EAST GALWAY
GAS PLANT
CONCERN GROUP

Significant Further Information Response

Observation to An Coimisiún Pleanála

In respect of the following applications:

1. **Reserve Gas-Fired Generator (OCGT)** — ABP-320095-24 / (s.37E SID)
2. **Battery Energy Storage System (BESS)** — ABP-320916-24 (s.37 appeal, GCC ref 24/60845)
3. **400 kV Gas-Insulated Switchgear Substation (GIS)** — A07.320094 (s.182A SID)

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Preamble

The East Galway Gas Plant Concern Group is a group of residents, landowners and families from the community around Coolpowra, which is situated between Portumna and Killimor in southeast Co. Galway. We came together in 2024 after three major applications arrived, together, for the locality in which we live and raise our families. We did not seek this.

What is proposed here is not a modest development. It is the largest fossil-fuel generating station in the history of the State, the largest battery storage installation in the history of the State together with a synchronous condenser, and the equivalent of the largest gas-insulated switchgear substation in the State – all on land assembled by the developer and brought forward across three separate planning applications. The site is greenfield, unzoned, unserviced agricultural land with significant environmental sensitivities. It has no history of energy generation and no history of heavy industry. It is reached by a restricted national secondary road that the local authority and Transport Infrastructure Ireland have repeatedly refused to open to far smaller development. Nothing in any development plan, and nothing in the character of this place, ever marked it out as somewhere a project of this scale would be built.

We are an ordinary rural community. We are also united in our opposition. More than 380 objections were lodged against the battery storage with Galway County Council, over 800 people signed our 2024 observation on the fossil-fuel generator, and our community campaign is followed by some 1,400 people. This community has already accepted significant electricity infrastructure. No one objected to the 400 kV AIS substation, the 220 kV pylons, or the EirGrid series compensation works now under construction which will improve the grid's flow of electricity. But these proposals are of a different order, and it is here that we must draw the line. The wider community has had to fund, learn and report on three separate applications as though each stood alone, when they are in truth one development, and when the applicant has lodged all three simultaneously together at both turns. This observation is the result of hard work on a limited timeframe. It has been done at our own expense, in our own time, and in good faith. It is grounded throughout in the applicant's own documents, independent research, and in the findings of the public authorities. It sets out, in detail, why we believe these applications should be refused.

Yours in good faith

Members of the East Galway Gas Plant Concern Group (& East Galway Next Gen CLG)

Paul Madden, Coolnageerah, Portumna, Co. Galway, H53 C9K4.

1. Introduction

This observation is made in respect of the following planning files presently before An Coimisiún Pleanála ("ACP") that concern proposed developments at Coolpowra, Co. Galway.

- Project 1: A07.320095 - 1,155MW Gas-Fired Generator comprising 3 × 385 MW open-cycle gas turbines and 19,000 tonnes of gas oil reserve storage and the Above-Ground Installation ("OCGTs");
- Project 2: GCC ref 24/60845; ACP-320916-24 - the first-party appeal against Galway County Council's (GCC) refusal in respect of the 400MW Long Duration Energy Storage System (LDES) and 400MVA Synchronous Condenser on 30th August 2024 ("BESS"), and;
- Project 3: A07.320094 - in respect of the 400kV Gas Insulated Switchgear electricity substation ("GIS").

The applicant's 2026 FI response ("2026 FIR") makes clear that each of the projects listed above are dependent on one another. The BESS & OCGT are physically dependent on the GIS, whilst the applicant's GIS need case is dependent on the BESS and/or OCGT:

> "*The proposed ESS (Project 2) and RGFG (Project 1) are operationally dependent on the GIS substation*
>
> *…*
>
> *However, in the absence of a committed connected plant, it would be expected that the timing and justification for [GIS] construction / energisation would be reviewed, as the principal need case and utilization of the asset arise from the associated connections*" [1]

We therefore consider matters raised relating to GIS are by extension related to the OCGT and BESS. The applicant presenting the GIS' need case as dependent on a committed plant extends the relevance of the OCGTs to the GIS.

Our observation raises a range of significant concerns, many of which we consider sufficient in themselves to warrant refusal. They fall under the following (non-exhaustive) themes:

Need - a need case that does not withstand the State's own resource-adequacy, capacity-market and independent research, and that relies on policy now five years old without account of what has changed since.

Project Purpose - one stated purpose (renewables backup, peaking) to the planning authority, and a different stated purpose to the energy regulator i.e. data centre activity (Commission of Regulation of Utilities ("CRU") Large Energy User ("LEU") submission, Cloudy DS, the Castlelost precedent).

Climate and emissions - materially incorrect emissions calculations, inconsistency with the carbon budgets and the electricity sectoral emissions ceiling, and the wider concern of fossil-fuel lock-in and stranded assets.

[1] 2026 FIR, p6

Roads, traffic and safety - a new access onto a national secondary road not shown to be structurally or operationally safe, an unsupported traffic assessment, material increase in peak hour traffic, intensification of exit, missing collision records, planning precedent and an abnormal load that a senior ESB engineer considered undeliverable by road.

Water, flooding and European sites - effects on the receiving waters and designated sites, including the drinking-water source for much of the State, not assessed to the standard the Directives require. Misrepresentation in EIAR about the site's flooding concerns, and the affect the proposals would have on surrounding landowners;

The adequacy of the assessments - an Appropriate Assessment and Natura Impact Statement scoped only to the access road, which post-dates the original application and pre-dates the further-information request, therefore did not address many specific FI matters; assessment contains repeated deferrals on significant matters (e.g. COMAH deferrals).

Project splitting - the nature in which the case is presented; missing assessments for key dependent projects;

Site and process - unzoned, unserviced agricultural land with no genuine alternatives assessed; a substation capacity constraint; an omitted gas connection assessment 25km away; greenfield with no history of energy generation; lack of public consultation.

Local impacts - residential amenity, noise, land-take, environment, visual impact and the long-term effect on the community.

***Note 1**: For the ease of the reader, we have attributed the following background colours to quotes from the following parties;*

- *Applicant*
- *Planning Authorities*
- *Other*

***Note 2**: We were advised by An Coimisiún Pleanála, that the content of this observation was "open to make any submission or observation that you wish. You may include any matters that you consider relevant and you may refer to or provide any documentation or supporting material that you consider appropriate in support of your observation"*

2. Gas Insulated Switchgear

2.1. Roads / Project Delivery

We have significant concerns about the haulage route[2] for the GIS transformer. The applicant has not demonstrated that they're suited for the scale of haulage required, together with the distance to an unserviced location. Abnormal loads present a material issue for this project.

> *"Should permission be granted for the development, a specialist haulage contractor will be engaged to liaise with relevant highway authorities and secure appropriate permits for the transport of any abnormal loads."*[3]
>
> *"Depending on the axle loading of construction related vehicles and/or abnormal loads, further tests to determine the structural strength of the L8763 carriageway, or further visual inspections prior to and post construction, should be undertaken, if necessary, in agreement with Galway County Council."*[4]

The applicant intends to analyse haulage and the road's structural strength on a basis that is subject to planning permission. This is premature. Such assessments should help ACP inform their decision – not follow it.

> *"The N65 national road has been constructed to be capable of withstanding higher than current traffic volumes. No significant visual defects within the immediate vicinity of the N65/L8763/L8760 junction were observed during a site visit on 29 May 2024. The level of traffic anticipated to be generated by the GIS project would not be anticipated to result in a measurable impact on the road structure of the N65. The pavement formation on the L8763 is unknown, and as such construction traffic may result in short term localised degradation to the L8763 carriageway"*[5]

The same conclusion is made for all three projects in the Addendum's respective Road Structure Impact chapters despite there being insufficient analysis conducted on abnormal loads. We are particularly concerned with the N65 and especially L8763's capability to accommodate abnormal loads of this scale. In addition to the GIS project's transformer, each of the proposed OCGTs would require haulage for the turbine casing, turbine rotor, generator rotor, generator casing, step-up transformers and generator transformers. Surveys, permits, reports and approvals for these are a must and present a significant challenge as the applicant will know at a smaller scale from its previous Castlelost project.

In 2017, a 550 tonne 400kV GIS Substation Transformer was delivered to Moneypoint, Co. Clare. This project's delivery "*posed many risks which had to be mitigated*"[6].

[2] EIAR ADD: Figure 13.1.
[3] EIAR ADD 13.4.
[4] EIAR ADD 13.9.1.
[5] EIAR ADD 13.5.3.1.
[6] Robert le Roux, Design and delivery of Ireland's largest transformer, Transformer Magazine, Volume 4, Issue 4 (p94-99): available at hrcak.srce.hr/file/298112

> *"Due to the size of the transformer … the location of the substation and the condition of rural roads in Ireland, this transformer could not be delivered by road. The specification included details of the required delivery by sea, Shannon River and utilisation of the power station's internal roads*
>
> *…*
>
> *Because of this [weight], some manufacturers had to withdraw from the tender process due to their transformer being too big to transport on the roads in their own countries."*[7]

These quotes are from Robert le Roux, an Electrical Engineer and Senior Technical Specialist with ESB International with over 30 years of experience. He is a Primary Plant Specialist and the Irish Representative on Cigre Study Committee A3, Convenor of WG A3.39, and member of WG A3.33, A2.48 and JWG C4/B5.41. He holds DSc, MBA, MTech and BTech degrees, as well as NHD and ND, all in Electrical Engineering – HV.

His Moneypoint account illustrates the difficulty involved in hauling transformers of this size: girder trailers more than 100m in length carrying 550 tonnes. The article's transformer – Ireland's largest – was for a 400kV GIS substation and is therefore directly comparable with the requirements for the applicant's proposed Coolpowra 400kV GIS substation on the same 400kV system.

The author notes that Ireland's 400kV system is rated to 550kV insulation level which presents a more demanding spec. He also states that transformers this size could not be delivered by road due to the condition of rural roads in Ireland. Moneypoint required a marine delivery despite being directly accessible from the N67 road. So demanding were the size and transport constraints that some manufacturers had to withdraw from the tender process due to their transformer being too big to transport on the roads in their own countries. Coolpowra is located inland in East Galway with no such marine delivery option. The applicant's FI response contains no abnormal-load-swept-path or haul-route assessment to demonstrate that such loads could reach the site.

EirGrid's evidence in their 2024 High Court proceedings versus the applicant, stated that "*the applicants had failed to provide them with a detailed schedule to underpin their submitted implementation plan demonstrating that they fully understood what was required to deliver 400 kV infrastructure at this scale"*[7]. The same section of this observation illustrates that the TSO's GIS feasibility concerns were stated as rejection reasons for the applicant's operationally associated OCGT and BESS projects.

[7] 7.1. Court Case of this observation

The applicant fails to demonstrate a deliverable development, and the EIAR is deficient on a central construction-phase issue. There are smaller generators stuck at Dublin Port as they are too heavy for M50[8], where TII stated "*at this stage we reasonably believe that the proposed movement of the abnormal indivisible loads could cause damage to the M50*".

Considering the above, we ask ACP to consider whether they can assess;

i. the scale of abnormal loads required for Coolpowra;

ii. their ability to travel 185km on Irish motorways, traversing the M50, M4, M6 per the applicant's proposed haulage route);[9]

iii. their ability to travel 35km along the N65 to the newly proposed staggered L8763 junction situated on an elevated esker ridge.

2.2. Regulation (EU) 2024/573

Regulation (EU) 2024/573[10] - which came into effect on 11th March 2024, prohibits the placing of such SF_6 switchgear on the market from 1st January 2032;

> "*The EU announced the adoption Regulation (EU) 2024/573 to phase out fluorinated gases (F-gases) and other substances that contribute to global warming and ozone layer depletion. These regulations came into effect on 11th March 2024*"[11]

Voltage range	Prohibition date	Switchgear voltage
0-24 kV	1st Jan 2026	10/20 kV (MV)
>24 kV ≤ 52 kV	1st Jan 2030	38 kV
>52 kV ≤ 145 kV ≤50 kA	1st Jan 2028	110 kV
>145 kV >50 kA	1st Jan 2032	220/400 kV

The applicant has not demonstrated that the project is deliverable on the roads in question - that difficulty is now compounded by time. We also ask ACP to weigh the consequences of approving a development that is dependent on a technology which the EU is in the process of prohibiting on climate grounds.

For context, the applicant didn't address the insulating gas, state its quantity, or give its global warming potential ("GWP") in the addendum or the 2024 EIAR.

[8] https://www.independent.ie/irish-news/generators-to-combat-power-shortages-are-stuck-at-dublin-port-as-they-are-too-heavy-for-m50/a532597380.html
[9] 2026 ADD: Figure 3.3.
[10] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32024R0573
[11] https://www.esbnetworks.ie/services/get-connected/renewable-connection/f-gas-regulation

"… there are no operation phase emissions associated with either the GIS or ESS projects"[12]

A 400 kV Gas Insulated Switchgear, as its name suggests, has an operational emission by design: Sulfur Hexafluoride (SF_6) leakage. The International Electrotechnical Commission (IEC) 62271-203 permits operational leakage up to 0.5% per year notwithstanding additional releases on filling, maintenance and end-of-life. SF_6 is an extremely potent greenhouse gas;

- Carbon dioxide (CO_2) GWP* = 1
- Methane (CH_4) GWP = 28
- N_2O (Nitrous oxide) GWP = 265
- **Sulfur Hexafluoride (SF_6) GWP = 23,500**[13]

*Global Warming Potential (GWP) is a measure of how much heat a GHG traps in the atmosphere over a given period relative to the same mass of carbon dioxide, which is set at 1.

[12] 2024 EIAR-VOL3: APP9, 2.2.: Addendum refers to this chapter and the stance on GIS emissions remains
[13] Green House Gas Protocal, AR5: https://ghgprotocol.org/sites/default/files/Global-Warming-Potential-Values %28Feb 16 2016%29_1.pdf

3. Project Splitting / Dependencies on External Works

3.1. Project Splitting Update

At the pre-application meeting[14], the applicant initially sought to bring the components forward under one single SID application. The Board raised the alternative of separate applications:

> *"The Board's representatives queried if the Prospective Applicant had considered whether the various components of the project (the reserve gas fired generator, the transmission/grid connection/GIS works, and battery energy storage system) should be considered as distinct components that should be brought forward under separate planning applications, i.e. Section 37B, Section 182A and Section 34 of the Planning and Development Act, 2000 (as amended) ('the Act') respectively)."*

The Board also advised that combining the GIS with the generator in a single application would require it to be *"clearly shown that the grid connection and GIS component is an essential element which would solely serve the reserve gas-fired power generator"*[11]. The applicant did not pursue that route. Instead, the development was divided into three separate applications;

- **OCGTs**: Section 37E, to ACP
- **GIS**: Section 182A, to ACP
- **BESS + Synchronous Condenser**: Section 34, to GCC

… with two further essential components deferred entirely:

- **25km Gas Pipeline**: Deferred to Gas Networks Ireland (GNI)
- **GIS-AIS Connection**: Deferred to EirGrid

The applicant outlines the relationship between the projects in the FI response;

> *"The proposed ESS (Project 2) and RGFG (Project 1) are operationally dependent on the GIS substation*
>
> *…*
>
> *However, in the absence of a committed connected plant, it would be expected that the timing and justification for [GIS] construction / energisation would be reviewed, as the principal need case and utilization of the asset arise from the associated connections"*[15]

We are left with one development requiring five components to function. Of these, three are now before ACP (one of which is on appeal having previously been refused by GCC in part due to its operational dependence on an external project).

Two functional components have not been presented to any planning authority to date:

- The 25km gas pipeline has been deferred to GNI for a separate consent later. Per the applicant's FI response, its route remains unidentified and is not assessed in the 2024 EIAR or the addendum, despite being raised multiple times in the GCC CE report referenced by the

[14] ABP-319073-24, available at: https://www.pleanala.ie/anbordpleanala/media/abp/cases/records/319/p319073a.pdf
[15] 2026 FIR, p6

applicant[16] in the addendum. The OCGTs cannot function without it. By way of comparison, Bord na Mona's (BnM) Derrygreenagh EIAR properly assessed the gas pipeline route: *"the Gas Connection Corridor, identified by GNI during the preliminary design stage is assessed in this EIAR as part of the Overall Project for completeness, as it will be integral to the operation of the Proposed Development."*[17]

- The GIS–AIS grid connection has been deferred to EirGrid for a separate consent later. None of the three ACP projects can export power without it as confirmed by the applicant's 2026 FI response.

In the absence of the above elements, the entire development serves no purpose. This is the defect identified in Pol O'Grianna & Ors v An Bord Pleanála [2014] IEHC 632 (Peart J, 12th December 2014), where the Board granted permission for a wind farm while accepting the developer's argument that the grid connection (to be designed and built later by ESB) fell outside the assessment. The High Court quashed that decision, holding:

> *"The wind turbine development on its own serves no function if it cannot be connected to the national grid. In that way, the connection to the national grid is fundamental to the entire project, and in principle at least the cumulative effect of both must be assessed in order to comply with the Directive."*

Peart J. further identified a "*prematurity in the seeking of permission for the construction of the wind farm ahead of the detailed proposals for its connection to the national grid from ESB Networks.*" Critically, the Court held that intent is irrelevant: "*Whether such 'project splitting' is intentional, inadvertent or the result of circumstances peculiar to a development … does not matter".* Where an essential component is omitted, or where the development is divided into separate applications, project splitting has occurred and permission should be refused.

We draw ACP's attention to the applicant's own 2026 FI response;

> *"The 2022 EPA EIAR Guidelines explicitly note that where a development 'serves no function' without its connection to the national grid, the connection is 'fundamental to the entire project' and the combined/cumulative effects must be assessed."*[18]

The prohibition on project splitting is well established in the jurisprudence of the Court of Justice of the European Union, which has repeatedly held that the objective of the EIA Directive cannot be circumvented by the splitting of projects, and that the cumulative effect of projects must be considered to avoid the assessment obligation being evaded in its entirety:

- **Case C-2/07** Abraham v Région Wallonne — the whole of a project, including works functionally connected to it, must be assessed
- **Case C-392/96** Commission v Ireland — cumulative effects and thresholds must not be used to exempt projects from assessment;
- **Case C-205/08** Umweltanwalt von Kärnten;
- **Case C-244/12** Salzburger Flughafen;

3.2. Water

[16] 2026 ADD: 3.2.2: "Galway County Council's report to the Commission dated 18 September 2024"
[17] BnM's Derrygreenagh Environmental Impact Assessment Report – Volume I January 2024, Ch. 5, page 5-2
[18] 2026 FIR, p6: "serves no function" and "fundamental to the entire project" are exact phrases from the O'Grianna case

We ask ACP to consider the following relating to dependence on works outside of the applicant's control, and project splitting;

Per the applicant's correspondence with Uisce Éireann, lodged on ACP's file[19], it appears that it requires the construction of a 100mm water pipeline from the N65, 250 metres along the L8763 to the site. The applicant has no land ownership along this narrow L8763 road, with a culvert on one side and residential properties on the other. ACP and GCC will both be aware of the highly dangerous junction and its part in GCC's refusal. We now know that;

- The Portumna Water Treatment Plant is at capacity and cannot currently cater for such a development.
- The letter was not a connection offer, but a feasibility confirmation which is subject to external upgrades outside of the applicant's control (suggested to take place in 2027).
- Any potential future connection will be the applicant's own construction works.
- Despite receiving the feasibility letter on 2nd February 2026 over five months before the ACP FI deadline, the applicant's EIAR addendum was submitted without any references to these required construction works.
- Per the applicant's 2026 addendum, the water pipeline's source at the N65/L8763 junction is designated as Flood Zone A & B (i.e. highest risk of flooding)[20].
- The applicant's 2024 EIAR, which sought construction works at the same junction, concluded *"that the application site is currently in Flood Zone C and will remain in Flood Zone C"*[21]

3.3. Grid Capacity

We ask ACP to consider a material matter raised section 7.1 (paragraph 91) of this observation, where EirGrid (TSO) states that there is a 1000MW capacity limit at the Oldstreet 400kV node. This was among the TSO's cited reasons for their rejection of the applicant in the 2028/29 T-4 Capacity Auction. This bears directly on the proper planning and sustainable development of the proposal before ACP, in one of two ways;

I. the application is premature (i.e. exceed the grid's capacity to facilitate it);
II. the applicant is dependent on unplanned external 400kV works that are outside of its control to facilitate its proposed projects.

We ask ACP to consider the points below;

i. The GIS serves no function without the AIS connection to the national grid which is fundamental to the entire project. This remains unassessed in the EIAR addendum.
ii. The OCGTs serve no function without the gas pipeline connection to the gas network. The proposed connection to New Inn - as indicated in 2024 EIAR with no environmental information, has also materially changed (Appendix 3.)
iii. Per 2026 FIR, the BESS and OCGTs are physically dependent on the GIS, whilst the GIS need case is dependent on the BESS and/or OCGT. Hence i and ii are relevant to all three components.

[19] ACP 320916 - Response 04-02-26 – Attachment D
[20] 2026 ADD: Envirologic's flood risk assessment, p54
[21] 2024 EIAR: 8.3.5.

4. Response to The Need Case

> *"The proposed development addresses the key challenges to ensuring security of electricity supply as set out in the Government's Policy Statement on Security of Supply (November 2021). This states that "ensuring continued security of electricity supply is considered a priority at national level and within the overarching EU policy framework in which the electricity market operates".*
>
> *There is overwhelming evidence to support this strategically important development, which provides enduring flexible gas-fired generation capacity and will assist with Government Commitments in the Climate Action Plan 2025.*
>
> *We hereby request An Coimisiún Pleanála to grant permission in accordance with the proper planning and sustainable development of the area, having regard to National, Regional and Local Planning and Development Policy".*[22]

Throughout the 2024 EIAR, the 2026 FI response and associated addendum, the applicant is heavily reliant on the 2GW (2,000MW) target when underpinning the case need yet provides no account on its progress.

4.1. Climate Action Plan 2025 & All-Island Resource Adequacy Assessment 2026-2035

> *"Ireland's Climate Action Plan 2025 states that we must deliver at least 2GW of new flexible gas-fired generation capacity by 2030 to facilitate the integration of renewables."*[23]

The 2GW target is the applicant's primary need case, and it's already on course to be surpassed without the proposed Coolpowra OCGTs.

The target was set back in 2021, the origins of which warrant context (see Appendix 4.1. for more detail). Every Climate Action Plan since 2021 has referred to this 2GW target without disclosing its physical or contractual progress, which is essential context for deciding multi-year commitments with major environmental consequences.

This context is provided by the Transmission System Operator, EirGrid's All-Island Resource Adequacy Assessment (AIRAA) 2026–2035[24], published in December 2025. This assessment is a statutory requirement under Section 38 of the Electricity Regulation Act 1999. Its outputs are used to inform the SEM Capacity Auctions, and to signal system requirements to policymakers, regulators, and industry. It is the authoritative all-island assessment of whether forecast generation will meet demand. It considers Republic of Ireland (IE / ROI) and Northern Ireland (NI) generation capacity as separate categories. The applicant will be aware of this report as it cited its predecessor, AIRAA 2025-2034 in the addendum (although the 2026-2035 was available at the time);

[22] 2026 FIR, p23
[23] 2026 ADD, 3.1.
[24] All-Island Resource Adequacy Assessment (AIRAA) 2026–2035

Table 5.2 Ireland assumptions for new conventional plant capacities in adequacy studies (rated MW).										
Cumulative (MW)	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Total Successful in Capacity Auctions less Operational Plant*	900	2,060	2,110	2,450	2,450	2,450	2,450	2,450	2,450	2,450
AIRAA 2025 Expected New Capacity Delivery**	610	910	1,500	1,900	1,900	1,900	1,900	1,900	1,900	1,900

*Capacity successful in capacity auctions that has not received a termination notice or is currently operational.

**Expected capacity is based on plant delivering early, delivering late, or not delivering. Note all values are rounded to the nearest 10 MW and capacity is presented as capacity commissioning during the calendar year.

EirGrid AIRAA's Table 5.2 above shows that by 2030, 2450MW of conventional capacity has been successfully auctioned to new gas-fired generators, with AIRAA's conservative (risk-adjusted) expectation set at 1900 MW. This is accurate for the 2026-2029 window as the data omits the recent 2029-30 auction results – hence the table's stagnation post-2029. The 2021-2025 window's progress can be found within the AIRAA's data workbook[25], where a further 192MW became operational in Dublin during Q4 2024:

Conventional Generation - IE

5.3.1. Ireland Portfolio

Table 5.1 Assumptions for conventional plant changes in Ireland

Plant	Units	Capacity (MW)	Comment
Moneypoint	MP1	250	Following submission of a closure notice, these units exited the market at the end of June 2025. EirGrid notes that these units will be retained beyond this date to proactively mitigate the risks of an electricity crisis as defined by Regulation (EU) 2019/941 and the Risk Preparedness Plan (RPP) for Ireland. However, this is considered a mitigating measure and not part of the central assessment.
	MP2	250	
	MP3	250	
Edenderry	ED3	58	Awarded capacity in the 2025/2026 T-4 capacity auction to switch fuel from Distillate Oil to Gas.
	ED5	58	
FlexGen	Ringsend	64	Newly operational as of Q4 2024.
	Poolbeg	64	
	Corduff	64	

Table 5.2 Ireland assumptions for new conventional plant capacities in adequacy studies (rated MW)

Cumulative (MW)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Successful in Capacity Auctions less Operational Plant	900	2060	2110	2450	2450	2450	2450	2450	2450	2450
AIRAA 2025 Expected New Capacity Delivery	610	910	1500	1900	1900	1900	1900	1900	1900	1900

Table 5.3 Capacity (MW) assumed to be subject to run hour limits in Ireland

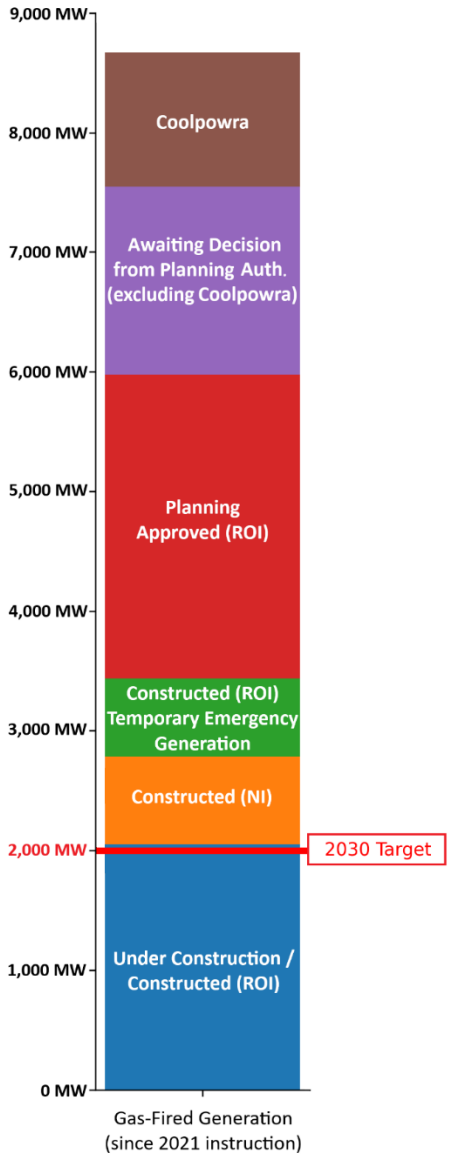
The Transmission System Operator's filing shows that, with 192MW delivered in 2024 together with a further risk-adjusted 1,900MW expectation by 2029, the 2GW target is on course to be exceeded without Coolpowra OCGTs.

We ask ACP to consider this data from the TSO when contemplating Coolpowra OCGTs need case, together with the environmental consequences an approval would bring.

[25] https://www.eirgrid.ie/airaa

4.2. Projected new gas-fired generation in Ireland

The chart below is independent of EirGrid's AIRAA analysis and illustrates the level of gas-fired generation at various stages of planning system since the 2021 call for 2000MW. The background to this data is provided in Appendix 4.2. If we exclude temporary emergency generation units, **there is ~6.9GW of new flexible gas-fired generation capacity in the pipeline without Coolpowra**.



Republic of Ireland (ROI) and Northern Ireland (NI) can currently exchange a limited capacity; this is expected to increase substantially once the North-South Interconnector comes online in 2030/31. In any case, the chart above illustrates that the 2GW target is set to be surpassed in ROI alone.

We ask that ACP consider the following in its assessment of Coolpowra's need case;

i. this chart, supported by data in Appendix 4.2.
ii. the scale of this project compared to peers in Appendix 4.2.

4.3. Single Electricity Market Committee (SEMC) & SEM T-4 Capacity Auctions

> *"The aim of the capacity market is to procure the capacity required for the secure operation of the power system in both Northern Ireland and Ireland through competitive auctions therefore ensuring that consumers do not pay for more capacity than is needed".*[26]

In light of 4.1 and 4.2, It follows that the proposed Coolpowra 1,155 MW gas-fired power plant would materially add to the capacity beyond system requirements and would exacerbate consumer cost pressures at a time of persistently high energy prices. **Freedom of Information requests show the applicant has been unable to qualify these OCGTs for three consecutive T-4 Capacity Auctions: 2027/28, 2028/29 and 2029/30 (Appendix 4.3.** Even if the units did qualify, the material hurdle of procuring a capacity contract remains. See 7.1. Court Case of this observation for more detail.

Under the SEM, gas-fired generation routinely sets the System Marginal Price (SMP), even during periods when most of the electricity is produced from lower-cost renewable sources. This results in consumers paying electricity prices determined by the most expensive marginal gas unit required to meet demand, rather than the average cost of generation across the system. Crucially, additional gas-fired capacity does not reduce consumer prices - it increases the likelihood that gas continues to set the marginal price, increasing exposure to volatile international gas markets and sustaining elevated wholesale electricity prices.

In parallel, the SEM capacity mechanism compensates generators for availability rather than utilisation. Gas-fired plants receive capacity payments funded by consumers regardless of how often they are dispatched. Consumers therefore pay for gas capacity simply to exist on the system, even during periods when it is not required to meet demand. Accordingly, unnecessary gas capacity imposes a double and enduring cost on consumers: first through capacity payments for surplus plant, and second through prolonged gas-based marginal price-setting. It comes as no surprise to find that as of May 2026, Ireland already has the highest electricity costs in Europe[27]. This proposal would ensure it remains there.

In this context, we ask ACP to consider whether Coolpowra's need case, as outlined in the addendum, is fundamentally at odds with the stated objective of the SEM capacity mechanism, with regards to;

i. potentially locking consumers into avoidable cost, together with the nation into extended fossil fuel dependence.
ii. SEMC's repeated rejections of the applicant's Coolpowra proposal

4.4. EU Taxonomy & Transitional Generation

The applicant claims the Coolpowra OCGTs qualify as a "transitional activity" under the EU Taxonomy.

> *"While further significant renewable energy growth is the primary objective, additional firm dispatchable "transitional" * generation and energy storage, such as that proposed, are essential to bridge variability and support renewable generation intermittency … Under the EU Taxonomy Regulation, gas-fired generation is classified as a transitional activity where it replaces more carbon-intensive sources, complies with lifecycle emissions thresholds, and is capable of operating on renewable or low-carbon gases*

[26] All-Island Resource Adequacy Assessment (AIRAA) 2026–2035, p82
[27] https://www.rte.ie/news/business/2026/0506/1571946-ireland-electricity-prices/

> *Article 10(2) of Regulation (EU) 2020/852 defines "transitional" activities. A transitional activity is an economic activity for which no technologically and economically feasible low-carbon alternative exists and which supports the transition to a climate-neutral economy on a 1.5°C pathway by cutting GHG emissions. It qualifies only if it:
>
> - has GHG performance at the best level in its sector/industry;
> - does not hamper the development/deployment of low-carbon alternatives; and
> - does not lock in carbon-intensive assets over their economic lifetime"[28]

It does not. 8.4. EU Taxonomy of this observation provides more detail.

By reciting the Article 10(2) definition, the applicant ignores the binding technical screening criteria in the Complementary Climate Delegated Act (EU) 2022/1214[29] that alone confer that status.

The applicant's proposal fails to meet the requirements on both available routes. It exceeds the life cycle and direct emissions thresholds, and also fails five of the transitional route's seven prerequisite conditions.

On the applicant's own figures, it is therefore not a Taxonomy-aligned transitional activity, and it likewise fails the Regulation's own definition, having selected the open-cycle configuration that emits roughly twice a comparable closed-cycle plant, and locking in a fossil-fuel asset over a design life exceeding 25 years.

4.5. EirGrid's All-island Resource Adequacy Assessment 2025–2034

> *"In the All-island Resource Adequacy Assessment 2025–2034[4] EirGrid show the projected proportion of demand for each sector for 2025 and 2034 and taken into account the Government's Climate Action Plan targets. Over the next ten years, demand is forecasted to grow considerably. In the median scenario, electricity demand is forecasted to increase 45% by 2034 from 2023 levels with growth coming from new technology loads, data centres and the electrification of heat and transport"*[30]

EirGrid's current[31] Resource Adequacy Assessment, also available to the applicant at time of FI submission, shows this increase is planned for, and on a path to balance without Coolpowra. The principal adequacy challenge falls in the 2026-2028 window and is mitigated by the emergency generation procured under the CRU's Security of Supply programme. The AIRAA then sees awarded capacity come online as EirGrid's base scenario runs at surplus generation from 2029-2035. The most prudent (secure) assessment reaches balance by 2031 and is within the Reliability Standard for 2031 and 2032. The prudent scenario's maximum residual deficit thereafter is around 400MW in 2034, composed predominantly of EirGrid's 350MW Transmission Outage Planning (TOP) buffer which EirGrid acknowledge "*may not increase adequacy risks to consumers*".

