

To whom it may concern

I live in the rural area surrounding the proposed Coolpowra Reserve Gas-Fired Generator development and the proposed infrastructure would be located close to my home and the environment in which I live. The area is characterised by farmland, rural roads, hedgerows, watercourses and open countryside. It is an area where families live, where children grow up and where future generations will continue to depend on a healthy environment and a landscape that retains its rural character.

For this reason, I have reviewed the Significant Additional Information, the Environmental Impact Assessment Report (EIAR) Addendum, the revised Natura Impact Statement (NIS) and the revised access arrangements to the best of my ability. Please note that given the enormity of the files, both old and new, and the technical nature of the material, it is difficult to pen every concern that I have or that I might not yet have reviewed given the enormity of the files, especially in light of the most recent revelation by the eastgalway gasplant concern group that this enormous proposal approval would result in our area hosting over half of the entire country's 2030 limit for remissions from electricity. This submission should be read together with my previous observations and objections.

I would also like to highlight, that the presence of such developments is far more than a "NIMBY" issue, it is a much larger economical, climate, environmental and health issue. And lets not fool ourselves, we know what will come further down the tracks given Nigel Reams recent development approved in Westmeath. If we allow this development to proceed we are merely ripening the area for data centre development.

Data centres now account for 21 per cent of Irelands total metered electricity and are projected to grow to 30% by 2030 (United National University Institute for Water, Environment and Health). Electricity prices have absolutely soared for domestic users in Ireland over the last five or six years. Last month, Friends of The Earth released a report with Beyond Fossil Fuels that found the average Irish household might have paid an estimated 360 euros in additional electricity costs between 2015 and 2023 due to the "intensity of data centre presence" on Ireland's Single Electricity Market grid. Cumulatively for all Irish Households the data centre price effects was as high as 715m euros the research suggested. Other countries are now looking to Ireland, sadly not as a good example, but in terms of lessons to be learnt! Lets not make a bad situation potentially even worse place.

Having reviewed the documentation available, I remain concerned about the potential implications of the proposed development for human health, air quality, biodiversity, climate change, emergency preparedness, visual amenity and the long-term character of the area surrounding our home. The additional information submitted has not reduced these concerns.

1. Inadequacy of Technology Maturity — LDES is at Experimental Stage

Research by Cornwall Insight, written in collaboration with Ireland's Climate Change Advisory Council, found that limited financial incentives, a lack of clear targets, and market

design limitations are all hindering the development of long-duration energy storage technologies in Ireland. [Solar Power Portal](#)

At present there is only 0.29 GW of LDES on the Irish grid, all coming from a single pumped storage hydro asset at Turlough Hill — meaning the type of technology proposed here has essentially no proven operational track record in Ireland. [Solar Power Portal](#)

Objectors at the Buncrana iron-air battery storage project — Ireland's first of its kind — specifically cited the use of "untested technology" as a formal objection ground, raising concerns about lack of proven long-term performance. [Donegal Live](#)

We would request that the developer submit an independent, peer-reviewed evidence of the specific storage technology's performance over a minimum 5-year operational period at comparable scale elsewhere.

2. Fire Risk and Thermal Runaway — Specific Dangers to Rural Location

In the past four years, more than thirty large-scale battery energy storage systems around the world experienced failures resulting in fires and, in some cases, explosions. Thermal runaway — where stored chemical energy converts uncontrollably to thermal energy — is by far the most severe BESS failure mode. [Jensen Hughes](#)

During thermal runaway, large amounts of flammable and potentially toxic battery gas are generated, largely containing hydrogen, which is highly flammable under a wide range of conditions. This can create an explosive atmosphere in the battery enclosure. A real-world incident illustrated this starkly: when a HAZMAT team attempted to enter a BESS to survey an incident, an explosion occurred, seriously injuring firefighters. Investigations found that clean agent fire suppression systems were incapable of stopping thermal runaway, and that flammable off-gases concentrated because there was no means of ventilation. [ScienceDirectScienceDirect](#)

The rural location compounds this risk significantly. Response times for fire services in rural County Galway are far longer than in urban areas. What is the nearest fire station, what is its estimated response time, and does the emergency response plan account for multi-day battery fires in a location with limited access?

