through rewetting and rewilding must be considered in a very serious way e.g. Lough Boora is a leading example of an alternative approach for consideration.

(15) Archaeology & Cultural Heritage

Our observation as made (June 2023) has not been addressed e.g. the Narrow Gauge Railway which is identified as a protected structure in the Westmeath County Dev Plan, Ref RPS 021/008; NIH 15402102.

In addition, Woodtown House, a noted Protected Structure which is just 850m from the windfarm site has not been given due consideration in the response document.

Lisclougher Bridge (RPS 014-022) has not been included for consideration nor the archaeological consideration of Cloneycavan man.

(16) SEA (Strategic Environmental Assessment) analysis.

Our observation as made (June 2023) has not been addressed i.e. has the SEA Directive Directive 2001/42/EC been complied with? It provides that Programs / Plans / Projects should be conducted as a whole and not in isolation.

(17) DRB Community CLG adopts the further observation points made by EcoAdvocacy & EHP Services in their respective submissions.

Submission authored by:	Just Cornely	Date: _	12 th Feb 2024

Daryl Kennedy (on behalf of Noeleen Kennedy)

Response to 'Response to Observations Received Ballivor Wind Farm (ABP Ref. 316212)'

On behalf of DRB Community Company Limited by Guarantee

By Jesmond Harding



Marsh Fritillary, Grangemore, N 64551 53675, County Westmeath.

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1.1 INTRODUCTION

Jesmond Harding was requested by DRB Community Company Limited by Guarantee to survey areas of the Ballivor Bog Group in May 2023. Arising from the time constraints that applied, the survey was carried out on two dates, 25 May 2023 and 29 May 2023.

Jesmond Harding is the author of two books, "Discovering Irish Butterflies & their Habitats" published in 2008 and "The Irish Butterfly Book" published in 2021 He has had articles published in various periodicals including the Irish Naturalists' Journal, Peatland News (Irish Peatland Conservation Council), Wings (BirdWatch Ireland) and the online nature magazine Wildlife Extra. He featured in the third series of "Living the Wildlife" (episode 2) and "The Burren: Heart of Stone" (Episode 1). He was part of the expert group that drew up the red list for Irish butterflies in 2010. He is a member of the Irish Peatland Conservation Council, Burrenbeo Trust, and a founding member of Butterfly Conservation Ireland. He is Conservation Officer for Butterfly Conservation Ireland. Jesmond gives talks on butterflies and advises on habitat creation and management. He is involved with several Lepidoptera recording programmes. He is an author, editor and member of the coordination committee for the Butterfly Atlas Project 2010-2021 led by the National Biodiversity Data Centre and works with the Burrenbeo Trust to manage limestone habitats. Jesmond manages Butterfly Conservation Ireland's website and Butterfly Conservation Ireland's reserve at Lullybeg, County Kildare.

On January 22, 2024, Jesmond Harding was provided with a copy of the report prepared by MKO Consultants in response to requests issued by An Bord Pleanála on the 20th of June 2023 (Third Party Submissions) and the 29th of June 2023 (Local Authority Reports). The applicant was invited by An Bord Pleanála to respond to all observations received to the application. Jesmond Harding was asked DRB Community CLG to prepare a response to the response provided on behalf of the applicant by MKO Planning and Environmental Consultants. This response follows. The applicant's response is provided following the response provided on behalf of DRB Community CLG.

2.1.3.2.3 Impact on the Marsh fritillary

Several submissions were received with regard to potential impacts to marsh fritillary, including one from DRB Community CLG which included a Lepidoptera report undertaken by Jesmond Harding. This report included results of surveys carried out in May 2023 during the adult marsh fritillary flight period and concluded with four main concerns regarding the assessment of this species:

Concerns over Section 6.6.2.1.6 of the EIAR which states the timing of marsh fritillary surveys carried out in 2020;

Concerns over Section 6.6.2.1.6 of the EIAR which states that no suitable marsh fritillary habitat was identified within the construction footprint of the proposed development;

Based on the identification of a breeding site within the construction footprint, as per the report provided in the submission, the decision not to include marsh fritillary as a Key Ecological Receptor (KER) should be reviewed.

