

Observation To An Coimisiún Pleanála

Garrane Green Energy Ltd

ACP Casse Number 323635

Development Description: A ten-year permission for the erection of 9 No. wind turbines with a tip height of 170m. • Upgrade of existing Access Tracks and construction of new permanent Access Tracks, permanent turbine hardstand areas and turbine foundations. • Construction of two new bridge crossings on-site, one over the River Mague and one over the Charleville Stream. • Upgrade of existing site drainage network and installation of new site drainage. • Wind Farm Internal Cabling connecting the wind turbines to the electrical substation. • Construction of a permanent on-site AIS 110kV Substation, with a 'loop in' Grid Connection to the existing 110kV overhead line between Charleville and Killonan, including two single-storey control buildings with welfare facilities, all associated electrical plant and equipment, security fencing, gates, signage, all associated underground cabling, private well for water supply, wastewater holding tank, and all ancillary structures and works. • Construction of a permanent double circuit 110kV underground cable and two steel cable interface masts to connect to the existing overhead line. • Erection of a permanent 60m Meteorological Mast for monitoring wind speeds. • Construction of a Temporary Construction Compound for use during construction. • Upgrade of the existing entrance on the N20 (Site Entrance 1) (to be used for abnormal loads and turbine component delivery) and upgrade of an existing site entrance on the L1537 (Site Entrance 2) (to be used for all construction traffic except for abnormal loads and turbine component delivery). • 6 No. temporary spoil storage areas and 1 No. permanent spoil storage area. • Biodiversity enhancement and improvements associated with the Project. • Landscaping, fencing and all associated ancillary works. This application is seeking a ten-year permission and a 35-year operational period from the date of overall commissioning of the entire wind farm

Development Address: Ballynagoul, Creggane & Garrane, Charleville & Kilmallock, Co. Limerick.



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27 October 2025

An Coimisiún Pleanála

Re: Case Number 323635

Dear Sir/Madam,

I wish to lodge an observation to An Coimisiún Pleanála in respect of the proposed development by the applicant, Garrane Green Energy Ltd., to construct a windfarm comprised of nine turbines, substation, roads, masts and ancillary equipment at the following sites: Ballynagoul, Creggane and Garrane, Charleville & Kilmallock, Co. Limerick. I have over 40 years of ornithological experience and expertise, particularly on raptors (birds of prey) in Ireland, the UK and USA, but also including decades of experience in contributing to national surveys of waterbirds (IWEBS), as well as coordinating surveys for declining species, particularly Hen Harrier (see Irish Wildlife Manuals, e.g., <https://www.npws.ie/sites/default/files/publications/pdf/IWM93.pdf>). I was chairperson of the Irish Raptor Study Group for some years as well as Ireland's national coordinator for the European raptor monitoring programme (EURAPMON) programme, 2012-2016. I also have a long-standing ecological interest in an area particularly at risk of being impacted negatively by the proposed development, namely Charleville lagoons, which I visited regularly to count waterbirds in the 1980s (See also Mee, T. 1994. Charleville lagoons: a site guide. In Birds of Clare & Limerick 1982-1991). Therefore, I lodge this observation regarding the proposed planning development (case no. 323635) on the following ecological grounds:

Proximity to Charleville Lagoons. A site of national ornithological value

According to the planning documents and drawings submitted to Limerick City & County Council by Garrane Green Energy Ltd (see Ch. 1 & 2 Figures), the development site boundary borders on Charleville Lagoons at its southern edge. Most problematic from a bird perspective is the proximity of proposed turbines T1 (100m from the nearest lagoon) and T2 (460m) to the lagoons. In the past (80's-90's), the main bird interest at Charleville Lagoons was on the pools on the Limerick side of the lagoons (Mee, T. 1994. Charleville lagoons: a site guide. In Birds of Clare & Limerick 1982-1991). However, with changes to the vegetation, such as increased cover, the pools on the North-west corner of the lagoons appear to be particularly favoured by duck although birds move between pools throughout the day to feed and loaf as well as in response to human disturbance. Roosting Cormorant appear to favour the large pools on the Limerick side of the lagoons.



