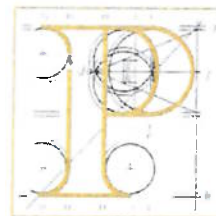


Our Case Number: ABP-320705-24



An
Bord
Pleanála

Developments Application Unit
Newtown Road
Wexford
Co. Wexford
Y35AP90

Date: 06 November 2024

Re: Proposed development of 9 no. wind turbines, 110kV substation and ancilliary development located in the townlands of Snatty, Hurdlestown, Oatfield, Drumsillagh, Sallybank, Gortacullin, Aharinaghbeg, Knockshanvo, Cloontra, Cloghoolia, Ballycullen and others, County Clare. And located in the townland of Court, County Limerick. (<https://knockshanvoplaning.ie/>)

Dear Sir / Madam,

An Bord Pleanála has received your submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course in respect of this matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,



Lauren Murphy
Executive Officer
Direct Line: 01-8737275

PA09

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64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902



Your Ref: ABP-320705-24

Our Ref: SID-CL-2024-28

(Please quote in all related correspondence)

31 October 2024

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

Via email to: laps@pleanala.ie

Re: Notification under the Planning and Development Act, 2000, as amended.

Proposed Strategic Infrastructure Development (SID): Proposed development of 9 no. wind turbines, 110kV substation and ancillary development

A chara,

I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated heading(s).

Archaeology

It is noted that the Environmental Impact Assessment Report (EIAR) submitted as part of the planning application includes a desk-based Archaeological Impact Assessment (AIA), which was carried out in relation to the proposed development by Tobar Archaeological Services (EIAR Chapter 13; dated 29 August 2024).

The proposed development is located in proximity to a number of Recorded Monuments, which are subject to statutory protection under Section 12 of the National Monuments (Amendment) Act 1930-2014. The EIAR acknowledges that there is a potential that previously unknown sub-surface archaeological features or deposits may be present within the proposed development site (PDS). It is noted that no advance archaeological investigations have been carried out within the PDS to inform the EIAR, other than a walkover



survey. The Department advises that advance archaeological test excavation should be carried out in advance of any development.

It is noted that exclusion zones may be necessary to protect vulnerable heritage assets located in proximity to the PDS and ensure that they are safely preserved in situ during the construction phase. In that regard, the Department advise that similar measures may be required at decommissioning phase also and that the advice of a suitably qualified archaeologist may be needed to inform any plan for decommissioning of the development in due course. The Department advises that this can be addressed by the inclusion of an appropriate condition if the development is permitted.

The Department has reviewed the EIAR and advises that the following should be included as a condition of any grant of permission. Note, these recommended conditions align with Sample Conditions C3, C5 and C6 as set out in *OPR Practice Note PN03: Planning Conditions* (October 2022), with appropriate site-specific additions/adaptations based on the particular characteristics of this development and informed by the findings of the EIAR.

Archaeological Requirements:

1. All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 13 of the EIAR (Tobar Archaeological Services; dated 29 August 2024) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.
2. The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development archaeological testing in areas of proposed ground disturbance and to submit an archaeological impact assessment report for the written agreement of the planning authority, following consultation with the National Monuments Service of the Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.
 - a. The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.

- b. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service of the Department, shall be complied with by the developer.
 - c. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority.
3. A suitably qualified archaeologist shall be retained to advise on and establish appropriate Exclusion Zones around the external-most elements of vulnerable Heritage Assets (as identified in Chapter 13 of the EIAR or by any subsequent investigations associated with the project).
 - a. Exclusion Zones shall be fenced off or appropriately demarcated for the duration of construction works in the vicinity of the monuments. The location and extent of each Exclusion Zone and the appropriate methodology for fencing off or demarcating at each location shall be agreed in advance with the National Monuments Service the Department and the planning authority.
 - b. No groundworks of any kind (including but not limited to advance geotechnical site investigations) and no machinery, storage of materials or any other activity related to construction will be permitted within Exclusion Zones.
4. The Construction Environment Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 13 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.
5. The applicant shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the development, to include mitigation measures for the removal of the turbines and the protection of any archaeological sites and monuments that are *in situ* at the site. The Decommissioning Plan shall be updated to include the location of any archaeological or cultural heritage constraints as set out in Chapter 13 of the EIAR and by any subsequent archaeological investigations associated with the project. It shall clearly describe all identified likely impacts from decommissioning—both direct and indirect—and all mitigation measures to



be employed to protect the archaeological or cultural heritage environment during decommissioning works.