Highlights that rewetting of cutover bog within the Ballivor group would be beneficial to the metapopulations of marsh fritillary in the wider environment.

Based on the above concerns, the report advises that marsh fritillary are included as a Key Ecological Receptor (KER) and an impact assessment should be undertaken. The points below address each of these concerns and in doing so, address all other submissions relating to marsh fritillary.

The following contains the applicant's response to these points and the response on behalf of DRB Community CLG.

Applicant's response

2.1.3.2.3 Impact on Marsh fritillary

Section 6.6.2.1.6 of the EIAR states that adult marsh fritillary were identified during the multidisciplinary walkover survey of the proposed development site in April 2020. The Lepidoptera report included in the submission highlights that adults are unlikely to be seen at this time year. In response, it can be confirmed that the above date was recorded in error, and this text should have noted that adult marsh fritillary were identified during the multi-disciplinary walkover survey carried out on the 26th May 2020.

1.2 DRB Community CLG Response

This correction is welcome. The weather conditions on 26 May 2020 were warm and sunny, and ideal for observing the Marsh Fritillary.

2.1.3.2.3 Impact on Marsh fritillary

Applicant's response

Suitable marsh fritillary habitat within the construction footprint of the proposed development

The proposed development has been designed to avoid areas identified as potential significant habitat for marsh fritillary, which were recorded during surveys in 2020. No areas identified as providing suitable habitat for this species are located within the proposed development footprint.

The Lepidoptera report provided by DRB Community CLG details results from four locations within the proposed development site boundary which were surveyed in May 2023. Concern was raised as this report identified a marsh fritillary breeding site (Site 1 of the report) to be within the footprint of the proposed development. However, as indicated in Figure 3-1 in the Marsh Fritillary survey document provided in Appendix 1 of this submission response, none of the sites surveyed in the report are within the footprint of the proposed development.

However, taking into consideration the findings of the Lepidoptera report, including the identification of marsh fritillary breeding sites in close proximity to the footprint of the proposed development, additional surveys were undertaken on a precautionary basis on the 22nd of August 2023, to ground truth previous surveys carried on the site in 2020, 2021, and 2022, and following on from the surveys undertaken by a third party in 2023. The findings of these additional surveys are provided in the Marsh Fritillary survey document in Appendix 1.

1.3 DRB Community CLG Response

The response to the above is stated in responses to the applicant's information at 3.3.1, 3.3.2, 4.1 and 4.2.

2.1.3.2.3 Impact on Marsh fritillary

Applicant's response

The inclusion of marsh fritillary as a KER

Considering the findings and recommendations of the DRB Community CLG Lepidoptera report, as well as the results of the 2023 surveys, marsh fritillary have been included as a KER in response to the concerns raised in the submissions and an impact assessment has been undertaken in the Marsh Fritillary survey document included as Appendix 1 of this response.

The Marsh Fritillary Impact Assessment took account of surveys carried out on behalf of the applicant in 2020, 2021 and 2022, the survey undertaken by Jesmond Harding for DRB Community CLG and a further survey conducted later in 2023 which identified three Marsh Fritillary larval webs as follows:

Plate 3-4 Marsh fritillary larval web recorded at IG N63629 57298, approximately 30m west of proposed road infrastructure and adjacent to Site 1 of the DRB Community CLG Lepidoptera report.

Plate 3-5 Marsh fritillary larval web recorded at IG N63621 57275, recorded approximately 5m south of the web depicted in Plate 3-4.

Plate 3-6 Marsh fritillary larval web recorded at IG N63619 57279, approximately 10m west of proposed road infrastructure and 15m north of Site 1 of the DRB Community CLG Lepidoptera report.