[28] 2026 ADD 3.1.
[29] Commission Delegated Regulation (EU) 2022/1214v of 9th March 2022 amending Delegated Regulation (EU) 2021/2139: Annex I, 4.29
[30] 2026 ADD: 3.1.
[31] All-Island Resource Adequacy Assessment (AIRAA) 2026–2035

4.6. International Energy Agency: "Powering Ireland's Future"

> "*The IEA report references the additional 2GW dispatchable capacity required by 2030 and concludes that Ireland's future system adequacy depends on the timely delivery of a portfolio of resources including dispatchable generation*"[32]

Context shows that the IEA report was referencing the same CAP target outlined by the applicant in section 4.1 of this observation – the IEA report is not an endorsement of OCGTs as claimed by the applicant.

In fact, the report warns that "*investing in fossil-fuel-fired generation capacity to enhance energy security could result in stranded assets, lock-in of emissions and exposure to natural gas price volatility*"[33]. The report was informed by contributions from a range of key stakeholders, including representatives of the CRU, Northern Ireland's Utility Regulator, EirGrid, SONI, and ESB.

The same report's Adapted Transition Pathway results show Ireland's share of fossil-based generation falling from almost 50% in 2023 to around 30% in 2030 and less than 10% in 2035. Minister Darragh O'Brien stated that this technical assessment "*will serve as a starting point for a cross-government programme of work in 2026 to consult on the role of the energy sector in delivering security, competitiveness, and sustainability across Irish society into the 2030s*".

4.7. National Development Plan Reference

> *"The proposed technologies are not only a compliant transitional solution, but an essential enabler of renewable energy deployment, ensuring that decarbonisation can proceed without compromising security of supply. The Coolpowra development will support National Development Plan (NDP) major infrastructure projects, cater for anticipated economic growth, strengthen national resilience and accelerates the low-carbon transition."*[34]

The applicant's OCGTs are not a compliant transitional solution as outlined in section 8.4. EU Taxonomy) of this observation. They are not an essential enabler of renewable energy deployment as outlined by EirGrid's AIRAA 2026-2035 in section 4.1, together with the SEM Committee's repeated refusals of Coolpowra's qualification attempts (Appendix 4.3..

[32] 2026 ADD: 3.2.
[33] International Energy Agency (IEA) Report "Powering Ireland's Energy Future", p65
[34] 2026 ADD: 3.1.

5. Response to Alternatives & Site Justification

5.1. Background

> *"More considered and comprehensive description of 'reasonable alternatives' studied, with particular emphasis on 'alternative locations,' notwithstanding existing information at EIAR 3.2.2."*[35]

ACP's concern with the site-selection process is not new to the applicant. It was also raised at the pre-application stage, before the EIAR was lodged:

> *"The Board's representatives advised that the site is located in an unzoned and unserviced rural area and accordingly it would be important for any future planning application to provide significant justification in terms of site selection for the project"*[36]

It is appropriate that site selection and justification carry considerable weight. The applicant's response in the 2026 addendum offers little over 2024's EIAR which was already flagged as inadequate by ACP.

5.2. Plan-led, or Developer-led?

The question for site selection is not just whether a site is acceptable, but whether it was chosen in the right way. This section contrasts the Coolpowra applicant's approach with the direction of policy on plan-led versus developer-led development.

As outlined in 5.1, ACP found the site justification and alternatives process to be inadequate. These are not incidental gaps; they are the structural consequence of developer-led siting. A project that begins with a chosen site cannot produce a genuine site-selection assessment. This deficiency cannot be cured by further information, because there were no genuine alternatives to begin with.

5.2.1. The Applicant's Opinion

The alternatives issue, as outlined in the FI response, requires context. This project, as evidenced by 6. CRU LEU Policy – Lumcloon Energy Submission of this observation, has links to the LEU industry. In a submission to the CRU on the LEU connection policy consultation in 2025, Lumcloon Energy, the applicant's parent company, illustrated their thoughts on the plan-led / state-led matter;

> *"A state-led approach to developing data centres can seriously inhibit economic growth"*[37]
>
> *"Overly prescriptive regulations may limit competition and innovation by setting too many constraints or barriers"*[38]

In its December 2025 decision paper, the CRU determined the opposite[39]. The CRU stated that the scale of these types of development require;

[35] ACP in an FI Request to Halston, 9th January 2026, Item 1(a)(iii)
[36] Pre-App meeting between ACP, Halston & Lumcloon Energy, 7th March 2024, APB-319073-24: https://www.pleanala.ie/anbordpleanala/media/abp/cases/records/319/p319073a.pdf
[37] Lumcloon Energy submission to the CRU LEU Consultation, p13: https://consult.cru.ie/en/submission/cru-c38-19
[38] Lumcloon Energy submission to the CRU LEU Consultation, p12: https://consult.cru.ie/en/submission/cru-c38-19
[39] CRU/2025/236, Cover Letter: https://www.cru.ie/about-us/news/the-cru-publishes-its-decision-on-new-electricity-connection-policy-for-data-centres/

"a longer-term State-led approach encompassing spatial planning, targets-based and plan-led infrastructure development … This will help ensure that the utility infrastructure required to meet the growing demands will be planned in a coordinated and efficient manner".

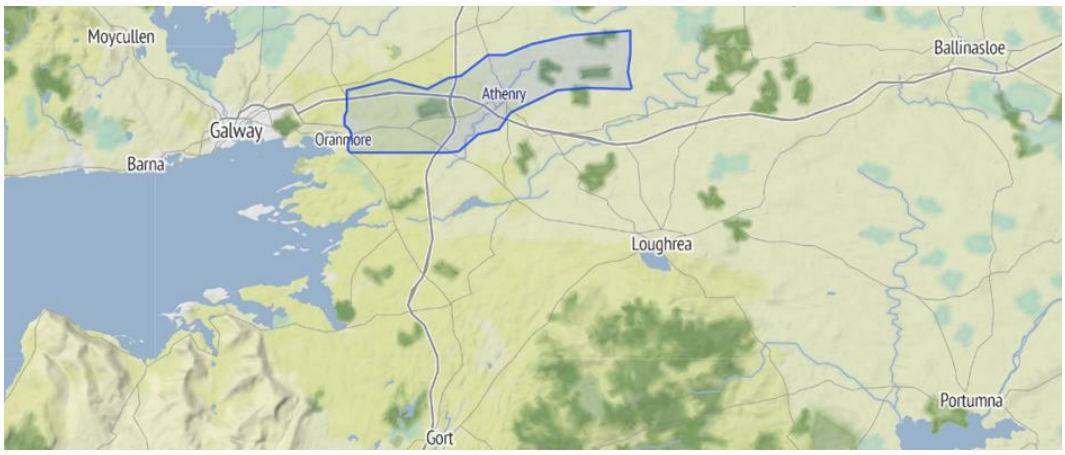
5.2.2. Policy Direction

The settled policy direction is that location for this kind of development should be plan-led, not developer-selected.

- The recent Large Energy User Action Plan[40] (LEAP), approved by Cabinet in 2026, commits Ireland to a plan-led approach to large energy infrastructure. It presents move towards a national framework of coordinated, forward-planned development in green energy parks co-located with renewables and consistent with Ireland's legally binding climate objectives.

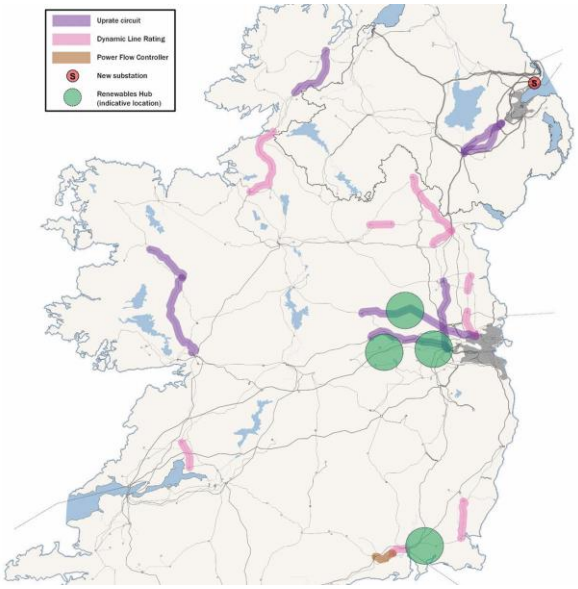
- The Spatial Planning and National Roads Guidelines (2012) state that "*Development should be plan-led: The planning process for national roads has taken account of appropriate future development patterns and requirements, including the implications of the National Spatial Strategy and Regional Planning Guidelines, as the NRA has adopted a 20 year design horizon as a basis for traffic capacity requirements. Accordingly, in preparing development and local area plans, planning authorities must assess the trip generation aspects of any land use zoning objectives and how such trip generation is to be catered for, promoting the use of sustainable modes, while protecting the strategic function of the national roads network.*"[41]

- The Galway County Development Plan ("GCDP") 2022-2028, has designated a Strategic Economic Corridor to cater for large scale development. See 9.7.2. GCDP 2022-2028 – Strategic Economic Corridor (i.e. Plan-led);



- EirGrid and SONI's Shaping Our Electricity Future[42] publication outlined renewable energy hubs that have been strategically identified for energy production whilst aligning with EU requirements. The hubs are circled in green;

[40] https://enterprise.gov.ie/en/publications/publication-files/leap-large-energy-user-action-plan.pdf
[41] Department of the Environment, Community and Local Government, Spatial Planning and National Roads Guidelines for Planning Authorities (January 2012), Issued under s.28 of the Planning and Development Act 2000.
[42] https://cms.eirgrid.ie/sites/default/files/publications/Shaping-Our-Electricity-Future-Roadmap_Version-1.1_07.23.pdf (page 23)



5.3. Logue

FP Logue LLP provided a legal note to appendix 8 of the East Galway Gas Plant Group observation for PA7.320095 and it remains applicable after the applicant's FI response. It is also relevant to the GIS and BESS projects. We have included paragraphs 40-47 in Appendix 5.3., but a summary follows:

The EIAR does not comply with Article 5(1) of the EIA Directive. Rather than assess reasonable alternatives to minimise the project's environmental impact (the purpose of the obligation), the EIAR offers only a self-serving justification for the single site the applicant had already assembled, when the applicant's own landholding is not a relevant factor in the assessment. The claim that the project is so site-specific that alternative locations need not be considered is, in FP Logue's view, implausible and unfounded: comparable gas projects exist at locations across Ireland, and it cannot be that the only suitable site happens to be land owned by a company connected to the applicant. The treatment of alternative technologies and layouts is equally deficient in that no lower-carbon, renewable-ready, or watercourse- and hedgerow-sparing alternatives were examined - so that the chapter reads as a justification of a pre-fixed configuration rather than a genuine consideration of options.

5.4. FI Response (Coolpowra EIAR Addendum 3.2.2.) – Similarities to 2024 Alternatives Chapter

This section deals with arguments the applicant repeated from their 2024 EIAR into the 2026 Addendum (i.e. things that the applicant said the first time and are still saying);

5.4.1. No alternative locations assessed

ACP directed "*particular emphasis on alternative locations*", having found 2024 EIAR's treatment insufficient. The applicant's 2026 addendum supplied no alternative locations: no sites, no comparison, no assessment of their environmental effects. The ACP direction was not answered.

5.4.2. 400kV "best fit"

This is a voltage answer to a location question. It has nothing to do with which location minimises environmental harm. Ireland has 438km of 400kV OHLs and is scheduled for significant expansion in the coming years.

The 400kV cannot be deemed as the best fit, as the proposed project does not fit. In response to not qualifying for the 2028/29 Capacity Auction, the applicant initiated legal proceedings against EirGrid

(TSO) and the CRU (Regulator). High Court records[43] show that a limit of 1GW can be accommodated at the Oldstreet node (7.1. Court Case). This was among several refusal reasons for the applicant's OCGTs and BESS. At the hearing, EirGrid representatives said the applicant had failed to demonstrate that they fully understood what was required to deliver 400kV infrastructure at this scale.

> *"Connection at a lower voltage (e.g., 220kV/110kV) was considered at a conceptual level but was discounted because it would not provide the same "system fit" for the identified need"*[44]

4.3. Single Electricity Market Committee (SEMC) & SEM T-4 Capacity Auctions of this observation has addressed the applicant's "identified need" in the eyes of EirGrid, the CRU and the SEMC. This undermines the "identified need" on which the application rests and the "system fit" said to flow from it, and also brings into question the project's rigid scale and the exclusion of lower voltage options.

We ask the planner to also note 2.1. Roads / Project Delivery of this observation, which relates to material issues in terms of delivery of 400kV infrastructure to the applicant's proposed site.

5.4.3. Lands under the control of the applicant

This is an economical answer to a location question. As Logue puts it, the developer's own circumstances are not a relevant factor. Choosing the site that's cheapest to connect is not the same as choosing the site with least environmental harm, which is what the Directive requires.

5.4.4. Oldstreet being the only existing intermediate substation along the route of the Moneypoint-Woodland 400kV line

This is not an environmental or site-limitation factor. The project involves constructing a new 400 kV GIS substation, which removes any requirement to rely on an existing intermediate connection. The reference to "*the only existing intermediate substation*" describes the most convenient pre-existing connection point, which happens to be adjacent to the applicant's lands and not a locational necessity. A connection to an overhead line does not require a pre-existing node, e.g:

- BnM's Derrygreenagh Power[45] (OCGT & CCGT) will build a new 400kV GIS substation to connect to the same Moneypoint-Woodland 400kV line without a pre-existing node. It's worth noting that project will be on land zoned for economic development 70km to the east of Oldstreet. This comes after BnM's site selection process considered a three-tier assessment with many alternatives addressed.

- Kilshane Energy (OCGT)[46] seek to build a new 400kV GIS substation in Dublin without a pre-existing node. This project is adjacent to existing energy infrastructure.

- This applicant's own Castlelost FlexGen[47] project – analogous to Coolpowra on a lesser scale – involved building a 220kV GIS substation to tap into a 200kV line without a pre-existing node within a 50km radius (per Castlelost OCGT EIAR)[48]. Their

[43] https://www2.courts.ie/viewer/pdf/a5501a2f-7278-48e6-ba60-52ce9de790a3/2025_IEHC_174.pdf/pdf
[44] 2026 ADD: 3.2.2.
[45] https://bnmenergypark.ie/derrygreenagh-power/
[46] https://www.pleanala.ie/en-ie/case/323897
[47] https://lumcloonenergy.com/castlelost-flexgen/
[48] https://www.pleanala.ie/publicaccess/EIAR-NIS/312783/SEP-0347 LEL GIS CASTLELOST - ENVIRONMENTAL/SEP-0347 LEL GIS CASTLELOST EIAR (VOL 2)_v10.pdf

alternative site summary didn't specify substations – proximity to overhead lines was the goal.

5.4.5. Invoking "where a project is site specific, alternative sites may not be relevant"

We should note to ACP that we have analysed the site selection process for each of the peer projects to this one, and that Oldstreet/Coolpowra has never been considered a viable alternative site at any stage of any of those processes. It is therefore quite remarkable that a gas-fired power plant of this scale should go from never being considered at all, to being put forward as site-specific.

The 2026 Addendum states that "*alternative sites along the 400kV were evaluated at high level at the outset*". A project for which alternative sites were evaluated is the opposite of a project so site-specific that alternatives may not be relevant. The applicant cannot both assert that alternatives were assessed and that no alternatives were relevant.

This project cannot be site specific:

- It's proposing a gas plant 25km from the gas pipeline connection. The applicant's own analysis considers sites >20km from gas pipelines as unsuitable (see 5.5.3; 5.5.4)
- A pre-existing node is not a pre-requisite condition.
- BESS is the most location-flexible generation asset there is.
- ACP specified that it is unzoned, unserviced and would require significant justification.
- It is a green field site with no history of energy generation.
- EirGrid stated that Oldstreet cannot accommodate its capacity (7.1. Court Case) – by definition it cannot be specific to a site that cannot cater for it.

5.4.6. Improves cost benefit analysis

Financial answer - not relevant to environmental considerations on alternative sites.

5.5. FI Response (Coolpowra EIAR Addendum 3.2.2.) – Differences to 2024 Alternatives Chapter

This section deals with arguments the applicant introduced in the 2026 Addendum (i.e. things that weren't discussed in 2024);

5.5.1. Short Circuit Issues

> *"In the document Eirgrid state that short-circuit issues in the GDA [Greater Dublin Area] presents a growing challenge for grid stability and generator integration and recommend "connecting at 400kV stations which minimises short-circuit contributions and provides greater operational flexibility … This is a defining "specific characteristic" of the project for EIA purposes. It is not simply a land-use choice. Rather it is a choice driven by the need to connect at a 400kV node to deliver the intended grid function. Identifying the 400kV network as the best connection option materially limits the scope for alternative sites"*[49]

This is a misinterpretation by the applicant and a relabelling of 5.4.2's voltage issue. Context shows that EirGrid was providing a Dublin solution to a Dublin problem. It placed a limit on new conventional generation connecting to the 220kV system in the greater Dublin area (unless designed to replace an

[49] 2026 ADD: 3.2.2.

existing unit) and identified the extension of the 400kV network **into Dublin** as the longer-term remedy for localised generation opportunities e.g. Belcamp substation[50]. EirGrid stated;

> *"To address the high short-circuit levels in Dublin in the long term, new generation must connect at the 400 kV voltage level. Dublin does not currently have any circuits at this voltage level, but there are several 400 kV projects contained in the NDP which will provide a much-needed base to accommodate opportunities for new demand and generation in combination with solving operational constraints that affect transfer capacity, network reliability, and solving market power issues. If larger conventional generators are looking for connections in Dublin to enter into the T-4 CRM Capacity Auctions, EirGrid will very likely specify 400 kV connection methods and as the 400 kV network has not yet expanded, it may mean that those generators will have difficulty qualifying due to the associated delivery times with 400 kV infrastructure. From a CRM viewpoint, prospective larger conventional machines could connect at the 400 kV voltage level once those projects have been delivered"[51].*

In June 2026, Kilshane Energy launched 680MW OCGT plans[52] with ACP in the North Dublin area beside the established Huntstown energy production site. They intend to construct a 400kV substation to connect into the 400kV line. Dublin's short circuit issue therefore does not halt or "*materially limit*" conventional generation across the rest of the country, as claimed by the applicant. At the time of Short Circuit publication, Cashla Peaker Plant[53] procured a T-4 capacity contract to produce a 330MW OCGT at 220kV in East Galway.

5.5.2. Alternative sites along the 400kV being evaluated at high level at the outset

- This contradicts the applicant's "*site specific*" claim.
- There is no evidence of this claimed evaluation – no sites, criteria or comparisons.

5.5.3. Mitigation hierarchy of avoid, reduce and, if possible, remedy.

> *"Developing the facility at this location avoids and reduces adverse environmental effects following the mitigation hierarchy of avoid, reduce and, if possible, remedy"*[54]

The hierarchy presupposes that the effects have been identified and that avoidance is carried out at the (missing) alternatives stage – not within the confines of a site that is already chosen.

- The claim that it's sufficiently separated from sensitive receptors sits against the applicant's own exclusion criteria in the same chapter. The applicant claims that unidentified locations were rejected for insufficient buffer to residential receivers, yet in Coolpowra there are residents located circa. 300 metres from the proposed gas plant building. The applicant omitted the nearest dwelling from their original EIAR due to using an outdated census in the analysis at the time.
- The applicant claims a low-sensitivity environmental baseline, yet environmental grounds contributed to Galway County Council's ("GCC") refusal of the BESS project. A site whose Appropriate Assessment cannot reach a "no adverse effect" conclusion is not a low-sensitivity baseline.

[50] https://www.eirgrid.ie/eastmeathnorthdublin
[51] All-Island Resource Adequacy Assessment 2026–2035, p87
[52] https://www.pleanala.ie/en-ie/case/323897
[53] https://cashlapeakerplantsid.ie/home
[54] 2026 ADD: 3.2.2.

- EPA's 2022 EIAR Guidelines state that earlier stages in the evolution of a project represent the greatest potential for avoidance of significant adverse effects and that each stage of the conception of the project is assessed with questions such as "*is this the best site / route?*". There is no evidence to suggest that the applicant has correctly applied the hierarchy.
- A correct, unbiased application of the mitigation hierarchy would likely have yielded the same result as Freneystown Wind Farm in Co. Kilkenny[55];

> *"Over the past number of years, we have been actively carrying out a range of environmental and other studies at the proposed site of Freneystown Wind Farm. However, due to a number of factors identified during the development phase, the project has been significantly delayed, and we have been unable to compile a planning application for the project. We have therefore taken the difficult decision that EDF power solutions is not in a suitable position to proceed with the project."*

5.5.4. Local Planning Authority

> *"The local planning authority state that the principle of the proposed development is generally supported by the policy objectives set out under the Galway County Council Development Plan [GCDP] 2022-2028."*[56]

The applicant curiously interprets support from the same planning authority that refused its proposed BESS development three weeks prior. Some of the main refusal points were as follows;

- Endangerment of public safety by reason of traffic hazard
- Material contravention of GCDP's roads policy
- No certainty that the proposed development would not adversely affect local European sites.

Read in context, the referenced CE / Planning Authority letter is not an endorsement, but a submission of significant concerns identified during the relatively short statutory timeframe available to it. What it supports, in carefully selected qualified terms, is the principle of the proposed development as at the time underpinned by security of supply (i.e. 2GW target) – no environmental or rationale for proper planning and sustainable development was provided. The report in fact raises serious concerns on site suitability, scale, environmental effects and material contraventions to the GCDP 2022-2028 – any of which can defeat this application;

- The Environmental Section / Climate Units comment on whether the introduction of an entirely new fossil gas fired generator is required or appropriate to meet Ireland's targets
- The Roads & Transportation Engineer's report is itself a refusal recommendation – the conditions are a contingency request should ACP decide to grant against its road's objection.
- The Environmental Section / Climate Units note that the development's annual GHG emissions equate to 20% of Co. Galway's 2019 baseline CO2 emissions, and that Galway County Council's LACAP 2024-2029 is aligned to Ireland's legally binding climate ambition (to deliver a reduction of GHGs by 51% in 2030 and climate neutrality by 2050).
- The Environmental Section / Climate Units recommended that the applicant's proposed development night-time noise operational impact of *"+6dB above existing background*" **receives careful consideration by ACP**. In addition to this, we ask the planner to consider our views on the applicant's noise chapter in Appendix 5.5.4 - Noise. The applicant admits "*a likely significant adverse impact*" and is in breach of GCDP NP1, NP4 and EU Directive 2002/49/EC.

[55] https://www.edf-powersolutions.ie/our-sites/freneystown/
[56] 2026 ADD: 3.2.2: "Galway County Council's report to the Commission dated 18 September 2024"

- The Planning Authority also highlighted the significant visual impacts of the proposed development as identified from a number of sensitive receptors in the vicinity of the site.
- The Conservation Officer identified Barroughter Bog's hydrological pathway, stating that it should have been screened in for the purposes of the AA, that there can be no lacuna in mitigation, and that the cumulative impacts of the gas pipeline are not adequately addressed.
- Inadequate assessments on biodiversity, hydrology, and the water course realignment.
- The Planning Authority repeatedly flags that the gas pipeline element is not adequately scoped and that a more detailed consideration of the full impacts of the gas connection should be provided. Not only has the applicant not addressed this in the Addendum, but it has also failed to even note the material change in the proposed pipeline route (per GNI). It now seeks to go in a different direction to the indicative route map portrayed in the 2024 EIA as seen in Appendix 3. - including through the GCDP's sensitive Shannon Environs landscape.

5.6. Peer Project Comparisons (including applicant's previous projects)

As noted in 5.1, ACP required significant justification for the site's selection - the applicant failed to provide this. ACP then requested a more considered and comprehensive description of reasonable alternatives via FI, with particular emphasis on locations. The applicant provided none. We draw ACP's attention to some peer comparisons;

5.6.1. Bord na Móna (BnM) Derrygreenagh CCGT & OCGT (ACP-319023)[57]

This application was approved in 2026. The application also made references its approved predecessor which was never constructed. Taken together, the EIAR considered:

- Three tiers of alternative site assessments (all brownfield sites).
    - Regional: Bellacorrick, Co. Mayo; Edenderry, Co. Offaly and Derrygreenagh Co. Offaly.
    - National Spatial Strategy: Athlone-Tullamore-Mullingar gateway
    - Localised within selected zone: Three locations within Derrygreenagh

Derrygreenagh was selected on account of;

- Zoning for Economic Development within a Strategic Development Location per Offaly CDP 2021-2027.
- Historical links to energy generation.
- Close proximity to gas pipeline.
- Existing Industrial setting
- EirGrid's (TSO) desire to locate a 400kV substation node in the Midlands.
- Direct access onto the R400 and existing screening
- Distance from properties (1.1km in Derrygreenagh)

See Appendix 5.6.1 – Bord na Mona Derrygreenagh – Alternatives EIAR Quotes for references.

5.6.2. Bord Gáis Energy (BGE) Cashla OCGT[58] *(ACP-324113)*

> *"The Peaker Plant requires a connection to an existing gas supply. This limits site selection to areas within the vicinity of an existing gas pipeline."*[59]

[57] https://bnmenergypark.ie/derrygreenagh-power/
[58] https://www.cashlapeakerplant.ie/home
[59] Cashla EIAR, Volume 2 - 3.3.1

This application is currently with ACP. This proposed development has already procured a 10-year capacity contract from SEM's T-4 Capacity Auction, signifying legitimate support from CRU and EirGrid. The Cashla EIAR site selection consisted of;

- Site selection included a nationwide map analysis of locations based on;
    - Proximity to gas pipeline (<5km)
    - Proximity to substations (<10km)
    - 220kV OHL

Figure 3-2 - Intersection of existing gas pipelines with EirGrid substations

- The mapping analysis narrowed the sites down to four: Prospect, Naas, Dunstown and Cashla.
- Cashla's was aided by its close proximity to the gas pipeline, together with no TSO design constraints.

After examining of a further four zones east of Galway city, BGE ultimately chose the site 2km to the west of Athenry due to:

- Intersection of the existing gas transmission lines (on site) and electricity grid infrastructure,
- Location within the Oranmore–Athenry Strategic Economic Corridor (SEC), designated by Galway CC to accommodate strategically important economic development, including infrastructure projects.
- Bounded by the M18 & M6 motorways.
- Lack of significant environmental constraints

Noteworthy items:

- BGE prioritized proximity to gas pipeline (on site) over substation, which will require a separate 7km underground cable connection. This contrasts with the Coolpowra applicant's OCGTs which are ~25km from the intended pipeline.
- BGE state the plant's capacity (334MW) was set by the EirGrid requirements to support surrounding areas:

"A larger capacity plant would provide a greater support capability but would be beyond the stated EirGrid requirement to manage the transmission network. A lower capacity plant would result in an EirGrid need for additional plants to achieve the required electrical supply reserve".[60]

This quote is significant, particularly in the context that this development is on the same 220kV line as Oldstreet (where the Coolpowra applicant intends to connect), and BGE has illustrated that detailed discussions have taken place with the TSO around the need for and design of the project.

5.6.3. Castlelost FlexGen OCGT[61] (Westmeath CC: 2360442)

The same applicant as the current Coolpowra proposal (i.e. Lumcloon Energy subsidiary with Halston E&P on EIAR).

This project secured planning permission in 2021 for a 275MW OCGT, Synchronous Condenser, BESS, and 220kV GIS in Castlelost, Co. Westmeath. This project is analogous to the Coolpowra proposal at a smaller scale. As such, it offers a relevant benchmark for assessing the Coolpowra site. Castlelost EIAR: Section 2.8.3 outlines the scoring system and criteria used in their evaluation.

Unsuitable /Constrained	1
Potential Constraints	3
Suitable /Unconstrained	5

Table 2.2 Site Selection and Options Appraisal Summary

	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6
Townland	Srabragan /Tawlaght,	Lumcloon,	Coolcor	Ballybeg	Pass of Kilbride	Kiltotan and Collinstown and Oldtown
ED	Aghafin	Gallen	Ballyburly	Wicklow Rural	Enniscoffey	Castlelost
County	Leitrim	Offaly	Offaly	Wicklow	Westmeath	Westmeath
Criteria	Summary Comment					
Electrical transmission system	110kV OHL & substation	Four 110kV OHL and substation	Three 110kV OHL and substation	220kV & 110kV OHL and substation	220kV OHL	220kV OHL
Natural gas transmission system	>20km	5-20km	5-20km	<5km	<5km	<5km
Access /Roads	Site accessible from Regional Road	Site accessible from Regional Road	Site accessible from Regional Road	Site accessible from local road	Site accessible from Regional Road	Site accessible from Regional Road
Zoning	Not Zoned – white lands	Not Zoned – white lands	Not Zoned – white lands	Not Zoned – white lands	Not Zoned – white lands	Not Zoned – white lands
Ground Conditions	Brownfield – subject to assessment	Brownfield – subject to assessment	Brownfield – subject to assessment	Greenfield	Greenfield	Greenfield
Designations /Env Constraints	Adjacent to L. Allen – Natura 2000 sites <5km	Natura 2000 sites >5km	Natura 2000 sites >5km	SPA & SAC sites <5km /Potential LVIA	Natura 2000 sites >5km	Natura 2000 sites >5km
Availability of suitably sized lands	Potential size constraint	Yes	Yes	No	No	Yes
RANKING	**25**	**31**	**31**	**27**	**31**	**35**

Noteworthy items:

[60] Cashla EIAR, Volume 2 - 3.4.2

[61] https://www.pleanala.ie/publicaccess/EIAR-NIS/312783/SEP-0347 LEL GIS CASTLELOST - ENVIRONMENTAL/SEP-0347 LEL GIS CASTLELOST EIAR (VOL 2)_v10.pdf

- This project is analogous to Coolpowra, and analysed six sites, yet no such analysis was performed for Coolpowra despite twice being asked by ACP to do so.
- In terms of the electrical transmission system, the applicant considers OHLs and/or substations to be equally suitable i.e. there is no requirement for a pre-existing substation. OHLs on their own are sufficient to score a 5, e.g. Enniscoffey and Castlelost. The applicant claimed that a pre-existing node was necessary for their current Coolpowra proposal, despite both BnM and the applicant having illustrated that this is not the case.
- The applicant considers sites situated more than 20km away from the natural gas transmission system to be "Unsuitable / Constrained". We note that Coolpowra is 25km away from the natural gas transmission system.
- The applicant indicates a preference for greenfield sites over brownfield sites. Projects of this scale, as directed by numerous policies (Appendix 5.6.3 - Policies concerning use of brownfield/industrial sites & change of land use.), should strive to go in the opposite direction.
- The applicant indicates a preference for unzoned lands over appropriately zoned land. Projects of this scale, as directed by numerous policies (Appendix 5.6.3 - Policies concerning use of brownfield/industrial sites & change of land use.) together with ACP in the pre-application meetings, should strive to go in the opposite direction.
- Coolpowra would finish joint-fifth when compared against the above site selection criteria.

5.6.4. Lumcloon Energy OCGT[62]

In 2008, the same parent applicant from the current Coolpowra proposal, secured planning permission for a 350MW OCGT at Lumcloon, Co. Offaly. It was not constructed.

The EIA detailed a comprehensive analysis of multiple sites, favouring factors such as:

- Brownfield sites
- History of energy generation
- Industrial use zoning
- Proximity to gas network
- High voltage electricity grid
- Proximity to neighbouring properties
- Traffic and access

[62] https://epawebapp.epa.ie/licences/lic_eDMS/090151b2803d0efc.pdf

Table 1.3 Site Suitability Matrix

	Lumcloon	Ferbane	Athlone	Tullamore
General Assessment Criteria for Location of Power Plants				
History of Power Generation	4	1	1	1
Adequate supply of water	4	4	4	4
Proximity to the electricity network (high voltage), including connection	4	3	2	3
Proximity to the gas network (high pressure) <20km	4	4	4	4
Low population density	4	3	1	2
Land availability and ownership	4	3	3	3
Total	**24**	**18**	**15**	**17**
Site Specific Assessment Criteria				
Proximity to neighbouring occupied properties	4	2	1	2
Existing Ground Conditions	4	1	4	3
Brownfield Site	4	1	3	1
Traffic and Access	4	2	4	4
Visual	2	2	3	3
Total	**18**	**9**	**15**	**12**

Note:
4 High Weighting
3 High Medium Weighting
2 Low Medium Weighting
1 Low Weighting

Noteworthy items:

- This project had similar MW output to one of Coolpowra's three proposed OCGTs, and even though it is nearly 20 years old, it still provides a more comprehensive alternative sites analysis than the present day Coolpowra addendum.
- History of power generation is a positive factor, Coolpowra has none.
- The 20km threshold remains for the Gas Network connection, as seen in Castlelost 2021 EIAR.
- Brownfield site is a considered a positive factor.

See Appendix 5.6.4 – Lumcloon OCGT – Alternatives EIAR Quotes for references.

The standard is clear for site selection and alternatives analysis. Yet the addendum response from the applicant offers nothing of substance over the original 2024 response which was deemed inadequate by ACP. Moreover, past projects (5.6.3; 5.6.4) show that the applicant understands ACP's request but has twice failed to address it. We urge ACP to strongly consider this in their decision, particularly as a comprehensive description of alternatives was required with particular emphasis on locations. (section 5.1).

6. CRU LEU Policy – Lumcloon Energy Submission

The pre-application meetings, EIAR and EIAR addendum frames the proposed development's primary purpose squarely in terms of supporting renewables and securing supply;

> *"The development is designed to provide complimentary, quick-response dispatchable capacity and system services to the grid*
>
> *…*
>
> *further significant renewable energy growth is the primary objective, additional firm dispatchable "transitional" generation and energy storage, such as that proposed, are essential to bridge variability and support renewable generation intermittency*
>
> *…*
>
> *2GW of new flexible gas-fired generation capacity by 2030 to facilitate the integration of renewables*"[63]

This rationale underpinned the need case presented to ACP, including SID designation, and was central to how the projects were characterised and assessed throughout the planning process to date.

