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21/06/2026
Address in Ireland
Carrickanass
Carrowmore
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Ballina
Co Mayo

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

**Re: Objection to the Proposed Tirawley Wind Farm Strategic Infrastructure
Development Objection Submission to An Coimisiún Pleanála**

Re: Planning permission for the construction of Tirawley Windfarm consisting of 16 no. wind turbines, a permanent 110kV substation, 110kV underground cable and grid connection, and ancillary development in the townlands of Ballymurphy, Ballynaleck, Barnhill Lower & Upper, Barroe, Billoos, Carn, Carrickanass, Carrowmore, Castlелacken Demesne, and other townlands in County Mayo.

Dear Sir/Madam,

I am writing as the son of a landowner with full authority to act on my father's behalf in all matters relating to the land and houses on his property in Carrickanass Co Mayo.

I wish to adopt and support the detailed submission made by the Lacken Ballycastle Community Landscape Protection Group in relation to the proposed Tirawley Wind Farm development (PAX16.324258). In particular, I endorse the concerns raised regarding cumulative wind farm development across North Mayo, impacts on the Céide Fields cultural landscape, effects on tourism and recreation, biodiversity impacts, inadequacies in community consultation, and the assessment of the Battery Energy Storage System. While I do not repeat those detailed arguments in full, I request that they be considered as forming part of this submission.

Preamble

I will outline our personal reasons why this development should not go ahead, and list other issues which must be taken in consideration.

We own two houses on our 26ac of land. Folios MY42923 and MY37294. Constant Energy has not recognised the houses in their plans. Neither is currently occupied and I plan on renovating both in time, one as my primary residence and the other for guest accommodation.

1 Residential and property impact

Homes that are near wind turbines are effectively valueless because no one would choose to live near one. Banks are less likely to finance these homes for renovation as they would not have the market value they would have had previously. They will therefore increase rural depopulation because the children of homeowners will not choose to continue living in their parents' home and will move away. This has happened already ref Pat O'Brian Farmer West Cork.

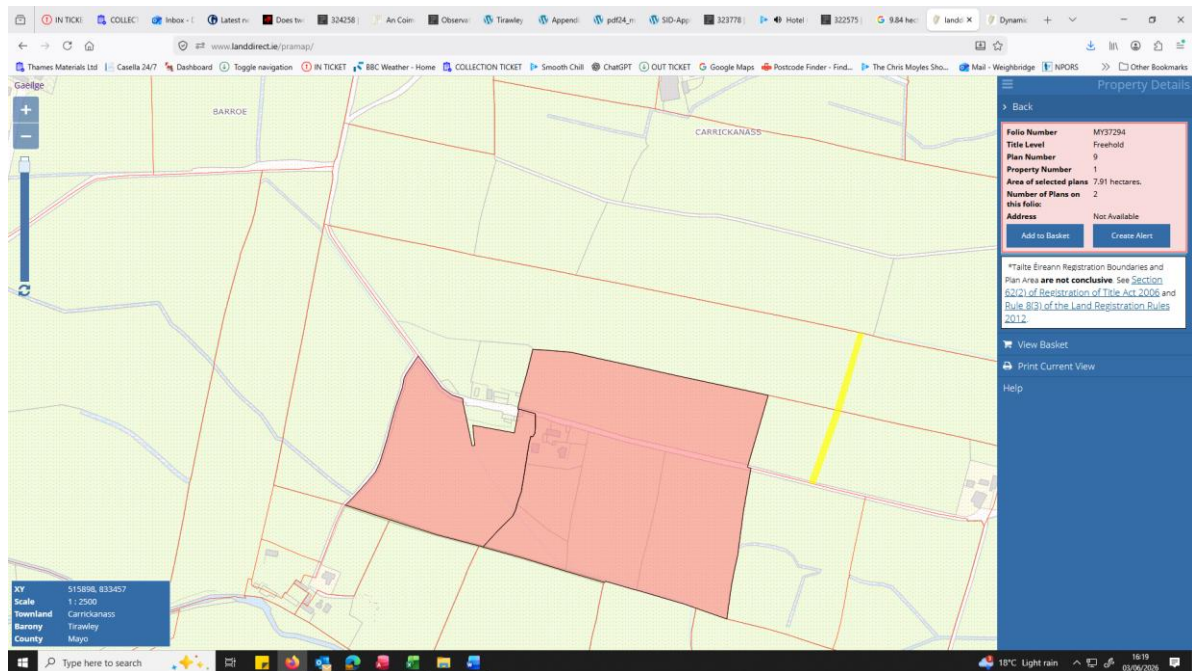
<https://www.facebook.com/localsagainstlaurclavaghwindfarm/videos/787870016090863/?mibextid=rS40aB7S9Ucbxw6v>

I plan on creating a permaculture farm which would enable students and tourists to stay and learn from the experience and most importantly bring their own experience and best practices from elsewhere. I have done this myself and have stayed in such places in the uk. However, to fund this I would need to get a mortgage from a bank, and a wind turbine 600m away, and the BESS battery storage site <400m away will devalue the property to such an extent that I would not expect the bank to lend me the money. Not to mention that fewer people if any would want to spend any time there due to shadow flicker, noise and low frequency sound. This would then prevent me moving to Ireland and my project from going ahead and prevent me from adding tourist accommodation which we know has been depleted over recent years.