1.4 DRB Community CLG Response

A "Key Ecological Receptor" (KER) is defined as a species or habitat occurring within the zone of influence of the Proposed Development upon which likely significant effects are anticipated. "Zones of Influence" (ZOI) for individual ecological receptors refers to the zone within which potential effects are anticipated. ZOIs differ depending on the sensitivities of particular habitats and species and were assigned in accordance with best available guidance and through adoption of a precautionary approach. The zones of influence for the Marsh Fritillary differ according to the site characteristics, such as the topography of the surrounding landscape, including the levels of exposure to wind and sunlight, the soil moisture levels, and whether these characteristics will be changed by developments such as tree and scrub removal or development, the excavation of soil near a habitat and the erection of structures that have a shading effect or require drainage.

3.3 Surveys undertaken in 2023

3.3.1 Potential suitable marsh fritillary habitat

Areas identified as providing potential suitable habitat for marsh fritillary during previous survey efforts and in the DRB Community CLG Lepidoptera report were surveyed, as well as any other areas identified during the survey. On a precautionary basis, areas previously identified as providing potential suitable marsh fritillary habitat have been extended and now small sections of potential habitat, totalling 0.049 ha, are within the Proposed Development footprint. Areas identified as potential suitable habitat are indicated in in Figure 3-1.

1.5 DRB Community CLG Response

It is a matter of concern that the time constrained surveys carried out in May 2023 on behalf of DRB Community CLG identified habitat for the Marsh Fritillary not identified in previous surveys. It is a matter of concern that 490 square metres of potential habitat is within the proposed development

3.3.2 Evidence of marsh fritillary

Three marsh fritillary larval webs were recorded within an area identified as providing suitable habitat during the 2023 survey effort and are shown in Plates 3-4 to 3-6. This area is located between proposed Turbines 13 and 14 in the vicinity of Site 1 of the DRB Community CLG Lepidoptera report. The locations of the larval webs are shown in Figure 3-1. All larval webs recorded were outside the footprint of the Proposed Development. 1.6 DRB Community CLG Response

Finding only three larval nests on 22 August 2023 raises concern about the survey.

May and June 2023 were mainly dry, with above average sunshine and temperatures in both months. June 2023 was the warmest June on record. The weather conditions favoured early adult emergence and breeding, and accelerated development was noted with the first larval nest nationally recorded by Jesmond Harding on a bog site in County Kildare on 29 June 2023. This date is over three weeks earlier than the previous earliest known date for the appearance of a larval nest on the site.

The development of Marsh Fritillary larvae is reliant on warmth with direct sunlight in spring especially critical. At 3.3.1 the report points out that the potential breeding habitat identified between Turbines 13 and 14

"are areas that are exposed to high levels of sunlight and with an abundance of devil's bit scabious. Sward height in these areas was varied and no evidence of grazing was present. Plates 3-1, 3-2, and 3-3 show typical areas identified as providing potential suitable habitat for marsh fritillary."

The timing of larval web surveys in summer and autumn must consider the prevailing weather conditions during and following the adult flight period and site characteristics. When these circumstances favour rapid development, larvae enter their overwintering diapause earlier than on cooler, wetter sites in cooler years, but 2023 was the warmest year on record. Examining the photographs of the larvae included in the report, these are in the third instar (characterised by spines that project away from the anal segment). This is the final instar before the overwintering stage is reached. Synchronous development is not a marked feature of this species across a population; larvae shown in the report could be late developing larvae from eggs laid later during the flight period. When the diapause phase is reached, the larvae disappear until spring, forming dense hibernaculum webs out of sight beneath vegetation.

It is possible that larval webs were missed owing to survey timing. In addition, the extent and quality of the habitat and the recording of 18 adults on Site 1 on 29 May 2023 suggests that a figure greater than three larval webs with a wider spatial distribution can be expected. In this regard, it is suggested that a survey for Marsh Fritillary nests be repeated in March and April 2024. At a minimum, this survey needs to be carried out on Site 1 and for c.300m southwards along the railway bank and c. 300m south of the proposed location of turbine 13.