The CRU held a Large Energy User connection policy consultation in 2025[64]. Lumcloon Energy's submission[65] (available in Appendix 6 – Lumcloon Energy Letter to CRU (RE: CRU/202504)) articulates a fundamentally different primary objective for both their Coolpowra and Castlelost proposals, clearly stating their "**intention of supporting the data centre industry**", and noting that their "**construction and operation will provide direct support in providing either on site, or proximate, generation to data centres**".

We request that ACP take a careful read of this Lumcloon Energy submission to CRU and consider the ramifications it brings upon these planning applications.

6.1. Change of Project Purpose

This represents a clear and significant departure from the rationale presented to ACP, and within the planning documentation. The projects are no longer described as back-up for the national grid or supporting the integration of renewable energy, but rather as infrastructure intended to facilitate private, energy-intensive data centre development. This shift materially alters the purpose and justification of the developments as presented for assessment. Such a divergence raises fundamental issues regarding the accuracy, completeness, and transparency of the information provided to ACP.

In the absence of a clear, consistent and complete disclosure of the intended function of the developments, ACP and the public have not been afforded the opportunity to properly assess the proposals in accordance with the principles of proper planning and sustainable development.

More broadly, the introduction of alternative or expanded functions highlights an issue that arises irrespective of end use. Where a development is presented as capable of serving different system or demand functions, reliance on system-level policy cannot substitute for a site-specific justification. In such circumstances, the acceptability of the site in principle becomes a threshold issue and must be

[63] 2026 ADD: 3.1
[64] https://consult.cru.ie/en/consultation/review-large-energy-users-connection-policy
[65] https://consult.cru.ie/en/submission/cru-c38-19

addressed before reliance is placed on mitigation measures, environmental assessment, or SID designation.

This issue was expressly identified at the pre-application consultation stage, as outlined in 5.1. Background of this observation. The application was nevertheless advanced based on a narrowly defined peaking and grid-back-up role, and without a clear or consistent site-specific justification addressing the alternative / expanded functional scope now articulated.

6.2. Precedent

The relevance of this issue is underscored by recent experience in respect of the applicant's Castlelost FlexGen and BESS developments (from section 5.6.3 of this observation), which is analogous to this application, in that it sought permission to develop:

- OCGT (275MW) & GIS (220kV) – Westmeath CC: 21515
- BESS & Synchronous Condenser – Westmeath CC: 21532

In 2025, with construction of the project well advanced, a substantial data centre development was subsequently sought at same location under a separate Lumcloon Energy subsidiary, "Red Admiral DC"[66].

Westmeath County Council sought significant further information[67] from Red Admiral DC, formally questioning whether the energy infrastructure originally permitted based on providing demand-responsive services to the national grid had subsequently been repurposed to serve the proposed data centres. In doing so, the Planning Authority raised concerns relating to functional interdependence, project splitting, EIA Directive compliance, and specifically required clarification as to whether the original gas-fired power plant and associated BESS were now intended to meet the requirements of the CRU's Large Energy User (LEU) connection policy.

The applicant's response stated that the BESS will now serve the associated data centre, not the wider electricity grid as originally permitted, but reiterated that the OCGT is contracted for the grid purposes – the Red Admiral data centre application was then approved by Westmeath CC.

However, the data centre will also be grid-connected, meaning it will a draw large, continuous load from the grid. The OCGT and data centre will sit at the same node, so in system terms; New demand (Red Admiral DC) + local dispatchable generation (Castlelost OCGT) = proximate pairing, even if not contractually linked. This process was acknowledged in the applicant's EIAR for the data centre;

> *"It is also located adjacent to the existing Castlelost Flexgen project in anticipation of CRU large energy user (LEU) policy decision"*[68]

The applicant's Castlelost EIAR formed the template for the Coolpowra EIAR, which to this day has typos referring to Castlelost. Both EIARs repeatedly point towards the security of supply crisis, amber alerts and backup for renewables. These justifications underpinned the project rationale to the satisfaction of Westmeath CC. Five years later; the applicant is building data centres to consume the same energy that was originally designed for said energy crisis. It's noteworthy that while the red line boundary for the proposed Coolpowra development is ~46ha, the applicant's associated company

[66] Westmeath CC: 2560344: https://www.eplanning.ie/WestmeathCC/AppFileRefDetails/2560344/0
[67] https://westmeathcoco.eplanning.ie/idocswebdpss/ViewFiles.aspx?docid=289187&format=djvu
[68] Red Admiral DC EIAR VOL2, Westmeath CC 2560344, 4.3.3

(Hanney Properties) has assembled further ~65ha adjacent to the current site. The applicant is also giving ACP the option to grant their "temporary" construction entrance on a permanent basis in the addendum.

Public observations in 2024 questioned whether the applicant has provided the planning authority with complete information. In 2026, there is a documented material divergence between what the applicant is telling the energy regulator versus what it is telling the planning authority. We ask the planners to carefully consider the applicant's letter to CRU grouping both Coolpowra and Castlelost as an integrated portfolio of Data Centre support, together with the precedent set in Castlelost. With this context, it cannot be assumed that the Coolpowra development would not come to support data centres through either direct or proximate generation. The community's concern extends not only to the applicant's current proposals, but also to the longer-term intended use.

6.3. CCGT Base Load

In relation the Coolpowra OCGT application, ACP received an observation showing an FOI disclosure of an email sent by Lumcloon Energy to an EirGrid representative in August 2023, in which it is stated that proposed gas-fired plant "*will be configured so that it could be adapted to add combine cycle capability to 1, 2, or 3 units. This involves designing future spacing and connections*" (Appendix 6.3 – FOI Request).

Combined cycle gas turbine (CCGT) generation is ordinarily deployed to serve sustained and predictable electricity demand, rather than the intermittent peaking operation relied upon in the planning justification for the proposed development. The inclusion of such future conversion capability is therefore more consistent with load profiles associated with LEUs than with the operating characteristics of reserve, demand-responsive generation. It is noteworthy that no such combined cycle capability, or provision for future conversion, or why it would be adapted on some units and not others, is described or assessed in the planning application or accompanying EIAR / addendum.

6.4. Cloudy DS

In May 2026, Lumcloon Energy was in Korea to sign an MOU with the Korean automotive-semiconductor company IA (and its affiliate IA Cloud), alongside Lumcloon Energy subsidiary; "CLOUDY". Cloudy is described as a subsidiary of Lumcloon Energy and "*an Irish data centre and cloud infrastructure company*".[69]

[69] https://www.mk.co.kr/en/it/12061136 & https://www.linkedin.com/posts/enterprise-ireland-asia_datacentre-aiinfrastructure-sustainability-activity-7466004363644145664-noNp?utm_source=share&utm_medium=member_desktop&rcm=ACoAABZWYfEBy8OcS9epBoZAPeebV-sbVV_ZKaw

The MOU is directed at modular data centre (MDC) projects with IA stating it intended to use "Ireland as a bridgehead" for the European AI-infrastructure market. Cloudy intends to “push to build” MDCs in Ireland from 2028.

SoloCheck.ie records a single “CLOUDY” subsidiary in the Lumcloon Energy family: Cloudy DS Limited[70]. That entity was previously named Cloudy H2 Limited. Its name changed in January 2025 according to Companies Registration Office number 701308 (Appendix 6.4 – Cloudy DS). FOI requests show that the applicant's first attempt to qualify its Coolpowra OCGTs in a SEM T-4 Capacity Auction (2027/28) came in 2023, when "Cloudy H2 Limited" of Gortlusky, Killimor, Ballinasloe, Co. Galway, sought to qualify "Ballyboggan FlexGen" units 1, 2 and 3 for connection at the Oldstreet substation. Ballyboggan is a townland adjacent to Coolpowra (Appendix 6.4 – Cloudy DS). Therefore, the same generators now presented to ACP as renewable-backup capacity were first advanced by a related data-centre subsidiary at the same Oldstreet node.

Taken together, these matters raise material questions as to whether the applicant’s planning applications have been advanced based on a description of the proposed development that is materially incomplete or internally inconsistent as to its intended function. In that context, we respectfully request that ACP consider the matters outlined above, and their relevance in its assessment of the applications, including, but not limited to, any implications they may have for:

- the stated purpose of the proposed development;
- the basis upon which Strategic Infrastructure Development (SID) status was sought and obtained;
- the potential for project splitting or functional interdependence with other developments, and;
- whether the acceptability of the Coolpowra site in principle has been assessed as a threshold planning matter, prior to reliance on mitigation measures, environmental assessment, or SID status.

[70] https://www.solocheck.ie/Irish-Company/Cloudy-Ds-Limited-701308

7. High Court Case – Coolpowra FlexGen versus CRU & EirGrid

This chapter of our observation is material to the planning applications, relating to technical issues, potential for project splitting and the need case / project rationale. The applicant initiated a High Court[71] case in November 2024, in which it challenged by judicial review the refusal to qualify the Coolpowra units for the SEM T-4 2028/29 Capacity Auction.

7.1. Court Case

The Judge identified procedural shortcomings in how the qualification decision had been reached and remitted the matter to the respondents (EirGrid & CRU) for fresh consideration, however the outcome did not change, and the capacity auction proceeded without the applicant. The substance of the decision was unaltered.

The outcome is not the purpose of this observation; it is the evidence that the proceedings put on record. For this reason, we kindly request ACP to read the Coolpowra-related paragraphs of this case and consider the implications it has on the assessment of the applicant's planning application. Some notable paragraph quotes and notes are recorded below;

> ***88.*** *The proposed development is in Co. Galway and constitutes the construction of the three gas turbines, a 25 km gas pipeline, and a 400 kV substation.*

The GIS, OCGT and 25km gas pipeline identified as a single integrated project.

> ***89.*** *A separate application was submitted by Lumcloon Power (E) to qualify nine battery modules which it proposes to develop, each with the capacity to produce 100 MW of electricity (900 MW in total). Again, this development is in Co. Galway adjacent to the first development. It would use the same substation referenced above.*

A possible technical error on the BESS description, but the operational dependency on the GIS is explicit.

> ***91.*** *Mr. Reams states that the reasons given by EirGrid for refusing the applications are very short and are made by reference to s. E.7.2.1(f) of the Code which provides as follows:*
> *"E.7.2.1 The System Operators may reject an Application for Qualification for a Capacity Year in respect of a Candidate Unit or combination of Candidate Units where:*
> *...*
> *(f) they consider the delivery of a part or all of any New Capacity proposed in the Application for Qualification is not feasible (either technically or in the applicable timeframe)"*
> *He cites the reasons stated in the decision as follows:*
> *"(i) In respect of Coolpowra Flex Gen's application: "REJECT_NOT_FEASIBLE*
> *25km of gas pipeline considered a Strategic Infrastructure Development. SID approval can take from 18-24 months. Delivery not possible for 1st October 2028 on this basis. New 400 kV transmission station considered not feasible in the timeframe. Limit of 1000 MW onto the 400 kV line at Oldstreet...*

[71] High Court [2025] IEHC 174, [Record No. 2024/1407 JR]

(ii) In respect of Lumcloon Power (E)'s application: "REJECT_NOT_FEASIBLE: Development of a new 400 kV transmission station is considered not achievable in the timeframe. Limit of 1 GW can be accommodated at any new Oldstreet 400 kV station...".

It appears that the TSO rejected the applicant's T-4 applications for the following reasons;

- Flex Gen
    - 25km pipeline would be considered SID, planning approval can take 18-24 months before construction begins, delivery not possible on this basis.
    - 400kV GIS not considered feasible in the timeframe
    - Limit of 1000MW onto the 400kV line at Oldstreet

- BESS
    - 400kV GIS not considered feasible in the timeframe
    - Limit of 1000MW onto the 400kV line at Oldstreet

The applicant did not appear to address / disclose any of these issues in their EIAR addendum. The 1000MW node limit is a material technical hurdle which might render the 1155MW and 400MW proposals premature. In response, the applicant argued that their objective is to deliver capacity to the grid and not through the grid. The project is therefore dependent on a significant transmissional upgrade that is outside of the applicant's control. It also raises the question as to why an applicant would design a project that lies out of compliance with its node's maximum capacity.

The OCGTs alone are 155MW above the limit, for context, there are five gas plants being constructed since 2021 that have a generation capacity of less than 155MW (Appendix 4.1.).

99. *Mr. Reams says there are several aspects of the CMDRB's decisions that are of concern. First, the CMDRB applied the wrong factual threshold and reversed the burden of proof in relation to the issue for decision. Mr. Reams says the question was whether EirGrid had shown that the connection was not feasible, not whether the applicants had demonstrated that it was feasible. This was important, says Mr. Reams, because it justified EirGrid's position that a very high (and in the applicant's view, unrealistic) level of detail regarding the construction of the projects was required.*

A curious line of reasoning by the applicant when we consider the complexity of the project, and the importance of the TSO's ability to assess it. The applicant is short on detail in the eyes of the TSO. We note that Fred Logue is on record likening the applicant's planning application to outline planning permission i.e. lacking in detail.

100. *In its application for a review decision in respect of Coolpowra Flex Gen's Candidate Units, EirGrid relied upon multiple items of information extraneous to the application, including advice allegedly provided to it by Gas Networks Ireland (GNI) on an unknown date and in an unknown form, and its alleged understanding of unspecified previous Strategic Infrastructure Development applications. In the CMDRB determination regarding Coolpowra Flex Gen's Candidate Units, this information was relied upon in rejecting the applicant's contention that the gas connection could feasibly be delivered.*

It appears that the applicant was not pleased with the TSO conducting independent research on the project delivery timelines i.e. Gas Networks Ireland, which is fundamental to a project of this scale considering the four-year delivery timeframe. TSO responses are found in paras. 111-112.

> ***101.*** *Further, Mr. Reams contends that the alleged information relied upon by EirGrid regarding the timeline for deciding SID applications conflicts with An Bord Pleanála's statutory objective of determining SID cases within 18 weeks.*

The applicant's construction / delivery timelines take for granted that SID cases are solved within 18 weeks, which is not the case. We are now 24 months into the applicant's SID planning application and have yet to see a pipeline SID application. Time has vindicated EirGrid's conservative timeline estimations.

> ***111.*** *Ms. Fitzgerald [EirGrid] says that insofar as complaint is made about EirGrid's reliance on Gas Networks Ireland's views, Coolpowra Flex Gen signed a consent form authorising the SO to share information with GNI and Mutual Energy in respect of the three relevant units on a confidential basis, and vice versa. Accordingly, Coolpowra Flex Gen would have been aware that EirGrid would be in contact with GNI throughout the application process.*
>
> ***112.*** *It is significant to note that para. E.7.2.1(f) of the CMC refers to whether the delivery of a part or all of any new capacity proposed in the application for qualification is feasible. The assessment of the feasibility of the delivery of new capacity necessarily entitles EirGrid to take into account any grid upgrade connection requirements and/or gas connection works.*

Response to the applicant's claims in para. 100.

> ***119.*** *EirGrid's point remained that the SOs considered that the delivery of the new capacity was not feasible in the timeframe, and that the applicants had failed to provide them with a detailed schedule to underpin their submitted implementation plan demonstrating that they fully understood what was required to deliver 400 kV infrastructure at this scale.*
>
> ***120.*** *The applicants failed to show how they could feasibly deliver the capacity within the required timeframe. The EirGrid submissions elaborated on a range of matters that a reasonable participant proposing to build a facility and deliver equivalent energy capacity would be expected to be aware of. A prudent transmission operator should take into account the various matters identified. These included what was said by GNI as to the indicated timelines of 60-72 months. Mr. Downey rejects the contention that EirGrid's reasons are speculative and premature in the context of delivery of a project in four years' time.*

Paragraphs 119 & 120 show strong comments from Mr. Aodhagan Downey (EirGrid) on the applicant's understanding of what was required to deliver the proposed project. Independent GNI advice shows that the pipeline timelines are 5-6 years. We ask ACP to take into consideration the level of accuracy in the applicant's project delivery timelines.

> ***122.*** *Separately Mr. Downey strongly refutes the assertion in Mr. Reams' affidavit that there was any element of pre-determination of the application. The applications were properly assessed and given the scale of the project, the delivery of the new capacity was considered to be not feasible within the timeframe.*

It appears that the applicant felt the TSO had pre-determined the rejection of their application.

> ***123.*** *Mr. Melvin [CRU] also swore an affidavit on behalf of the CRU in the Coolpowra proceedings. From para. 47 onwards he addresses the potential consequences of an indefeasible candidate unit qualifying for capacity auctions. These include the fact that SOs would have reduced confidence in the unit, making it more challenging for the SOs to reliably forecast a future gap between supply and demand. If such projects were successful in a Capacity Auction, but subsequently failed to deliver, or delivered late, it may have consequences for subsequent Capacity Auctions and for security of supply generally or may dampen competition in the wider energy markets. Failure to deliver may result in the retention of less efficient plants and therefore there would be "more polluting" forms of power generation on the system for longer.*

CRU's Director of Security of Supply and Wholesale outlining in principle the consequences of failed project delivery timelines.

7.2. Applicant requests modification to Capacity Market Qualification Process

After the High Court action rendered no change to the applicant's exclusion, the applicant sought a change to the Capacity Market Qualification process: CMC_04_25 – ADJUSTMENT OF CMC AUCTION QUALIFICATION CRITERIA TO FACILITATE COMPLEX PROJECTS WITHIN STATE AID APPROVAL[72]:

> *"The proposer [Lumcloon Energy] argues that complex generation projects require longer lead times to commission, rendering complex projects unable to qualify within the four-year commissioning window. Therefore, this Modification Proposal seeks to extend the delivery window from the start of the relevant Capacity Year to the 'applicable time frame' i.e. the Long-Stop Date. The change would be limited to T-4 auctions only."*[73]

The applicant is implicitly admitting that its "complex project" is unable to qualify within the capacity's maximum four-year commissioning window. Because of this, it seeks to extend the delivery window.

SEM ultimately rejected the applicant's proposal on numerous grounds, citing inconsistencies with the Capacity Remuneration Mechanism, unlevel playing fields, project definition ambiguities, security of supply concerns, volume mismatches and additional cost to consumers. Some quoted examples are outlined below;

> *"The existing delay modification mechanism, set out in J.5 of the Capacity Market Code, is designed to apply to individual units post-auction on a case-by-case basis, in line with CMC objectives, where events outside of the control of the developer have led to delay in delivery. However, this could apply to multiple units, provided the proposed definition of a 'Complex Project' is achieved. This would likely exacerbate security of supply risks."*[74]
>
> *"If the SEM Committee accepted this Modification Proposal and a significant volume of projects met the broad proposed definition, there would likely be a volume mismatch between system needs and volumes procured for a particular Capacity Year. This is a suboptimal*

[72] https://www.sem-o.com/sites/semo/files/2025-09/SEM-25-045 CMC modifications Workshop 43 %28Part A%29 Decision Paper_0.pdf
[73] Single Electricity Market (SEM) Capacity Market Code Modifications Workshop 43 (Part A) Decision Paper 2.1.2.
[74] Single Electricity Market (SEM) Capacity Market Code Modifications Workshop 43 (Part A) Decision Paper 2.3.5.

> *outcome and one contrary to security of supply objectives and would also place an additional cost on the consumer."*[75]

SEMC confirmed that the legal matters in 2024 contributed to the delay in lead time for the T-4 2029/30 capacity auction. In their response to the applicant, the SEMC also note the new planning permission requirement;

> *"Finally, as per the correspondence issued to EirGrid on 29 April 2025 (D/25/9470), the Commission for the Regulation of Utilities (CRU) directed EirGrid to issue a grid connection offer to any applicant located in Ireland that is successful in the T-4 Capacity Auction for 2029/30 and that has provided evidence of granted planning permission for the unit by the Qualification Application Date for the 2029/30 T-4 Capacity Auction. This is a change in approach from previous years, where submission of planning permission was sufficient, and will reduce the extent to which less underdeveloped projects progress through qualification."*[76]

7.3. SEMC amends Capacity Market Qualification Process

The SEMC sought to amend the code[77] in part B of the same workshop referenced in 7.2, removing any presumption of qualification, and removing the concept of "feasibility" for "achievability".

> *"The second part proposes to delete E.7.2.1 (f) to avoid the overlapping of provisions between this provision and E.7.5.1. This, according to the RAs, is in line with their view that the concept of 'achievability' is clearer than that of 'feasibility' and that an assessment of deliverability sits better in the section dealing with 'Requirements for New Capacity' rather than 'Administrative Considerations'. The legal drafting also proposes to amalgamate E.7.5.1 (b) and (c) into one, given the RAs' understanding that E.7.5.1(c) is a subset of E.7.5.1(b)."*[78]

There is a lot to unpack here for the consideration of ACP;

i. GIS, OCGT and associated gas pipeline defined as one integrated project
ii. BESS dependency on GIS is reiterated
iii. 5/6 year construction timeline for a 25km gas pipeline per GNI. Consider this together with the fact that capacity auctions only run to T-4 years, the 2031 deadline for SF_6 and the abnormal load issues outlined in section 2.1 of this observation. Can the applicant overcome these independently, with what is available for assessment in the planning applications?
iv. 1000MW accommodation limit at Oldstreet 400kV (per TSO) and what it means for the integrated project.
v. The applicant took issue with the high level of detail required in the qualification process for EirGrid's feasibility assessment. Could the applicant view the EIAR / planning process in the same way? e.g. alternatives response to ACP / the addendum containing many deferred assessments.

[75] Single Electricity Market (SEM) Capacity Market Code Modifications Workshop 43 (Part A) Decision Paper 2.3.6.
[76] Single Electricity Market (SEM) Capacity Market Code Modifications Workshop 43 (Part A) Decision Paper 2.3.10.
[77] https://www.sem-o.com/sites/semo/files/2025-09/SEM-25-046 CMC Modifications Workshop 43 %28Part B%29 Decision Paper_0.pdf
[78] Single Electricity Market (SEM) Capacity Market Code Modifications Workshop 43 (Part B) Decision Paper 2.1.3.

vi. Are the applicant's construction timelines in the addendum grounded in reality – or overly optimistic as seen in 2024 (i.e. 18 week SID decision times are not realistic).
vii. The TSO's assertion that the applicant doesn't fully understand what is required to deliver 400 kV infrastructure at this scale, that a reasonable participant would be expected to be aware of. See 2.1 of this observation.
viii. The applicant's assertion that their qualification refusal was pre-determined.
ix. The SEMC's subsequent rejection of the applicant's "complex projects" auction timeline modification change.
x. The SEMC removing any presumption of qualification, and changing the "feasibility" concept for "achievability"
xi. The subsequent 2025 CRU instruction to reject all projects that don't possess full planning permission by pre-application qualification date
xii. Does it seem like there is an "identified need" and/or "system fit" for this project, as claimed by the applicant?[79]

[79] 2026 ADD: 3.2.2.

8. Climate

8.1. Knox Findings

This section refers to technical note prepared by Mr. Martin Knox (Appendix 8.1.). Knox holds a PhD in Chemistry in thermodynamics, was Head of Environment at Roche Ireland (a COMAH-regulated site), and has over twenty years' experience as an IEMA-registered environmental, quality and safety auditor across the chemical, aerospace and medical-device sectors in Ireland, the UK, the Netherlands, the US and New Zealand.

His note identifies the following;

- The applicant's operational GHG emissions projections are incorrect. Per the 2024 EIAR[80], the operational GHG emissions for the OCGTs are 586,400 tCO_2e/yr. Knox used the EU ETS/EPA methodology which is the standard-bearer for operational combustion CO_2 and found the GHG emissions for the OCGTs to be in the region of 900,000 tCO_2e/yr.
- The applicant concedes that the development (at its own 586,400 tCO_2e/yr figure) would have a major adverse impact on the climate yet proposes no mitigation measures.
- The applicant contextualizes its GHG emissions by framing it through the lens of the national "all-sector" budget, rather than the more relevant electricity sector emissions budget.
- The next electricity sectoral emissions ceiling (2031-2035) is likely to be in the region of 15 $MtCO_2e$, or 3 $MtCO_2e$/yr (as is 2030). This proposed development would therefore consume ~30% of the annual Electricity SEC budget per year by itself for this period.
- The EIAR's "positive impact" conclusion rests on comparing the development to coal and peat generation. Coal and peat have already been eliminated from routine electricity generation in the State
- The DNV are unable to model BESS fires. They can only assess them only qualitatively - an assessment-adequacy gap.
- ALARP/COMAH deferral. DNV's own conclusion that the operator "will be required to demonstrate" risk management later i.e. risk control deferred to post-decision detailed design.
- The DNV severity matrix omitted GHG as a receptor impact. S1–S4 severity / D4 duration methodology was applied to fire/release events but not to GHG emissions on climate. On the applicant's own methodology, long-term climate damage would rate D4/S4 (major/catastrophic) but wasn't assessed i.e. the applicant's own risk framework applied consistently would flag climate damage as severe yet it wasn't run.
- National policy envisages prioritisation of renewables gases for hard-to-decarbonise sectors, where direct electrification is not feasible.

[80] 2024 EIAR: Table 15.2

8.2. Cumulative GHG assessment for South-East Galway

Schedule 6 of the Planning and Development Regulations 2001 (as amended)[81] which transposes the EIA Directive (2014/52/EU), requires the EIAR to describe the likely significant effects of the development, including "the cumulation of effects with other existing and/or approved projects" and the development's impact on climate, including the nature and magnitude of its greenhouse-gas emissions.

First, the EIAR understates operational emissions by approximately one third. The applicant predicts GHG emissions of 586,400 tCO_2e/yr[82] before diesel backup. At the EIAR's own stated 39% efficiency, a 1,155MW natural-gas plant emits approximately 518 tCO_2/GWh. Operated for 1,500 hours at its stated capacity, the plant would emit approximately 900,000 tCO_2e/yr. This has further implications for the operating scenarios used in the air-quality assessments. Accordingly, the applicant's OCGT lifetime GHG emissions (excluding diesel) expand from 14,660,000 tCO_2e to 22,500,000 tCO_2e. A 53% increase on what is reported in the EIAR.

Second, former Tynagh mine site is ~10km from the applicant's proposed site. It comprises an existing 400MW CCGT and in 2024 received planning permission for a 350MW OCGT[83]. These projects are in the same locality and supporting the same grid that the proposed development seeks to situate at. Therefore, the cumulative effects of the development need to be assessed.

- The approved Tynagh North 350MW OCGT annual emissions "*are expected to be approximately 368,158* tCO_2e."[84]
- The active Tynagh 400MW CCGT annual emissions are 664,096 tCO_2e according to a 5-year average from EU ETS[85]
- The proposed Coolpowra are predicted to be 586,400 tCO_2e/yr per applicant's EIAR but closer to ~900,000 tCO_2e/yr when corrected. This excludes diesel backup and upstream emissions.

		Do Nothing	+ Tynagh OCGT	All Three Active	
				EIAR	CORRECTED
	MW	tCO2e/yr	tCO2e/yr	tCO2e/yr	tCO2e/yr
Tynagh CCGT	400	664,096	664,096	664,096	664,096
Tynagh OCGT	350		368,158	368,158	368,158
Coolpowra OCGT	1155			586,400	900,000
TOTAL tCO2e/yr		664,096	1,032,254	1,618,654	1,932,254
% of Area Sectoral Budget 2030 (3 MtCO2e/yr)		22%	34%	54%	64%

The electricity sector's 2030 sectoral emissions ceiling is 3 $MtCO_2e/yr$[86] and when the locality's emissions are measured against this sectoral ceiling:

[81] Planning and Development Regulations 2001 (S.I. No. 600/2001), Schedule 6, as amended by S.I. No. 296/2018, transposing Directive 2014/52/EU.
[82] 2024 EIAR: Table 15.2
[83] Tynagh North, ACP 317810:
[84] Tynagh North, ACP 317810: Ch 7
[85] Tynagh CCGT emissions 2019–2023, EU ETS verified: https://www.euets.info/installation/IE_71
[86] Government of Ireland, Sectoral Emissions Ceilings (28 July 2022): https://www.gov.ie/en/press-release/dab6d-government-announces-sectoral-emissions-ceilings-setting-ireland-on-a-pathway-to-turn-the-tide-on-climate-change/ [Electricity: 10.5 $MtCO_2E$ (2018) → 3 $MtCO_2E$ (2030 ceiling)].

- The existing Tynagh CCGT alone already accounts for ~22% of the entire national electricity sector's 2030 allowance.
- With the consented Tynagh North OCGT operating, this belt reaches ~34% (over a third of the sector's 2030 national ceiling) before the proposed Coolpowra development is considered.
- Adding the proposed development on the applicant's own figures brings the cluster to ~54% but the correct figure is closer to ~64% and nearly two-thirds of the entire country's 2030 electricity-sector allowance concentrated in a single locality.

The applicant has not acknowledged this cumulative picture in the EIAR or addendum.

As stated earlier, the sectoral ceiling is 3 $MtCO_2e$ for 2030, and the trajectory points to a similar or lower annual budget across 2031–2035, with a 2050 target of net zero. Consenting new fossil capacity on a 25-year timescale commits the locality to emissions the sector is required to eliminate and would consume an outsized share of a national electricity allowance. It's key to note that where a budget period's emissions exceed its carbon budget, the excess is carried forward and "*the current carbon budget shall be decreased by the amount of greenhouse gas emissions that are carried forward*".[87] The nation will end up footing the bill for these breaches.

The scale of sectoral contribution in South-East Galway represents a material contravention to the proper planning and sustainable development assessment. We respectfully ask An Coimisiún Pleanála to weigh these cumulative carbon-budget effects, and the local environment and communities, in its decision.

This highlighted cluster alone would account for ~64% of Ireland's 2030 electricity sectoral emissions ceiling.

In the Galway County Council report referenced by the applicant[88], the Environmental Section / Climate Units queried whether the introduction of an entirely new fossil gas fired generator is required or appropriate to meet Ireland's targets. They also noted that the development's annual GHG emissions equate to 20% of Co. Galway's 2019 baseline CO2 emissions, and that Galway County

[87] Climate Action and Low Carbon Development (Amendment) Act 2021: 6D(5)
[88] 2026 ADD: 3.2.2: "Galway County Council's report to the Commission dated 18 September 2024"

Council's LACAP 2024-2029 is aligned to Ireland's legally binding climate ambition (to deliver a reduction of GHGs by 51% in 2030 and climate neutrality by 2050. This GCC response was based on the applicant's EIAR, which by extrapolation indicates that the applicant's proposal would produce over 40% of Co. Galway's targeted emissions ceiling for 2030 (or over 60% on corrected emissions). That ceiling is inclusive of other sectors. Either number is difficult to reconcile with the principles of proper planning and sustainable development.

8.3. Peer GHG Comparison

The list below is not exhaustive. It contains EIAR data from some of the bigger plants shown in Appendix 4.1. already approved / in the planning pipeline. The applicant's EIAR figures are shown to not only be out of line with OCGT peers in terms of scale, but also in terms of emissions intensity (e.g. Tynagh North, ESB Aghada).

Plant (ref)	MW	Type	Constr. (tCO_2e)	Oper. (tCO_2e/yr)	Oper. lifetime (tCO_2e)	Predicted run time (EIAR)	Qualifiers / notes (EIAR)
Coolpowra (EIAR)	1,155	OCGT	28,200	586,400	14,660,000	1500	
Coolpowra (CORRECTED)	1,155	OCGT	28,200	~900,000	~22,400,000	1500	
Tynagh North (ACP 317810)	350	OCGT	8,484	368,158	9,203,947	1500	
ESB Aghada (1061938)	299	OCGT	18,493	235,359	5,883,975	1500	
Shannon STEP (ACP 319566)	600	CCGT	110,709	869,702	21,742,544	–	*1.26 Mt 2026 → 0.67 Mt 2050*
Derrygreenagh (BnM) (ACP 319023)	710	CCGT + OCGT	58,939	1,393,853	–	–	*CCGT stated to replace Moneypoint.*
Cashla (ACP 324113)	334	OCGT	1,919	21,540	–	100	
SSE Tarbert (ACP 318540)	350	OCGT (HVO)	10,399	61,321	1,533,021	1800	
Kilshane 1 (ACP 317480)	293	OCGT	–	508,603	–		
Kilshane 2 (ACP 324305)	680	OCGT	–	36,989	–	200	
Castlelost (Westmeath CC: 21515)	275	OCGT	–		–	1000	*Operational emissions not found in EIAR*

For context, the electricity sector's 2030 annualised allowance is 3 $MtCO_2e$, it is likely that the 2031-2035 window will remain close to this annualised level or thereabouts.

From the chart above, three gas plants alone (Shannon STEP, Derrygreenagh, and Coolpowra) would exceed this level **before** any account is taken of large energy users or other generation. Therefore, there is no headroom within the prospective sectoral ceiling for the Coolpowra development's scale and emissions. The CAP's 2GW target, per EirGrid data from 4.1. Climate Action Plan 2025 & All-Island Resource Adequacy Assessment 2026-2035, is already set to be surpassed.

Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended) requires a relevant body (ACP in this case), in so far as practicable, to perform its functions in a manner consistent

with, among other objectives: "*the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State*" (s.15(1)(e))[89].

Separately, Schedule 6 of the Planning and Development Regulations 2001 (as amended), transposing Annex IV of Directive 2011/92/EU, requires an estimate, by type and quantity, of the emissions expected from the operation of the development.

A grant of permission for a development whose emissions, whether on the corrected figures or those stated in the EIAR, would contribute to an exceedance of the electricity sector's 2030 ceiling before any account is taken of large energy users, falls outside the spectrum of outcomes consistent with that statutory obligation. We further note the applicant's incorrect ceiling in the EIAR (i.e. all sectors), together with potential for future CCGT conversion (Appendix 6.3 – FOI Request), and the EIA is to that extent inadequate.