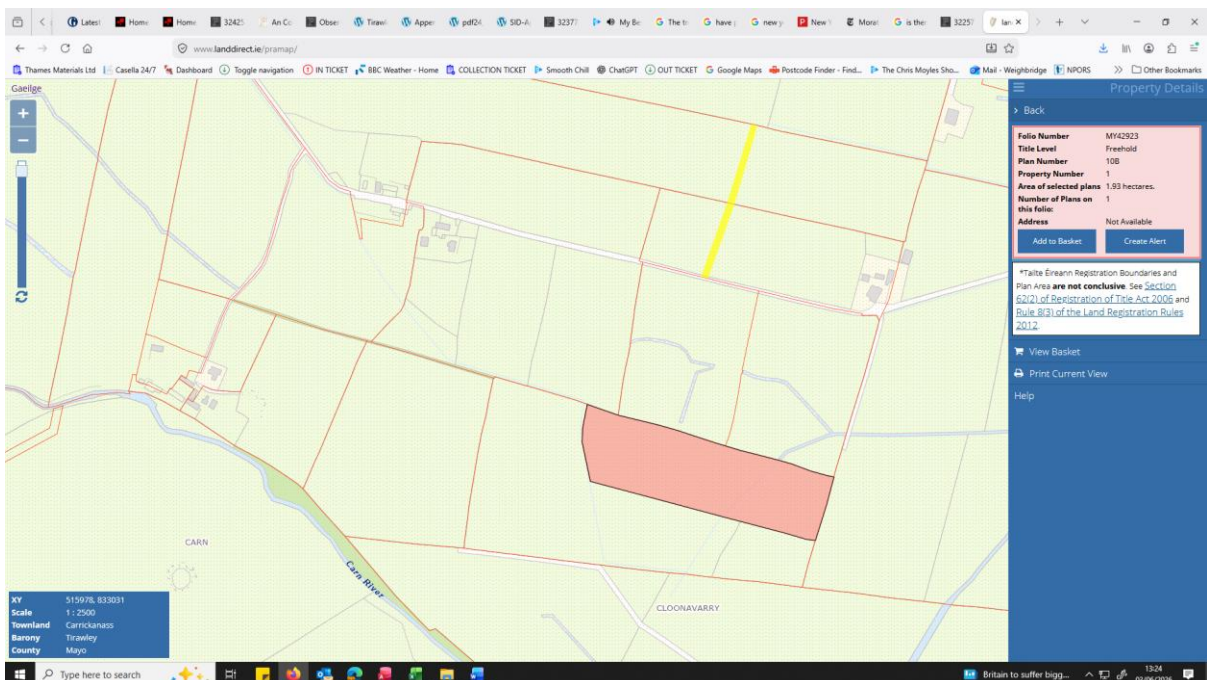
Grid connection

We own land both sides of the L31143 road which the developer plans to run the connection from the BESS battery storage facility to Killala. The plans indicate they wish to widen the road to 6m. **Permission for this has not been sought, nor will it be given.** As this is a Private Wire route to the grid in Killala it would not be able to compulsory purchase our land to expand the road and lay the cable.

Image showing our land either side of the L31143



The stream also feeds in to and provides fresh water to a further field



The above image also shows the watercourse which supplies our land with fresh drinking water for the cattle which are raised on it. This water is currently clean, and I have established that the site the BESS is 8-10m higher in elevation than our land. That land drains into our stream. This means the water will be contaminated regardless of any mitigation that may be put in place. I speak as someone with professional experience who works in land restoration and have run 2 muck tips in the uk in the last 10 years. Contamination, during the construction process alone, regardless how small is unacceptable. The heavy plant which would be used would require servicing every 500hrs and it would be done on site. The same heavy plant would also have mechanical failures such as hydraulic hoses fail (which they do on a regular basis) and when they do it's a hazardous waste contamination. Even after construction, if the BESS were to suffer a fire, that would contaminate the land and water around it for many years. The local fire brigade has already stated that they would not be able to treat such an event.

This short clip shows frog spawn in our stream I filmed on the 8th May 2026. Frog spawn is a very good indicator of current water quality.



20260508_170442~
2.mp4

This is an area of outstanding natural beauty, and as a Londoner who travels to Lacken on average 2 times a year, I have a unique perspective on the area's restorative qualities. We learnt during lockdown how very important spending time in the countryside is for human mental health. This development would turn the whole area into a disjointed power plant, and it would have a negative effect on the mental health of residents and visitors, of which there are many.

The wildlife in the area is diverse and would be devastated by this proposal. On one day in May I identified a huge number of birds, many of them migratory.

This list is a snapshot of birds identified by birdsong and visually on our land.

Willow Warbler, Eurasian Wren, Eurasian Blackbird, European Goldfinch, Barn Swallow, Sand Martin, Eurasian Skylark, European Robin, Common Starling, Woodpigeon, Jackdaw, Sedge Warbler, Common Whitethroat, Eurasian Blackcap, European Stonechat, Meadow Pipit. This is not a full list of what is in the area, just what I managed to record on one day.