3. Water Contamination and Proximity to Watercourses

This argument has been raised at Oireachtas level regarding Irish BESS developments specifically:

If a leak occurs, lithium-ion energy storage batteries contain liquid electrolyte which can react with moisture to form **hydrofluoric acid** — an acutely dangerous substance. Senators in the Oireachtas raised this directly in the context of a BESS site near a sensitive ecological

area draining into rivers designated as Special Areas of Conservation, calling for independent safety assessments before developments of this scale are considered. [Irish Examiner](#)

You should map all watercourses, drains, and designated ecological areas within the catchment of the proposed site in H53. County Galway contains numerous SAC and SPA designations connected to the River Shannon system/Lough Derg. If any drain or surface water feature connects — even indirectly — to a designated watercourse, this is a compelling ground for refusal or, at minimum, an independent hydrogeological assessment.

We would request that a full independent hydrogeological assessment demonstrating that no surface water or groundwater pathway connects the site to any protected water body or watercourse be completed.

4. Air Pollution

The Environmental Impact Assessment Report identifies emissions including nitrogen oxides, nitrogen dioxide, carbon monoxide and particulate matter arising from the operation of the proposed gas turbines and associated infrastructure. The World Health Organization identifies air pollution as one of the most significant environmental threats to human health and links exposure to these pollutants with cardiovascular disease, respiratory disease, stroke, asthma, lung cancer and premature mortality (World Health Organization, 2021).

The Environmental Protection Agency reports that Ireland continues to exceed World Health Organization Air Quality Guideline values for several pollutants despite generally complying with European Union legal limits (Environmental Protection Agency, 2024a). The Environmental Protection Agency has also reported that air pollution contributes to approximately 1,700 premature deaths annually in Ireland (Environmental Protection Agency, 2024b).

These findings are directly relevant because the proposed development would introduce a new industrial emission source into an area where we live. While the applicant's modelling may indicate compliance with regulatory standards, scientific evidence demonstrates that health effects can occur at levels below legal limits and that cumulative exposure over time remains important (World Health Organization, 2021). The information available therefore leaves me concerned about the long-term implications of additional emissions arising from three large gas turbines, three emission stacks, emergency diesel generators and associated operational activity.

5. Absence of Adequate Regulatory Framework in Ireland

Sinn Féin Senator Nicole Ryan told the Seanad that "communities deserve proper transparency, consultation, and independent safety assessments before developments of this scale are considered," arguing that "rural Ireland is not a dumping ground for projects that would never be tolerated in urban areas." [Irish Examiner](#)

Planning and environmental compliance remain critical obstacles for storage projects in Ireland — securing planning permission is a lengthy and complex process, particularly where environmental impact assessments or local community concerns arise. [Addleshaw Goddard](#)

Crucially, there is currently **no bespoke national regulatory or safety framework** for large-scale LDES in Ireland equivalent to, for example, NFPA 855 in the US. This absence means there is no statutory minimum safety standard against which the proposal can be assessed. ***Hence we are asking An Coimisiun Pleanála whether it is satisfied that adequate standards exist to protect the public?***

6. Visual Intrusion and Incompatibility with Rural Character

The development comprises **two separate outdoor compounds** plus an internal building, together with all ancillary works — a significant industrial footprint in a rural setting. The proposed Coolpowra Reserve Gas-Fired Generator, together with the associated Energy Storage System, Gas Insulated Switchgear Substation and related infrastructure, would introduce a substantial concentration of industrial energy infrastructure into a predominantly agricultural rural landscape. Given its scale, industrial appearance and operational characteristics, we remain concerned that the development does not align with the RSES vision for rural placemaking and may adversely affect the character and attractiveness of the surrounding area. This is particularly relevant to nearby communities such as Killimor and Portumna, whose rural identity, agricultural activity and tourism potential contribute significantly to their economic and social sustainability.

We are also concerned regarding Galway County Development Plan Policy Objective RD3 – Assimilation of Buildings, which seeks to ensure that all buildings are appropriately sited and sympathetic to their surroundings in terms of scale, design, materials and colour, while also protecting visual amenity and important landscape features.

