

Knockraha Environmental Group,
Knockraha Area Community Association CLG,
Knockraha Community Hall,
Knockraha, Co, Cork.
T56 AC92
4th April 2026

The Secretary,
An Coimisiún Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902,

Case Reference: VA04.324082

The proposed development consisting of a 10 year planning permission for construction of 1 Battery Energy Storage System, 1 110kv AIS electrical substation building and 1 single storey customer substation building

Applicant: Drumkee LCIS Ltd
At: Ballynanelagh, Knockraha, Co.Cork,

Dear Sirs,

We refer to the above planning application submitted to your office and wish to make the following observations.

Background

Knockraha is a small rural village 15km east of Cork City which has expanded over the last few years because of new housing developments within the village and one-off housing throughout the area. Unfortunately, there have been no improvements to roads or services of any kind within the village or surrounding areas to keep pace with the expanding population.

The area is primarily agricultural, with dairying being the main activity locally - the only significant development is the ESB Substation located on a high point overlooking the surrounding land and village. This is a strategic infrastructure facility which is managed by the ESB in an area designated by the 2022 - 2028 Cork County Development Plan, as 'Rural Housing Area under Strong Urban Influence'.

Site Selection

We are concerned that the Site Selection process which has been set out by the Applicant does not sufficiently demonstrate why an unserved greenfield site which is zoned for Agricultural Use was selected as the most suitable location for the proposed development. The process undertaken does not demonstrate so in our opinion.

Development Site Location

The proposed site location is in a prominent elevated location and can be easily viewed from many points. The fact that there is an existing ESB Sub Station at this location does not mean that it is a suitable site for this development. The existing ESB Sub Station has expanded over the years but under current criteria, this site would not be selected for an ESB Sub Station if it was a greenfield site.

Furthermore, previously in this townland, Island Stability Services had applied for permission for a Synchronous Condenser, this has already been dismissed as being unsuitable by Cork County Council and a previous applicant (ref 224488) for a similar development. The reason given to the previous developer by Cork County Council was Health and Safety issues which could arise during construction. It is our opinion that there has been no improvement in local conditions and that these Health & Safety concerns still exist.

The proposed site is circa 1 mile from Knockraha Village – this is much too near an existing village which has expanded significantly in recent years.

The Knockraha Area is already going through a significant Strategic Infrastructure project (The Celtic Inter Connector Project) which is ongoing for a number of years. This will connect to the existing Sub Station in Knockraha. This current proposed development has not secured a Grid Connection locally – it is totally speculative in nature.

Additionally, on October 5th 2022, Cork County Council approved planning permission to Killeena Stability for a Synchronous Compensator which is on a Green Belt site and less than 100 metres south east of the existing substation. This will further increase the electrical infrastructure in the area.

Furthermore, an application for a similar battery energy storage development has been recently submitted to your office and is currently being reviewed by An Bord Pleanála Ref No:ABP-320276-24 (23/05992 Neoen Renewables Ireland Limited). Its proposed location is also at Ballynanelagh, Knockraha, Co. Cork. We are of the view that another application for a Battery Energy Storage Facility in the same townland is unnecessary and excessive in view of the application which is currently in progress.

This project will not have any social or economic benefit to the local community. It should also be noted that this is an area used as a local amenity for residents as a walking & running route – there are no alternative amenities provided for the local population or residents so this development would disrupt access to the only route available.

We see an Industrial Development in our rural area being proposed without any consultation with local residents, businesses and Community Groups.

Environment

Regardless of any measures undertaken by the developer, the fact that this is a significant water source will not change. What would change is that there is a risk introduced with such a development on this site where none exists currently as the land is used for Agricultural purposes.

It has not been demonstrated that this application will not have adverse impacts on the environment. The additional electrical infrastructure will have a significant effect on the landscape surrounding the Knockraha area. The development is on high ground. The dwellings in the vicinity of this development depend on their own water wells as there is no mains water supply to the area. With the increased volume of oil and other substances being stored at the facility, all of which is being monitored remotely, the chances of an accidental spill will increase. The developer has outlined that the project will not have an impact on the water environment due to the distance to the watercourses, however, the underground streams which supply these watercourses emanate from this area and any accidental spill could have a catastrophic impact on our ground water supply and the supply to the greater Glanmire and Cobh districts. The water source emanating from here is a significant part of the Glashaboy Waterworks and this has been completely ignored. This site is on waterladen land and it not a suitable site for any development.

Archaeological Findings

Knockraha (Cnoc Ratha translates as ‘the hill of the forts’)

It is clear that this is an area of Archaeological interest due to recent findings in the area. We refer to Archaeological findings at the site of a proposed development by Neoen Renewables Ireland Limited (23/05992) in the same townland of Ballynanelagh. We have lost so much of our heritage locally and nationally which can never be replaced. On this basis, it is not suitable for such a development which will alter the area forever.

Site Entrance

The site entrance is the same entrance that is to be used for a Planning Application that is currently with An Bord Pleanála (Case reference: VA04.320532 Ballyvatta Solar Farm Limited lodged on 09/08/2024). We also note that the maps differ in both applications even though it is the same location. It is unclear which map is the correct one or if both are in error.