I also witnessed bat activity in the early evening. I also have concerns regarding the bat surveys which it seems were carried out on my land without permission and as such I consider trespass, and therefore invalid. I write this as someone who wishes to protect the bats on my land and provide an even better environment for them to live in.

Turbines

AT1 is in the region of 600m from the house, AT2, 3 and 4 are all about 1000m from the house. This would be an awful place to live. The regulations regarding set back were established in 2006 and at that time the average turbine height was 50m. The new regulations which have yet to be ratified would mean none of these turbines would be far enough from housing to be allowed. Therefore, is it distasteful that the developer is trying to push through what would be improper when new updated regulations are made law. The area would suffer from setbacks that should never have been allowed. The shadow flicker would be most distressing, and I am concerned about the effect on those with light sensitive epilepsy. So much so, that I would have to prevent my sister from ever visiting, due to her living with this issue. I lost my 8 year old niece to an epileptic seizure in 2012. The risk to those affected is too great. My family continue to raise money for Epilepsy Action and Epilepsy Awareness in the uk to help those affected and to seek treatments and hopefully a cure.

3 Site suitability and Landscape impact

The sites are already considered unsuitable for a windfarm and considering the latest Mayo County Development Plan regarding landscape protection and visual amenities, this windfarm would be counter intuitive to those plans. The Wild Atlantic Way has and will continue to be a huge success bringing tourists to the area and to the country. Social media will sour the experience, tourists and influencers will no longer come to see the raw beauty of the area if its skylines are ruined by turbines. The windfarms would kill the goose that laid the golden egg.

4 Financial

The windfarms will not bring meaningful long-term work to the area. During construction the haulage industry will do well, I know because I work in that area. And once the work is finished, any extra drivers that were employed would be made redundant and any extra lorries that were purchased for the project would be sold. This is happening now in west London with the HS2 project. Ongoing the windfarms will require minimal staff, and financially any contribution would be negligible.

5 The BESS

I have many concerns regarding the behemoth Bess which would be less than 400m from our house. Fortunately my nearest neighbour is a qualified ecologist and has looked into this matter in some detail. I include his study here.

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1. PRELIMINARY — THE BESS WAS "SLIPPED IN" VIA A SECOND APPLICATION

The Observer draws the Board's urgent attention to the following critical procedural sequence:

Application 1 — PAX16.323778:

- Lodged: 30 September 2025
- Description: "16 wind turbines, a permanent 110kV substation, 110kV underground cable and grid connection and **ancillary development**"
- Decision: **Incomplete Application — 11 November 2025**
- **NO MENTION OF BESS**

Application 2 — PAX16.324258:

- Lodged: 30 April 2026 — seven months later
- Description: "16 wind turbines, a 110kV sub-station, **an energy storage system in the form of a battery array located within container units** and all associated infrastructure"

- Decision due: 27 May 2027
- **BESS EXPLICITLY ADDED**

The first application was found incomplete and returned. Rather than resubmitting a compliant wind farm application, the applicant returned seven months later with a materially different development — one that now includes a large industrial BESS facility that was **never scoped, never advertised as part of the original development, and never subjected to proper environmental assessment as a standalone component.**

The BESS layout drawing reveals a substantial industrial compound comprising:

- Multiple rows of lithium-ion battery storage containers
- A large fire water storage tank
- Transformer units
- Electrical control panels
- Perimeter security fencing (shown on all four elevation drawings)
- Internal access roads
- Lamp posts / security lighting
- Landscaping screening bunds on all four sides

This is not "ancillary" infrastructure. This is a large-scale industrial energy facility that has been inserted into the application without the procedural rigour it demands.

2. BESS GROUND 1 — PROCEDURAL: SEPARATE DEVELOPMENT, NO STANDALONE EIAR

The Deficiency:

A BESS of this scale is not exempted development under the Planning and Development Act 2000 (as amended), Section 4(1)(h), or the Planning and Development Regulations 2001 (as amended). It constitutes a distinct industrial energy infrastructure facility with its own:

- Land take and ground disturbance
- Drainage requirements
- Access infrastructure
- Operational noise and lighting profile
- Fire and chemical hazard profile
- Visual impact
- Grid connection requirements

The EIAR chapter structure confirms there is no dedicated BESS chapter. The BESS is identified as a site infrastructure element in Chapter 2 but is not individually and systematically assessed across all environmental topics as required by the EIA Directive (Article 5, Annex IV) and Schedule 7 of the Planning and Development Regulations 2001.

Required Remedy:

- The Board must determine whether the BESS requires its own standalone planning application and EIAR.
- The Observer submits it does, and that the BESS must be severed from the wind farm application and assessed independently before any determination is made.

3. BESS GROUND 2 — PROCEDURAL: SCOPING PROCESS BYPASSED

The Deficiency:

The Scoping Opinion (Appendix 1.3) was obtained for the wind farm as originally conceived, without any BESS component. As a direct consequence:

1. The EPA, NPWS, OPW, Irish Water, Mayo County Council, and all other prescribed bodies were never consulted on the environmental effects of the BESS.
2. The public was never given an opportunity to participate in scoping the BESS assessment.
3. The applicant has unilaterally determined what to assess for the BESS, with no regulatory oversight of that determination.
4. There is no verification that all significant environmental effects of the BESS have been identified and assessed — because that verification process (scoping) was never conducted for the BESS.