The proposed site has historically been used for agriculture and is located within an established rural landscape accessed from the L8763 local road. The surrounding area is characterised by farmland, hedgerows, rolling countryside, watercourses and dispersed one-off rural housing. The local road network follows an esker landscape feature that contributes significantly to the area's visual character and sense of place. There is currently no comparable industrial or commercial development within the immediate vicinity of the site.

Given the scale of the proposed development, including three 45-metre emission stacks, gas infrastructure, fuel storage facilities, transformers, high-voltage electrical infrastructure and associated works, we remain concerned that the proposal would not assimilate appropriately into its rural surroundings. The introduction of large-scale industrial structures into an otherwise agricultural landscape has the potential to significantly alter the visual character of the area and affect the amenity enjoyed by local residents.

The Newmarket Environmental Protection Group in County Cork, opposing a BESS development, argued that their application "presents significant concerns regarding public safety, environmental protection, and the integrity of the rural landscape." [Irish Examiner](#)

Galway County Council refused an energy storage facility on several grounds including that the local road network was unsuitable and that the energy storage facility was premature pending decisions on associated infrastructure. [GalwayBayFM](#)

The Galway County Development Plan 2022–2028 includes Chapter 14 on Climate Change, Energy and Renewable Resources, but it must be read alongside Chapter 4 on Rural Living and Chapter 8 on Tourism and Landscape. The Galway County Development Plan expressly recognises that "*a balance is required between supporting rural-based enterprises and protecting the local environment*". [Galway](#)

In this instance has the developer been requested to demonstrate in a Landscape and Visual Impact Assessment (LVIA) that the cumulative visual impact of both compounds and all ancillary infrastructure is acceptable?

7. The Synchronous Condenser — Noise and Vibration

A synchronous condenser is a large rotating electrical machine operating continuously. Noise impact assessments for synchronous condensers have been required as planning conditions at sites in the UK, reflecting that they generate significant continuous operational noise. [Conradenergy](#)

Continuous low-frequency noise and vibration from rotating machinery in a quiet rural environment can cause ***chronic sleep disruption, heightened stress, and impaired wellbeing***. The Association of Acoustic Consultants of Ireland (AACI) has published Environmental Noise Guidelines for planning authorities, providing a working reference for appropriate noise assessment standards to be used by planning authorities in Ireland. [ICAN Acoustics](#)

As local residents we demand that a full independent noise impact assessment covering both facilities — the LDES compound and the synchronous condenser building — modelling noise levels at the nearest residential properties at night, and verifying compliance with AACI guidance is carried out.

8. Road Infrastructure and Construction Traffic

Both the Galway County Council refusal and objections at Buncrana highlighted road infrastructure as a material planning consideration. Rural roads in the H53 area are typically narrow, unclassified local roads with no footpaths, passing places, or HGV provision. Construction of two compound facilities plus ancillary works will generate prolonged heavy vehicle movements.

As a local resident I welcome a detailed Construction Traffic Management Plan (CTMP) and a pre- and post-construction road condition survey, with the developer bound to remediate any damage at their own cost.

Summary: Key Asks to the Planning Authority/An Coimisiun Pleanala:

Please note the following formal requests to be addressed before any decision is made:

1. **Full independent EIA** — was a screening determination made and was EIA required? If not, please challenge the screening.
2. **Independent hydrogeological assessment** — all surface and groundwater pathways to protected waters.
3. **Independent fire and emergency risk assessment** — including response time analysis for rural location and full thermal runaway modelling.
4. **Noise impact assessment** compliant with AACI guidelines, covering both the LDES compound and synchronous condenser, with night-time readings at all nearest residences.
5. **Landscape and Visual Impact Assessment (LVIA)** addressing cumulative impact of both compounds and all ancillary structures.
6. **Technology maturity evidence** — peer-reviewed operational data for the specific LDES technology proposed.
7. **Construction Traffic Management Plan** with road condition surveys and remediation bond.
8. **Proof that the rural location is necessary** — i.e. that no brownfield, industrial-zoned, or less sensitive site could accommodate this development.
9. **All three developments are looked at collectively and not in isolation of one another** (i.e. ABP 320094-24; ABP 320095-25 & ABP 320916-24).

I respectfully request that An Coimisiún Pleanála take these concerns into account when determining this application.

Yours sincerely

Mark Quirke

Ballinahiskera

Killimor

Co. Galway

H53 W522