Fig. 1
Proximity of
turbines T01
(100m) and
T02 (460m)
to
Charleville
lagoons
(from
Appendix
8.2)

According to data in Crowe (Crowe, O. 2005. Ireland's Wetlands and their Waterbirds: Status and Distribution. Birdwatch Ireland, Co. Wicklow), Charleville Lagoons held a high diversity of wildfowl (14 species) for an inland site, including nationally important numbers of Shoveler, a scarce and declining duck species. This species is red listed as a species of high conservation concern in Ireland (Gilbert et al. 2021. Birds of Conservation Concern in Ireland 2020-2026, Irish Birds 9: 523-544). Up to the 1990s, Charleville Lagoon held some 2.1% of the national Shoveler duck population (Crowe 2005). Although Shoveler numbers declined at Charleville Lagoons after the late 1990s (IWEBS data), peak numbers recorded as part of the EIAR for the site were significantly higher than the 1% qualifying threshold for national importance (Table 1). A brief visit to the site in October 2025 located similarly high Shoveler numbers at the site. Peak counts of Teal at the lagoons during the EIAR were also above the 1% threshold for national importance while peak Wigeon numbers also approached the 1% threshold (0.81%). Also of note were higher counts of Cormorant and a family part of Whooper Swan that flew in from the south and settled on one of the ponds in October 2025.

Waterbird surveys conducted as part of the EIA recorded significant numbers of birds both during the breeding (Ch. 8, Table 8.11) and non-breeding season () at Charleville Lagoons. These include significant numbers of Little Grebe (100), Mallard (194), Shoveler (45), and Teal (127) during the breeding season (Table 8.11). Indeed, numbers of Shoveler and Little Grebe are significantly higher than the 1% threshold (national significance) for non-breeding populations these species (>20) across the island of Ireland (Table 1). Shoveler is a rare/scarce breeding species in Ireland. While the number reported in the EIAR are undoubtedly non-breeding/late winter birds that presumably disperse to the breeding grounds in late spring, the species has been recorded as a confirmed breeder at the site (Balmer *et al.* 2013).

Table 1. Peak waterbird counts for selected species at Charleville Lagoons between 1996-2023 (IWEBS data, Birdwatch Ireland), 2023 & 2024 (Garrane Green Energy EIAR*), A. Mee (own data, Oct 2025)**.

Species	AllIreland _1pc	Flyway _1pc	Peak	1996/97	2010/11	2018/19	2022/23	2023* & 2024	2025**
Mute Swan	90	100	34	9	21		15	7	-
Whooper Swan	150	340	8		8			0	6
Wigeon	560	14000	374	227	225	1	339	456	120
Gadwall	20	1200	12		12		7	17	-
Teal	360	5000	759	338	59	230	100	543	25
Mallard	280	53000	247	137	102	100	69	129	60
Shoveler	20	650	148	148	50	22	38	63	55
Tufted Duck	270	8900	56	10	56		16	24	5
Little Grebe	20	4700	30	7	30	20		10	10
Cormorant	110	1200	6			6	1	1	12
Coot	190	15500	43	1	6		4	51	20

Collision risk modelling – Whooper Swan

Collision with powerlines is the most commonly reported cause of death in swan species (Brown et al. 1992. Wildfowl 43: 70-79) and this risk may be higher in the vicinity of wind farms (Brenninkmeijer & Klop 2015). However, Whooper Swan was not one of the selected species (KOFs) for inclusion in collision risk modelling (Ch. 8, Sec 8.11.2 in the EIAR).

Brenninkmeijer, A. & Klop, E. 2015. Bird mortality in two Dutch windfarms: effects of location, spatial design and interactions with power lines. *In*: Book of Abstracts for the Conference on Wind Energy and Wildlife Impacts, Berlin, 10-12 March 2015 (https://www.cww2015.tu-berlin.de/fileadmin/fg123_windsynopse/cww2015/downloads/CWW2015_Book_of_Abstracts.pdf).

Only one flock of Whooper Swan was recorded during surveys as reported in the EIAR (10 flying NE approx. 1.1km outside the site boundary in October 2023 (Table 8.17). Just a single Whooper Swan was recorded at Charleville Lagoons in November 2023, oddly reported as later flying east towards Bruff (13km NE of the lagoons). Consequently, Whooper Swan is classed as of Negligible Importance in the assessment of importance and identification of Key Ornithological features (Table 8.20, P 69). The EIAR also concludes this on the basis of distance to Kilcolman SPA, unlikely functional linkage to this site and activity within the site and wider habitat availability for swans. While Whooper Swan use of the lagoons and the windfarm footprint may be intermittent, I recorded the species, a single family party of six birds, flying in and settling on the lagoons, presumably temporarily as a safe roost site, on a single visit in October 2025. This suggests that use of the lagoons and potential linkage with Whooper foraging flocks (e.g. Churchtown) do occur.