6. The planning authority and the National Monuments Service of the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

Reason: To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest.

Nature Conservation

These observations are intended to assist in relation to identifying potential impacts on European sites, other nature conservation sites and biodiversity and environmental protection in general, in the context of the current proposal. The Department recommends the following points for consideration:

Lesser Horseshoe Bat

Vehicle based Transect Surveys are not a suitable method to survey for lesser horseshoe bats (LHB) as their ecology and highly directional echolocation calls, which travel short distances, make them unlikely to be detected by this method. The range of reliable detection for this species¹ is in the order of five metres, subject to various variables, with bats beyond this having low probability of being detected. This combined with utilising a mechanically propelled vehicle on forest track, presumably with headlights on, which bats may avoid before becoming within the short detection distance, mean that any LHB data collected by this method is not a reliable reflection of the number of this species present or their usage of the area. It is not surprising then that this method did not detect LHB on the site. The method can of course produce useful data for more common and more detectable bat species.

Static detectors also have a very limited detection range for LHB, again likely to be of the order of five metres, therefore, the Board should be conscious that only an approximate 5 metres radius circle was reliably surveyed around proposed turbine locations but the development proposes to remove habitat over an approximate 100 metre radius circle around turbines. The LHB records obtained from the static detectors are useful in that they

¹ Russ J. *et al* (2021). Bat Calls of Britain and Europe: A Guide to Species Identification.



demonstrate significant and extensive usage of the area by LHBs and can be used to make certain inferences, but the limitations also need to be understood. For example, where turbine bases are proposed in what is currently thick plantation and the static detectors were so located, they would not record what could be much heavier LHB usage of forest edge or forest track as close as 10 metres away and deep within the area that will be cleared for development and mitigation against bat collision.

In relation to the assessment of the quality of the habitat present, it is stated in the ecological assessment that conifer plantation is a sub-optimal habitat for LHBs and this Department acknowledges that for example, native broad leaved woodland would be a better habitat; however, as static detector results demonstrate, this does not mean that the existing habitat in this area is not important, particularly given its proximity to known long term summer and winter roosts of LHBs. The conifer plantation is in many places edged with broadleaved tree species and within the plantation are many open areas incorporating woodland edge, heath areas, a large previously burned area recovering to natural vegetation, footpath/track and substantial lengths of narrow forest road, many of which are lined at the sides by broadleaf trees, in particular willow scrub. Edge habitats of this type are sheltered and may attract significant numbers of insects and therefore bats. LHBs will not use or cross open areas in a landscape or areas affected by artificial light, therefore, these large, undisturbed, structurally diverse, dark, insect rich sheltered edges offer valuable habitat in a landscape where agricultural intensification and development pose significant threats. In particular, broadleaf lined roadways within the site offer distribution corridors and foraging habitat over significant distances. These commuting routes may also link up disparate foraging areas and bring further roosts within range. Apart from the proposal to remove bat habitat around turbines (approximately 3.14 hectares around each turbine) to mitigate against bat collision it appears some of the narrow forest road will need to be widened to facilitate development. Such widening would remove the narrow band of willow/broadleaf edge and push the road edge back to a less desirable abrupt conifer edge with a wider open road space, these combined habitat clearances would reduce current LHB foraging habitat and reduce habitat connectivity.