4. MARSH FRITILLARY IMPACT ASSESSMENT

4.1 Assessment of the Potential Impacts on marsh fritillary during construction

At 4.1 The Marsh Fritillary Impact Assessment contains the following statements:

The Proposed Development footprint has been specifically designed to avoid areas identified as providing suitable habitat for marsh fritillary where possible. However, following on from the 2023 survey effort, a highly precautionary approach was taken, and small sections of potentially suitable marsh fritillary habitat were identified at the very edge of the Proposed Development footprint (Figure 3-1). Therefore, there will be a direct loss of some small areas of potential habitat, totalling approximately 0.049 ha.

The loss of approximately 0.049 ha of potential suitable habitat for marsh fritillary will be slight in nature and suitable habitat is abundant in the wider landscape and no significant impacts are anticipated. However, the opportunity for implementing a marsh fritillary management plan will be taken to enhance and promote further areas of suitable habitat within the development site. The implementation of this plan will negate the slight loss of potential suitable habitat for marsh fritillary within the site.

1.7 DRB Community CLG Response

The area identified in Figure 3-1 that will be lost is close to the third larval web found in August 2023. Given the survey timing and weather conditions during the period May-August 2023, it is likely that this is breeding habitat, rather than potential breeding habitat.

The characterisation of the loss of habitat as 'slight in nature' is disputed. The Marsh Fritillary often breeds in discrete areas of a site containing suitable and potentially suitable habitat for reasons that are not evident. Removal of part of its habitat might remove the population. The statement that 'suitable habitat is abundant in the wider landscape' does not appear to be supported by any of the surveys on behalf of the applicant and is not supported by the surveys undertaken on behalf of the DRB Community CLG. The habitat on the proposed development site contains large areas of unvegetated bare peat, with some raised bog remnants, scrub and woodland.

Most areas of the cutover bog contain vegetation characteristic of acid soils and is unsuitable for Devil's-bit Scabious. The farmland adjoining the bog is mostly intensively managed, with evidence of fertiliser and herbicide application resulting in improved grassland for livestock grazing and silage, containing no habitat for the Marsh fritillary.

The intention to 'promote further areas of suitable habitat within the development site' is described in 5.1. Avoidance of impacts to established habitat is preferable to initiatives to create new habitat which might be unsuitable. The sequencing is concerning. If the work destroys the habitat before any potential compensatory habitat develops, it is likely there will be no Marsh Fritillary population remaining to occupy any new habitat. The development site is extensive and design should be applied to avoid any loss of habitat.



Figure 1 Bare peat and vegetation on acid peat consisting notably of Heather, rushes, Downy Birch and Grey Willow.



Figure 2 Large areas of bare acid peat exists in the area, containing no habitat for the Marsh Fritillary.

4.1 Assessment of the Potential Impacts on marsh fritillary during construction

4.1 Disturbance/Direct Mortality

No breeding sites for marsh fritillary were identified within the footprint of the proposed development. However, larval webs were identified in close proximity to road infrastructure between Turbines 13 and 14. Therefore, there is potential for the inadvertent disturbance/direct mortality to this species arising from the construction phase of the proposed development via encroachment of machinery into identified breeding sites.

1.8 DRB Community CLG Response

The Marsh Fritillary Impact Assessment does not address under mitigation the changes to the habitat that will occur when the road is constructed and cabling for the proposed turbines 13 and 14 is installed. It is likely that the drainage applied in advance of installing cables will reduce soil moisture which will stress the shallow-rooted foodplant of the Marsh Fritillary butterfly during extended dry weather which will impact foodplant quality. This can result in the starvation of the larvae. The warmer, drier summers expected will increase the danger of population loss. It should be noted that the breeding habitat in much of the proposed development site is on elevated ground and additional drainage will increase the stress on the habitat.