In conclusion, I believe that this conclusion is flawed for a number of reasons:

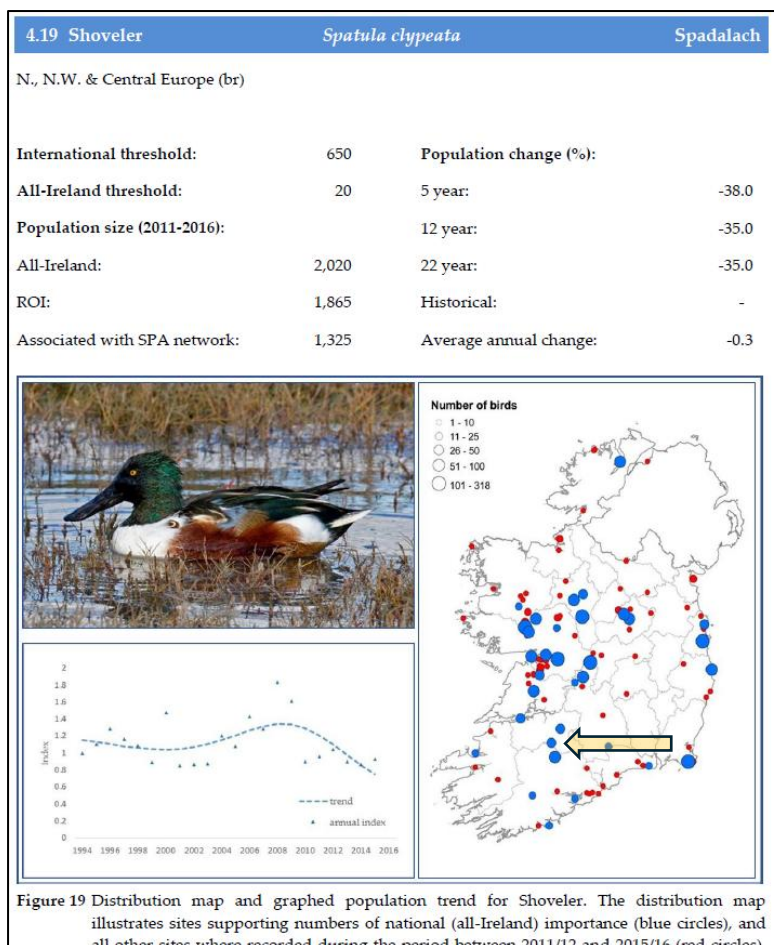
1. No vantage points (VPs) were located outside the proposed windfarm footprint south of Charleville lagoons which would have presented more robust data on possible Whooper Swan movements between the large wintering Whooper flock at Churchtown. Indeed, the viewshed of none of the VPs identified in the EIAR cover the Charleville Lagoons adequately (Appendix 8.2). Only one (VP8) is located at the southern end of the proposed site. The viewshed for VP7 (see Viewshed analysis, Appendix 8.2) is also shown to partially cover Charleville Lagoons despite being located 1.7km north of the northern edge of the lagoons. Thus, the lack of data of Whooper Swan flight activity as presented in the EIAR cannot adequately rule out this species and the risk posed by the proposed windfarm and its location in close proximity to the lagoons.
2. Lack of systematic monitoring of waterbird numbers and potential movements at Charleville Lagoons. According to the data presented (Appendix 8.1, Table 48), just 10 visits were made to the site over the course of two winters. However, just five of these occurred during the monitoring 'window' (Oct-Mar) for wintering Whooper Swan, one visit in March 2023 (2 hours), and four visits in Dec 2023-Mar 2024 (8 hours). This contrasts to the minimum of 72 hours recommended for each VP/year, or 36 hours over a winter (SNH guidelines). Thus, the opportunity of adequately sampling Whooper Swan use of the site is much reduced.

Cormorant

Table 8.20 (Ch. 8, P60 of the EIAR) erroneously states that “cormorant is a common and widespread species in Ireland, reflected by its inclusion in the BoCCI Green list” when the species is Amber listed (Gilbert et al. 2021).