8.4. EU Taxonomy

The applicant claims the Coolpowra OCGTs are transitional activities under the EU Taxonomy;

> *"While further significant renewable energy growth is the primary objective, additional firm dispatchable "transitional" * generation and energy storage, such as that proposed, are essential to bridge variability and support renewable generation intermittency … Under the EU Taxonomy Regulation, gas-fired generation is classified as a transitional activity where it replaces more carbon-intensive sources, complies with lifecycle emissions thresholds, and is capable of operating on renewable or low-carbon gases*
>
> *Article 10(2) of Regulation (EU) 2020/852 defines "transitional" activities. A transitional activity is an economic activity for which no technologically and economically feasible low-carbon alternative exists and which supports the transition to a climate-neutral economy on a 1.5°C pathway by cutting GHG emissions. It qualifies only if it:
>
> - has GHG performance at the best level in its sector/industry;
> - does not hamper the development/deployment of low-carbon alternatives; and
> - does not lock in carbon-intensive assets over their economic lifetime"[90]

The Taxonomy Regulation is by its own design an anti-greenwashing legislation. Its purpose is to prevent unsubstantiated sustainability claims. Invoking it without meeting its criteria is the precise harm the Regulation exists to prevent. Article 10(2), as quoted by the applicant, is only the definition. It doesn't itself state whether a specific gas plant qualifies. This is decided by the technical screening criteria;

> *"a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it **complies with the technical screening criteria**"*[91]

The structure is:

[89] Section 15: Climate Action and Low Carbon Development Act 2015 (as amended by the Climate Action and Low Carbon Development (Amendment) Act 2021), section 15(1)(e).
[90] 2026 ADD 3.1.
[91] Commission Delegated Regulation (EU) 2022/1214v of 9th March 2022 amending Delegated Regulation (EU) 2021/2139: Annex I, 4.29

- **Taxonomy Regulation (EU) 2020/852, Art. 10(2)**: defines "transitional activity". This is what the applicant cites.
- **Complementary Climate Delegated Act (EU) 2022/1214, Section 4.29**: sets the binding technical screening criteria a gas plant must actually meet to *be* a Taxonomy-aligned transitional activity. This is what determines whether Coolpowra OCGTs qualify as transitional activities.

You need both of the above. The applicant claims the transitional status conferred by the definition while ignoring the screening criteria that are the only route to that status. The screening criteria offers two routes; (a) and (b).

Route (a): Life-cycle emissions below 100 gCO_2e/kWh: Coolpowra OCGTs fail this route as a modern OCGT typically produces life-cycle emissions more than 500 gCO_2e/kWh.

Route (b): the seven-condition transitional route (for facilities permitted by 31 December 2030): **requires compliance with all of seven** conditions, (i) to (vii). Coolpowra fails at least five:

- **(i) Direct emissions below 270 gCO_2e/kWh** (or ≤550 kg CO_2e/kW averaged over 20 years):
    - The applicant's own figures the OCGT (39% efficiency) exceeds 470 g CO_2e/kWh. The Irish Academy of Engineering gives an OCGT (30% efficiency) an emission factor of 612 g CO_2e/kWh[92] (IAE, Table 10).
    - In terms of the ≤550 kg CO_2e/kW averaged over 20 years, there would need to be a run hour limit imposed for Coolpowra OCGTs to around 800hrs/year based on EIAR emissions or 500hrs/year based on independent calculations. The applicant's own 2024 EIAR expects the OCGTs to operate at 1,500hrs/year. In the T-4 2026/27 capacity auction, their application listed each of the three turbines to run full-time i.e. 8,760 hrs/year (Appendix 6.4 – Cloudy DS).
- **(ii) A published comparative assessment showing the power cannot be generated from renewables, subject to stakeholder consultation**:
    - No such assessment appears anywhere in the EIAR.
- **(iii) Replacement of an existing high-emitting solid- or liquid-fossil-fuel generator:**
    - Coolpowra replaces nothing - it is proposed as net-new greenfield capacity. The "ability to replace" the diesel TEG units is asserted but not committed. The AIRAA 2026-2035 data in 4.1. Climate Action Plan 2025 & All-Island Resource Adequacy Assessment 2026-2035 of this observation illustrates that there is more than enough physically and contractually committed capacity to surpass the TEGs.
- **(iv) New capacity not exceeding the replaced facility by more than 15%:**
    - As mentioned in (iii), Coolpowra replaces nothing, a 1,155 MW plant exceeds the (zero) replaced capacity without limit.

[92] Irish Academy of Engineering calculations: https://iae.ie/wp-content/uploads/2026/05/Energy-Security-and-the-Future-of-Moneypoint-Power-Station.pdf

- **(v) A switch to full use of renewable and/or low-carbon gaseous fuels by 31 December 2035, "with a commitment and verifiable plan approved by the management body of the undertaking."**

    - Throughout the EIARs, the applicant offers only that the units are *"**capable** of being … converted / adapted / reconfigured / modified to adapt … **in the future**"*[93]

    - Capability is not commitment. There is no date, no commitment, no board-approved plan, and at best a ">30%" hydrogen blend rather than full use. The Regulation demands a binding, dated, board-approved plan; the applicant supplies a vague future aspiration.

    - Renewable and/or low-carbon gaseous fuels will not exist in the quantities a 1,155 MW plant would need by 2035, if at all. In any event, national policy reserves what little renewable gas is produced for high-temperature industrial heat and other sectors that cannot be electrified - not for power generation. Hydrogen is inadequate for this type of electricity generation.

The applicant fails the Complementary Climate Delegated Act (EU) 2022/1214's technical screening criteria, therefore cannot be counted as a transitional activity. For the record, the applicant also fails on its quoted Taxonomy Regulation (EU) 2020/852, Art. 10(2) definitions:

- ***"has GHG performance at the best level in its sector/industry";***

    - The Irish Academy of Engineering's figures state that an OCGT emits 612 gCO_2/kWh, while a CCGT on identical fuel emits 306 gCO_2/kWh. The applicant has selected the configuration that emits twice as much as the readily available alternative within the same sector. That is – by definition – not the best level in its sector/industry.

    - ACP know this. In Bord Gais Energy's Cashla OCGT pre-application meeting[94], ACP representatives queried why they're "*going with open cycle instead of closed cycle, and noted that this may have implications under the Climate Change Act*". Bear in mind that was for a ~330MW OCGT, we'd be interested to hear the same ACP representative's thoughts on 1,155MW OCGT.

- ***"does not lock in carbon-intensive assets over their economic lifetime"***

    - The OCGT has a design life of "at least" 25 years, is fuelled by natural gas, and offers only that it is "capable" of being converted in the future with no date, commitment or plan given. A 1,155 MW gas plant built, surplus to EirGrid's AIRAA 2026-2035 requirements, designed to operate for >25 years on fossil fuels is the paradigm of an asset locked in over its economic lifetime.

I ask ACP to reconsider the applicant's compliance with the EU Taxonomy Regulation considering the items presented here, and its impact under the Climate Change Act.

[93] 2024 EIAR -VOL2_V7, 2
[94] ABP-320975-24

8.5. Stated MW

The EIAR describe the OCGTs to combine to 1,155MW, yet the 2024 EIAR's GHG appears to account for 1,125MW. The applicant originally discussed 1,125MW in the pre-planning application meetings with ACP[95], but then sought for 1,155MW in the planning application. ACP should be aware as to which MW figure is used by the applicant in their GHG assessments.

Incidentally, at the same pre-planning application, the BESS was discussed as 200MW, not the 400MW it would be become three months later in the planning applications. At twice the size this represents a considerable increase to what was first put forward to the planners, with no record of dialogue discussing such an increase between the time of pre-planning meetings and the planning application itself.

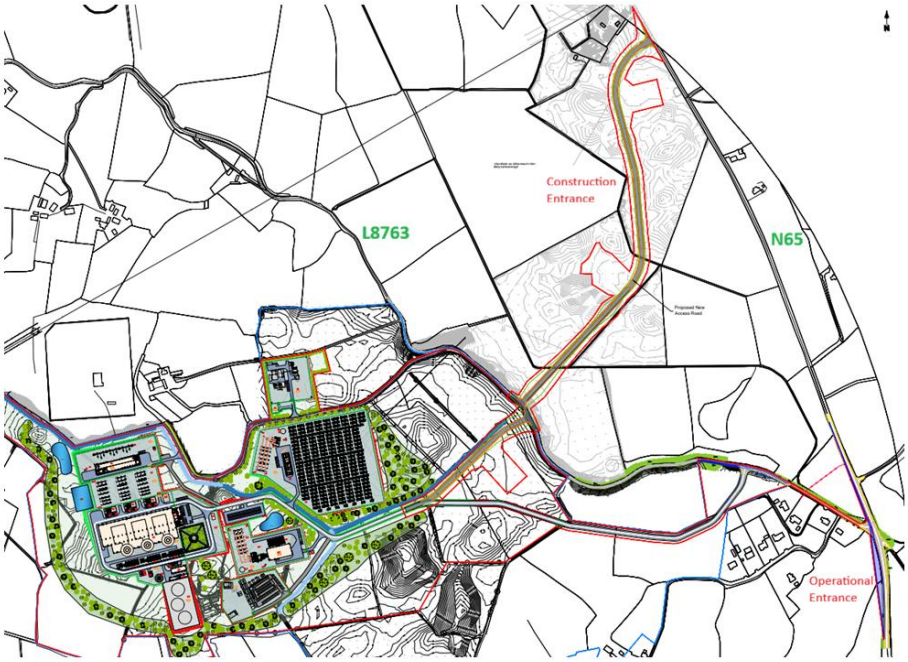
[95] https://www.pleanala.ie/anbordpleanala/media/abp/cases/records/319/p319073a.pdf

9. Roads

Roads and transport represent a significant issue for the developer, as illustrated by GCC's refusal for the BESS project in 2024. This chapter addresses the following;

- 9.1 considers the confusion around the application over whether the access is temporary, or permanent and over the status of the N65 and L8763;
- 9.2 responds to each ground of Galway County Council's refusal and related planning matters;
- 9.3 sets out the record of road traffic collisions on the proposed route;
- 9.4 illustrates the deficiencies in the applicant's traffic count;
- 9.5 illustrates the deficiencies in the applicant's traffic assessment;
- 9.6 outlines the recent and relevant planning history along the N65 corridor;
- 9.7 addresses the applicant's reliance on the 2012 national roads guidelines in terms of strategic infrastructure designation;
- 9.8 closes the chapter with a range of significant road and traffic matters.

The proposed site is situated off the L8763; a local road that connects to the N65 between Portumna and Killimor, Co. Galway.



GCC refused the applicant's BESS application in 2024, among the refusal reasons were issues with the N65/L8763 (now "operational") junction:

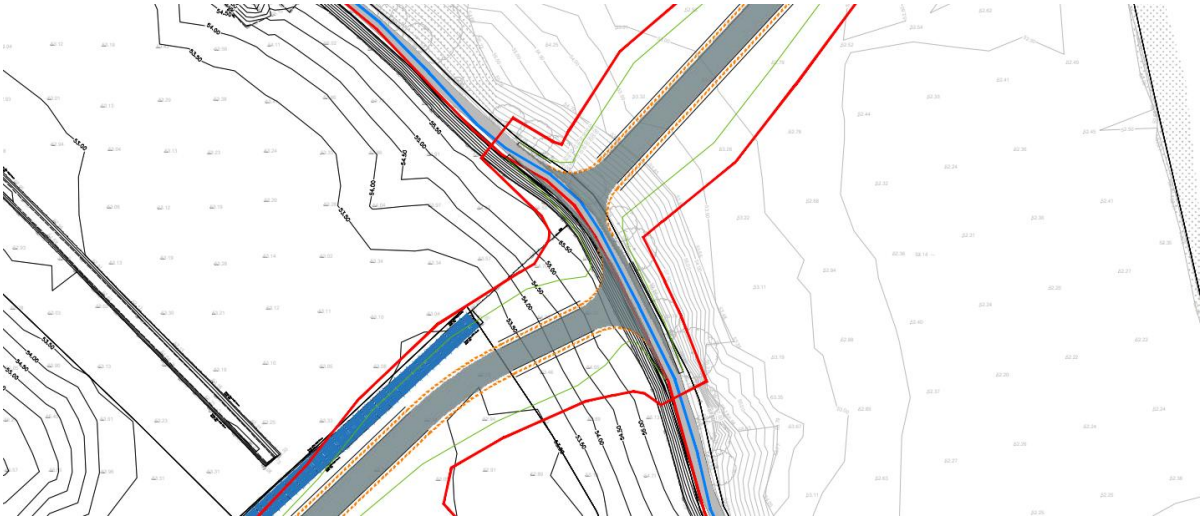
> *"Having regard to National Policy and the existing local public road network intended to serve the proposed development, whilst including considerations of public road capacity, width and alignment, the surface or structural condition of the pavement, and future maintenance*

requirements, and in the absence of complete and sufficient details pertaining to the same including relevant third party agreements and consents, that would render the network, or any part of it, unsuitable to carry the additional road traffic. It is considered, the proposed development would endanger public safety by reason of traffic hazard because of the additional traffic turning movements the development would generate at a point where the proposed site entrance on to the road network is also deemed unsatisfactory, owing to the restricted forward sight distances available at the road frontage, precluding the provision, and maintenance of, a safe and satisfactory means of vehicular access. It is further considered the scale of remedial works required to provide public road widening and acquired sightlines from the proposed entrance of the development site onto the L-8763 and as proposed from the N65 Junction, would constitute significant roadside intervention on National and Local routes in contravention of DM Standard 28, DM standard 33a and Policy Objective NR 1, NNR 2 of the Galway County Development Plan 2022 – 2028, which seeks to safeguard national, regional and local roads. It is therefore considered that the proposed development would be at variance with National Roads Policy in relation to control of development on/affecting national roads and would interfere with the safety and free flow of traffic and endanger public safety by reason of traffic hazard, obstruction of road users or otherwise and therefore would be contrary to the proper planning and sustainable development of the area"[96]

The applicant is now proposing a new route that would create a new entrance onto the N65, circa. 1km to the north of the existing N65/L8763/L8760 junction and 500m to the south of the existing N65/L8762 junction;

This newly proposed route would also cross the L8763 road at a newly created staggered junction. This would be 200m to the east of the existing Oldstreet substation junction and 500m to the west of the applicant's originally proposed (now "operational") site entrance;

[96] GCC 24/60845: Planners Report



9.1. Confusion

The applicant presents the newly proposed entrance as a temporary construction route, while seeking to retain the originally proposed entrance as the long-term operational route.

9.1.1. Temporary or Permanent

The applicant ultimately defers the nature of their new access proposals to ACP;

> *"the temporary construction-stage access road will be decommissioned and reinstated unless otherwise authorised by condition of any grant of permission"*[97]

For the purposes of assessment, the new N65 access is presented as temporary; and the environmental assessment, appropriate assessment and public consultation all proceed on that basis. But buried in the wording of the addendum is a suggestion that the temporary new entrance road will only be removed "*unless otherwise authorised by condition*".

The idea seems to be that a permanent new access onto a restricted route may be authorised without having it applied for or assessed on a permanent basis.

9.1.2. Contradiction

The applicant, despite having been refused previously, maintains that the N65/L8763 junction is a viable option for the project. If the existing junction were genuinely viable, there would be no need to acquire further land and construct a new entrance onto a restricted national road, together with a staggered junction on a route its own road safety audit found inadequate. The applicant's actions indicate that the original junction is not a viable access, in contradiction to its words;

> *"A "do-nothing" scenario would result in the original construction access arrangement which was assessed within the July 2024 EIAR prevailing. Under this option, all proposed construction traffic would access the site using the existing local road network, with no new access points created to the national secondary road (N65). The access as currently proposed remains a reasonable and viable access option"*[98]

[97] 2026 ADD: 3
[98] 2026 ADD: 3.2.3.

The DoECLG's 2012 Guidelines warn that any new accesses to national roads generate additional turning movements and safety risks, and direct planning authorities to guard against a proliferation of such accesses on roads with speed limits above 60kph as part of the overall effort to reduce road fatalities and injuries. This applies to all kinds of development.[99]

That applicant's "Do Nothing Scenario" exposes a contradiction in that;

i. Its words say the original junction is a viable option, in which case a new access is not needed, and;
ii. Its actions say a new access is needed, because the original does not work.

On either reading, the access strategy is contrary to the proper planning and sustainable development of the area. A new access onto a restricted national route is not something a planning authority should grant when the applicant itself deems it unnecessary.

This has further implications for **land-take**. The applicant has procured a 70ac agricultural field to serve as an access road that it doesn't need, in its own opinion.

9.1.3. N65/L8763 Status

The applicant states that, for construction purposes, the original junction access *"remains a reasonable and viable access option, notwithstanding the withdrawal of letters of consent relating to the cutting/pushing back of the hedgerow to facilitate sightlines as per TII guidelines*."[100]

The works proposed in the 2024 EIAR were not, however confined to a hedgerow cutback. The road safety audit report prepared for the applicant in 2024 listed, among its necessary actions;

> *"Ensuring appropriate construction, widening and drainage of the L8763"*[101]

And was acknowledged by the applicant;

> *"The applicant company has put in place agreements with relevant landowners associated with road improvement work at the N65/L8763 junction."*[102]

[99] Department of the Environment, Community and Local Government, Spatial Planning and National Roads Guidelines for Planning Authorities (January 2012), Issued under s.28 of the Planning and Development Act 2000.
[100] 2026 ADD: 2.2.
[101] 2026 ADD: 13.5.1.1.
[102] 2024 EIAR 10.3.2.

The proposed works also involved junction works, shown in purple

The original junction therefore required substantial roadside works on third-party land – and the consents on which those works depended were withdrawn when the landowners learned of the true nature of the project (per said landowner's submissions) – see section 9.8.4 for more on this.

These proposed works were not incidental. They were required by the applicant's own stage 1 Road Safety Audit, and their scale was material to the objections of TII and GCC's Roads and Transportation Engineer, and to GCC's refusal:

> *"It is further considered the scale of remedial works required to provide public road widening and acquired sightlines from the proposed entrance of the development site onto the L-8763 and as proposed from the N65 Junction, would constitute significant roadside intervention on National and Local routes in contravention of DM Standard 28, DM standard 33a and Policy Objective NR 1, NNR 2 of the Galway County Development Plan 2022 – 2028"*[103]

In the addendum, the applicant now recharacterizes those works, undermining the Road Safety Audit report by reducing them to hedgerow maintenance and leaving their resolution to ACP;

> *"It remains appropriate for the application to include the current access, as it remains open to the Commission to address any issues regarding maintenance of the hedgerow"*[104]

That recharacterisation cannot be reconciled with GCC's refusal, which did not turn on hedgerow maintenance but on traffic hazard;

[103] GCC 24/60845: Planners Report
[104] 2026 ADD: 3.2.3.

> *"It is considered, the proposed development would endanger public safety by reason of traffic hazard because of the additional traffic turning movements the development would generate at a point where the proposed site entrance on to the road network is also deemed unsatisfactory, owing to the restricted forward sight distances available at the road frontage, precluding the provision, and maintenance of, a safe and satisfactory means of vehicular access."*[105]

In the same addendum, the applicant admits that it can no longer carry out the necessary works;

> *"The applicant also considered widening the existing L8763 public road as it routes from the N65 to the development boundary. This option does reduce private land take but was not considered a viable option due to third-party land ownership constraints."*[106]

9.2. Applicant's Response to GCC Refusals

In addendum 3.2.3.3, the applicant implies that it's compliant with the very grounds that TII and GCC refused them on.

The following sub sections outline each GCC refusal reason together with the policy's definition and the applicant's response. We then give our opinion under each reply.

9.2.1. Refusal Reason NR1: Protection of Strategic Roads

9.2.1.1. GCC Definition

GCDP requires the planning authority;

> *"To protect the strategic transport function of national roads and associated national road junctions, including motorways through the implementation of the 'Spatial Planning and National Roads Guidelines for Planning Authorities' DECLG, (2012) and the Trans-European Networks (TEN-T) Regulations."*[107]

9.2.1.2. Applicant response 1:

The applicant's response to this refusal states;

> *"In the context of these guidelines, construction traffic related to the proposed development is consistent with the definition of strategic traffic within the guidelines in that it is "contributing to socio-economic development and the transportation of goods and products".*[108]

DoECLG defines strategic traffic as "*major inter-urban and inter-regional traffic … which contributes to socio-economic development, the transportation of goods and products.*"[109] The applicant quotes the second half and drops the first. Strategic traffic is the long-distance, through traffic a national road is

[105] 2026 add: 3.2.3.
[106] 2026 ADD 3.2.4.
[107] Galway County Development Plan 2022–2028, C6
[108] 2026 ADD: 3.2.3.3.
[109] Department of the Environment, Community and Local Government, Spatial Planning and National Roads Guidelines for Planning Authorities (January 2012), Issued under s.28 of the Planning and Development Act 2000.

built to carry – not HGVs and workers turning off the N65 into one site. The same definition puts the applicant's traffic in the category to be limited: the strategic function is maintained "*by limiting the extent of development that would give rise to the generation of short trip traffic on national roads*"[85] with an onus on developers to keep it on the non-national network.

9.2.1.3. Applicant response 2:

The applicant's response to this refusal states;

> *"The traffic survey undertaken on the N65 as part of preparing Chapter 13 of the EIAR recorded a two-way traffic flow of 3172 vehicles on 28 May 2024, which broadly approximates Annual Average Daily Traffic (AADT) at this location. Existing vehicle turning movements at the N65/L8763/L8760 junction are estimated (based on the traffic survey count data appended to the EIAR) to be approximately 130 per day. As detailed within the EIAR, the operational phase of the LDES development covered by the planning application is not anticipated to generate a measurable number of trips (15-20 operatives over three shifts). The development covered by the planning application does not therefore materially impact on the N65 or L8763 and is not therefore at variance with the National Policy or Policy Objective NR1. This is also of relevance to the TII submission of 09 August 2024 in relation to the planning application."*

A new development at a 100kph location engages NR 1 however few trips it generates. Putting development traffic through the existing N65 junction intensifies it, and the Guidelines guard against that intensification regardless of how modest the increase. This can be seen in the Appendix 9.6. Recent N65 Corridor Planning History.

The applicant also implies that volume has relevance to TII's submission. TII found that the development is;

> *"at variance with official policy in relation to control of development on/affecting national roads, as outlined in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012), as the proposed development by itself, or by the precedent which a grant of permission for it would set, would adversely affect the operation and safety of the national road network"*[110]

That "precedent" concern is, by its nature, independent of the developer's trip numbers.

9.2.2. Refusal Reason NNR2: Safeguard Regional and Local Roads

9.2.2.1. GCC Definition

GCDP seeks;

> "To safeguard the carrying capacity and safety of the County's regional and local road network."[111]

9.2.2.2. Applicant Response:

The applicant's response to this refusal states;

[110] Transport Infrastructure Ireland submission to GCC Ref: 2460845
[111] Galway County Development Plan 2022–2028, C6

> *"In relation to a road, the concept of carrying capacity refers to the maximum number of vehicles that a road network can accommodate before it becomes congested and inefficient. The impact of the proposed development on the carrying capacity of the local road network, in this case limited to the L8763 is fully covered within the EIAR Chapter and associated appendices. The proposed development has been shown to not impact on the carrying capacity of the L8763. Details in relation to the safety of the proposed development in relation to the L8763 has been previously covered above in relation to the RSA."*[112]

This is an incorrect statement by the applicant. The applicant's own RSA found that the road cannot carry the development's traffic without being rebuilt, which is itself a carrying-capacity point. It is also notable that the applicant failed to address the safety aspect of NNR2's definition in its response.

9.2.3. Refusal Reason DM Standard 28

9.2.3.1. GCC Definition

GCDP requires the following standards with regards to DM28: Sight Distances Required for Access onto National, Regional, Local and Private Roads;

> *"Vehicular entrances and exit points must be designed by the developer as part of a planning application with adequate provision for visibility so that drivers emerging from the access can enjoy good visibility of oncoming vehicles, cyclists and pedestrians. Where a new entrance is proposed, the Planning Authority must consider traffic conditions and available sight lines. Road junction visibility requirements shall comply with Geometric Design of Junctions… (DN-GEO-03060) for rural roads and Design Manual for Urban Roads and Streets for urban roads (including any updated/superseding document). Where substantial works are required in order to facilitate the provision of adequate sight distances lands within the sight distance triangles shall be within the control of the applicant and shall be subject of a formal agreement with the adjacent landowner which ensures certainty that the applicant is in a position to comply with the relevant condition and or standard."*[113]

9.2.3.2. Applicant's Response

The applicant's response to this refusal states;

> *"The design proposed as part of the planning application addresses existing substandard sight distances at both the L8763/site access and N65/L8673, and will bring the sight distances into line with the requirements of DM Standard 28 based on the specified design speeds. The design of junctions, as submitted by the Applicant, provided for the full implementation of the recommendations of the RSA. The proposals will result in a safer junction for all users. The junction will be subject to a Stage 2 audit prior to construction and a Stage 3 audit on completion of the development."*[114]

However, this response omits the withdrawal of consents from the adjacent landowners from the definition – which "*ensures certainty that the applicant is in a position to comply with the relevant condition and or standard"* i.e. design of junctions to facilitate sightlines. The applicant therefore does not have the ability to ensure compliance with DM Standard 28.

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[112] 2026 ADD: 3.2.3.3.
[113] Galway County Development Plan 2022–2028, C15
[114] 2026 ADD: 3.2.3.3.

The applicant then disputed GCC's citation of DM Standard 33(a). The standard requires a TTA, an RSA and an RSIA, each carried out by a suitably competent consultant and assessed for cumulative impact. An inadequate or incomplete TTA or RSA engages DM Standard 33(a) independently of the RSIA. Here, the Road Safety Audit was Stage 1 only and was prepared without collision data. The applicant's argument debates only whether an RSIA was required; it does not answer GCC's citation.

9.2.4. TII Submission

In response to TII's submission on the BESS at GCC level, the applicant claims that it did not need to provide TII with a design report;

> *"The requirement for design reports is covered within the TII publication 'Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes' (DN-GEO-03030). No change is proposed to the design of the N65 (for example in terms of the cross-section, road markings, signing, horizontal and/or vertical alignment or drainage); proposed works are limited to setting back of the existing fence-line outside of the required visibility splay and replacing it with a fence-line in accordance with the TII CC-SCD-00320 standard detail; and, existing road signing is to be relocated outside of the required visibility splay. As such, and in the context of DN-GEO03030, the design team consider the scheme to be "Type C" which does not require the preparation of a Design Report."*[115]

The applicant appears to have misapplied the standard. Type A-D classifications in DN-GEO-03030 apply to Road Safety Improvement Schemes (RSIS) - TII's own programme of safety remediation identified through road safety inspections. "Type C" is defined as a "*routine **Road Safety Inspection Scheme** that does not require design*", e.g. "*replace lighting pole with passively safe pole, remove hazard/tree from the clear zone*."[116]

A development-led access scheme is not a Type C RSIS. It is separately categorized as a **Local Improvement Scheme**. It is also the standard's first listed example of a scheme to which it applies; "*a commercial development being promoted by a private entity which accesses a National Road*"[92]. For Local Improvement Schemes the standard is explicit: such schemes "*require the preparation of a Design Report*"[92] to be submitted to TII.

In conclusion to the applicant's response to GCC's roads refusal, it's worth noting that these standards (NR1, NNR2, DM Standards 28 and 33(a)) were engaged by the BESS alone. Once the OCGTs and GIS are added, the cumulative impact on the national road is materially greater, and the threshold correspondingly higher.

9.2.5. Claimed Junction Permissibility

> *"Significantly and for context it is worth noting that Eirgrid plc was granted planning permission (Galway County Council Ref. 23/60849) to construct "Series Compensation Equipment" on a 12.5ha site directly east of the existing Oldstreet substation. ESBN, in its capacity as Transmission Asset Owner (TAO) has commenced construction of this project. The L8763 public road running from the development site beside the existing 400kV AIS substation to its junction with the N65 are being used by those constructing on their behalf. The use of the L8763 by ESBN for their construction traffic was permitted by Galway County Council and establishes a precedent and permissibility in principle for use of the L8763 and junction with the N65 in its current form."*[117]

[115] 2026 ADD: 3.2.3.4
[116] Transport Infrastructure Ireland, *Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes* (DN-GEO-03030, April 2021)
[117] 2026 ADD 3.2.3

The applicant relies on the EirGrid planning permission[118] to argue that use of the N65/L8763 junction in its current form is established as permissible. This cannot be the case as it is not in line with proper planning and sustainable development.

While both projects use the junction;

- EirGrid's EIAR states that sightlines "*have been confirmed to be met for the junction of the L8763 and the existing access road to the substation*"[119] - not the N65/L8763 junction.
- GCC Planner's report refers to same sightlines as EirGrid.
- EirGrid's red-line boundary was confined to its own site.
- The applicant's red-line boundary includes the N65/L8763 junction

It appears that the N65/L8763 junction's inadequate sightlines - which GCC refused this development on - were not assessed in the EirGrid process. This appears to be a shortcoming, not a finding of acceptability.

A junction sightline that was never assessed cannot have been found acceptable, and what was never found acceptable cannot establish a precedent. The EirGrid permission cannot displace the requirements of DM Standard 28 or the proper planning and sustainable development of the area.

9.3. Road Traffic Collisions

The applicant refers to legislation and guidance;

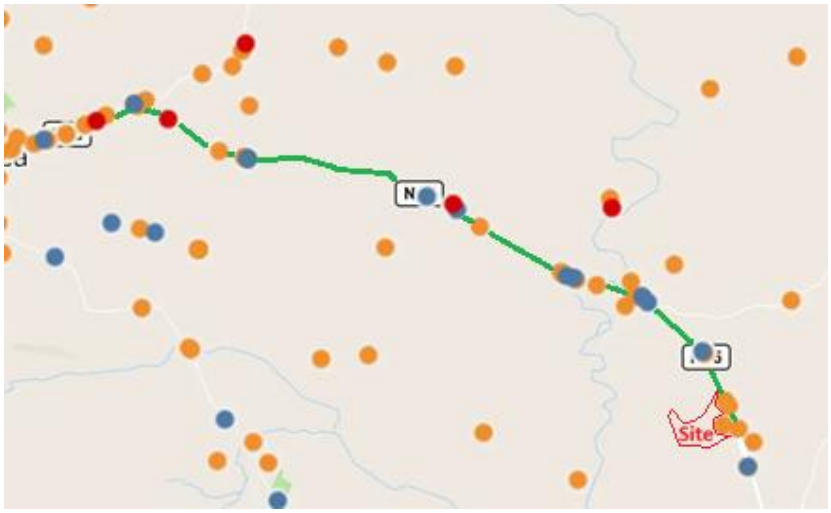
> *"Relevant guidance on assessing the impact of a development on roads, traffic and transport is contained within: the TTA guidelines produced by Transport Infrastructure Ireland (TII) and, the Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Impact Assessment Reports. The latter states that traffic impact should be assessed for the construction phase, operational phase, and for unplanned events such as traffic collisions (road safety)."*[120]

Traffic collision data is therefore vital, especially considering the scale of a project as proposed. The applicant goes on to say;

> *"Collision data is not currently publicly available due to ongoing issues in relation to GDPR and associated data-sharing agreements between An Garda Síochána and the Road Safety Authority."*[121]

The 2016-2024 collision data was forecast to arrive early this year and is publicly available[122] since May. The applicant was given until July 10th, by ACP, but in responding early submitted a road safety assessment without a collision-history baseline. Therefore, the road safety impact of the development remains unassessed, and the deficiency remains before ACP. RSA collision data is shown below;

[118] GCC Ref. 23/60849
[119] EirGrid plc, EIAR (GCC Ref. 23/60849)
[120] 2026 ADD: 13.3.1.
[121] 2026 ADD: 13.5.1.1.
[122] https://www.rsa.ie/road-safety/statistics/collisions#

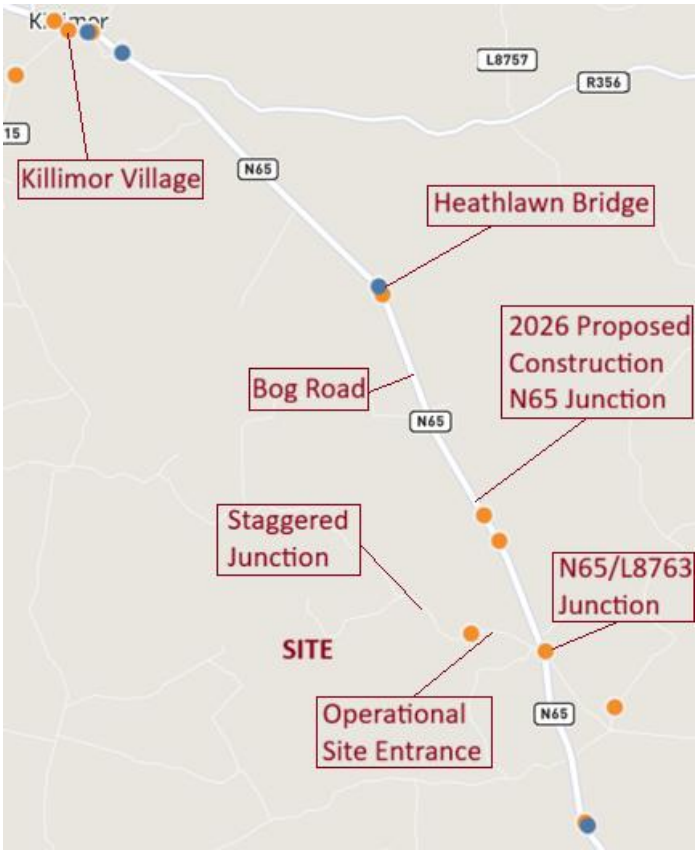


- Green – Applicant's proposed N65 route
- Red - fatal traffic collision
- Blue - serious injury traffic collision
- Orange - non-serious injury traffic collision

The RSA website carries a caveat that data from 2022 onwards is provisional and that some collisions in their dataset have no coordinates so therefore remain unmapped. In this context, the map is read as a minimum case scenario. The Kilmeen Cross & N65 Action Group's observation is found within our original OCGT submission, and as a standalone submission[123] to GCC. It illustrates accidents not captured by the RSA data and identifies black spots with reference to local junctions without hard shoulders.