The conservation objectives for LHB in Danes Hole, Poulnalecka Special Area of Conservation (SAC) (Site Code: 000030)² state that there should be no significant decline in the extent of potential foraging habitat within 2.5 kilometres of qualifying roosts and that there should be no significant loss of linear features within 2.5 kilometres of qualifying roosts. There are three turbines proposed within this 2.5 kilometres range, which would require the removal of approximately 9.42 hectares of foraging and connecting habitat in addition to the removal

² https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000030.pdf



of further linear habitat by forest road widening and construction. It has been established by the assessments that the existing habitats are foraging habitat and not just potential habitat (320 LHB passes recorded on four detectors within the core 2.5 kilometres foraging range, each of which only effectively surveys an approximate 5 metres radius and survey was not targeted on the best habitat within the future development zone or proposed zone of tree clearance). Therefore, it appears to this Department that the proposed development would be contravening these conservation objectives and because of this it cannot be concluded, based on the evidence provided, that the development would not have an adverse effect on the integrity of Danes Hole, Poulnalecka SAC.

Overall the 10 static detectors located at proposed turbine bases (with inherent limited detection range for LHB) recorded 1,098 LHB passes during the survey period in 2022. It is noted that 344 and 323 bat passes were recorded at detectors D06 and D04 respectively both of which are beyond the 2.5 kilometres radius of Danes Hole, Poulnalecka SAC. While 2.5 kilometres from a roost is the accepted core foraging area for LHB, it is just the core range, LHBs can forage beyond the core from a roost and may travel significantly beyond this distance to other roosts. Ratty River Cave SAC (Site Code: 002316) contains both a winter and summer roost and is 2.5 kilometres from the development site boundary and potential adverse effects on this site are of also of concern. In addition, as outlined in appendix 6-2, an additional seven undesigned roosts, including two large summer roosts of which at least one is a maternity roost, were recorded within 2.5 kilometres of the site. While not the optimal habitat for this species, the proposed development site provides valuable supporting habitat for these sites. The Danes Hole winter roost designated SAC is one of the largest LHB winter roosts in Ireland and holds significantly more hibernating bats than are present in the summer roost within the same SAC. LHBs may travel greater distances than the core foraging area to suitable hibernation sites and therefore impacts to supporting habitat or connectivity beyond normal core foraging distances could impact on numbers of bats at a linked hibernation site. The LHB Species Action Plan 2022-2026³ notes the importance of connectivity in the landscape in maintaining genetic diversity and states *"The retention of existing linear landscape features within at least 2.5km but preferably 5km of lesser horseshoe bat roosts with 20 bats or more is essential to counteract the documented genetic differentiation that has already occurred within the species throughout its Irish distribution."* That the static detectors recorded LHB across the entire site appears clear indication that the site is extensively used by this Habitats Directive Annex II and Annex IV species.

³ NPWS & VWT (2022) Lesser Horseshoe Bat Species Action Plan 2022- 2026. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland



The Clare County Development Plan states that it is an objective of Clare County Council b) To promote the conservation of biodiversity through the protection of sites of biodiversity importance and wildlife corridors both within and between the designated sites and the wider Plan area and d) To ensure there is no net loss of potential Lesser Horseshoe Bat feeding habitats, treelines and hedgerows within 2.5 kilometres of known roosts. The proposed development by removing significant areas of habitat appears to conflict with these objectives.

LHB Collision Risk

Reference is made in the Natura Impact Statement (NIS) (p.89, Section 6.2.1.1.1, paragraph 3) to “*walked surveys*” and inference is made from this to collision risk. As outlined above, Section 2.2.4.2 (p.9) of the NIS details how “*Manual Transect Surveys*” were carried out and details that they were in fact driven surveys, which are not a suitable survey method for this species. The Department can find no data presented of walked surveys and therefore such inference is in the Department’s view unfounded. However, given the ecology and sensitivity of LHB, if the development proceeded and all tree lines within 100 metres of turbines were removed and lighting introduced it is accepted collision risk would be low as LHBs would be unlikely to enter the area and therefore the Department consider habitat degradation, habitat loss and loss of connectivity greater concerns.