Shoveler

Along with other waterbirds (Gadwall, Greylag, Moorhen, Mute Swan, and Teal) Shoveler is evaluated and class as on ‘negligible importance’ and therefore not considered as a Key Ornithological Feature in the EIAR (Ch. 8, Table 8.20) and, thus, excluded from collision risk modelling. However, as previously discussed, this species is without doubt the most important from a conservation standpoint regularly occurring at Charleville Lagoons on the edge of the proposed development site. Charleville Lagoons ranks 19th on a national scale for Shoveler, second only to Kilcolman SPA in importance as a wintering site for the species in Co. Cork, and the most important site in Co. Limerick (Lewis et al. 2019. IWM No. 106).



see https://www.researchgate.net/publication/339842922_Irish_Wetland_Bird_Survey_200910-201516_-_Irish_Wildlife_Manuals_No_106.

Golden Plover

As well as being protected under Annexe I of the Eu Birds Directive, Golden Plover is a species high conservation concern in Ireland (red listed in *Gilbert et al. 2021*). Charleville Lagoons held nationally important numbers of this species in the past (up to 3,500 up to 2004/05), well above the current 1% threshold for the species (920, IWEBS data, Birdwatch Ireland). While Golden Plover were recorded on a number of occasions during VP surveys (42 on one occasion in winter 2020/2021, see Table 14, Appendix 8.1, none in winter 2021/2022, 8 observations of flocks (max 47) in winter 2022/2023, see Table 18, 8 observations of 1-14 birds in winter 2023/2024, see Table 20). No Golden Plover were recorded in either winter (2022/2023, 2023/2024, Tables 31 & 32, Appendix 8.1). However, as previously stated the number of visits was just 10 visits were made to the site over the course of two winters, totalling some 20 hours. Thus, there is reasonable grounds to lack confidence in the both the quantity and quality of the survey effort to adequately detect this species and conclude that the proposed development would have only Local (Higher value) importance for waterbirds,

Table 29 (Appendix 8.1) erroneously lists Golden Plover as Green listed, when it is red listed (as previously acknowledged in the report).

Table 29. Summary of specially protected and notable species counts for breeding wader surveys within the Site.

Common name	Scientific name	Peak count	Conservation status
Snipe	<i>Gallinago gallinago</i>	8	BoCCI Red listed / Wildlife Acts / SCI
Golden plover	<i>Pluvialis apricaria</i>	24	BoCCI Green listed / Wildlife Acts

Summary of Submission – Case Number 323635

My submission to An Coimisiún Pleanála here related solely to the Ornithology chapter (Ch. 8 of the EIAR) and associated appendices (Appendix 8.1, Ornithology Baseline Report, Appendix. 8.2, Ornithology Collision Risk Modelling Report) of which I feel I am qualified to critique. In summary, the proposed development as detailed in the EIAR, and the report and annexes which cover the ornithology section of the proposed development are deficient in a number of key areas:

- Siting in close proximity to Charleville Lagoons, a site of national importance for Shoveler, a red-listed duck species of high conservation concern in Ireland
- Siting in close proximity to Charleville Lagoons, a site of local and potentially national importance for Teal and Wigeon, as well as several other waterbird species including Whooper Swan, Cormorant.
- Inadequate and insufficient survey effort for waterbirds over a number of winters at Charleville Lagoons itself.
- The lack of vantage point survey effort at the southern part of the proposed site in proximity to Charleville Lagoons.
- No vantage point surveys to the south of the proposed site which would adequately cover the potential flyway for several species of waterbirds using Charleville Lagoons including Whooper Swan.
- Siting of turbines in close proximity to Charleville Lagoons, especially T01 as close as approx. 100m, T02 <500m, T03 600m, T04 850m, T05 1.1km etc from Charleville Lagoons.
- Not only will several turbines be potentially within 1km or less from the lagoons but the impact of ancillary structures including substation, roads, masts and equipment during construction and operational phases have both short and longer term impacts on waterbird use and occupancy of Charleville Lagoons.

Conclusion

On the basis of the serious concerns outlined here on the impact of the proposed windfarm development at Ballynagoul, Creggane and Garrane, Charleville & Kilmallock, Co. Limerick, it is my submissions conclusion that the development be (a) refused planning permission or (b) exclude turbines sites within 1km of Charleville Lagoons, namely turbines T01, T02, T03 and T04.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Allan Mee'. The signature is written in a cursive, flowing style.

Dr. Allan Mee

Ornithologist