Unfortunately, there has been a notable increase in collisions along the N65 since the closure of the data window, including two fatalities in the past eight months[124,125]. The Heathlawn-Green Door area in particular – a 4km stretch that traverses the broken Heathlawn bridge, bog road, and the applicant's proposed construction and operational junctions – has seen a concentration of collisions. A temporary culvert is due to be put in place this year to relieve single lane traffic measures which has deteriorated the road further. A localized RSA map of reported accidents is shown below;

[123] Kilmeen Cross & N65 Action Group submission: GCC Ref. 23/60849
[124] Galway Bay FM, N65 crash at Kilcooley
[125] RTE, N65 crash at Moyleen

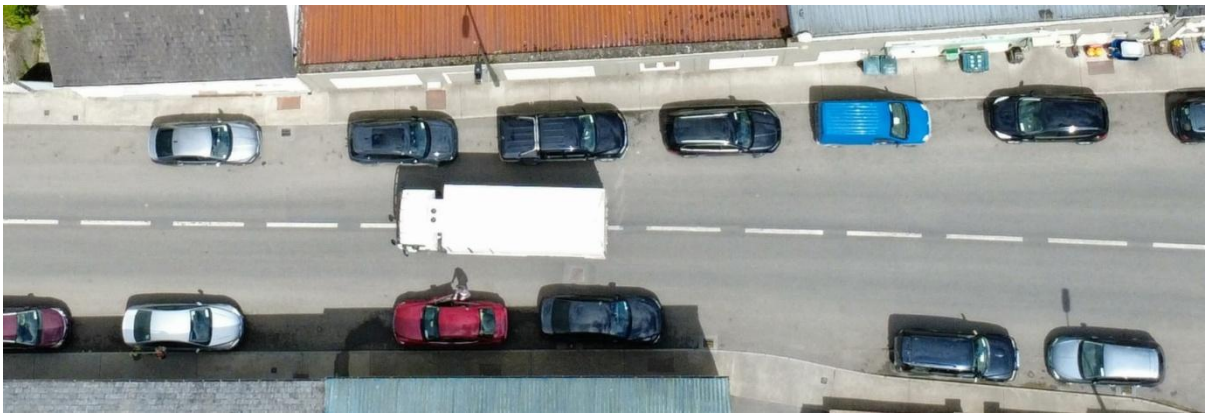


> *"The main haul route to the site is via the M6 motorway (Junction 1 - Kiltullagh), to the N65 and therefore does not pass through the towns of Loughrea or Portumna. The N65 then connects to the L8763 local road approximately 4km north of Portumna"*[126]

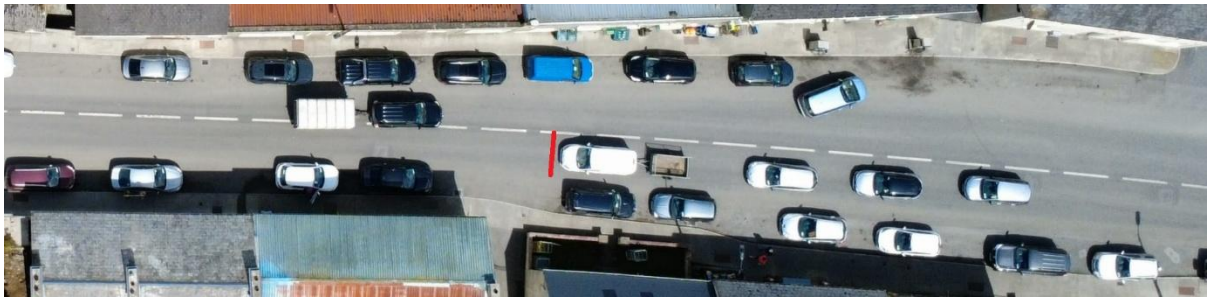
The applicant completely omits consideration of Killimor village, where collision data illustrates another concentration of collisions. There is a school to the immediate north of the village which accommodates approximately 150 students plus staff. The village itself is also a constraint on traffic flow in its own right: the route effectively narrows to a single lane through the village, presenting difficulty for ordinary traffic before any account is taken of the construction traffic that this development would route through it. This leaves a significant gap in its assessment route;

[126] 2026 ADD: 3.2.3.

One HGV traversing Killimor village *(red line indicates stoppage)*



Single lane traffic



The photos above represent daily life through Killimor. The drone photos were taken over a five minute period on an average day. The N65 is not a benign rural road onto which an additional 500 vehicles per day[127] is immaterial. It contravenes the strategic objective of the N65. It is a corridor with a recorded history of injury and fatal collisions. The applicant's proposed developments would add to years of significant new and intensified turning movements onto the N65 at one of the locations where the corridor's collision history is concentrated. A development that introduces additional turning movements at junctions on a road already carrying a fatal-collision record engages directly with the safety concern that NNR2, TII and the guidelines exist to protect, and on which GCC already refused this development.

9.4. Traffic Count

The applicant recorded 3,172 vehicles[128] along the N65 on 28th May 2024. To validate it they compare their survey data against a TII permanent counter;

> *"Data from the permanent Transport Infrastructure Ireland (TII) traffic counter site (TII traffic counter reference TMU N65 050.0 W) located on the N65 at Ballycasey, Co. Tipperary (13km to the south of Portumna) was compared for the traffic survey date of 28 May 2024, and average weekday traffic volumes over the previous 12 months (May 2023 to April 2024 inclusive). Traffic levels recorded on 28 May 2024 were approximately 1.8% higher than the average weekday traffic. On this basis, the data collected on 28 May 2024 is considered to be robust and no additional factoring has been applied to take account of seasonality"*[129]

[127] See section 9.5: Traffic Assessment of this observation.
[128] 2024 EIAR: App 13.1.
[129] 2026 ADD: 13.4.2.

This validation exercise confirms only that 28 May was a normal day at Ballycasey. It says nothing about whether the count taken at Coolpowra is accurate. For context;

- The Ballycasey TII traffic counter[130], from 2023-05-01 to 2024-04-30 as referenced by the applicant, shows an average weekday traffic of 3,998 vehicles. That is **26% higher** than the applicant's count at Coolpowra.
- In 2021, 12km northwest of the applicant's site on the same N65 corridor, Tynagh North OCGT recorded 3,741 vehicles[131] and used a pre-covid scale (x 1.12) to bring the result to 4,190 for 2024. It is notable that **even the 2021 covid traffic was 18% higher** than the applicant's 2024 count. The Tynagh model's traffic growth assumes ~4,500 daily traffic for

This means that the applicant's validating counter, and a comparable count on the same road, both record materially more traffic than the applicant's survey. As outlined above, the 1.8% seasonal check confirms only that 28 May was a normal day at Ballycasey and it does nothing to confirm the count actually taken at Coolpowra.

A 26% discrepancy against a comparable count on the same road is the kind of anomaly a robust traffic assessment would investigate and resolve, rather than accept.

It is also a shortcoming for the addendum to rely on the same traffic count conducted by a different consultant in 2024. Speed is just as important as the traffic count itself. The 2024 assessment was taken on a bend to the south of the N65/L8763 junction where vehicles were recorded travelling up to 126kph on a 100kph speed limit road. The new proposed entrance sits on a narrow stretch of the corridor known for its speed. There are two recorded traffic collisions on this stretch of the N65 in the RSA's 2016-2024 data. It is our view that an updated traffic counter at the newly proposed junction would have been a prerequisite for this assessment.

9.5 Traffic Assessment

[130] https://trafficdata.tii.ie/tfweekreport.asp?sgid=XzOA8m4lr27P0HaO3_srSB&spid=7830AECC16D6&reportdate=2023-05-01&enddate=2024-04-30

[131] Tynagh North OCGT: Traffic Chapter: https://tynaghnorthocgt.com/wp-content/uploads/2023/08/Chapter-14-Traffic.pdf

The applicant previously stated in the 2024 EIAR that "*approximately 200 vehicles will enter the site in the morning and leave the site in the evening. This is based on vehicle occupancy of two*"[132]. That is, "during *the peak hour periods*"[133]. It also states that "*It is estimated that up to 50 vehicles will enter the site each day delivering materials during construction*". This brings the total up to 500 vehicles per day according to the applicant's 2024 EIAR.

However, for the addendum's traffic calculations; *"A vehicle occupancy of 1.5 persons per vehicle has been assumed for construction related personnel and 75% of arrivals and departures have been assumed to occur within the peak hour"*[134].

The applicant has changed two assumptions that cancel each other out exactly — occupancy from 2 to 1.5, and a new 75% peak factor (1 ÷ 1.5 × 0.75 = 0.5, the same as 1 ÷ 2). On any given workforce, both produce the identical peak-hour figure. They cannot explain why the peak-hour count has fallen from the ~200 vehicles in the EIAR to ~110 now (or roughly 95 personnel vehicles). The only explanation would be a halving of the construction workforce which represents a reduction the addendum never acknowledges. The assessment's central input has been cut in half behind a screen of offsetting assumptions.

Simply put, 200 vehicles arriving during the morning peak hour represents;

- for the applicant's own traffic data's peak hour[135] of 249 vehicles [08:00-09:00] – an 80% increase in traffic, concentrated with turning movements / intensification at proposed N65 junction.
- for TII's Ballycasey N65 traffic data's peak hour[136] of 304 vehicles [08:00-09:00] – a 66% increase in traffic, concentrated with turning movements / intensification at proposed N65 junction.

200 vehicles leaving during the evening peak hour represents for;

- for the applicant's own traffic data's peak hour of 278 vehicles [08:00-09:00] – a 72% increase in traffic, concentrated with turning movements / intensification at proposed N65 junction.
- for TII's Ballycasey N65 traffic data's peak hour of 362 vehicles [08:00-09:00] – a 55% increase in in traffic, concentrated with turning movements / intensification at proposed N65 junction.

If the applicant was granted permission, using its own traffic numbers, for N65 during peak hours;

- 44% of the entire morning peak hour traffic will be coming to a stop on the straight to turn into the proposed junction.
- 42% of the entire evening peak traffic will be starting from a standstill at the N65 junction to adjoin a 100kph road.
- In that context, this proposal would result in that just shy of one in two peak hour vehicles turning into, or out of the proposed junction. It is a frightening thought for the safety of the road users and goes against the road's strategic function.

[132] 2024 EIAR: 2.5.2
[133] 2024 EIAR: 9.6.2.2.
[134] 2026 ADD: 13.5.1.2.
[135] 2024 EIAR: App 13.1.
[136] TII Traffic Counter N65 Ballycasey: https://trafficdata.tii.ie/tfweekreport.asp?sgid=XzOA8m4lr27P0HaO3_srSB&spid=7830AECC16D6&reportdate=2023-05-01&enddate=2024-04-30

The applicant states;

> *"Traffic impact is typically assessed in terms of the impact of the traffic generated by a development on the operation of the local road network. A '**material increase**' is considered to have occurred where a development exceeds threshold values including where: traffic to and from the development exceeds 10% of the traffic flow on adjoining local and regional roads; and traffic to and from the development exceeds 10% of turning movements at junctions with and on National Roads."*

Then the applicant, despite significant increases outlined above, goes on to say:

> *"The output shows that the proposed cumulative construction **will have no material impact on the operation of the L8763 or N65 at these junction locations**, and that both junctions will operate with a large amount of spare capacity and minimal queuing"*[137]

The applicant seems to reach this conclusion by substituting a different test - junction saturation (RFC) - while the statutory test under NR 4 / DoECLG (2012): 2.5 concerns itself with the creation and intensification of access on a restricted national road (irrespective of spare junction capacity). A junction may have ample capacity and still breach national-roads policy the moment a new or intensified access generates increased traffic as shown in Appendix 9.6. Recent N65 Corridor Planning History

This brings us to 2012 DoECLG's NRA TTA Guidelines[138];

> *"The TTA should be written as an impartial assessment of the traffic impacts of the proposed development and it should not be seen to be a "best case" promotion of the development. All impacts, whether positive or negative, should be recorded.*
>
> *…*
>
> *The level of detail included within the TTA should be sufficient to enable the planning authority and those making observations on the proposed development to follow all stages of the assessment process, to know what assumptions have been made and to arrive at a similar set of results and conclusions"*

On the applicant's own data this is a 72–80% intensification of turning movements onto a restricted national road via new and/or existing exits. That is exactly what GCC's NR 4 and DoECLG (2012)'s spatial planning guidelines 2.5 prohibit, and one for ACP to consider.

9.6 N65 Planning History

This section should be read in conjunction with Appendix 9.6. Recent N65 Corridor Planning History".

GCC[139] categorises planning applications into 1995-2015 and post-2015. Although N65 issues have long been established, our focus is on the post-2015 applications along with some particularly relevant applications from the prior window. We also additionally focus on some relevant peer cases.

[137] 2026 ADD: 13.3.4.1.
[138] DoECLG, 2012: 3.4: https://assets.gov.ie/static/documents/spatial-planning-and-national-roads-guidelines-jan-2012-382-mb.pdf
[139] Galway County Council Planning Search platform: https://www.eplanning.ie/GalwayCC/searchtypes

Across these decisions the planning authorities have applied a consistent policy. The content of each is set out in appendix;

- DoECLG (2012) 2.5 and 2.6;
- GCC Policy Objectives NR 1 and NR 4;
- GCC Policy and Objective TI 6 and TI 7;
- GCC Development Management Standards 18, 19(a), 20, 26, 27, 28 and
- GCC Development Management Standards 33;
- GCC Policy Objective RH 15, and;
- and the proper planning and sustainable development of the area.

9.6.1. Post-2015 Proposals

While sightlines and need are necessary prerequisites, the historical planning decisions on the N65 ultimately turn on a single decisive threshold: the intensification of access onto a restricted national road.

Precedent also carries significant weight. The approval of a proposal such as that under consideration would set precisely the precedent that the planning authorities and TII have repeatedly declined to set and would undermine the consistent application of national roads policy that both bodies exist to protect. It's worth noting that the applicant's proposal brings a level of intensification far beyond anything in the history of housing and agricultural refusals on this road.

The planning history on this road is consistent across every form of access;

- New entrances onto the N65 were refused (GCC 18/411; GCC 18/1748) onto the "restricted road" due to the "turning movements" and "intensification" they would introduce, together with the "undesirable precedent" they would create.

- Existing entrances onto the N65 were also refused regardless of whether sightlines were achieved. In GCC 21/523 the Council refused the "*additional traffic & turning movements*" and the "*unsubstantiated intensification of existing access*" on a "*restricted national route*" / "*Class 1 controlled route*," again citing the "*undesirable precedent*." The same recurs in GCC 22/60534 which was refused for the "*generation of increased traffic from an existing access*" that would "*endanger public safety by reason of traffic hazard*" on a "*strategic restricted route*," and again naming the "*precedent*."

All new, existing and even local roads in some circumstances were all held to the intensification standard.

ACP have also determined N65 planning applications, with the intensification threshold at the forefront of the decision. In GCC 18/849, GCC granted permission for a house on an existing access with housing need accepted - TII appealed - then ABP refused, finding that the proposal would "*endanger public safety by reason of traffic hazard*," would constitute a "*turning movement*" / "*intensification*," and would "***undermine and provide precedent for flexibility***" on these restricted roads.

One single permission stands out in the post-2015 window, and it is the exception that confirms the rule: GCC 23/61148 (ABP 319000) was granted by GCC – TII appealed - ABP Inspector recommended refusal, but ABP still approved, because it caused "*no intensification of the existing entrance*". The housing applicant was an active farmer using the shared entrance of an adjacent dwelling, who

established that he currently visits the farm "*up to 5 times a day to check on cattle*," and that in a "*no development*" scenario "*the amount of trip generation and turning movements in and out of the access will continue in any event*,". GCC's road section had previously acknowledged that because it generated no new traffic, it set no precedent for traffic-generating development. This opinion carried through, so the authorities could grant it without compromising traffic safety and unravelling a line of refusals. This case does not assist the Coolpowra applicant, it only underlines what the present applicant lacks.

The consequence for this application is one of consistency and fairness. The planning authority has refused a series of far more modest proposals (single houses and agricultural sheds) on this very stretch of road, **to preserve the safety of road users**, and to avoid the precedent that new or intensified access would set. It has done so even where sightlines were achieved, and a housing need was accepted

9.6.2. Relatable Context Proposals

i. Tynagh Energy (GCC 04/4554): Temporary Construction Road off N65

The closest precedent in terms of function and proposal: a gas-fired power plant (400MW CCGT) seeking a temporary construction access onto the N65. It was refused on two grounds

i) sightlines were not demonstrated,

ii) the site lay on a restricted route where the development objective was to control non-essential development, such that the proposal would "*contravene materially a development objective*"

The GCC Planner stated that:

> *"The proposed development would, if permitted,* ***contravene materially*** *a development objective as set out in the County Development Plan and would therefore* ***be contrary to the proper planning and sustainable development of the area****"*[140].

This decision established that on the N65, a power-generation construction access can be refused on the restricted-road policy, as otherwise it would be contrary to the proper planning and sustainable development of the area.

ii. Applicant A (GCC 25/60493): HGV works on the L8763.

Applicant A's L8763 site is approximately 900 metres northwest of the applicant's proposed staggered junction. It was refused under GCC's NNR 1, NNR 2 and DM Standards 27, 28, 33 (with flood zone concerns under FL 8) and because routing development traffic via the narrow L8763 would result in an **"*intensification of use of existing access onto the N65*."**

The L8763 was treated as a road that cannot safely absorb such traffic. This site is in the same townland on the same local road. The HGV-generating development was refused for intensification of N65 access at a fraction of the applicant's proposed scale.

iii. Applicant B (GCC 05/4009; GCC 06/1200): Derelict house adjacent to applicant's proposed N65 access.

Applicant B's site is the derelict dwelling adjacent to the applicant's proposed new N65 entrance. It was refused twice. Critically, "Applicant B" had secured sightlines (215m in both directions achieved through a third-party boundary consent) and was refused nonetheless, on the restricted national

[140] Tynagh CCGT: GCC Planner's Report: https://www.eplanning.ie/GalwayCC/AppFileRefDetails/044554/0

secondary route policy (DC Standard 1 of the then GCDP). It was considered be not proper planning and sustainable development for the area.

For context, at the applicant's current proposed N65 entrance, a modest derelict-dwelling renovation with full sightlines secured was refused twice on the restricted-road policy. The present proposal, at the same point promising to generate hundreds of thousands of turning movements per year of construction, cannot stand where the previous one fell.

iv. Applicant C (GCC 08/318) — newly proposed house directly opposite applicant's proposed N65 access.

Applicant C's entrance sits across the proposed new Coolpowra N65 entrance. It is similar to the case referenced in 9.6.1 of this observation (GCC 23/61148), in that "Applicant C" did not intensify an existing N65 access: the GCC planner's report specifically acknowledges that *"there will not be an increase in traffic movements"* as the applicant already lived in the lane and used the existing family cul-de-sac, had a substantiated housing need, achieved sightlines. This was determined under the older, pre-2012 plan.

At the applicant's own proposed entrance, a derelict-dwelling renovation with secured sightlines was refused twice. On the applicant's own proposed staggered-junction road, a HGV-generating development was refused for intensifying the N65 access. The closest functional peer, a gas-generation construction road on this same N65, was refused on the restricted-route policy and sightlines.

Every relevant comparator points to refusal; the present proposal seeks the intensification each of them was refused for, at the greatest scale ever seen on this corridor.

All of the above concerns other applicants on this road. The most directly relevant comparator is the applicant's own prior BESS refusal at GCC level. That proposal was refused for intensifying the N65, and it would have generated a fraction of the construction traffic that the wider development now proposed would produce. If the smaller proposal failed the intensification threshold, the present one cannot meet it.

9.7. DoECLG: Spatial Planning and National Roads Guidelines (2012)

The Spatial Planning and National Roads Guidelines, section 2.5, states that:

> *"The policy of the planning authority will be to avoid the creation of any additional access point from new development or the generation of increased traffic from existing accesses to national roads to which speed limits greater than 60 kmh apply.* ***This provision applies to all categories of development****"*

The same guidelines, section 2.6, goes on to state that:

> *"Planning authorities may identify stretches of national roads where a less restrictive approach may be applied, but only as part of the process of reviewing or varying the relevant development plan and having consulted and taken on board the advice of the NRA and having followed the approach outlined below"*

The applicant cites 2.6, claiming that it "*explicitly recognises that, in exceptional circumstances, a less restrictive approach may be adopted in the case of developments of national and regional strategic importance*"[141].

This means they seek a relaxation of the very policy that safeguards the safety and capacity of the national road network, while asserting that those same objectives will somehow be met, having been refused on the same safety grounds in 2024.

9.7.1. Developments of National and Regional Strategic Importance

The Guidelines do not permit the applicant to invoke a less restrictive access policy. It provides the planning authority with a range of factors to consider including the road itself, the relevant development plan and the NRA. Taken at a high level, the situation is as follows;

- GCC's and TII's history (Appendix 9.6. Recent N65 Corridor Planning History) both point to the N65 not being a suitable stretch of road to cater for new exits and/or intensification of any manner.
- The applicant's own road safety audit points to the L8763 not being a suitable road (see 9.1.3. N65/L8763 Status of this observation).
- The relevant plan has not identified the applicant's location, or any part of the N65, as one where a less restrictive approach could apply. It has instead designated a strategic economic corridor 40km away from the applicant's site, bounded by motorway and rail infrastructure (see 9.7.2 of this observation).

The applicant's reliance on "strategic importance" does not assist it. SID status under section 37A is a planning-process classification determining which body decides the application; it is not the same as the "National and Regional Strategic Importance" roads-policy category in DoECLG 2.6.

DoECLG 2.6 also considers "*where the locations concerned have specific characteristics that make them particularly suitable for the developments proposed*". The applicant's site is 25km away from the gas transmission network per the Applicant's EIAR[142]. See 5.6.3. Castlelost FlexGen OCGT (Westmeath CC: 2360442) and 5.6.4. Lumcloon Energy OCGT of this observation, where the applicant classifies sites situated more than 20km away from the natural gas transmission system as "Unsuitable / Constrained". It would be difficult for the planning authority to reconcile a finding that the site is "*particularly suitable*" under DoECLG 2.6 with the applicant's own historical analysis describing it as "*unsuitable*". We had to use historical analysis as the applicant has provided no such analysis for this site, despite twice being asked by ACP.

DoECLG 2.6 sets out a range of criteria for consideration of the planner. We have provided a table to illustrate each criterion's bearing on the applicant's proposal below;

> *"In considering whether exceptional circumstances arise in the development plan and local area plan context, the planning authority and the NRA should take the following matters into account:"*

	DoECLG, 2012	Bearing on applicant's proposal:
1	*Relevance/appropriateness in supporting the National Spatial Strategy and Regional Planning Guidelines (now NPF / RSES).*	**AGAINST:** GCDP 2022-2028 specifically supports a designated strategic economic corridor elsewhere and is based on the

[141] EIAR ADD: 3.2.4.
[142] 2024 EIAR 1.3.

	DoECLG, 2012	Bearing on applicant's proposal:
		National Development Plan and Regional Spatial and Economic Strategy (RSES). (see 9.7.2 of this observation). See 4.2. Projected new gas-fired generation in Ireland for context on other policies / needs.
2	*the requirements of other planning guidelines issued under section 28 of the Act including the Retail Planning Guidelines (2005), which include a general presumption against large retail centres being located adjacent or close to existing, new or planned national roads, including motorways*	Not addressed by the applicant. The named example (retail) does not directly apply, but the factor requires consistency with all s.28 guidelines — including the National Roads Guidelines themselves, which 2.5 prohibits the applicant from escaping.
3	*The nature of the proposed development and the volume of traffic to be generated by it.*	**AGAINST:** This project proposes a multi-year 55%–80% increase in peak-hour turning movements onto the N65 together with a permanent operation intensification thereafter. Historical planning considerations (see appendix 9.6) together with relevant policies within.
4	*Implications for the safety, capacity and efficient operation of national roads.*	**AGAINST:** See 3 above. Also new junction on a 100kph road; reliance on a ~3.5 m local road that its own road safety audit report advises is not up to standard / HGV issues.
5	*Any plans for future upgrades of national roads / transport infrastructure.*	N/A - There are no stated plans to further upgrade the existing road network in the area. The condition of the existing road network is key.
6	*The suitability of the location compared to alternative locations.*	**AGAINST —** no alternative location analysis has been provided by the applicant despite twice being asked by ACP. See section 5. Response to Alternatives & Site Justification.
7	*The pattern of existing development in the area.*	**AGAINST —** Greenfield site with no history of energy generation. "Unzoned and unserviced" area per ACP in pre-application planning meetings.
8	*Satisfactory details of demand-management measures.*	None provided.
9	*Acceptable funding/delivery proposals for any required road improvements.*	Not addressed.
10	*The precedent that could be created for cumulative development and implications for the national road network.*	**AGAINST —** a relaxation here sets the precedent the Guidelines and the County's refusal record exist to prevent. This is repeatedly referenced by the planning

	DoECLG, 2012	Bearing on applicant's proposal:
		authority in Appendix 9.6. Applicant also suggests follow-up projects to come[143]

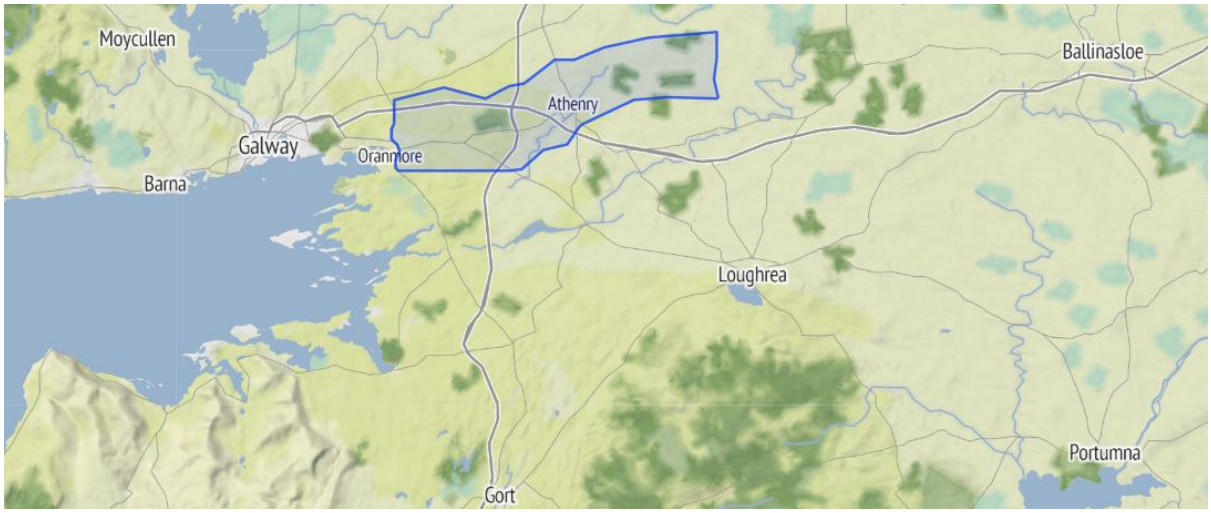
Note: the "lightly trafficked" (<3,000 AADT) avenue for DoECLG 2.6 does not apply to applicant's site.

9.7.2. GCDP 2022-2028 – Strategic Economic Corridor (i.e. Plan-led)

Section 1.5 of the same DoECLG guidelines states that;

> *"**Development should be plan-led**: The planning process for national roads has taken account of appropriate future development patterns and requirements, including the implications of the National Spatial Strategy and Regional Planning Guidelines, as the NRA has adopted a 20 year design horizon as a basis for traffic capacity requirements. Accordingly, in preparing development and local area plans, planning authorities must assess the trip generation aspects of any **land use zoning objectives** and how such trip generation is to be catered for, promoting the use of sustainable modes, while **protecting the strategic function of the national roads network**."*[144]

The GCDP 2022-2028 has designated a strategic economic corridor[145] (SEC) in which it seeks to cater for the type of development that the applicant proposes;



> *"The SEC runs east from Oranmore to Athenry and is part of the long-standing economic development strategy for the county which has identified priority areas for economic development. The alignment of the corridor is based around that of the Galway to Dublin railway line and the M6 road corridor*
>
> *…*

[143] 2026 ADD: 3.1.

[144] Department of the Environment, Community and Local Government, Spatial Planning and National Roads Guidelines for Planning Authorities (January 2012), Issued under s.28 of the Planning and Development Act 2000.

[145] GCDP – Strategic Economic Corridor: https://data.gov.ie/en_GB/dataset/county-galway-strategic-economic-corridor-cdp-2022-2028/resource/4bb328b0-e33a-4ba7-9ab9-313ffaf1f0e8

> *The RSES makes reference to this Oranmore – Athenry Corridor as an example of an opportunity for economic development that should be promoted and to assist in the identification of suitable sites. This SEC should also be serviced to high international standards to attract further FDI and indigenous industries which would further develop the SEC as a strategic location with readily accessible infrastructure".*[146]

GCDP's Objective EL 2 states:

"In relation to the Strategic Economic Corridor the Planning Authority will take steps to:

- *Reserve lands to **support nationally and regionally significant activities and to attract specialist enterprise development that is large scale of high value**;*
- *Facilitate opportunities for employment and **technology-based uses**;*
- *Ensure that development is compatible with the enhancement, preservation and protection of the environment and cultural resources recognised within the corridor;*
- *Identify sites of adequate size and location to accommodate necessary infrastructure or support activities which would not be appropriate in proximity to centres of population or sensitive environments or environmentally sensitive economic activities"*

For context, Bord Gais Energy's Cashla OCGT (5.6.2. Bord Gáis Energy (BGE) Cashla OCGT (ACP-324113)) conducted phase two of their alternative sites investigation within this SEC corridor. GCDP's Objectives EL 4 and EL 5, in consultation with all relevant stakeholders (including the NTA, TII and Irish Water) highlights specifically the former Galway Airport and Parkmore Industrial Estate respectively as potentially suitable destinations for projects like the applicant's proposal. The GDCP's SEC was part of a wider strategic plan prepared through following national and regional plans, policies and guidelines such as the National Development Plan, Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region 2020 and the Galway Transport and Planning Strategy.

9.7.3. Misclassification

The applicant cites the BESS and synchronous condenser proposal as part of a collective SID proposal;

> *"The EIAR and EIAR Addendum has been prepared to support a reserve gas-fired generator nominal capacity of 1,155MWe (a Strategic Infrastructure Development (SID) under Section 37A of the Planning and Development Act 2000, as amended) together with a grid-connected energy storage system (comprising a Battery Energy Storage System (BESS) and synchronous condenser), which will connect to the national grid via a proposed 400kV GIS substation qualifying as electricity transmission infrastructure and a separate Section 182A SID. Collectively, these elements fall within the Energy Infrastructure classes listed in the Seventh Schedule for the purposes of Sections 37A and 182A and therefore constitute strategic electricity infrastructure of national and regional importance, contributing materially to security of supply, system stability and the integration of renewable generation on the national grid."*[147]

This is incorrect. They are an S34 refusal on an S37 appeal. The applicant appears to piggyback one development onto its perceived classification of another to promote a less restrictive approach. The applicant then states:

[146] GCDP 2022-2028: 5.7.1: https://consult.galway.ie/en/system/files/materials/6962/Chapter%205%20-%20Economic%20Development%2C%20Enterprise%20and%20Retail%20Development.pdf
[147] 2026 ADD: 3.2.4.

> *"Having regard to the above, the development proposed is considered to clearly meet the criteria for a development of national and regional strategic importance within the meaning of Section 2.6 of the Spatial Planning and National Roads Guidelines. In this context it is appropriate to consider a less restrictive policy stance in respect of access to the adjoining national secondary road, while still ensuring that the design of any junction or access arrangement safeguards the safety, capacity and strategic function of the national road network in accordance with the Guidelines."*

The applicant appears to tell ACP to do the applicant's job (the safe design of the junction) while also telling ACP how to do its own (apply a less restrictive approach).

With the consideration of matters raised in 9.7.1-9.7.3, we strongly disagree with the applicant's proposition stating that its development warrants a less restrictive approach.

9.8. Other Roads & Traffic Points

9.8.1. Heathlawn

As referenced in 9.3. Road Traffic Collisions); Heathlawn bridge, along with the road itself presents a material issue for the applicant.

In March 2026 Galway County Councillors received an update about the Heathlawn bridge. It states that the road to the immediate south is built on bog/peat type soil. A 900mm diameter concrete culvert provides a crossing for the water course at this location, constructed with parapets and headwalls. There are no verges or side slopes on either side of the carriageway and the drop-off is up to 3.2m at the culvert location. A collision in 2024 (on record in map above) caused significant damage to the headwall, engineers found wash-out and void formation under the existing pavement.

The structure of the pavement is also weakened at this general location. There is evidence of separate longitudinal cracking (>10m) along both lanes about 70m south of the culvert location. GCC and TII are in the process of resolving the incident, potentially placing a temporary culvert to reopen the second lane of traffic while their engineers discuss longer term solutions.