This is a breach of Articles 5 and 6 of the EIA Directive and Article 6 of the Aarhus Convention.

Required Remedy:

- A supplementary scoping process specifically addressing the BESS, with full public participation and prescribed body consultation, must be completed before the BESS assessment can be considered adequate.

4. BESS GROUND 3 — PROCEDURAL: REDIII FAST-TRACK MISAPPLIED

The Deficiency:

The application is classified as a "REDIII Application" under Directive (EU) 2023/2413 (REDIII). REDIII provides for accelerated permitting of **renewable energy** projects. The classification of the BESS under REDIII is legally and factually questionable:

1. **A BESS does not generate renewable energy.** It stores and dispatches electricity. Whether it qualifies as a renewable energy project for the purposes of REDIII accelerated permitting — as a standalone element, rather than as a purely ancillary component of a genuinely co-located generation facility — is a matter of legal interpretation that the Board must specifically address.
2. The Irish transposing instruments for REDIII (S.I. No. 36 of 2024) do not override the EIA Directive, the Habitats Directive, or the Planning and Development Act 2000. Accelerated permitting cannot lawfully circumvent these fundamental environmental protections.
3. The use of REDIII classification to fast-track a large industrial battery storage facility that has bypassed scoping, independent ecological assessment, and fire safety review is an improper use of the accelerated permitting framework.

Required Remedy:

- The Board must issue a formal ruling on whether the BESS qualifies for REDIII accelerated treatment and, if not, apply normal timelines and full assessment requirements to the BESS component.

5. BESS GROUND 4 — PROCEDURAL: MATERIAL CHANGE — PUBLIC NOT ADEQUATELY NOTIFIED

The Deficiency:

The Site Notice and Newspaper Advertisements published for the original application (PAX16.323778) contained no reference to a BESS. The revised application (PAX16.324258) introduces the BESS as a major new component. Members of the public who reviewed the original notice and chose not to object — because the development as described did not affect their interests — may not be aware that a large industrial battery storage facility has now been added.

The public participation rights guaranteed under:

- EIA Directive, Article 6(4)
- Habitats Directive, Article 6(3) read with the Aarhus Convention
- Planning and Development Act 2000, Section 34

...require that the public be given adequate, specific, and meaningful notice of the actual development being proposed. A BESS compound visible across four elevation drawings — with battery containers, transformers, fencing, a fire water tank, and security lighting —

cannot be considered adequately described by the phrase "ancillary development" or even "energy storage system in container units" in a brief newspaper advertisement.

Required Remedy:

- New site notices and newspaper advertisements specifically describing the BESS — its location, dimensions, capacity, operational characteristics, and fire risk profile — must be published.
 - A fresh public participation period of not less than eight weeks must follow.
-

6. BESS GROUND 5 — NATURE: NO ECOLOGICAL SURVEY OF BESS COMPOUND FOOTPRINT

The Deficiency:

The BESS compound occupies a distinct parcel of land within or adjacent to the wind farm site. No dedicated ecological survey of the BESS compound footprint is identifiable in the EIAR appendices. Specifically:

- **Habitat survey:** The NHAP/Phase 1 habitat survey of the BESS compound footprint, establishing the baseline habitat type and condition before development, has not been submitted.
- **Protected species:** No assessment of protected species — bats, breeding birds, ground-nesting birds, reptiles, or invertebrates — specifically at the BESS compound location has been submitted. Given that 9 of 16 turbines are already classified as high-risk for bats, the likelihood of bat foraging activity at the BESS location is elevated and demands targeted survey effort.
- **Flora:** No botanical survey of the BESS compound footprint has been submitted. If the compound footprint overlaps with blanket bog or modified grassland habitats, the loss of these habitats is an unassessed impact.
- **The BESS was not in scope** at the time surveys were conducted, so there is no reasonable basis to assume the general wind farm surveys covered the BESS footprint adequately.

Required Remedy:

- A Phase 1 and Phase 2 ecological survey of the BESS compound footprint and a minimum 200m buffer zone must be conducted and submitted.
 - A dedicated bat activity survey of the BESS compound location, compliant with BCI (2026) guidelines including the $\geq 10^{\circ}\text{C}$ temperature threshold, must be conducted and submitted.
-

7. BESS GROUND 6 — NATURE: NO APPROPRIATE ASSESSMENT FOR BESS

The Deficiency:

The Natura Impact Statement (NIS) was prepared for the wind farm as scoped. The BESS — with its own ground disturbance, drainage regime, construction traffic, operational lighting, and noise profile — has not been assessed for potential effects on Natura 2000 sites, including:

- Lackan Saltmarsh and Kilcummin Head SAC
- Killala Bay/Moy Estuary SPA

Under *People Over Wind* [C-323/17], the proposed mitigation measures (including BESS compound landscaping and bunding) cannot be used to screen out the obligation for Appropriate Assessment. The Board cannot be satisfied, in the absence of BESS-specific AA screening, that the BESS will not adversely affect the integrity of any Natura 2000 site.