Noise

The noise survey completed in respect of this proposed development is based on the current situation at this location. The proposed Celtic Interconnector includes an additional 4 transformers at the Southern boundary of the existing ESB site bordering the L6989. We currently have no way of knowing how these transformers, switchgear installations and the permitted Synchronous Compensator will affect the noise levels in the immediate area. In effect any survey carried out will be null and void as the noise levels will increase due to current planned developments at this site. The cumulative effects of these planned developments have not been considered appropriately in this noise survey but will undoubtedly have a significant effect.

Fire.

Fire is a known and acknowledged risk with BESS. Moreover, fires involving lithium ion or lithium ion phosphate batteries are very difficult to extinguish.

A significant volume of water is needed to fight fires in BESS, potentially multiple times the volume required for the extinguishing of ordinary fires. The proposal sets out a firewater reservoir which will be filled with 500,000 litres of rainwater. We feel that this is not adequate. It also depends on large volumes of rainwater to fill it and maintain it to this level. This is not viable in reality. There is not a mains water supply at this site or a river nearby that could be used in the event of an emergency.

Nor does the planning application acknowledge the contaminants that are typically present in fire water from a BESS. Considerable research has been done on this internationally including, for example, by Quant et al. (2023) who have identified a range of inorganic and organic pollutants in fire water from BESS, including particle-bound polycyclic aromatic hydrocarbons, soot, per and polyfluoroalkyl compounds, nickel, cobalt, lithium, manganese and fluoride. Analysis of this firewater demonstrated high toxicity towards a range of tested aquatic species.

Given the volume of water that is typically required to fight a fire in a BESS and the contaminated nature of same, there has been no assessment of below:

- How this firewater would be stored in the event of an incident
- How effective any filters would be against contaminants that are not hydrocarbon-based
- What the potentially critical impact of such contamination would be on water quality
- What the impact of such contamination would be on the quality of water and the environment immediately adjacent to the proposed facility.

When BESS facilities burn, they release a cocktail of dangerous gases such as carbon monoxide, hydrogen fluoride and hydrogen chloride. Larsson, F. et al, (Toxic fluoride gas emissions from lithium-ion battery fires, Sci Rep. 2017;7:10018) have analysed fumes from seven different types of commercial lithium-ion batteries, validating their results with two independent measurement techniques. Their findings are that fumes can contain large amounts of hydrogen fluoride, phosphoryl fluoride, phosphorus pentafluoride and other potentially very toxic gases.

These can originate from the electrolyte, the binder in the electrodes, flame retardants in the electrolyte and/or separator, in additives and in the electrode materials.

Furthermore, there is no reference made of Cork County Council Fire Authority being contacted in relation to this proposed development. Does the Fire Authority have personnel with the training, skills and equipment to control this type of fire?

National Policy

This project contradicts key national policy objectives outlined in Project Ireland 2040 - National Planning Framework (NPF) by prioritising industrial development over the preservation of high-quality farmland. Ultimately, this rural area relies significantly on the Agricultural Sector of the Economy.

Conflict with National Policy Objectives (NPF)

- a. Protection of Agricultural Land and Rural Economy
 - National Policy Objective 23 states that the planning system should "facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector."
 - The proposed development would remove premium agricultural land from food production, undermining local and national food security.

The Common Agricultural Policy (CAP) and Ireland's Rural Development Programme (RDP) (2014-2020) prioritise enhancing the competitiveness of agriculture through on-farm investment, which this project directly contradicts by displacing productive farming activities.

- b. Impact on Rural Landscape and Cultural Heritage
 - National Policy Objective 14 aims to "protect and promote the sense of place and culture and the quality, character, and distinctiveness of the Irish rural landscape."
 - The industrial-scale solar farm will alter the traditional rural landscape, diminishing its attractiveness for both agricultural and rural tourism purposes.
 - The proposed development does not align with sustainable land-use principles outlined in Green Infrastructure Planning, which promotes protecting vulnerable landscapes and ensuring long-term rural viability.

- c. Environmental Concerns and Sustainable Land Use
 - National Policy Objective 52 mandates that development should occur within environmental limits and ensure sustainable management of natural capital.
 - The project does not align with the principles of the circular economy as it removes fertile land from food production in favour of energy generation, which could be accommodated in alternative locations such as brownfield sites, industrial areas, or less productive land.
 - Sustainable Land Management and Resource Efficiency emphasises the need to use natural resources wisely; using prime agricultural land for non-agricultural purposes is an inefficient use of a critical resource.

Conclusion

As a Community, we have been besieged by a raft of Planning Applications in recent years. Some have been necessary to the Strategic Infrastructure of the Country as a whole which we accept.

However, this has led to the Community at large being overwhelmed by speculative private developers seeking unnecessary and inappropriate developments in a Rural Area not designated for such activities. Eirgrid chose Ballyadam in Carrigtwohill as the most appropriate site to locate the Celtic Interconnector Converter Station – this is an area zoned for Industrial use.

We are appealing to An Coimisiún Pleanála to refuse this planning application.

Yours faithfully,

Marguerite Cremin

Knockraha Environmental Committee