Hen Harrier

Hen Harrier is included on Annex I of the EC Birds Directive and based on the latest Breeding Hen Harrier Survey⁴, the Republic of Ireland national breeding population is in the range of 85 – 106 pairs. The population is 33% smaller than the population in 2015 and there was a 27% contraction in breeding range during the same period. The magnitude of decline in total numbers of breeding pairs of Hen Harrier in Ireland is unsustainable and appears to have increased since 2015⁴. Nationally, non-designated areas hold approximately 48.1% of the known breeding territories.

The Hen Harrier Threat Response Plan 2024-2028⁵ notes the considerable overlap between the breeding range of Hen Harrier and the upland areas in which wind energy development has been concentrated in Ireland and references the Windharrier⁶ project carried out by University College Cork (UCC) between 2012 and 2014. This examined a range of potential

⁴ Ruddock, M., Wilson-Parr, R., Lusby, J., Connolly, F., J. Bailey, & O’Toole, L. (2024). The 2022 National Survey of breeding Hen Harrier in Ireland. Report prepared by Irish Raptor Study Group (IRSG), BirdWatch Ireland (BWI), Golden Eagle Trust (GET) for National Parks & Wildlife Service (NPWS). Irish Wildlife Manuals, No. 147. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

⁵ <https://assets.gov.ie/304583/3c321ea1-c7bc-494d-b809-0a310be70a80.pdf>

⁶ https://www.ucc.ie/en/media/research/planforbio/forestecology/WINDHARRIE_RFinalProjectReport.pdf



impacts of wind energy development on Hen Harrier and found: (i) that breeding success was statistically non-significantly lower within 1,000 metres of wind turbines, although sample sizes were relatively small; and (ii) that, based on composite considerations of findings, it is possible that lower breeding success recorded within 1,000 metres of wind turbines reflects a biologically relevant pattern. In addition, the density of all bird species, including likely prey species for Hen Harrier, was lower at wind energy development sites than control sites and lower again closer to turbines. Windharrier found that the risk of direct collision with wind turbine rotors was low. However, since its conclusion in 2015, the National Parks and Wildlife Service of this Department has received evidence of one possible and three probable/confirmed incidences of Hen Harrier mortality caused by turbine strike⁵.

As outlined in the EIAR the proposed development site is part of an upland range that was identified as an important non designated breeding area for Hen Harrier⁴ and the site itself is of National Importance to Hen Harrier throughout the year, both as a confirmed breeding site for one pair and winter foraging and roost site. The species was recorded regularly during the breeding season, with a confirmed nest located in 2018, 2019 and 2023 and probable breeding at the Wind Farm Site in 2020 and 2022. Additionally, Hen Harrier were observed regularly throughout all winter seasons surveyed. There were Hen Harrier roosts identified during surveys at the Wind Farm Site and in 2020, a roost was identified with a minimum of four birds going to roost.

The EIAR states that the *“development footprint does not overlap with the confirmed breeding locations no significant physical loss of nesting habitat is predicted”*; however, mapping and details of these locations are redacted from the documents available so this Department is unable to interrogate this information. The EIAR refers to the site being dominated by conifer plantation and the poor quality of this habitat. This Department agrees conifer plantation is not an optimal habitat for Hen Harrier and is only suitable in the pre-thicket stage of growth and post felling; however, the site also contains open areas of heath, forest edge, forest roads including significant edge and burnt areas of plantation, which now form an upland grassland/heath type habitat; these associated habitats would likely remain suitable for Hen Harrier. It should also be noted that even current or future mature forestry plantation will eventually be felled again opening up habitat once again for harrier usage, it is accepted this habitat will only be of use for a limited portion of each forestry cycle. A mosaic of forestry in different growth phases and stages of management often make up components of harrier habitat.