Required Remedy:

- A BESS-specific Appropriate Assessment Screening Report must be submitted.
- If significant effects cannot be excluded, a full BESS Natura Impact Statement must be prepared and submitted before a determination.

8. BESS GROUND 7 — NATURE: HABITAT LOSS, DRAINAGE AND WATERCOURSE IMPACTS

The Deficiency:

The BESS compound requires:

- Ground clearance and topsoil stripping across the compound footprint
- Concrete hardstanding and foundations for battery containers and transformer units
- A perimeter access road and internal hardstanding
- A drainage system to manage surface water runoff from the compound

None of these impacts have been assessed for the BESS specifically. In a landscape of blanket bog, wet grassland, and peatland, the drainage design of the BESS compound is particularly critical. Impermeable hardstanding across the BESS footprint will alter local hydrology, increase surface water runoff rates, and potentially generate contaminated runoff (from battery fluid leaks, fire suppressant residues, or transformer oil). No watercourse impact assessment specific to the BESS has been submitted.

Required Remedy:

- A BESS-specific drainage and hydrology assessment must be submitted, assessing the impact of the BESS compound on local hydrology and watercourses, including WFD compliance.
 - Containment bund specifications for chemical spill containment must be submitted and assessed.
-

9. BESS GROUND 8 — NATURE: BAT FORAGING HABITAT AT BESS COMPOUND

The Deficiency:

The BESS compound drawing shows the facility located at the wind farm access road junction area, adjacent to existing vegetation and potential hedgerow/woodland edge habitats. These are prime bat foraging habitats for multiple species including Lesser Horseshoe Bat and Brown Long-eared Bat — both confirmed present on the site. The compound's security lighting will create artificial light at night (ALAN), which is documented to displace light-sensitive bat species and disrupt commuting and foraging behaviour. No bat-specific assessment of ALAN impacts from BESS compound lighting has been undertaken.

Required Remedy:

- A BESS-specific bat lighting impact assessment must be submitted.
 - Lighting specifications for the BESS compound must be assessed against current best practice for bat-sensitive lighting (e.g., warm-spectrum, directional, motion-activated).
-

10. BESS GROUND 9 — PEOPLE: FIRE AND EXPLOSION RISK — THERMAL RUNAWAY

The Deficiency:

Lithium-ion battery systems carry a documented and serious risk of thermal runaway — a self-sustaining exothermic chain reaction that can propagate rapidly through adjacent battery units, resulting in:

- Intense sustained fire (temperatures exceeding 700°C)
- Explosion risk from gas accumulation
- Fires that can burn for days and are extremely difficult to extinguish
- Release of toxic gases (see Ground 10 below)

Real-world incidents at BESS facilities internationally (including the 2023 Merritt Island, Florida incident; the 2019 Arizona Public Service McMicken incident; and multiple UK

incidents) demonstrate that even well-engineered BESS facilities are vulnerable to catastrophic thermal runaway events.

The BESS layout drawing shows a fire water tank but:

1. The capacity of the fire water tank has not been specified or assessed as adequate for a multi-day lithium-ion fire.
2. The fire suppression strategy for the battery containers has not been submitted (lithium-ion fires require specialist suppression — standard water application can be counterproductive).
3. The fire safety assessment submitted (Appendix 16.1) relates to the wind farm generally and does not constitute a BESS-specific fire risk assessment.
4. The separation distances between individual BESS container units visible in the layout drawing have not been assessed against any Irish, UK, or international standard (e.g., NFPA 855, IEC 62933).

Required Remedy:

- A standalone BESS Fire Risk Assessment prepared by a chartered fire safety engineer must be submitted.
- Fire suppression strategy, container separation distances, and water supply adequacy for a multi-day fire must all be assessed and documented.
- The assessment must be reviewed by Mayo County Council Fire Authority and the Health and Safety Authority (HSA) before any planning determination is made.
- Minimum separation distances between BESS container units must comply with NFPA 855 (2023) or equivalent standard, and compliance must be demonstrated in the submitted drawings.

11. BESS GROUND 10 — PEOPLE: TOXIC GAS DISPERSION — RISK TO RESIDENTS AND LIVESTOCK

The Deficiency:

During thermal runaway, lithium-ion batteries release a complex cocktail of toxic and flammable gases, including:

- **Hydrogen fluoride (HF)** — acutely toxic, causes severe burns to airways, skin, and eyes; immediately dangerous to life and health (IDLH) at 30 ppm
- **Carbon monoxide (CO)** — colourless, odourless; can cause fatal poisoning without warning
- **Hydrogen cyanide (HCN)** — highly toxic at very low concentrations

- **Volatile organic compounds (VOCs)** — carcinogenic and respiratory hazards
- **Lithium oxide particulate** — respiratory hazard

No toxic gas dispersion modelling for a thermal runaway scenario at the BESS compound has been submitted. In a rural Co. Mayo setting, with prevailing south-westerly winds off the Atlantic, a gas release event could affect:

- Nearby residential properties, which may be within the gas dispersion zone depending on compound location and wind direction
- Farm workers and livestock on surrounding lands
- Walkers and members of the public using public roads and rights of way adjacent to the site

The absence of any such assessment is a fundamental public safety failure in the EIAR.