> *"No significant visual defects within the immediate vicinity of the proposed N65/Access Road T-junction were observed during a site visit on 28 October 2025 by Trasky"*[148]

The applicant's addendum makes positive generalised structural assumptions about the N65 throughout. Yet it omits Heathlawn Bridge, situated approximately 1 km north of the proposed entrance on the applicant's own proposed haul route, where a traffic-signal control has been in place since 2024.

Considering the development's construction traffic and abnormal loads, it is a material matter for the road-structure assessment. Its omission means the addendum's conclusion on road structure cannot be relied upon as complete. A planner cannot be satisfied, on the assessment provided, that the proposed haul route can accommodate the development's construction traffic - neither at Heathlawn bridge, or elsewhere along the N65's pressure points. All this analysis appears to be deferred;

> *"Should permission be granted for the development, a specialist haulage contractor will be engaged to liaise with relevant highway authorities and secure appropriate permits for the transport of any abnormal loads."*[149]
>
> *"Depending on the axle loading of construction related vehicles and/or abnormal loads, further tests to determine the structural strength of the L8763 carriageway, or further visual inspections prior to and post construction, should be undertaken, if necessary, in agreement with Galway County Council."*[150]
>
> *"The level of traffic anticipated to be generated by the GIS project would not be anticipated to result in a measurable impact on the road structure of the N65".*[151]

The GIS, as outlined in section 2.1 of this observation, would be in the region of 550-tonnes[152]. We ask ACP to consider the impact this would have alone on the Heathlawn bridge and road. The assessments must inform the decision - not follow it. Sean Canney TD's submission on the applicant's project to GCC in 2024 highlighted how "*the lack of detailed transport and logistics planning shows insufficient*

[148] 2026 ADD: 13.5.1.2.
[149] 2026 ADD: 13.4.
[150] 2026 ADD: 13.9.1.
[151] 2026 ADD: 13.4.3.1.2
[152] Section 2.1 of this observation

preparation and risk assessment". He has since been appointed Minister of State for International and Road Transport, Logistics, Rail and Ports.

9.8.2. Stale Assessments

We note that these timeline predictions are reproduced from the 2024 EIAR and do not reflect reality. It would also have been considered good order for the applicant to update the "traffic growth" chapter to match newly proposed construction years.

> *"Whilst it is predicted that the reserve gas-fired generator and GIS projects will be operational in the second half of 2028"*[153]

9.8.3. Road Traffic Act

The applicant suggests that speed limits may be reduced;

> *"the N65 is formed from a single carriageway with a width of approximately 7.2m, bounded by shoulders. The posted speed limit on this section of the N65 is 100km/h which is consistent with current national guidelines on setting speed limits, but as a national secondary road may be reduced to 80km/h following the implementation of the Road Traffic Act 2024"*[154]

However, as confirmed by the Minister of State at the Department of Transport on 14 January 2026, the National Vehicle and Driver File Bill 2025 will allow local authorities to retain a 100 km/h limit on national secondary roads.[155] In any event, a new junction onto a road where recorded speeds already substantially exceed the 100kph limit remains a heightened collision risk that the assessment does not address. One cannot assess this particular matter based on an assumption.

9.8.4. Landowner Consent at the time of Planning Application

> *"In terms of the withdrawal of relevant third-party agreements and consents referred to in some submissions, we are advised that the subject application required confirmation of landowner consent at the time of the submission of the application (Ref. Article 22(2)(g) of the Planning and Development Regulations 2001 (as Amended)). This requirement was met and evidenced within the application at that time and the application complies with the requirements of planning legislation."*[156]

Reality says otherwise.

- GCC's BESS rejection referenced the consent withdrawals
- ACP's FI requests instructed that site access arrangements for construction **and operation** stages are "*to include all necessary consents as required from landowners*".

As evidenced in the submissions to GCC (and possibly ACP), the landowners were not provided the true nature of the projects by the applicant when signing consent for their required audit works.

The applicant now claims to planning authorities that it only "*required confirmation of landowner consent at the time of the submission of the application*".

[153] 2026 ADD: 13.4.3.
[154] 2026 ADD: 13.4.
[155] https://www.oireachtas.ie/en/debates/question/2026-01-14/31/
[156] 2026 ADD 3.2.3.

A consent given without disclosure of the development's true nature, and since withdrawn, does not provide a sound basis for the application, and a development dependent on consents the applicant no longer holds cannot accord with the proper planning and sustainable development of the area.

9.8.5. Esker

The applicant's proposed staggered junction is situated along an esker ridge, as evidenced by the contours in the mapping. This esker ridge is a notable standout feature of the local area, and the GCDP also recognises "*the unique importance of Galway's esker landscape deriving from its geological, zoological, botanical, scientific and landscape value*"[157].

Policy Objective ESK 1 seeks to "*protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county*", when assessing applications.

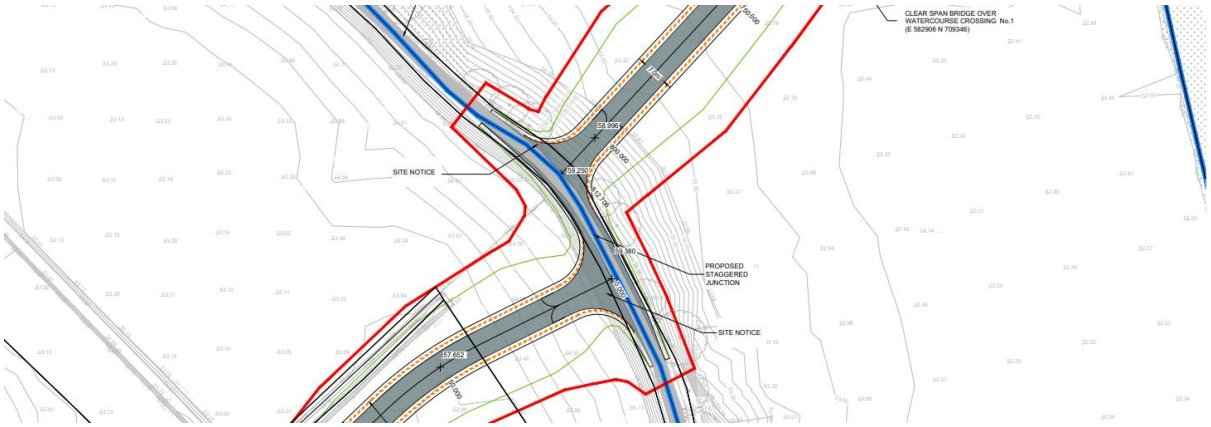
It goes without saying that the proposed staggered junction would do even more damage to this esker ridge than the applicant's original 2024 proposal.

9.8.6. Staggered Junction

It is noteworthy that the staggered junction's works and scale of fill are not dealt with in detail in the addendum, however, given that;

- the L8763 has been identified as unsuitable in its current capacity in the applicant's own 2024 road safety audit;
- it lies on a narrow Esker ridge,
- the EPA maps[158] indicate a water flow directly beneath the very point the applicant intends to construct upon this ridge,

It gives great cause for concern. The contours indicate that the fields either side of the esker are currently ~52 OD, while the existing road is 59.38 OD. This involves a significant climb of over 7 metres across an extended incline at either side of the road. The scale of these works has not been addressed in the EIAR, and by extension the potential effects on the hydrological pathways;



[157] GDCP 2022-2028; 10.13.2
[158] https://gis.epa.ie/EPAMaps/

It would be a monumental undertaking that goes against 9.8.5 above that gives great concern for both road and environmental safety. The photo below gives insight to the foundation of the very same esker L8763 road, in the field adjacent to the staggered junction;

9.8.7. HGV – Significant Underestimation

A relevant conclusion of the ground chapter's Section 10.1.4. Cut & Fill Calculation Errors) is outlined below;

The EIAR estimates a total fill requirement of 61,179.79m^3 for the original project's ground fill.

After careful review of the site investigation and the proposed construction drawings, the actual fill requirements appear to be approx. 269,662.54m^3. That represents an additional volume of 208,482.75m^3 on the fill alone. The applicant's EIAR fill volume appears to satisfy only 22% of the required amount.

Instead of 7,647 HGVs for fill, we have calculated 33,707 HGVs (i.e. 67,414 movements) – 441% of the EIAR's fill estimation.

Note that these numbers (i.e. EIAR fill and corrected fill) exclude:

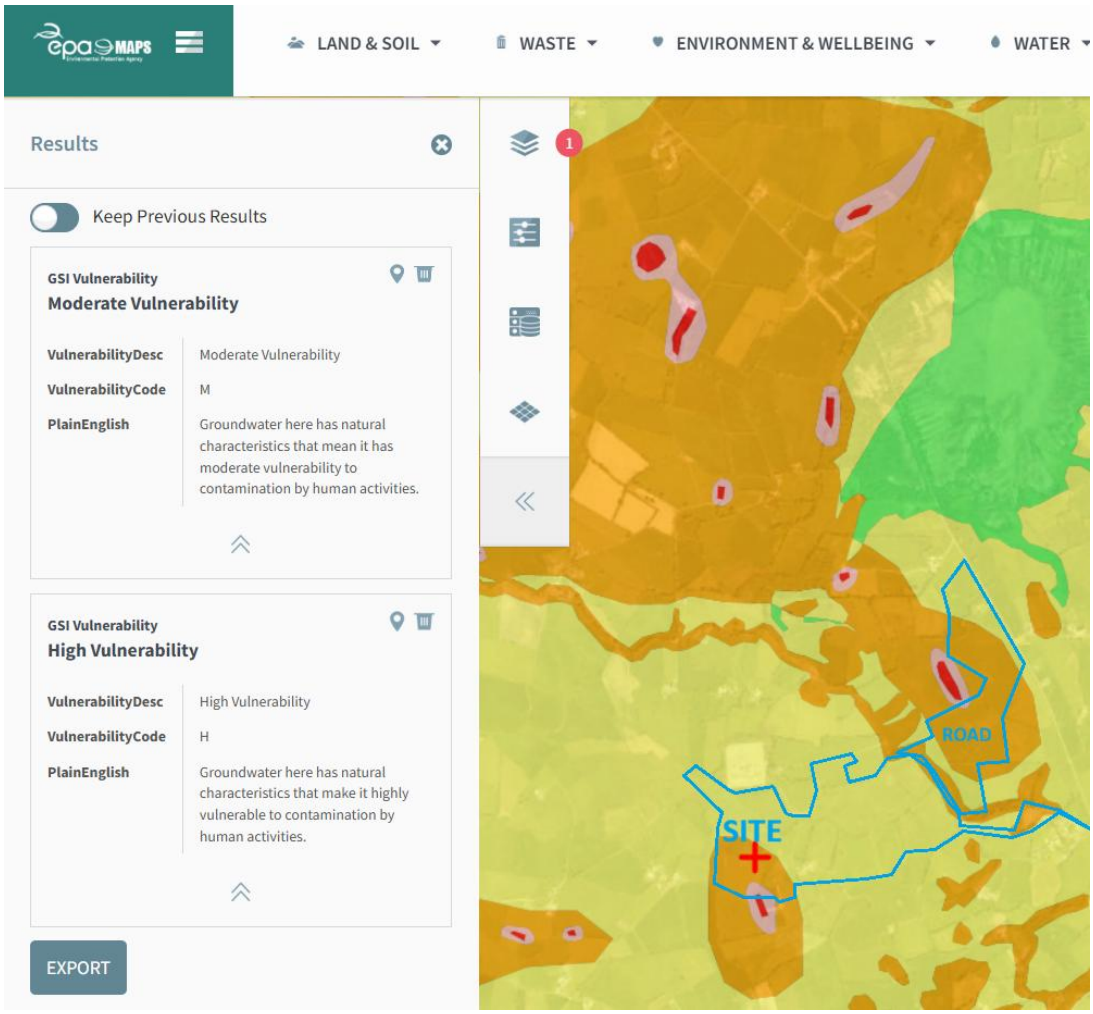
i. the further 9,153 HGV's as deduced from EIAR calculations (for non-fill related matters), which we cannot assess without sufficient EIAR data.
ii. HGV's for the proposed **new** access road construction, which remain undetermined according to addendum.

10. Site Investigations

The absence of any substantial ground investigation within the applicant's initial submission, quite correctly drew a further information request from the planner. It is of note that the ground investigation works now submitted, were carried out between June - October 2024[159]. This was just a few months after the submission of the initial planning application and pre-dates ACP's FI request by close to eighteen months. This raises two issues;

i. much of the requested further information has not been provided.
ii. submitting a planning application, then doing the ground investigations thereafter, which were eventually requested in a further information request, is an implicit acknowledgement that the applicant submitted an incomplete EIAR in 2024 to the planning authority which did not contain, at the point of submission, the baseline information the EIA process requires. This was seen in Coole Wind Farm (ACP-309770-21), where ACP refused permission on the basis that substantive analysis assembled after the fact.

According to EPA; the proposed site and particularly the main proposed works area is vulnerable to contamination by human activities;



[159] 2026 ADD: 7.6.2.4.

> *"Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. … All land area is assigned one of the following groundwater vulnerability categories: Rock near surface or karst (X) Extreme (E) High (H) Moderate (M) Low (L). Indicates the likelihood of groundwater contamination. Aids land-use management. Helps in the choice of preventative measures and enables developments, which have a significant potential to contaminate, to be located in areas of* ***lower*** *vulnerability"* (EPA's GSI definition)

With reference to EPA's map (above) on GSI vulnerability – we note that;

- the OCGTs are situated on High Vulnerability ground: "***Groundwater here has natural characteristics that make it highly vulnerable to contamination by human activities***" [160];
- Extreme and Karst vulnerability levels are contained within the site;
- The entire esker ridge road (L8763), which the applicant intends to significantly modify with a staggered junction, is highly vulnerable to contamination by human activities;
- Most of the newly proposed access road can be seen as highly vulnerable to contamination by human activities;
- The parts of the site not "highly/extremely" vulnerable, remain moderately vulnerable to contamination by human activities. The EPA's stated purpose of their map is to help developments which have a significant potential to contaminate, to be located in areas of "lower" vulnerability, which is indicated in green on their nationwide map.

10.1. Ground Investigation Concerns

The Ground Investigation Report (Coolpowra Galway 09-12-24 Rev B, Ground Investigations Ireland Ltd) does not constitute an adequate geotechnical or hydrogeological basis for a development of this nature, scale and risk profile. The report is preliminary in character, explicitly disclaims design status, contains material gaps, and includes a bedrock formation reference that is geographically inconsistent with the site.

Among the specific deficiencies are:

- **Dynamic foundation design**. The report provides allowable bearing capacities but does not address the dynamic foundation design required for rotating machinery (OCGTs), for which recognised practice (ACI 351.3R-18, DIN 4024) requires analysis the report does not contain.
- **BESS settlement and containment**. A 224-container battery array is settlement-sensitive and raises containment requirements (NFPA 855, IEC 62933, BRE SD1) that the report does not address. 13
- **Made ground, dewatering and groundwater**. Dewatering and groundwater characterisation are under-developed for the excavation and foundation regime proposed (EC7 / IS EN 1997; CIRIA C753).

[160] https://gis.epa.ie/EPAMaps/ - Land & Soil -> GSI Vulnerability

- **Soakaway performance**. Infiltration performance is not adequately demonstrated for the drainage strategy relied upon.

- **Bedrock formation inconsistency**. The report references the Lucan Formation, which is geographically inconsistent with this Galway site. The formation assignment requires verification against the GSI bedrock mapping and against borehole core descriptions, or correction.

- **Self-disclaimed status**. The report states that its recommendations 'should be verified in the design of the proposed buildings, using the full details of the loading conditions' — i.e. the author states the report is not a design document. If it is presented as adequate to demonstrate technical feasibility for OCGT + BESS foundations, that representation conflicts with the report's own terms.

The report is competent as a preliminary ground investigation but is being asked to do work it explicitly disclaims. For a development of this scale, the foundation, drainage, dewatering and excavation regimes are all under-characterised.

ACP seems to share this concern. The FI request states that, notwithstanding Article 23(6) of the Regulations, the scale of the foundations and structural requirements set out in EIAR Section 2.5.1.2 is considered insufficient for developments of the size and scale proposed, and requires comprehensive site investigations to characterise the geological profile, identify the bedrock, and establish the characteristics of the overlying soils and the depth of the water table (FI item 1d). That is the same inadequacy this ground identifies, reached independently.

The applicant must be required to provide a design-stage geotechnical assessment to EC7, including dynamic foundation analysis for the OCGTs and settlement/containment analysis for the BESS. Furthermore, the Lucan Formation reference should be verified against an independent source e.g. GSI mapping and borehole log and the groundwater, dewatering and infiltration characterisation must be completed for the purposes of assessment.

A summation of the further issues follows. Greater detail of this summary is provided thereafter.

- Lack of Site Investigation within Additional Site Area.
- Proposed Foundation Concerns.
- Failure to Address Site Investigation Concerns (e.g. flooding).
- The cut & fill calculation appears to be deeply flawed.

10.1.1. Lack of Site Investigation within Additional Site Area

There is now a **complete absence** of any site investigation works on the newly proposed access road. This proposed access is within an extended site boundary area of approx. 70 acres. The site extension is north-east of the original site boundary and much closer to an operational peat bog.

The suggested road construction is not based on any information about the site. Given that the proposed transformer for this development is documented in section 2.1 as weighing circa. 550 tonnes, standard road construction details are unlikely to apply. Making that assumption in the complete absence of any ground investigation is not good practice.

By way of example, the EIAR (pp 2-14) suggests there may or may not be a requirement for capping in the road make-up. It is a standard TII detail that road construction contains a capping layer beneath

the sub-base. Furthermore, the undulating nature of the land in question, creates significant areas of fill as identified on the drawings provided. Chainage 750m of the proposed road shows a fill area of just under 4m. In this instance, not only will capping be required, but meters of imported fill will also be needed. Considering this unusual, but obvious, road make-up necessity, the EIAR addendum does not appear to have analysed the required road make-up in any detail.

10.1.2. Proposed Foundation Concerns

> *"Notwithstanding Article 23(6) of the PDR's, the scale of the foundations and the structural requirements for the proposed development as set out in Section 2.5.1.2 of the submitted EIAR are considered insufficient for developments of the size and scale proposed. Provide further clarity on same."*[161]

The applicant directs ACP to section 2.1 of the latest EIAR in response to the above request for further information. Therein the developer confirms that detailed analysis of the proposed foundations has not yet been carried out.

> *"Typical preliminary pad sizes for industrial buildings are in the order of 1.8m x 1.8m x 0.6m, with final dimensions confirmed at detailed design change following completion of structural analyse and geotechnical verification."* [162]

The developer's assumptions regarding the adequacy of pad foundations are made without analysis of anticipated loading and the capacity of the ground to support it. Contrary to this assumption, much of the ground investigation provided suggests that the proposed pad foundations will not be sufficient.

- The plate bearing tests provided all confirm the current ground to be of poor bearing capacity and at the very least, requiring significant ground stabilisation to be built upon. The developer has not offered any stabilisation processes for consideration in its submission. The best of the plate bearing results suggest suitability for moderate loads only. Loading information for the proposed development does not appear to be provided. We know that abnormal loads weighing north of 500 tonnes are proposed for the site. This is exceptionally heavy loading over a relatively small area. Pad foundations are not the best solution for spreading loads. There appears to be large scope for the proposed foundations to require significant change.

- Notwithstanding the above, plate bearing tests 05, 09, 10 and 12 show incredibly poor results. The results are poor to the extent that soil stabilisation is unlikely to be successful and piling may be required.

- Dynamic probes 07, 11, 15, 16, 26, 27, 31, and 32 all show inadequate ground at depths of 1.5m up to 3.2m below existing ground level.

- Boreholes 01 to 05 show inadequate ground up to depths of 2m.

- Made ground of up to 2.8m deep was encountered at trial pits 07, 08, 14, 17, 21 and 29.

The above suggest pad foundations will not be appropriate. The developer has failed to allay the concerns raised over the proposed foundations.

[161] 2026 FIR
[162] 2026 ADD: 2.1.1.2.

10.1.3. Failure to Address Site Investigation Concerns (e.g. Flooding)

> *"Please undertake comprehensive site investigations that adequately inform consideration of the baseline environment and understanding of existing subsoil, geology and hydrogeology e.g. the geographical profile of the site, identification of bedrock, characteristics of the overlying soils and depth of water table etc"*[163]

While the developer has carried out additional site investigation works, it appears to ignore worrisome results for the proposed development. It is notable that the proposed structure and its levels have not altered at all despite:

- The recommendation from "*Apex Geophysics*" geophysical investigation report (Dec '24) stating that trial excavations should be carried out on bedrock to determine its excavation requirements. i.e. will it be dug out, ripped out, mechanically broken out or blasted out. The developer has confirmed that site investigation works ceased in October 2024. This recommendation was made in December 2024, so no such trial investigation was carried out.

- That same report identifies rock that would require heavy breaking/blasting ranging from 41.8mOD to 52.8mOD. Most of the proposed buildings have a finished floor level of 51-52mOD. Therefore, the potential for encountering this hard rock would be likely during construction. Noise and vibration pollution implications have not been considered in the developer's EIAR and have not been adequately screened out.

- Groundwater monitored in all the boreholes show a water table of 1.5m to 2.27m below ground level. The developer is suggesting a cut of 1.2m across the site. That will be insufficient in many areas for reasons explained further on. Therefore, excavations below the water table are very possible. No details on groundwater management, including pumping have been provided. The photo below is included in the initial EIAR Vol 3 appendix 14. At its own admission, ground conditions are waterlogged. Despite this, no changes have been suggested for the development.

Plate 8: Waterlogged conditions in low lying land in southern extent of site (Field 12) with drumlin in background (Field 13), looking east.

[163] 2026 FIR

- Flooding concerns remain after the updated Flood Risk Assessment in Appendix 8.2 of the latest EIAR. Table 18 is of particular interest. It clearly acknowledges that the proposed site is not an area deemed suitable by the Galway County Development Plan 2022-2028.

Table 18 – Requirements of Part 1 of the Justification Test

Requirement		Site Specific Response
Part 1		
	The subject lands have been zoned or otherwise designated for the particular use or form of development in an operative development plan, which has been adopted or varied taking account of the flood risk guidelines.	According to the Galway County Development Plan 2022 – 2028 the application area is not zoned. The area can be described as rural with agricultural lands dominating and with linear ribbon development along the L8763. The zoning objective for Rural Areas (RA) is to protect and promote in a balanced way, the development of agriculture, forestry and rural-related enterprise, biodiversity, the rural landscape and the built and cultural heritage. Residential development is permitted within RA, subject to compliance with the Rural Settlement Strategy.

The Flood Risk Assessment: Section 4.4 identifies four structures that will require Section 50 permissions. Despite this, no engagement has taken place with Inland Fisheries Ireland[164] or other state bodies that will have significant impact on flooding assessment. The photos below highlight the flooding concerns that exist both in and around the proposed site.

A view towards the immediate west of site, with applicant's lands at middle foreground

[164] 2026 FIR: ACP requested applicant to engage with IFI

A view towards the northwest of site, where the drains are at high levels.

View of the site facing east, where the 400MW BESS is proposed to situate.

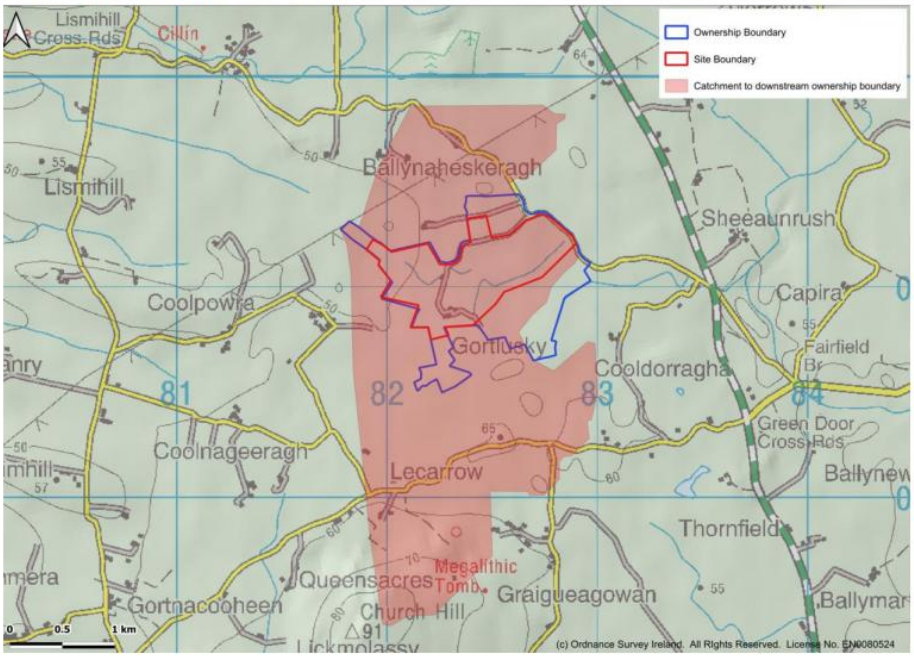
View of the site just south of the existing substation, where the 1,155 MW OCGTs are proposed to situate. GSI mark high vulnerability to contamination by human activities in above photo.

View of the proposed staggered junction over the elevated L8763 esker ridge.

There is a water spring 100m the immediate south of the new proposed N65 access which has not been mentioned in the addendum, marked X on map below;

The site is a fluvial collection point for a significant area of surrounding land, including the higher ground at Church Hill to the south as shown in the 2024 EIAR;

Figure 8.1 Catchment Map



As a result, the site and surrounding lands flood regularly (as the photographs show) in the winter. The photographs reflect the significant concerns of the surrounding landowners, whose local knowledge is that the watercourse carries far more water, and floods more often, than the EIAR presents. Those landowners are also concerned about what the proposed works would do to their own lands capacity to absorb rainfall, and whether the development would worsen the flooding they already experience.

10.1.4. Cut & Fill Calculation Errors

> *"The information collected from the site investigation should then be used to inform the extent of the earthworks and the cut & fill involved in the construction stages and are key considerations to identify potential environmental impact on soils, geology and hydrogeology"*[165]

The Cut & Fill calculation appears to be flawed. The ground investigation carried out suggests that in general, the top 1m of soil on the site is unsuitable for construction. It is classed as "Predominantly soft sandy gravelly clay or loose clayey sand/gravel". This rises to depths of 1.8m in places.

3.4 Integrated Interpretation

The combined geophysical and direct investigation data are plotted on Drawings AGP24105_R1 to AGP24105_R7 and have been interpreted as indicating the following subsurface layers:

- **Layer 1** - a thin upper layer of predominantly soft sandy gravelly clay or loose clayey sand/gravel soils ranging from 0.3 to 1.8 m thick (average 1.0 m).

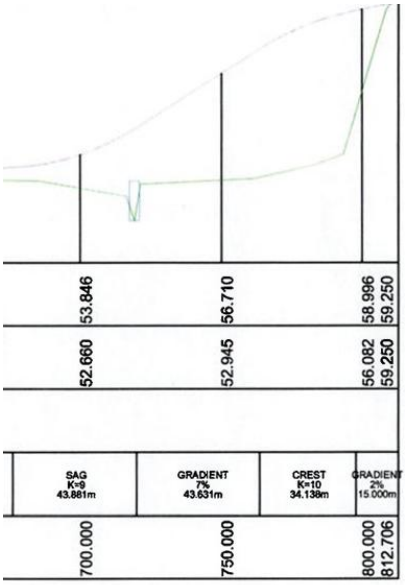
AGP24105 Coolpowra Power Plant Report 14 December 2024

[165] 2026 FIR

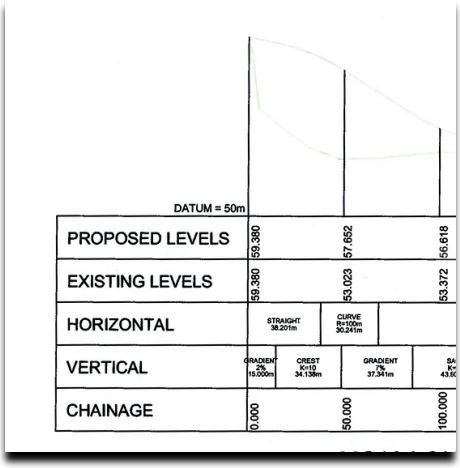
With that context, the developer's cut and fill calculations appear **much** too low.

It is noteworthy that the cut & fill requirements of the proposed new access track have not been considered in this calculation. That proposed road has a footprint of approx. 7,763m2 (1,109m * 7m). Drawing CPA-HAL-NR-XX-PL-3000 shows cuts of up to 2m being required and areas of fill of up to 6.69m being required. **This is a significant oversight in the cut & fill calculation**.

It is noteworthy that the cut & fill requirements of the proposed new access track have not been considered in this calculation. That proposed road has a footprint of approx. 7,763sqm (1,109m Long * 7m Wide). Drawing CPA-HAL-NR-XX-PL-3000 shows cuts of up to 2m being required and areas of fill of up to 6m of fill being required. This is a significant oversight in the cut & fill calculation. The road construction required is complex. Between chainage 700 and chainage 812, the proposed road will rise by 6.59m from existing ground levels. Between chainage 0 and chainage 50, the proposed road level will rise by 6.35m. This proposed road elevation rises to the top of a local esker which brings with it increased environmental considerations.



Proposed Road Long section detailed on Drawing CPA-HAL-NR-XX-PL-3000. Proposed 6.59m increase to existing levels. There is approx. 2,580m3 of fill required in this small area alone. (112m long * 7m wide * 3.3m avg. depth). It is not accounted for in the addendum.



Proposed Road Long section detailed on Drawing CPA-HAL-NR-XX-PL-3000. Proposed 6.35m increase to existing levels. There is approx. 1,110m3 of fill required in this small area alone. (50m long * 7m wide * 3.18m avg. depth). It is not accounted for in the addendum.

Section 7.3.3.1 of the latest EIAR details the cut and fill calculations for the various areas. The details are summarised in the table below.

Reference	Area sqm	Cut Volume	Cut Depth (Vol/Area)	Fill Volume	Fill Depth (Vol/Area)
Table 7.1	59,049.15	43,340.37	0.73m	37,886.99	0.64m
Table 7.2	14,579.66	8,622.63	0.59m	533.10	0.04m
Table 7.3	37,159.75	15,044.02	0.40m	20,055.52	0.54m
Table 7.4	8,138.25	1,829.70	0.22m	579.90	0.07m
Table 7.5	7,596.42	906.80	0.12m	2,124.28	0.28m
Total	126,523.23	69,743.52	0.55m	61,179.79	0.48m

The proposed cut & fill quantities appear to be made in error. There are multiple issues that immediately undermine them. Some examples are offered below.

- As noted already, site investigation carried out suggests that generally, the top 1m of soil on the site is unsuitable for construction. This rises to depths of 1.8m in places. If we take an average depth of unsuitable soil being 1m deep across the site, that would be a cut volume of 126,523.23m^3. The developer's cut & fill calculation assumes an average cut site wide of 0.55m, coming to 69,743.52m^3 in total. That does not corellate with the site investigation results. It appears to be undermeasured by at least 56,779.71m^3 (81% undermeasure).

- Table 7.1 of the EIAR[166] deals with the cut and fill requirements for the 400 kV GIS, OCGT & Fuel Storage area. The table states that a footprint of 59,049.15m^2 will require fill of 37,886.99m^3. That is an average of 0.64m fill to that footprint. That calculation appears very inaccurate.

Existing ground level in the area appears to be approx. 49.3mOD (An average of R3, R5 & R7 in the Site investigations[167]). Finished floor level for this building is stated to be 51mOD on the drawings provided[168]. That is a required average fill of 1.7m between the existing ground level and the finished floor level. However, the top 1m of soil sitewide is soft and unsuitable. Upon its removal, an average fill of 2.7m will be required in this area. The results of the corrected calculations are shown on the table below.

- Table 7.2 of the EIAR[169] relates to the Synchronous Condenser and adjacent parking area. According to R2 within the site investigation[170], the existing ground level is approx. 52mOD. The proposed finish ground level is stated to be 53.1mOD[171] approx. That is a required 1.1m of fill to the area. However, when the top 1m of poor ground is considered, 2.1m of fill is required to this area. The EIAR had calculated fill of just 0.04m to this area. That is less than 2 inches. The results of the corrected calculations are shown on the table below.

[166] 2026 ADD: pp 7-6
[167] Drawing AGP24105, AGP24105_R3, AGP24105_R5, AGP24105_R7 – All Dec '24
[168] CPA-HAL-OC-XX-DR-PL-1101 – Mar '24
[169] 2026 ADD pp7-6
[170] Drawing AGP24105, AGP24105_R2
[171] Drawing CPA-HAL-MP-XX-DR-PL-1000 – "MASTER PLAN SITE LAYOUT"

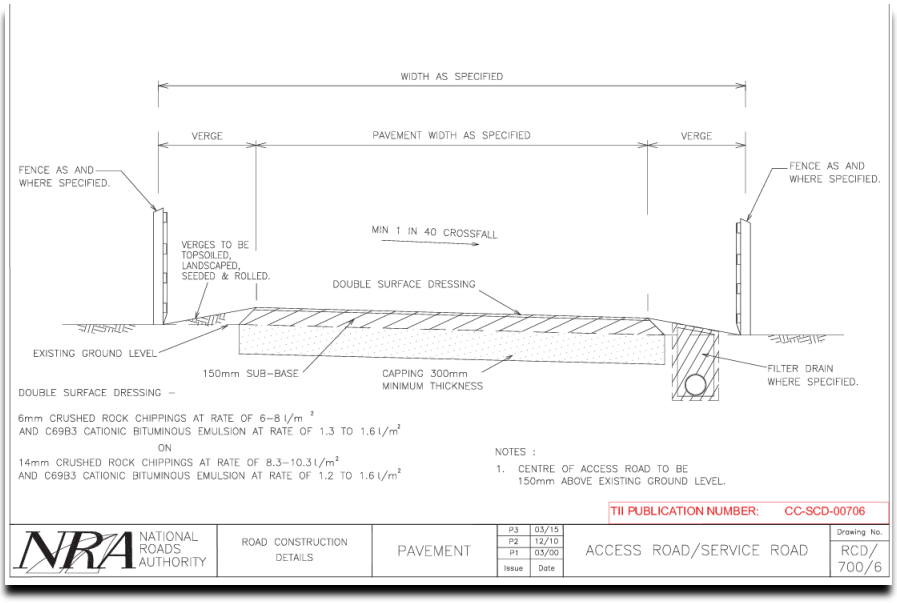
- Table 7.3 of the EIAR[172] deals with the cut and fill requirements for the LDES area. The table states that a footprint of 37,159.75m^2 will require fill of 20,055.52m^3. That is an average of 0.54m fill to that footprint That calculation appears very inaccurate.