If the development is to proceed the Biodiversity Management Plan contains some welcome measures; however, in terms of proposed mitigation to compensate for loss of harrier habitat. It is noted the proposed compensatory habitat area (58.57 hectares) is calculated based on



a 250 metre assumed 100% avoidance radius around each turbine. Given the estimated impacts of displacement of Hen Harrier by wind farms (Pearce-Higgins *et al.* 2009⁷; O'Donoghue *et al.* 2001⁸; Wilson *et al.* 2015⁶; Fernandez-Bellon *et al.* 2015⁹ etc.), there are grounds to question the adequacy of the proposed mitigation measures to ensure that the proposed wind farm will not significantly impact on the conservation of Hen Harrier. In terms of impact pathways, the proximity of the proposed wind turbines to nesting and foraging habitats utilised by the local breeding Hen Harriers may cause some displacement and disturbance along with likely negative effects on breeding outcomes up to a radius of 1 kilometre from the turbines. The Biodiversity Management Plan (BMP) itself (p.3) notes a 52.5% reduction in harrier activity within 500 metres of operating turbines (Pearce-Higgins *et al.*, 2009) and elsewhere notes disturbance displacement distance of 500-750 metres for breeding and resting harrier locations (Ruddock and Whitfield (2007)). It must be borne in mind that many of these avoidance estimates are based on studies carried out some time ago when turbines were very substantially smaller than those now proposed; for example, the hub heights of turbines studied in Pearce-Higgins *et al.* varied between 30 and 60 metres, the proposed turbines in this case will have hub heights of over 100 metres. The compensation area calculation in the BMP is very conservative and this should be considered in any evaluation of the area of the proposed compensatory area. In addition, while the clearance of mature forestry (54.2 hectares) to provide habitat will bring about habitat that would otherwise not be available for some time, the management measures on adjoining farmland and heath (46.5 hectares) may improve the habitat but this habitat already exists to a significant degree, so is not new habitat and is already available, whereas the habitat to be made unavailable by the development will be effectively removed from the current harrier range.

In relation to the calculation of the amount of foraging habitat to be lost (EIAR Section 7.6.2.1) it is stated it is assumed 100% loss within 250 metres for nine turbines, for which 58.57 hectares is presented as the figure of habitat lost; however, by the Department's calculations the formula for the area of a circle is $A = \pi r^2$, therefore $3.14 \times (250)^2 = 196,250\text{m}^2 = 19.625$ hectares per turbine. For nine turbines this is 176.625 hectares. It is not clear whether the 250 metres avoidance area is assumed from the turbine base or from the tip of the blades which would seem ecologically more appropriate, in which case the correct radius would be 250 metres + a minimum of 74.5 metres blade length leading to an exclusion area

⁷ Pearce-Higgins, James W., Stephen, Leigh, Langston, Rowena H. W., Bainbridge, Ian P. and Bullman, Rhys (2009). "The distribution of breeding birds around upland wind farms". *Journal of Applied Ecology*, 46,1323-1331.

⁸ O'Donoghue, B., O'Donoghue, T. A. & King, F. 2011. The Hen Harrier in Ireland: conservation issues for the 21st Century. *Biology & Environment: Proceedings of the Royal Irish Academy* 111: 1-11.

⁹ Fernández-Bellón, D., Irwin, S., Wilson, M. and O'Halloran, J. (2015). Reproductive output of Hen Harriers *Circus cyaneus* in relation to wind turbine proximity. *Irish Birds*. 10: 143-150.



of 33.06 hectares per turbine or 297.58 hectares for the nine turbines. Obviously a 500 metre avoidance zone would substantially increase the calculations further.

An Bord Pleanála as the deciding authority must satisfy themselves that they adhere to their obligations under Article 6 of the Habitats Directive (92/43/EEC). Competent national authorities, are to authorise activity only if they have made certain that it will not adversely affect the integrity of a European site and consequently, not likely to give rise to deterioration or significant disturbances within the meaning of Article 6(2). Any matters raised above should also be considered in the planning policy context for the proposed development, including the protective natural heritage and biodiversity objectives and policies in Clare County Development Plan.

In the event that additional heritage-related observations become available before the deadline date, a further letter will issue.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at: manager.dau@npws.gov.ie

Is mise, le meas,

Julie Sullivan
Assistant Principal
Development Applications Unit
Administration