Required Remedy:

- Worst-case toxic gas dispersion modelling for a full thermal runaway event at the BESS compound must be undertaken and submitted, referencing current Irish and international guidance (e.g., the UK COMAH Competent Authority guidance and HSA Technical Guidance Documents).
- Evacuation zone mapping must be produced and submitted.
- An emergency response plan specifically addressing BESS thermal runaway, including notification protocols for residents within the dispersion zone, must be submitted and reviewed by An Garda Síochána, Mayo County Council, and the HSA.

12. BESS GROUND 11 — PEOPLE: SEVESO III / COMAH — MAJOR HAZARD ASSESSMENT

The Deficiency:

The Seveso III Directive (Council Directive 2012/18/EU), transposed in Ireland by S.I. No. 209 of 2015 (Control of Major Accident Hazards Regulations), imposes obligations on establishments where dangerous substances are present above specified threshold quantities. The substances present in a large lithium-ion BESS facility — including flammable electrolyte solvents, lithium compounds, and fire suppressant chemicals — may meet or approach Seveso III threshold quantities, triggering:

- Notification obligations to the HSA
- The requirement to prepare a Major Accident Prevention Policy (MAPP)
- The requirement to prepare a Safety Report

- Land-use planning consultation requirements under Article 13 of the Seveso III Directive, which requires consultation with the competent authority before planning permission is granted for new establishments near populated areas or sensitive environmental receptors

No evidence has been submitted that:

1. A Seveso III threshold assessment has been conducted for the BESS facility
2. The HSA has been consulted on the BESS as a potential major hazard establishment
3. The Seveso III Article 13 land-use planning consultation requirement has been fulfilled

The failure to address Seveso III / COMAH obligations is a potentially unlawful omission that the Board must resolve before granting any permission.

Required Remedy:

- A Seveso III threshold assessment for the proposed BESS facility must be submitted.
- If thresholds are met or approached, full COMAH notification to the HSA must be made and the HSA's formal response obtained and submitted to the Board before any determination.
- Article 13 land-use planning consultation with the HSA must be documented and its outcome submitted.

13. BESS GROUND 12 — PEOPLE: NOISE — CONTINUOUS OPERATIONAL NOISE FROM BESS FACILITY

The Deficiency:

Operating BESS facilities generate continuous mechanical and electrical noise from:

- Battery thermal management systems (fans and cooling units running 24/7)
- Power conversion inverters and transformers
- HVAC systems maintaining safe operating temperatures within battery containers
- Security systems

This noise is:

1. **Continuous** — unlike wind turbine noise, BESS operational noise is not weather-dependent and may be louder in calm, quiet conditions
2. **Tonal** — inverter hum and fan noise often contain tonal components that are particularly intrusive and attract a tonal penalty under Irish noise guidance

3. **Low frequency** — transformer hum and cooling system vibration can include low-frequency and infrasound components that penetrate building fabric and are perceived as particularly disturbing

The noise assessment submitted (referenced in the EIAR chapter list as Chapter 13) relates primarily to wind turbine noise. **No dedicated noise assessment of the BESS facility as a standalone noise source has been submitted.** The BESS noise assessment should:

- Characterise the noise emission of the proposed BESS containers and ancillary plant
- Assess cumulative noise from the BESS combined with wind turbine noise at the nearest noise-sensitive receptors
- Assess compliance with WHO Environmental Noise Guidelines (2018) and EPA noise guidance
- Address low-frequency noise and tonality specifically

Required Remedy:

- A standalone BESS noise assessment, prepared by a qualified acoustic engineer, addressing all operational noise sources and their cumulative impact at the nearest noise-sensitive receptors, must be submitted.
- The assessment must address tonal components, low-frequency noise, and nighttime noise levels in accordance with WHO (2018) Environmental Noise Guidelines.

14. BESS GROUND 13 — PEOPLE: VISUAL IMPACT AND LANDSCAPE

The Deficiency:

The BESS layout drawing and elevation drawings clearly show a substantial fenced industrial compound comprising:

- Multiple rows of battery containers (visible at height above perimeter bunding)
- A large circular fire water storage tank
- Transformer units at multiple locations around the compound perimeter
- Security fencing and lamp posts on all four sides
- Internal access roads

The compound is described in the title block as drawn at 1:290 scale — indicating a facility of considerable physical extent. Yet:

1. **No photomontages** specific to the BESS compound from agreed public viewpoints have been submitted. Volume 6 Photomontages appear to relate to wind turbine visual impact only.

2. **No landscape and visual impact assessment** specific to the BESS has been submitted. The compound's visual profile — a low but extensive industrial installation in an open rural bogland landscape — is materially different from that of wind turbines.
3. **Lighting impact:** The lamp posts shown on the elevation drawings will generate light pollution at night in what is currently a low-light-pollution rural environment. No artificial lighting impact assessment for the BESS has been submitted.
4. **Cumulative visual impact:** The combined visual impact of 16 wind turbines **plus** a large fenced BESS compound **plus** a permanent substation in this landscape has not been assessed.