Existing ground level in the area appears to be approx. 52.5mOD (An average of R1, & R6 in the Site investigations).[173] Finished floor level for this building is stated to be 53mOD[174] on the drawings provided. That is a required average fill of just 0.5m between the existing ground level and the finished floor level. However, the top 1m of soil sitewide is soft and unsuitable. Upon its removal, an average fill of 1.5m will be required in this area. The results of the corrected calculations are shown on the table below.

- Table 7.4 of the EIAR[175] relates to the AGI area. According to R4 within the site investigation[176], the existing ground level is approx. 53.5mOD. The proposed finish ground level is stated to be 54.5mOD approx.[177]. That is a required 1m of fill to the area. However, when the top 1m of poor ground is considered, 2m of fill are required to this area. The EIAR had calculated fill of just 0.07m to this area. That is less than 3 inches. The results of the corrected calculations are shown on the table below.

- Table 7.5 of the EIAR[178] relates to the original access road. The existing ground level and the proposed finished level will likely vary, following the local topography. However, we do know that the top 1m of ground site wide is considered poor according to the site investigation results. We can therefore assume a minimum of 1m fill required for this road in replacing the excavated poor surface soil. The EIAR had calculated fill of just 0.28m to this area. That appears incredibly unlikely. Assuming a basis access track rather than an asphalt road, according to TII standards[179], one can expect at least 150mm sub-base (UGMA or Clause 804 stone) on top of a minimum 300mm of capping. That is a recommended minimum fill of 450mm beneath the road surface. See detail below for reference. The developer's EIAR calculation is 170mm less than TII recommended minimum fill depth, even before the poor 1m of soil is taken into account;

[172] 2026 ADD pp7-7
[173] Drawing AGP24105, AGP24105_R1, AGP24105_R6 – All Dec '24
[174] CPA-HAL-SB-XX-DR-PL-3201 – Mar '24
[175] 2026 ADD pp7-7
[176] Drawing AGP24105, AGP24105_R2
[177] Drawing CPA-HAL-MP-XX-DR-PL-1000 – "MASTER PLAN SITE LAYOUT"
[178] 2026 ADD pp7-7
[179] Drawing RCD/700/6 "Access Road/Service Road" - TII Standard Construction Details - Series 700



The developer has offered a construction programme of 28 months[180]. With there being an average of 20 working days in a month, the submitted programme of works equates to 560 working days over the course of the construction period.

The developer estimates 30 HGVs per day accessing the site over the construction period[181] i.e. 60 HGV movements considering entry and exit.

Using this information, we can calculate the estimated total HGV deliveries to site over the construction phase.

560 working days x 30 HGV deliveries per day = 16,800 HGV deliveries (or 33,600 HGV movements to and from the site).

Elsewhere, the developer offers information on expected fill requirements on site. It is important to note that in section 7.3.3.2 of the EIAR Addendum, the developer confirms that its fill calculations have assumed that no site excavated material will be capable of being re-used. Therefore, all fill delivered to site will require a HGV.

Tables 7.1 to 7.5 of the EIAR Addendum show a cumulative fill requirement of 61,179.79m³. A standard lorry delivering such material typically carries 8m³ per load. Therefore, we can calculate that 61,179.79m³ of fill will require 7,647 HGV deliveries or 15,294 HGV movements to provide the estimated fill requirements.

Knowing that the total HGV requirement for the project is 16,800, and that the fill element of works will require 7,647 HGV deliveries, we can calculate that 9,153 HGV movements are required to complete the rest of the development after fill works are completed. We do not have any data to further break that 9,153 of HGV deliveries, so will focus on the 7,647 HGV deliveries in the table below, which demonstrates an **enormous shortfall in the EIAR required fill calculations**.
The EIAR estimates a total fill requirement of 61,179.79m³ for the original project's ground fill.

[180] 2026 ADD: 5.1 / Figure 5.1.
[181] 2026 ADD: 11.4.1.1

After careful review of the site investigation and the proposed construction drawings, the actual fill requirements appear to be approx. 269,662.54m^3. That represents an additional volume of 208,482.75m^3 on the fill alone. The applicant's EIAR fill volume appears to satisfy only 22% of the required amount.

Instead of 7,647 HGVs for fill, we have calculated 33,707 HGVs (i.e. 67,414 movements) – 441% of the EIAR's fill estimation.

Note that these numbers (i.e. EIAR fill and corrected fill) exclude:

iii. the further 9,153 HGV's as deduced from EIAR calculations (for non-fill related matters), which we cannot assess without sufficient EIAR data.
iv. HGV count for the proposed **new** access road construction, which remain undetermined according to addendum.

The calculations below, based on removal of 1m of poor overlying ground, show a shortfall in the fill calculation of 208,482.75m^3.

The applicant's assumed minimum cut of just 1m may be optimistic. In fact, the applicant states an assumed cut of 1.2m[182] but does not appear to factor that in its calculations. Analysis of the site investigation results suggests the levels of cut & fill may be far higher than the 1m used for calculation purposes on the below table;

[182] 2026 ADD: Tables 7.1-7.5

EIAR Table Ref	Location	EIAR Stated Area (m^2)	EIAR Stated Fill Volume (m^3)	EIAR Fill Depth (Vol/Area) (m)	EIAR Fill Deliveries Required (Vol/8m3) (num)	Our calculated Fill Depth (m)	Our calculated Fill Volume (m^3)	Our calculated EIAR Fill Deliveries (num)	Our HGV Increase on EIAR FILL Estimate (num)	Notes
Table 7.1	400kV GIS, OCGT & Fuel Storage Area	59,049.15	37,886.99	0.64	4,736	2.7	159,432.71	19,929	15,193	Existing Ground to proposed finished floor level is 1.7m. However top 1m of existing is unsuitable according to Site Investigation and will have to be removed. That will require 2.7m of fill to the whole area rather than the 0.64m calculated in the EIAR. This will require an additional 15,193 fill deliveries via HGVs.
Table 7.2	Syncon & Adjacent Parking Area	14,579.66	533.10	0.04	67	2.1	30,617.29	3,827	3,761	Existing Ground to proposed finished floor level is 1.1m. However the top 1m of existing is unsuitable according to Site Investigation and will have to be removed. That will require 2.1m of fill to the whole area rather than the 0.04m calculated in the EIAR. This will require an additional 3,761 fill deliveries via HGVs.
Table 7.3	LDES	37,159.75	20,055.52	0.54	2,507	1.5	55,739.63	6,967	4,461	Existing Ground to proposed finished floor level is 0.5m. However top 1m of existing is unsuitable according to Site Investigation and will have to be removed. That will require 1.5m of fill to the whole area rather than the 0.54m calculated in the EIAR. This will require an additional 4,461 fill deliveries via HGVs.
Table 7.4	AGI	8,138.25	579.90	0.07	72	2	16,276.50	2,035	1,962	Existing Ground to proposed finished floor level is 1.0m. However the top 1m of existing is unsuitable according to Site Investigation and will have to be removed. That will require 2.0m of fill to the whole area rather than the 0.07m calculated in the EIAR. This will require an additional 1,962 fill deliveries via HGVs.
Table 7.5	Access Road (Original)	7,596.42	2,124.28	0.28	266	1	7,596.42	950	684	The levels of the Access Road will vary, but site investigation results suggest a minimum 1m of surface material must be removed before competent ground is encountered. That 1m of excavated material will need to be replaced with fill to prevent the road being constructed below existing ground level or else it will be subject to flooding. That will require a minimum 1.0m of fill to the whole area rather than the 0.28m calculated in the EIAR. This will require an additional 684 fill deliveries via HGVs.
TOTAL		**126,523.23**	**61,179.79**		**7,647**		**269,662.54**	**33,708**	**26,060**	

- Dynamic probes 07, 11, 15, 16, 26, 27, 31, and 32 indicate undetermined ground to depths of 1.5m-3.2m below existing ground level.

- Boreholes 01 to 05 show undetermined ground up to depths of 2m.

- Made ground of up to 2.8m deep was encountered at trial pits 07, 08, 14, 17, 21 and 29.

To conclude; the cut and fill quantities provided are not credible. This has a material impact on multiple elements – the project's environmental impacts; the turning movements onto a restructured national route; road structure impact; safety of road users; material interference with the strategic function of the N65 and more.

10.2. Treananearla Stream

The absence of any substantial details regarding the proposed diversion of the Treananearla stream in the applicant's initial submission, quite correctly drew a further information request from the planner. Several issues remain despite the response being provided.

A summation of the issues is as follows. Greater detail of this summary is provided thereafter.

- Affected Watercourses.
- Failure to Achieve Environmental Standards (on diversion).
- Unsubstantiated Fisheries Value Claims
- Method Statement deficiencies are apparent

The above is evaluated in greater detail below.

10.2.1. Affected Watercourses

> *"Submit a suitably scaled drawing clearly identifying and labelling all existing watercourses and drainage ditches running from outside and through the site to include direction of flow. Figures 6.3 and 8.3 of the submitted EIAR and submitted layout drawings are considered insufficient in this regard"*[183]

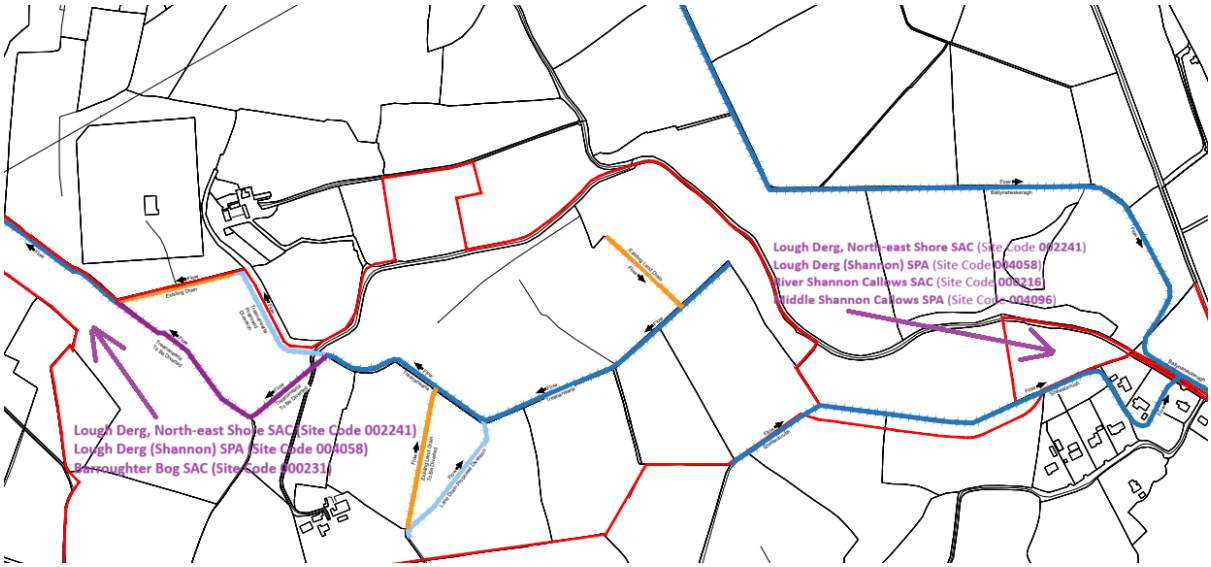
While the developer has submitted a drawing in relation to above (CPA-HAL-MP-XX-DR-PL-10000), it is not sufficient. It is notable that the submitted drawing does not identify and include the details of the newly proposed site access road together with the watercourses. It also appears that multiple watercourses have been overlooked on the drawing. The developer has acknowledged at least two watercourses being affected by the newly proposed access road. Those watercourses are not identified on the drawing. The developer has therefore failed to provide the required information.

The applicant's site has direct hydrological connections to;

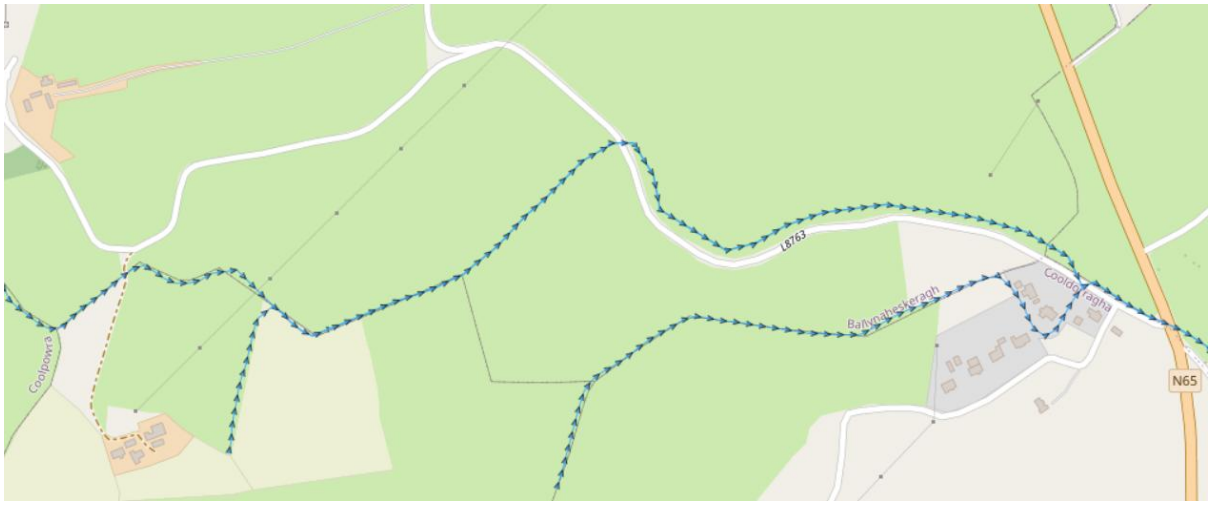
- **Lough Derg, North-east Shore SAC** (Site Code **002241**)
- **Lough Derg (Shannon) SPA** (Site Code **004058**)
- **Barroughter Bog SAC** (Site Code **000231**)
- **River Shannon Callows SAC** (Site Code **000216**)
- **Middle Shannon Callows SPA** (Site Code **004096**)

[183] 2026 FIR

The need for care here is immense. The County Galway Local Authority Renewable Energy Strategy (LARES) notes that "*areas of Iconic and Special sensitivity are deemed to be of particular value within County Galway*";



Applicant's watercourse flow map, with SPAs and SACs added



EPA's[184] flow map for the same portion of site

Given this sensitivity and the importance placed on by the EU Council Directive 2000/60/EC (Water Framework Directive) - any attempt to interfere with the watercourses in the extended site area or to move the Treananearla stream (as proposed by the applicant) cannot be permitted as not only do they feed through Kilcrow River towards Barroughter Bog SAC and Lough Derg SAC & SPA, but also east towards Gortaha (east) sub-catchments within the Lower Shannon system, with a separate hydrological connection to the River Shannon Callows SAC and Middle Shannon Callows SPA that added to the Council's second reason for refusal.

Abstraction, process discharge and firewater run-off must be assessed in-combination with each other, with the co-located components (Ground 1) and with other catchment users including the applicant's known future proposals, against the non-deterioration obligation of the Water Framework

[184] https://gis.epa.ie/EPAMaps/

Directive (Article 4; S.I. 272/2009; Weser, C-461/13). No such in-combination water assessment has been carried out.

Given the absence of detail the applicant must:

- be required to state, for EPA registration and assessment purposes, the maximum daily and annual water abstraction, the water source, and the NOx-control and inlet-cooling configuration that determine it;
- Specify the firewater supply, storage, replenishment and contaminated-run-off containment
- Show evidence of a substantive consultation with Uisce Éireann – feasibility is not to standard.
- Produce an in-combination assessment of abstraction, discharge and firewater against the Water Framework Directive and the Lough Derg European Sites In the absence of the above, the EIA is inadequate with respect to water

The presence of drainage ditches and water courses within the site also create a major risk to the surrounding aquatic and terrestrial biodiversity. The objective of the EU Water Framework Directive (WFD) is to protect and prevent deterioration. The proposal to develop at this site with multiple water courses present as well as plans to reroute part of the Treananearla Stream, is in breach of these objectives and creates an increased risk to the protected sites within the region.

The inadequacy of the watercourse mapping has direct consequences for protected species assessment. The Eurasian Otter (Lutra lutra) is protected by Irish law (wildlife act amended 2000) and classified as Annex II and IV species of the EU Habitats Directive (92/43/EEC), affording strict protection inside and outside of protected areas. Considering the feeding range of the otter (2km-15km) and the proximity of otter records to the site, particularly on the Kilcrow river (NPWS records, OPW records[185]), less than 4 kms for the proposed development, it is probable that the otter uses the Treananearla Stream and connected drainage ditches within the proposed site as a feeding ground. Indeed, this has been acknowledged by the Eirgrid EIAR[186] during the AA screening stage.

The direct flow from the site to the Kilcrow river via the Treananearla Stream (2km) and other watercourses provides a direct pathway of point and/or diffuse sources of pollution during construction and operational phases of the proposed development. This creates a risk of direct impact from point source input due to spillage of fuel or chemicals and indirect impacts due to consumption of contaminated prey items or reduction in prey populations (salmonoids and eels) associated with reduced water quality. As a biodiversity indicator species, the presence of the Otter in this location with recent sightings on the Kilcrow river indicates healthy fish populations and in turn healthy macroinvertebrate populations on which they feed.

10.2.2. Failure to Achieve Environmental Standards

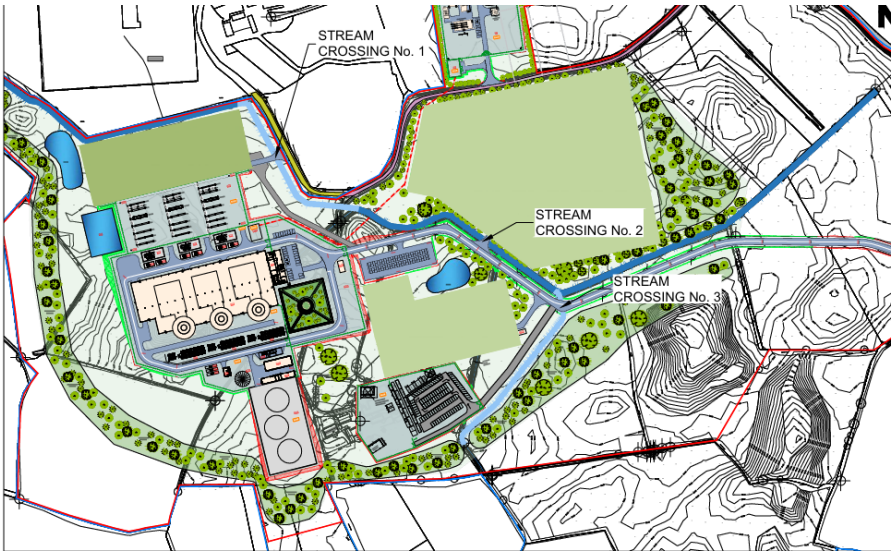
> *"Submit a detailed justification for the proposed realignment"*[187]

In reviewing the submitted "*justification*" it is apparent that the stream realignment is simply an exercise in cost saving - There is little environmental justification offered.

A primary justification cited is the proximity needed for the proposed facilities to operate at adequate capacity. Given that the Treananearla stream is approximately 4-5m wide, it is difficult to understand how accommodating the stream has any impact on proximity. When explaining its intentions for the

[185] Arterial Drainage Maintenance Works: Killimor Arterial Drainage Scheme 2020 - 2024 Natura Impact Statement
[186] GCC Ref: 2360849
[187] 2026 FIR

new proposed access track (within the new site extension area), the developer outlined its intention to bridge over the two affected watercourses to mitigate any environmental impact on them. No such mitigation measures appear to have been considered regarding the proposed Treananearla stream relocation. Even with the proposed realignment, the developers drawing CPA-HAL-OC-XX-DR-PL-1910 (see below) shows that they would also intend to form a bridge over the stream in multiple locations. The applicant's position is internally inconsistent which raises cause for concern.



"*Land Take Efficiency*" is offered as a justification. This seems to be more in line with an internal financial justification which should not influence proper environmental planning. In any event it does not need to be adjacent to the Oldstreet node. Section 5.6.2. Bord Gáis Energy (BGE) Cashla OCGT (ACP-324113) illustrates that not only was the gas transmission network a priority – BGE settled on a site that is 7km from the existing Cashla substation.

We refer to Figures 3.1 to 3.3 of the 2024 EIAR as reasonable alternatives having been reviewed to realigning the stream. It is apparent that stream realignment concerns were not a high priority for the developer. We can determine this by reviewing Figure 3.1 referenced. This early design iteration carefully worked around the existing Treananearla stream. It appears that no realignment would be required.

Figure 3.1 Site Layout Iteration (example 1)

This site layout was rejected internally by the developer for reasons unknown. While some reference is made to the repositioning indoors of specific items of equipment, no explanation is offered for the sudden relocation of the layout which interfered drastically with the Treananearla Stream.

Figure 3.2 Site Layout Iteration (example 2)

It is critical to bear Figure 3.1 above in mind, as it raises concerns around many of the internal site "*justifications*" put forward by the developer in its response to the Further Information request. The developer states "*Options to reduce the extent of realignment were considered*" – Figure 3.1 showed a stream realignment was not actually required. One must ask why this option was ignored.

The developer goes on to state

> *"However, localised crossing structures or culverts would introduce additional in-channel works, increase hydraulic and ecological constraints and create a long-term maintenance liabilities"*.

The applicant seems to be suggesting that it was less intrusive to realign approx. 330m of the stream than it was to form a bridge. This argument is not solid, particularly when the developer still intends to form bridges over the stream as noted above on CPA-HAL-OC-XX-DR-PL-1910 extract. It should be noted that bridging over watercourses in the newly proposed access road area is cited as being the best course to avoid any environmental impact. The developer's story is not consistent on this matter which is most concerning for this community.

Crucially, the applicant has stated that "*The realignment of the Treananearla stream has been developed to ensure that the proposal is consistent with the EIA "avoid-reduce-remedy" hierarchy*". The site layout alteration from Figure 3.1 to Figure 3.2 of the 2024 EIAR clearly demonstrates that the developer ignored its responsibility to "*avoid*" unnecessary environmental impacts on the Treananearla stream. Figure 3.1 illustrated a development that was positioned south of the Treananearla stream, thus avoiding its realignment. The subsequent alteration to the site layout shows a clear breach of the developer's responsibilities under environmental impact mitigation.

10.2.3. Unsubstantiated Fisheries Value Claims

ACP Further Information (9 Jan 2026): item 1e:

> *"an aquatic survey or fisheries assessment, with methodology and named author, to support the 'no fisheries value' conclusion; justification for the realignment; and IFI consultation, together with 3c.iv.2 (WFD objectives and connectivity to designated European Sites)."*

Galway County Council refusal (30 Aug 2024): Reason 2:

> *"direct hydrological link to the Lough Derg North-East Shore SAC (002241) and Lough Derg (Shannon) SPA (004058); the authority could not be certain the project would not adversely affect their integrity".*

In response to the Further Information request concerning the proposed diversion of the Treananearla Stream, the applicant asserts that the watercourse has "no potential fisheries value." This assertion provides the basis for the applicant's diversion. It is incorrect, unsupported by the best available scientific evidence, and contradicted by peer-reviewed state-commissioned research. It cannot lawfully be relied upon by ACP as a basis for granting permission.

10.2.3.1. The best available scientific evidence

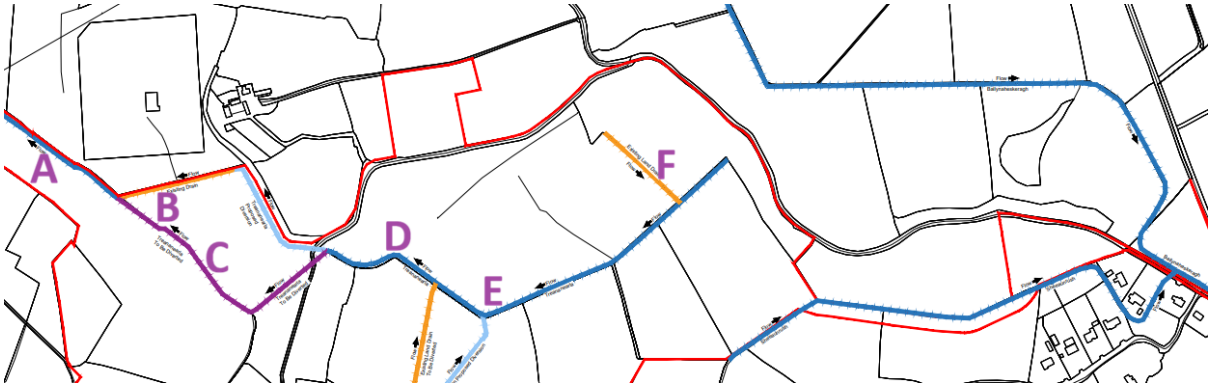
The Treananearla Stream is a direct tributary of the Kilcrow River. The Kilcrow discharges to Lough Derg, a designated salmonid water and one of the most ecologically and economically significant lakes in the State. The study Population Structure and Genetic Stock Identification of Brown Trout (Salmo trutta) from Lough Derg[188] (Magee, Bradley, Hynes, Prodöhl, Delanty, Kelly & O'Grady; Inland Fisheries Ireland / Queen's University Belfast, 2017) is one of the largest genetic stock identification studies of brown trout conducted in Europe, sampling 167 sites and more than 4,300 baseline fish across 2009–2012. It established, based on microsatellite DNA profiling, that the Kilcrow contributes 11% of the adult brown trout stock to Lough Derg — tied second among approximately 30 populations sampled, behind only the Camcor (13%).

The study records that small rivers and tributaries are also important contributors to lake stock, and that the baseline, although comprehensive, is still incomplete. The fact that the Treananearla itself was not individually sampled does not establish absence of value; it establishes absence of investigation. In ecological assessment under EU and Irish law, absence of evidence is not evidence of absence.

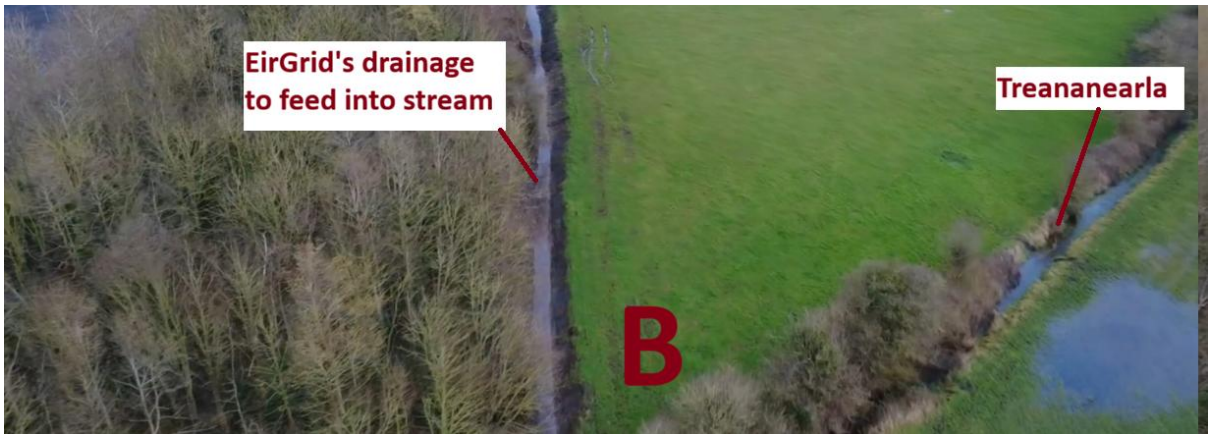
Critically, the Kilcrow sampling locations lay downstream of the Treananearla confluence. It follows that the genetic signal attributed to the Kilcrow depends upon the integrity of its upstream tributaries - of which the Treananearla is one. Any deterioration of water quality, hydromorphology or habitat in the Treananearla is in principle a deterioration affecting the Kilcrow population that delivers 11% of Lough Derg's adult trout stock.

The applicant also acknowledged that the Treananearla stream was assessed for its "*potential to provide foraging habitat and prey resources for the otter*" rather than confirming its fisheries value. The developer states that river habitat surveys and fisheries assessments were "*carried out utilising elements of the approaches*" in the River Habitat Survey Methodology and Fishery Assessment Methodology. This suggests an entire survey was not carried out. It does not detail which "*elements*" were utilised. It does not provide the additional information sought by the planner. The addendum refers to the Treananearla Stream as being "***shallow***"[189]. The photos below are inconsistent with that characterisation. The location letters are mapped are as follows:

[188] https://pure.qub.ac.uk/en/publications/population-structure-genetic-stock-identification-and-potential-i/
[189] 2026 ADD: 8.5.1.1.



Developer's flow network drawing. Note: *(EPA data indicates point C is the dividing line on western/eastern flow division, and that stream eventually continues northeast beneath esker ridge above "F").*



The connection to the Treananearla Stream, from the EirGrid site, as shown in photo B, is recent and has not been accounted for in the EIAR.

According to the applicant's map, it appears to acknowledge EirGrid's private drainage ditch as a completed stream channel to which it can adjoin. It's worth noting that EirGrid's intention was to **drain** its own site **into** the existing Treananearla stream – not for the drain to become the main artery for said stream.


C


D


E

Aerial photos of the Treananearla stream within the proposed site at almost full capacity.

The applicant's characterisation of no potential fisheries value is; (i) factually wrong, being contradicted by the largest genetic stock identification study of brown trout in this jurisdiction; (ii) methodologically inadequate, being unsupported by any cited fisheries survey, electrofishing data or habitat assessment of the receiving system; and (iii) legally insufficient, in that it does not engage with the non-deterioration obligation under Article 4 of the Water Framework Directive as interpreted by the CJEU in Weser (Case C-461/13), the assessment obligations under the EIA Directive, or the statutory protection of spawning grounds under s.171 of the Fisheries (Consolidation) Act 1959.

Stream diversion is exceptional, not routine. The starting presumption — consistent with the precautionary principle in Article 191(2) TFEU and applied in Weser (C-461/13) and Sweetman (C-258/11), is that **watercourses should be preserved in their existing alignment unless a compelling evidenced case is made out**. No such case has been made out here. Both planning authorities share this concern. Galway County Council refused permission in part on this basis: its second reason for refusal records a direct hydrological link to the Lough Derg North-East Shore SAC (002241) and Lough Derg (Shannon) SPA (004058) and concludes that, absent satisfactory evidence to the contrary, it could not be certain the development would not adversely affect their integrity.

ACP's FI request asked for an aquatic survey or fisheries assessment, with methodology and named author, to support the 'no fisheries value' conclusion, together with IFI consultation (FI item 1e). The applicant's bare assertion cannot survive either the authority's finding or ACP's own request for evidence.

Based on available scientific evidence, ACP would require a full hydrological and fisheries connectivity assessment of the Treananearla–Kilcrow–Lough Derg corridor, conducted to IFI standards and incorporating Magee et al. In the absence of this and substantive consultation with IFI, the diversion of the stream cannot be permitted.

The FI request from ACP also stated;

> *"You are advised to consult with the IFI regarding the works proposed including proposals for stream crossings and demonstrate evidence of such consultation in the response"*

The applicant did not consult with IFI.

10.2.4. Method Statement

> *"Proposed mitigation in Table 8.11 details the new channel will be dug in accordance with an agreed specification and best practice and the water will be rediverted. Please provide clarity on this specification to include a Method Statement and detailed drawings for the works proposed."*[190]

The developer has failed to adequately address the above request. No detailed drawing has been provided as per the planner's clear request. No detailed Method Statement has been provided as per the planner's clear request. There are multiple concerns in section 8.5 of the addendum, which addresses the construction works envisaged for the stream realignment.

The developer has stated (section 8.5.1) that the stream realignment will be the first works on site and will take place in the months of August/September to coincide with low stream flows[191]. Elsewhere, the developers programme of works shows a start date of October 2026. Both statements are incompatible. Are we to assume the developer will wait until August to start if works were in fact ready to commence in say December?

The developer states "*In order to facilitate the site layout (for the Proposed Development as Amended) realignment of the local drainage network is required at two separate channels*". Such a statement is directly contrary to the EIA *Avoid-Reduce-Remedy* policy which would require the site layout to be altered around the existing environmental constraints. As noted previously, and as demonstrated in Figure 3.1 above (of 2024 EIAR), the stream realignment works are avoidable.

The suggested construction process included the installation of new culverts and the decommissioning of existing culverts. This is contrary to the developer's justification for the stream realignment when it stated "*However, localised crossing structures or culverts would introduce additional in-channel works, increase hydraulic and ecological constraints and create a long-term maintenance liabilities*". Again, the developers suggested plan is inconsistent.