Figure 3 Marsh Fritillary breeding habitat on elevated ground at N 63660 57209, Bracklin, Co. Westmeath.

5. MARSH FRITILLARY MANAGEMENT PLAN

5.2.1 Peatland Stabilisation and Pollinator Enhancement Measures

The construction phase of the proposed project will lead to the creation of bare peat areas and verges that will require re-vegetation. This will also ensure peat stabilisation and thus surface water protection. Natural colonisation is the best method in terms of stabilising bare peat surfaces, as species colonise

the are adapted to the specific environmental conditions. However, there will be opportunities to enhance these areas for pollinating insects as part of the facilitated bare peat revegetation. Revegetation will be facilitated through the establishment of semi-natural grassland along the infrastructure corridor using a wildflower pollinator-friendly seed mix and/or by using 'Green Hay' in combination with fertiliser and/or lime and a nursery crop. The species mix will comprise of a variety of plant species that will grow on peatland habitats found in the Ballivor Bog Group and contribute to an enhancement in biodiversity. It is proposed to use a seed mix comprising of red fescue (Festuca rubra) and creeping bent, (Agrostis stolonifera) that will allow for a rapid revegetation, while not resulting in a cores/dense sward preventing other wildflower species from establishing. The use of wildflower/native species that are also locally common will be incorporated into the seed mixes. The management of the habitat in this way will be beneficial for other wildlife, particularly pollinators (bees, butterflies and other invertebrates) by providing more wildflowers, food and space.

1.9 DRB Community CLG Response

The use of imported seed mixes to attract pollinators and beautify the area should be avoided. Natural colonisation should be used, taking precautions against alien invasive species that may appear. Any 'green hay' should be obtained from a native donor source as close to the bog as possible to ensure native provenance. In addition, the grassland along the railway which might be used as a source of 'green hay', and which has been mown should be cut at no lower than a 100mm setting except the areas immediately adjoining the tracks with cutting apart from this area restricted to October-January to avoid unnecessary damage to the high-quality grassland in that area.

CONCLUSION

Having reviewed:

- the applicant butterfly surveys, as contained in the original planning application;
- o focused areas of the proposed development site by this author in May 2023;
- o the responses from the applicant via MKO Consultants

It is my expert opinion that the applicant's impact assessment on Ireland's only legally protected insect (the Marsh Fritillary) is insufficient; the available evidence suggests habitat elimination, specifically in the areas of planned turbines 13 & 14 and the potential for drying out of the remaining habitat.

Construction associated with any aspect of the windfarm must be avoided to assure habitat protection and the development of habitat that will occur naturally if nothing is done. The areas where no breeding habitat will develop should be re-wet under the Peatlands Climate Action Scheme (PCAS). The enhanced rehabilitation scheme will deliver benefits across climate action by optimising carbon storage potential within the residual peat, reducing Green House Gas (GHG) emissions and accelerating the development of carbon sequestration by promoting the development of Sphagnum-rich vegetation (peat forming mosses), where possible. This will also enrich the State's natural capital, increase eco-system services, strengthen biodiversity, improve water quality and storage attenuation as well as enabling the amenity potential of the peatlands. The measures proposed will set sites on an accelerated trajectory towards the development of a variety of habitats including developing natural peatland, wetland and woodland. As a public authority within the meaning of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2021 Bord na Móna must 'strive to avoid pollution or deterioration of habitats.' Bord na Móna has responsibilities under the Wildlife (Amendment) Act 2023 and the National Biodiversity Action Plan 2023-2030 prepared by the National Parks & Wildlife Service in which Bord na Móna is listed as a state body with a role in biodiversity conservation. Ireland has lost 30% of its semi natural grasslands in the past decade and more than half of the country's native plants are in decline (4th National Biodiversity Action Plan 2023-2030). Further loss and the risk of further loss described in the documentation submitted for the proposed project is unnecessary and unacceptable.

Jesmond Harding January 2024

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