Required Remedy:

- Dedicated photomontages of the BESS compound from a minimum of six agreed viewpoints, including from the nearest public road, nearest residences, and the nearest Natura 2000 site boundary, must be submitted.
- A landscape and visual impact assessment specific to the BESS compound must be submitted.
- An artificial light impact assessment for the BESS compound, including assessment of impacts on dark sky quality and bat activity, must be submitted.

15. BESS GROUND 14 — PEOPLE: SHADOW FLICKER FROM COMPOUND LIGHTING

The Deficiency:

Shadow flicker analysis (Appendix 15.1) was prepared for the wind turbines only. The BESS compound's lamp posts — if fitted with high-intensity floodlights or flashing security lights — can generate their own light nuisance effects, including glare, sky glow, and intermittent flash visible to nearby residents at night. No assessment of this issue has been undertaken for the BESS.

Required Remedy:

- Lighting specifications for the BESS compound must be submitted, including lux levels, directionality, operational hours, and colour temperature.
- A glare and light intrusion assessment at the nearest residential receptors must be submitted.

16. BESS GROUND 15 — PEOPLE: HUMAN HEALTH AND ELECTROMAGNETIC FIELDS (EMF)

The Deficiency:

Large-scale BESS facilities generate significant electromagnetic fields (EMF) from:

- High-current DC cabling between battery containers and inverters
- AC transformers and grid connection cables
- Power conversion equipment

No EMF assessment for the BESS compound has been submitted. The nearest residential receptors and any public rights of way within the compound vicinity require assessment for compliance with the ICNIRP guidelines on non-ionising radiation and the EU EMF Directive (Directive 2013/35/EU, transposed by S.I. No. 251 of 2016 in Ireland).

Required Remedy:

- An EMF assessment for the BESS compound and associated grid connection must be submitted, demonstrating compliance with ICNIRP guidelines at the nearest residential receptors and public access points.

17. BESS GROUND 16 — PEOPLE: TRAFFIC AND CONSTRUCTION IMPACTS

The Deficiency:

The Traffic Management Plan (Appendix 2.1 CEMP Management Plan 7) relates to the wind farm construction. The BESS introduces additional and distinct construction traffic requirements:

1. **Abnormal loads:** Battery containers and transformer units are large, heavy items requiring abnormal load haulage. The route assessment (Appendix 17.1 Turbine Delivery Report) addresses turbine delivery only — it does not address BESS container and transformer delivery, which will likely require similar or greater abnormal load management.
2. **Construction programme:** The BESS construction programme — its timing, duration, and overlap with wind farm construction — has not been individually assessed. Simultaneous wind farm and BESS construction could double the traffic generation on local roads during peak construction periods.
3. **Bridge and road assessments:** Palmerstown Bridge Report (Appendix 17.2) was prepared for turbine delivery. BESS container delivery loads have not been assessed against the same bridge and road network infrastructure.

Required Remedy:

- A BESS-specific abnormal load delivery route assessment must be submitted.
- The overall construction traffic assessment must be updated to include BESS delivery vehicles and show the combined traffic impact.

18. BESS GROUND 17 — SAFETY: INADEQUATE EMERGENCY RESPONSE PLANNING

The Deficiency:

The Emergency Response Plan (Appendix 2.1 CEMP Management Plan 1) was prepared for wind farm construction. No operational emergency response plan for the BESS during its operational life has been submitted. Key gaps include:

1. **No BESS-specific emergency response protocol** — thermal runaway, fire, explosion, and toxic gas release require a highly specific emergency response, fundamentally different from general wind farm emergencies.
2. **No liaison documentation with An Garda Síochána, Mayo County Council, or the National Ambulance Service** confirming that these services are aware of the BESS hazard profile and have been consulted on emergency response capability.
3. **No public notification plan** — nearby residents have not been informed of the BESS hazard profile, evacuation procedures, or emergency contact information.
4. **Response time assessment:** The rural location of the BESS raises serious questions about whether the nearest fire brigade station has the specialist equipment and training required to respond to a lithium-ion fire. No assessment of emergency service response times and capability has been submitted.
5. **No mutual aid agreement** — large BESS fires frequently require fire resources beyond those available from a single county fire service. No mutual aid arrangements have been documented.

Required Remedy:

- A comprehensive BESS Operational Emergency Response Plan, developed in consultation with Mayo County Council Fire Authority, An Garda Síochána, the National Ambulance Service, and the HSA, must be submitted and approved before any permission is granted.
- Evidence of consultation with all emergency services on BESS-specific risks must be submitted.

19. BESS GROUND 18 — SAFETY: GROUNDWATER AND SURFACE WATER CONTAMINATION

The Deficiency:

BESS facilities present multiple pathways for groundwater and surface water contamination:

1. **Battery electrolyte leakage** — lithium-ion batteries contain organic electrolyte solvents (e.g., dimethyl carbonate, ethylene carbonate) that are toxic to aquatic organisms and can contaminate groundwater if released.
2. **Transformer oil** — the transformer units shown in the BESS layout drawing contain transformer oil which is a listed hazardous substance under the Water Framework Directive.
3. **Fire suppression runoff** — in a thermal runaway event, fire suppression water mixed with battery electrolyte, lithium compounds, and combustion products is highly toxic. This contaminated water must be contained within bunded areas and cannot be allowed to enter watercourses or groundwater.
4. **The site is on peatland** — peat soils are highly permeable to certain contaminants and are directly connected to the blanket bog hydrology. Contamination of peat soils at the BESS compound could cause long-range contamination of the hydrological system.

No contamination risk assessment or containment design for the BESS has been submitted. The WFD Compliance Assessment Report (Appendix 9.3) does not appear to address BESS-specific contamination pathways.

Required Remedy:

- A BESS-specific groundwater and surface water contamination risk assessment must be submitted, addressing all contamination pathways identified above.
- Containment bund design specifications, capable of containing the maximum credible release volume plus fire suppression water, must be submitted and assessed.
- The assessment must demonstrate compliance with the Water Framework Directive and Groundwater Directive requirements.

20. BESS GROUND 19 — SAFETY: DECOMMISSIONING, BATTERY DISPOSAL AND REPLACEMENT

The Deficiency:

Lithium-ion battery systems have an operational lifespan of approximately 10–15 years — significantly shorter than the 25–30 year operational life of the wind farm. This means the BESS will require:

1. **Mid-life replacement** of all battery container units within the wind farm's operational life — at least once, possibly twice.
2. **Decommissioning** of end-of-life lithium-ion batteries, which are classified as **hazardous waste** under the Waste Framework Directive (2008/98/EC) and the

Batteries Regulation (EU) 2023/1542 (which replaces the Batteries Directive and introduces strict lifecycle and recycling obligations).

3. **Transport of hazardous waste** — decommissioned lithium-ion battery units must be transported by specialist hazardous waste contractors under the European Waste Catalogue (EWC) code 16 06 05 (other batteries and accumulators) and the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

None of these issues have been addressed in the application. The CEMP Decommissioning Plan (Appendix 2.1 Management Plan 6) addresses wind farm decommissioning only and contains no BESS-specific provisions. There is no lifecycle assessment for the BESS, no battery replacement plan, and no hazardous waste management plan for end-of-life batteries.

Required Remedy:

- A full lifecycle assessment for the BESS, including battery replacement cycles and decommissioning plan, must be submitted.
- A BESS hazardous waste management plan, demonstrating compliance with the Batteries Regulation (EU) 2023/1542, the Waste Framework Directive, and Irish waste licensing requirements, must be submitted.
- Financial security for BESS decommissioning and battery disposal must be conditioned, separate from any wind farm decommissioning bond.

21. BESS GROUND 20 — CUMULATIVE IMPACT: COMBINED WIND FARM AND BESS

The Deficiency:

The BESS has been inserted into an application that was scoped and structured around a wind farm only. No cumulative assessment of the combined wind farm and BESS development has been conducted across any environmental topic. Specifically, the combined development creates cumulative impacts not captured in the wind farm EIAR alone:

The complete comprehensive BESS objection is set out above across all twenty grounds covering:

PROCEDURAL (Grounds 1–4):

- The BESS was inserted via a second application after the first was found incomplete — it was never scoped, never properly advertised, and the public was never meaningfully notified of it
- It is a separate development requiring its own standalone EIAR and planning permission

- REDIII fast-track is being misused for a facility that does not generate renewable energy

NATURE (Grounds 5–8):

- No ecological survey of the BESS compound footprint
- No Appropriate Assessment screening for BESS impacts on Natura 2000 sites — *People Over Wind* applies
- Peatland drainage and watercourse contamination unassessed
- BESS compound lighting (ALAN) impacts on confirmed bat species unassessed

SAFETY (Grounds 9–11, 17–19):

- No BESS-specific fire risk assessment — thermal runaway from lithium-ion batteries can cause multi-day fires at 700°C+
- No toxic gas dispersion modelling for hydrogen fluoride, carbon monoxide, and hydrogen cyanide release
- Seveso III / COMAH threshold assessment not conducted — potentially unlawful
- No operational emergency response plan reviewed by Mayo County Council Fire Authority or HSA
- No groundwater/surface water contamination assessment for battery electrolyte, transformer oil, or fire suppressant runoff
- No lifecycle plan for battery replacement or hazardous waste disposal under EU Batteries Regulation (EU) 2023/1542

PEOPLE (Grounds 12–16):

- No BESS noise assessment for continuous cooling/inverter/transformer noise
- No dedicated photomontages or visual impact assessment for the BESS compound
- No lighting/glare assessment for compound lamp posts in a dark rural landscape
- No EMF assessment for high-current cabling at nearest residences
- BESS abnormal load delivery and construction traffic unassessed

CUMULATIVE (Ground 20):

- No cumulative assessment of the combined wind farm plus BESS across any environmental topic — noise, visual, ecological, traffic, or AA

The primary request to the Board is **refusal**. In the alternative, a comprehensive Further Information request addressing all 20 grounds, fresh public advertising, and mandatory consultation with NPWS, HSA, Mayo County Council Fire Authority, and EPA before any determination.

In Conclusion

This proposal is entirely unsuitable for the area, and these proposals should be government led, and not left open to developers to spam the countryside, leaving residents to wade through thousands of pages of planning documents and drawings to protect the environment when that should be the local and national governments job.

Yours Faithfully

PP William Joseph O'Grady

Dermot O'Grady