The developer states in its construction plan that the Treananearla stream has "*no potential for fisheries value*". This has not been determined in any fashion and is a baseless statement. The developers stated plan for the realigned streams depths and widths have had no input from fisheries or the OPW. Its suitability is in no way confirmed by the adequate bodies.

10.2.5. Absence of Consultation with Inland Fisheries Ireland

ACP's FI request stated that;

> *"You are advised to consult with the IFI regarding the works proposed including proposals for stream crossings and demonstrate evidence of such consultation in the response"*

It appears that no effort was made to contact the IFI. This is concerning with to the matters outlined throughout this chapter.

10.3. Habitats Directive

This section is supported throughout by the specialist hydrological and hydrogeological assessment of Dr Pamela Bartley (Hydro-G Ltd), which was appended to our 2024 observations and to this one for ease on the reader (see section 12.6. Previous Appendices from 2024 East Galway Gas Plant Concern Group 2024 Observation" for more information).

[190] 2026 FIR
[191] 2026 ADD: 8.5.1.1.

Dr Bartley is a civil engineer and a recognised surface-water and groundwater specialist, with expertise in Environmental Impact Assessment, catchment evaluation, public water supply, and water-dependent habitats. She is an Expert Service Provider in hydrogeology and Environmental Impact Assessment to Uisce Éireann and to the National Federation of Group Water Schemes. Her assessment is that the application contains *"significant lacunae"* across its Lands, Soils and Geology chapters, its Water chapter, the Construction Environmental Management Plan and the Natura Impact Statement. The matters below are drawn from that assessment and from the applicant's own documents.

10.3.1. The legal standard: Article 6(3) and the precautionary principle

Article 6(3) of the Habitats Directive (92/43/EEC) requires that any plan or project likely to have a significant effect on a European site, alone or in combination with other plans or projects, be subject to an appropriate assessment of its implications for the site's conservation objectives. The competent authority may consent to it only after ascertaining that it will not adversely affect the integrity of the site concerned.[192]

Article 6(3) is itself an expression of the precautionary principle. The Court of Justice has held that a consent may be granted only where the authority has made certain, on the basis of complete, precise and definitive findings, that **no reasonable scientific doubt** remains as to the absence of adverse effects on the integrity of the site (Waddenzee; Sweetman).[193] The burden of demonstrating that absence lies with the applicant; it is not for an objector to prove harm. Where doubt exists, or cannot be excluded, consent must be refused.

It follows that a European site may be screened out of further assessment only where there is no reasonable scientific doubt that it will not be significantly affected. A screening exercise that omits a pathway, or that rests on an incomplete evidence base, cannot discharge that standard.

10.3.2. The site is hydrologically connected to several European sites

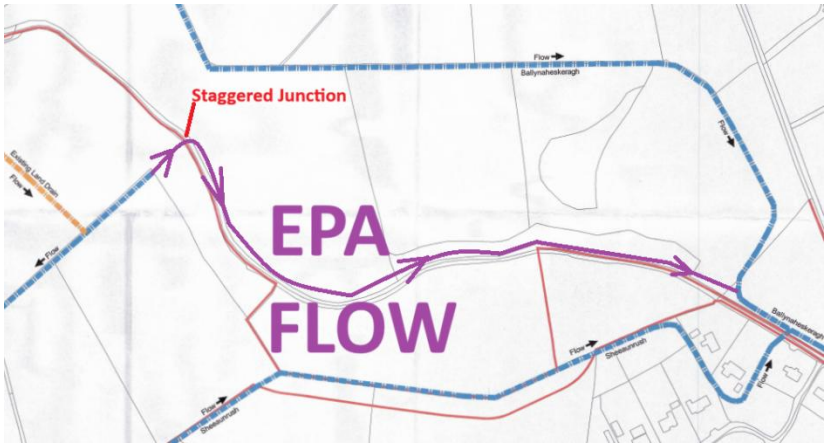
The applicant's own EIAR admits direct hydrological connectivity between the site and European designated sites. The Treananearla Stream, which the applicant proposes to divert, is stated to have connectivity to the Lough Derg, North-east Shore SAC (Site Code 002241) and the Lough Derg (Shannon) SPA (Site Code 004058), by way of the Kilcrow River.[194]

A second pathway runs eastward: the Sheeaunrush Stream flows via the Ballynaheskeragh and Gortaha Rivers to the River Shannon, connecting the site to the River Shannon Callows SAC (000216) and the Middle Shannon Callows SPA (004096). The applicant's groundwater data (Ch.7) records subsurface flow from the eastern part of the site westward toward the Treananearla / Kilcrow / Lough Derg pathway, corroborating the surface-water connectivity. The site is thus connected to the Lough Derg European sites by both surface-water and groundwater pathways. With the addition of the proposed new construction entrance, the site now has upwards of three hydrological pathways to the Shannon's SAC & SPA, however per the addendum's AA - it was **only screened in for the new construction road** – it appears despite concerns raised by GCC and the public, the applicant has not accepted or screened in Shannon SPA or SAC for the purpose of the main projects.

[192]Council Directive 92/43/EEC (Habitats Directive), Article 6(3); transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).

[193]Case C-127/02, Waddenzee, EU:C:2004:482; Case C-258/11, Sweetman v An Bord Pleanála, EU:C:2013:220.

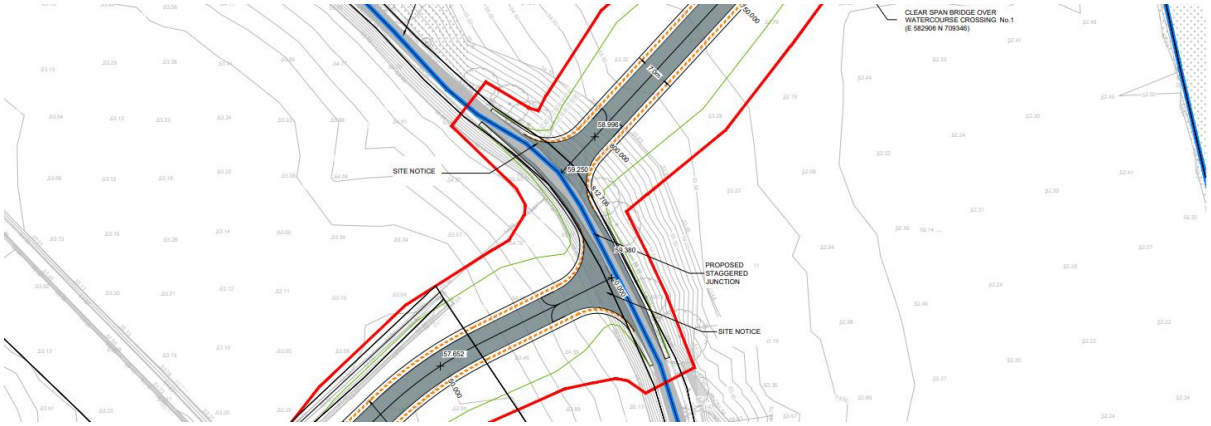
[194]2026 ADD 6.3.2 ; 7.3.2.4



It is noteworthy that the staggered junction's works are not dealt with in detail in the addendum, however, given that;

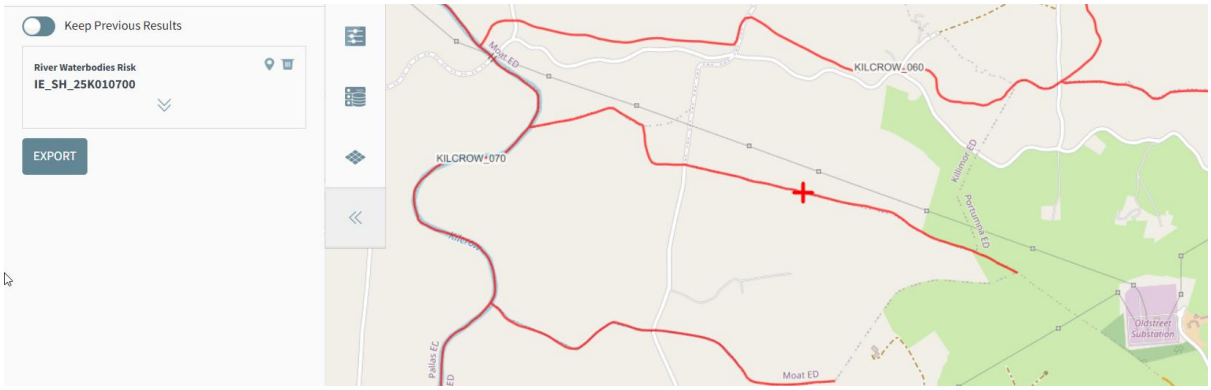
- the L8763 has been identified as unsuitable in its current capacity in the applicant's own 2024 road safety audit;
- it lies on a narrow Esker ridge,
- the EPA maps[195] indicate a water flow directly beneath the very point the applicant intends to construct upon this ridge,

It gives great cause for concern. The contours indicate that the fields either side of the esker are currently ~52 OD, while the existing road is 59.38 OD. This involves a significant climb of over 7 metres across an extended incline at either side of the road. The scale of these works has not been addressed in the EIAR, and by extension the potential effects on the hydrological pathways;



Dr Bartley identifies that the site sits across two sub-catchments (Hydrometric Areas 025B and 025C), and that the proposal could alter the catchment-divide dynamics — a matter the EIAR does not assess. The receiving watercourses are already under stress: Gortaha (Moderate status, under Water Framework Directive review) and **Kilcrow "At Risk"**), against the approaching 2027 WFD deadline;

[195] https://gis.epa.ie/EPAMaps/



10.3.3. The screening of Barroughter Bog SAC fails the precautionary standard

In GCC's report to ACP in September of 2024 (p28), it states that;

"The Planning Authority also observe that subject site adjoins a drain that may have hydrological connections to Barroughter Bog SAC and is also located within the same groundwater body. ***Water quality is noted as a listed Attribute in the Conservation Objectives of Barroughter Bog SAC****. Barroughter Bog SAC then* ***links to the Lough Derg North East Shore SAC and the Lough Derg Shannon SPA****. Therefore, An Bord Pleanala may wish to consider whether Barroughter Bog* ***should have been screened in for the purposes of the Appropriate Assessment*** *required to be carried out by the Bord, noting that works are proposed near this hydrological connection on site".*

ACP raised the same issue in their FI Request to the applicant[196];

> *"Please review the Appropriate Assessment Screening Report and Natura Impact Statement submitted in light of this Further Information request and include consideration of the following*
>
> *iii. all potential pathways from the site to Barroughter Bog SAC e.g. potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog."*

The applicant's response:

> *"An Appropriate Assessment Screening Report and Natura Impact Statement has been prepared and submitted in response to this Further Information request. The reports include consideration of the following;*
>
> - *all potential pathways from the site to Barroughter Bog SAC e.g. potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog".*

The applicant's Appropriate Assessment and NIS, both prepared by Moore Group and dated 25 November 2025, i.e. predate the FI request. They are scoped to, "Project Coolpowra Alternative Construction Access Road." Neither assesses the 1,155MW OCGT, the 400MW BESS or the 400 kV substation.

[196] 2026 FIR: Item 5

That scope is fatal to the screening of Barroughter Bog SAC. ACP's FI request specified "*potential for atmospheric pollution (including nitrogen) from the RGFG*" as a pathway to Barroughter Bog. Neither the Appropriate Assessment Screening Report nor the Natura Impact Statement contains the word "nitrogen," "atmospheric," or "RGFG" anywhere in their combined 78 pages. The atmospheric nitrogen pathway ACP directed to be assessed is not addressed, dismissed, or even mentioned. It is absent, because both documents are scoped to a road, and the nitrogen pathway arises from the power plant is not assessed.

In its place, both documents screen Barroughter Bog out on a single, identical sentence: that "*given the location of the SAC... and the nature of the qualifying interests for which it is designated (terrestrial habitats) no viable source pathway receptor links are identified*". That reasoning fails on three independent grounds, each established by the applicant's own documents or by the competent authority

First, it is internally contradicted. The same section describes the development's drainage running to the Treananearla Stream, into the Kilcrow River, which **runs along the eastern edge of the SAC boundary**[197]. A screening that denies "*viable source pathway receptor links*" while describing the drainage running into the river that borders the SAC cannot stand on its own terms.

Second, the "*terrestrial habitats*" justification is contradicted by the bog's own conservation objectives. In GCC's report to ACP in September of 2024 (p28), it states that;

> *"Water quality is noted as a listed Attribute in the Conservation Objectives of Barroughter Bog SAC.".*

Water quality is therefore a conservation attribute of the very site the applicant dismisses as a "*terrestrial*" habitat beyond the reach of water effects. An active raised bog is among the most water-dependent terrestrial habitats there is; its integrity is defined by its water regime. The "*terrestrial habitats*" reasoning misdescribes the receptor.

Third, the screening is silent on the atmospheric pathway. ACP's FI request directed the applicant to assess *"potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog."*[198] A raised bog is nutrient-poor and acutely sensitive to nitrogen enrichment, and the OCGTs present a material source of NOx. The atmospheric nitrogen-deposition pathway operates irrespective of surface-water flow. The 6.3.2 screen-out addresses **neither** the atmospheric pathway nor the flooding-and-infiltration pathway ACP named.

Under Article 6(3), a European site can be screened out only where no reasonable scientific doubt remains that it will not be significantly affected, and the burden of proving that lies with the applicant. That standard is not met. The applicant's own drainage description, the bog's own conservation objectives, GCC's own finding and ACP's own request each establish that reasonable scientific doubt remains. The application should be refused in this regard.

10.3.4. AA & NIS

[197] 2026 ADD: 6.3.2.

[198] 2026 FIR: Item 5.

In refusing the BESS, GCC made the applicant's AA & NIS a standalone reason for refusal;

> *"Based on the information received with the planning application, and noting the project characteristics, site topography and direct hydrological link to the Lough Derg, North-East Shore SAC (Site Code: 002241) and Lough Derg (Shannon) SPA (Site Code: 004058), and with particular concern in relation to drainage and surface water it is considered that the development has, in the absence of satisfactory evidence to the contrary, the potential to adversely affect the qualifying interests and conservation objectives of the Lough Derg, North-East Shore SAC (Site Code: 002241) and Lough Derg (Shannon) SPA (Site Code: 004058) and would therefore materially contravene* ***Policy Objective NHB 1*** *Natural Heritage and Biodiversity of Designated Sites, Habitats and Species,* ***Policy Objective NHB 2*** *European Sites and Appropriate Assessment, and Policy Objective WR 1 Water Resources, and* ***DM Standard 50 Environmental Assessments*** *of the Galway County Development Plan 2022-2028 and would therefore be contrary to the proper planning and sustainable development of the area. Therefore, the Planning Authority cannot be certain that the project will not adversely affect the integrity of the Lough Derg, North-East Shore SAC and Lough Derg (Shannon) SPA, in light of its conservation objectives which would contravene materially policy objectives and a development management standard contained in the Galway County Council – Planning Report County Development Plan 2022-2028 and would be contrary to the proper planning and sustainable development of the area".*[199]

GCC also noted to ACP that Barroughter Bog could have been screened in, that the River Shannon Callows SAC and Middle Shannon Callows SPA have not been identified as being within the zone of influence, and that the NIS mitigation was "*generic in nature... deferred to construction phase CEMP — this is not considered sufficiently robust and specific for the purposes of Appropriate Assessment whereby there can be no lacuna*."

Those findings concerned the Moore Group Natura Impact Statement. That Statement has not, in substance, been remedied. From what we can find on file, Moore Group's 2024 NIS still stands as is. The addendum AA/NIS deals exclusively with the new construction road and doesn't address the project components. We ask ACP to consider GCC's refusal outlined above, together with its suggestion to ACP (September 2024 report on SID) regarding potentially screening in more sites. The standard of measures within the applicant's EIAR has not changed, and GCC has already found these deficient and cited them in a refusal. The deficiencies that ground GCC's refusal of the related development seem to have been repeated and not cured.

In early January, 2026, ACP asked the applicant to;

> *"Please review the Appropriate Assessment Screening Report and Natura Impact Statement submitted in light of this Further Information request and include consideration of the following*
>
> > *a.* ***potential for significant in-combination effects arising from proposed project 2 the LDES (BESS)*** *i.e. firewater management strategy etc.*

[199] GCC Refusal Reason 2 for applicant's BESS: https://apps.galwaycoco.ie/ViewExternalDocuments/ViewPDF.aspx?RefNo=2460845&ViewFind=true&ref=2559319

b. all potential pathways from the site to Barroughter Bog SAC e.g. potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog.

*c. potential pathways to Lough Derg North-East Shore SAC and **Lough Derg (Shannon) SPA** and mitigation measures already proposed that may mitigate concerns to such designated sites."*

- Both AA and NIS were prepared by Moore Group and both are **dated 25 November 2025**.[200] Each is titled and scoped to, the "Project Coolpowra Alternative **Construction Access Road"**.

  Neither document assesses the OCGT, BESS or GIS. They assess a construction access road. The FI request directed the applicant to assess the European-sites implications of the development as a whole, in particular the atmospheric nitrogen pathway to Barroughter Bog SAC *"from the RGFG"*, and the in-combination firewater effects of the battery installation.[201] The applicant has responded to a requirement about the power plant with documents about a road.

- The Natura Impact Statement recites the **in-combination** principle, then applies it by querying the National Planning Application Database for developments granted permission within one kilometre in the preceding three years. The only project it identifies and assesses for in-combination effects is a **domestic wastewater treatment system serving a single dwelling**.[202] The OCGT, GIS and BESS are the projects which the access road is built to serve on adjoining lands sharing the same catchment and the same receiving waters. These not assessed in-combination at all. The construction road does not exist without the projects it intends to serve. ACP required the in-combination firewater effects of the battery installation to be considered. An in-combination assessment that captures a neighbour's septic tank but not the 1,155MW fossil fuel plant it serves, has not been carried out in any meaningful sense.

- As outlined above, the applicant's Further Information response states that *"an Appropriate Assessment Screening Report and Natura Impact Statement has been prepared and submitted in response to this Further Information request."*[203] Both documents are dated 25 November 2025. They therefore pre-date the Further Information request to which they are said to respond. A document prepared before a request was made cannot have been prepared to address that request, and on their face neither document engages the matters the request raised. **They couldn't screen in Barroughter Bog SAC on an AA and NIS that was already complete.**

- **The competent authority has already found the screening deficient**

  The addendum's Envirologic section 5: WFD screening, recites the same opinions from the 2024 original EIAR with regards to screening Shannon.

[200] ADD: AA & NIS.
[201] 2026 FIR.
[202] NIS: 5

GCC, as competent authority, found that the watercourse-realignment mitigation was generic and impermissibly deferred — *"the reference to silt fencing, which is deferred to construction phase CEMP — this is not considered sufficiently robust and specific for the purposes of Appropriate Assessment whereby there can be no lacuna"*. GCC, in their September 2024 report to ACP, invited it to consider whether Barroughter Bog SAC should have been screened in, and found that the River Shannon Callows SAC and Middle Shannon Callows SPA had not been identified within the zone of influence at all. The deficiencies the competent authority identified in their refusal of the BESS, and report to ACP in September 2024 are carried into the current AA & NIS.

The Appropriate Assessment that the applicant relies upon;

i. assesses the wrong project,

ii. omits the pathways that ACP required,

iii. assesses a septic tank in place of the power station it serves,

iv. pre-dates the request it answers.

v. does not improve or address on GCC's findings in its (i) refusal and (ii) screening matters

On the applicant's own documents, the screening of the European sites cannot be sustained, and the Appropriate Assessment has not been carried out to the standard the Habitats Directive requires.

As outlined in 10.3.1 of this observation regarding Article 6(3); the Court of Justice has held that a consent may be granted only where the authority has made certain, on the basis of complete, precise and definitive findings, that **no reasonable scientific doubt** remains as to the absence of adverse effects on the integrity of the site (Waddenzee; Sweetman).[204] The burden of demonstrating that absence lies with the applicant. Where doubt exists or cannot be excluded, consent must be refused.

[204]Case C-127/02, Waddenzee, EU:C:2004:482; Case C-258/11, Sweetman v An Bord Pleanála, EU:C:2013:220.

11. Visual Impact

11.1. Scale, Visuals & Perception

The OCGT stands out in terms of its scale and incongruence with both the local and wider landscape. It consists of three chimney stacks, each 45m high, together with an enormous building that the addendum cover page has now blended into that day's skyline. See a comparison of the applicant's 2024 EIAR cover and 2026 Addendum cover;

2024 EIAR Cover (& Visual Impact Assessments);

2026 Addendum Cover;

Yet, the colour of the building has not changed, the addendum still refers to the "*darker grey tones of the reserve gas-fired generator building*" and presents it as dark grey throughout addendum chapter 12's visual images.

By altering the addendum cover photo, the applicant materially understates how the development would appear in the application's most-viewed image. This is not a cosmetic matter. It goes to the reliability of the landscape and visual impact assessment, and to whether the assessment as a whole can be relied upon by ACP.

The claimed considerations in the addendum all relate to the tone of the **chimney stacks**, which for all intents and purposes remain as they were previously. We also note that the very same considerations seen in the addendum were also present in the 2024 EIAR.

The addendum describes to proposed development's visual effects on the immediate surrounding landscape as "*Not Significant*";

> *"Overall, the combined mitigation measures employed help to assimilate the development into the receiving landscape context and reduce its visual presence at surrounding visual receptors. In this regard, whilst there will still be some notable residual visual effects in the immediate surrounding landscape, these effects are highly localised and are deemed to be* ***Not Significant*** *once the proposed mitigation measures are implemented and the proposed screen planting has fully established"*[205].

[205] 2026 ADD: 12.2.

Elsewhere, in a striking move, the applicant invites ACP to seek another further information on its own application;

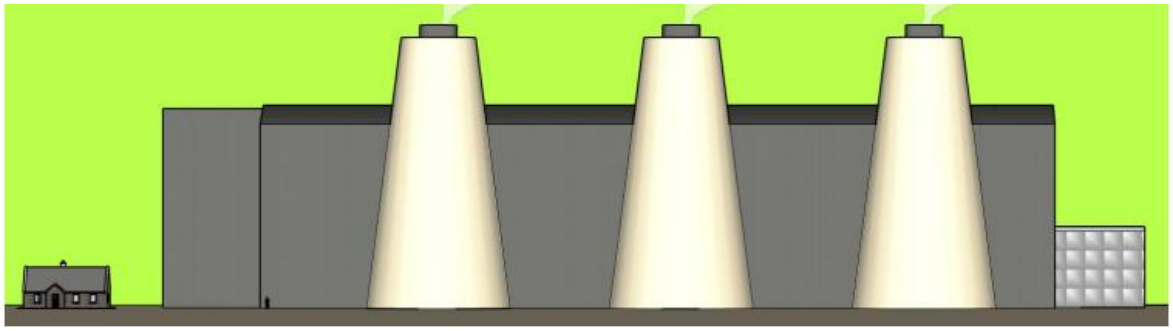
> *"The Commission may consider that these alternatives result in a less visually obtrusive intrusion in this rural landscape and may wish to seek further information or a revision to the EIAR and design proposal to reflect this view".*[206]

The applicant is implicitly acknowledging that ACP might find the design as submitted visually obtrusive, which sits very awkwardly with the applicant's simultaneous conclusion that the effect is "Not Significant".

The applicant's invitation to revise the design is a tacit recognition that no choice of tone resolves the underlying problem: a building of this scale cannot be assimilated into open agricultural land of this character.

The applicant also relies on the choice of stack colour to reduce the development's "perceived scale". This is a subjective assertion presented as if it were an established fact. No colour or tone alters the actual dimensions of the development. A 45-metre stack is 45 metres tall no matter the colour, and it imposes itself on this landscape accordingly. The notion that the visual impact of an industrial facility of this scale can be managed through the colour of its chimneys does not withstand scrutiny.

We present ACP with some scaled drawings, which include a person, an average dwelling house in the locality, and the OCGT;



Here it is scaled against the Colosseum in Rome;

For context, and perhaps precedent, the local planning authority sought further information on a house (GCC Ref. 211935) on the basis that a side elevation of 15.6 m was considered too "*suburban and bulky in character*" for this area. The house is situated within the same landscape sensitivity as the gas plant at a small fraction of the scale.

[206] 2026 ADD: 12.2.1.1.

This proposal is not short on visual disturbances. The GIS and diesel tanks present a material disturbance of their own.

11.2. Labelling a significant effect "localised" does not make it acceptable

The addendum concedes that the operational-phase landscape effect is "Substantial," which it accepts is "significant" in EIA terms. That concession should be the starting point.

The chapter then sets it aside in two ways, neither of which withstands scrutiny: by characterising the effect as merely "**localised**," and by relying on a **future screen** of planting that does not yet exist.

Even at maturity, that screen would only count for half of every year considering the nature of deciduous trees. They would also never reach the height of the facility. **Labelling a significant effect "localised" does not make it acceptable; it subjectively confines the harm to the people who live closest to it.**

The number of those residents was also understated, The applicant limited the population count to the townlands the site is within, whereas a 45m high chimney will be visible far beyond these townlands. This has been dealt with in prior observations, it's also worth noting that in the 2024 EIAR, the applicant attributed a population of zero to Cooldorragha i.e. the very residents which live between the N65/L8763 junction and the proposed site entrance;

11.3. Landscape Sensitivity

The chapter's primary mitigation is, in its own words, "the siting of the proposed development in a robust landscape context classified with a 'low' landscape sensitivity." The entire defence rests on that "low sensitivity" classification. Yet the chapter classifies the same Kilcrow Basin landscape unit inconsistently within its own pages: as "Low"[207] and as "Medium-Low"[208] sensitivity. The foundation of the chapter's landscape case is stated two different ways in the one document.

More fundamentally, the applicant relies on the dominant sensitivity rating of a broad landscape unit and treats it as if it resolved the question for this site. **The GDCP's own Landscape Character Assessment warns against exactly that**. It states that the dominant rating is generalised, and that:

[207] 2026 ADD: 12.2.
[208] 2026 ADD: 12.2.1.1.

> *"individual projects in any landscape area, notwithstanding its dominant sensitivity rating, may have greater or lesser impacts on the visual quality and character of the landscape depending on the details of the project design and the specific characteristics of the site and its context. The planning authority … may … require the applicants to demonstrate that the proposed development addresses the sensitivities identified for each relevant landscape type."*[209]

The applicant leans on the broad "low" rating and does not engage that finer detail. The rating it relies on equates this site's sensitivity to that of locations up to an hour and a half's drive away within the same county. The Plan itself says that is not a sufficient basis for assessing a specific site and a specific development.

11.4. Context of Landscape

When the site's specific context is examined, the picture is the opposite of "robust." The site sits on an esker ridge at the boundary of two of the most sensitive landscape units in the county:

- approximately 1km north of the Lake Environs Landscape (Lough Derg Environs unit), classified "Special" sensitivity (value 3), to which the site is hydrologically connected in two directions, via the Kilcrow and Shannon rivers; and
- approximately 2.5km west of the Shannon Environs Landscape, described as "very sensitive to any form of development", again, the site is hydrologically connected by the Shannon.

The applicant is relying on a high-level landscape sensitivity that equates the site to lands up to an hour and a half's drive away yet omits its proximity to the sensitive landscapes above. GCDP landscape character assessment admittedly does not go into specific detail, and should they choose to do so, may well include this side in either of the special / sensitive landscape's it borders and hydrologically connects to.

Indeed, the Church Hill monument, at 91m OD and a little over 1 km south of the site, lies within the "Special" Lake Environs and offers a panoramic view over Lough Derg (as seen in Preamble), Slieve Aughty and five counties. The proposed plant would be prominently visible from this highpoint and from the Lake and Shannon Environs. A development assessed as having a "*significant*" effect, sited on an esker ridge between two "Special" and "very sensitive" units, and visible from a "Special" highpoint, cannot be reconciled with the "low sensitivity, therefore acceptable" case the applicant advances.

[209] Galway County Development Plan 2022–2028, Appendix 4 (Landscape Character Assessment), 4.6.

Church Hill monument viewpoint situated in the "special sensitivity" Lake Environs landscape, and in red outlines the site.

11.5. Esker Road

The site lies on an esker. Galway's County Development Plan seeks to "*protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county*," and policy objective ESK 1 applies.[210] **The applicant's own biodiversity chapter records the esker hedgerows and treelines as features of ecological value**. The gas connection, if it proceeds, would also have to cut through this esker, in direct contravention to GCDP esker-protection objective.

11.6. Screening

The chapter's reduction of the effect to "Not Significant" through planting is not satisfactory. By the chapter's own description, that reduction occurs only "*once the proposed screen planting has fully established*." Notwithstanding the inadequacy of the screening to a development which cannot effectively be screened - full establishment of the proposed screen takes many years.

The visual impact chapter assesses a screened future state, not the development as it would appear for the foreseeable period. The photos are also depicted in full bloom season. It has been raised in previous submissions that the applicant did not provide a winter, or even night-time scenario.

There is a further difficulty. The established trees in this locality are predominantly deciduous ash trees. Ash is now subject to ash dieback, which "*is now prevalent throughout most of the island of Ireland and is likely to cause the death of the majority of the ash trees over the next two decades*"[211]. This will exacerbate the view of the fossil-fuel plant in particular for miles around the locality, and cannot be relied upon for long-term screening.

In terms of tree screening, EirGrid's AIS substation is in place for 25 years and the screening trees still don't cover the height of the structure. The applicant seeks to situate its proposed development to the immediate south of EirGrid's screening, thus rendering it redundant. It is also not clear whether the applicant seeks to connect the proposed GIS substation to the AIS substation above ground or underground (because there is no planning application), the latter of which would completely remove EirGrid's screening.

[210] Galway County Development Plan 2022–2028, Policy Objective 10.13.1 (esker systems); ESK 1.
[211] https://teagasc.ie/crops/forestry/advice/forest-protection/ash-dieback/

11.7. Visual Assessment

The visual assessment does not account for the EirGrid / ESB Networks Oldstreet works on lands immediately north of the site, recently consented and under construction[212], as acknowledged by the applicant. A visual assessment that omits a constructing adjacent development, which happens to have the same viewpoint in its own EIAR, does not represent the cumulative visual condition of the area, and understates the development's true visual effect.

11.8. Policy

The applicant states;

> *"In the context of the proposed development and the receiving 'low' sensitivity landscape classification (Galway CDP), it is not considered that the proposed development represents an inappropriate addition to this landscape context and complies with landscape and visual related policies and objectives in the current Galway CDP"'*[213]

The applicant places significant emphasis on the GCDP's Appendix 4: Landscape Character Assessment (LCA)[214], which classifies the region's sensitivity to development as iconic, special, high, or low. The applicant heavily leans on this site's classification as 'low sensitivity' in what appears to be an attempt to downplay the industrial scale of the project in an unzoned, unserviced area, saying it's "*unlikely to be adversely affected by change"*.

GCDP LCA 4.2 defines a landscape's sensitivity as its;

> *"Capacity to absorb a new development without exhibiting a significant alteration of character or change of appearance".*

GCDP LCA 4.4 adds Landscape Sensitivity Factors, emphasizing specific considerations such as the proximity to lakes, large rivers, ridgelines, and elevated areas. The applicant's site is located on an esker ridge at the boundaries of Lake and Shannon Environs, visible from a prominent highpoint within the Lake Environs. The planning authority should be prudent, and not simply depend on a generalized landscape categorization mechanism, as heavily emphasized by the applicant

GCDP LCA 4.6 states that:

> *"It should be noted that individual projects in any landscape area, notwithstanding its dominant sensitivity rating, may have greater or lesser impacts on the visual quality and character of the landscape depending on the details of the project design and the specific characteristics of the site and its context. The planning authority will consider this sensitivity rating and may, depending on the nature of the site and development require the applicants to demonstrate that the proposed development addresses the sensitivities identified for each relevant landscape type. In this respect, applicants may be required to prepare Visual Impact Assessment, photomontages etc. to the satisfaction of the Council prior to the making of any decision in respect to a planning application"*

[212] Galway County Council Ref. 23/60849
[213] 2024 EIAR: 12.7.
[214] https://consult.galway.ie/en/consultation/draft-galway-county-development-plan-2022-2028/chapter/appendix-4-landscape-character-assessment

The applicant too often leans on the 'low sensitivity' rating and ignores the finer detail of this classification. The applicant's visual impact assessment illustrates that this area doesn't have the capacity to absorb this project proposal compared to that of a brownfield site (see Appendix 5.6.3 - Policies concerning use of brownfield/industrial sites & change of land use.).

There are numerous local, national and EU policies that this project would contravene, particularly those aimed at environmental protection, landscape preservation, and the value of people. The project's scale and nature are fundamentally at odds with these policies, raising serious concerns about its suitability and compliance with broader environmental and planning standards;

Regional Spatial and Economic Strategy for the Northern and Western Region 2020-2032 (5.3):

> *"Ireland signed and ratified the Council of Europe's European Landscape Convention (2000), a treaty that came into effect in 2004. It recognises the importance of all landscapes, and not just exceptional landscapes, as having a crucial bearing on the quality of life and as deserving attention in landscape policy"*

Galway's County Development Plan 2022-2028 (4.2):

> *"protect and enhance the visual qualities of rural areas through the sensitive design of associated development' and 'encourage and support the social and economic development of rural parts of the County".*

The National Planning Framework (Project Ireland 2040):

> *"Irish countryside is, and will continue to be, a living and lived-in landscape focusing on the requirements of rural economies and rural communities, based on agriculture, forestry, tourism and rural enterprise, while at the same time avoiding ribbon and over-spill development from urban areas and protecting environmental qualities".*

The Rural Development Policy 2021-2025

> *"recognises the centrality of people, the importance of vibrant and lived-in rural places"*

The European Commission's Cork Declaration 2.0:

> *"Land management has a key role in the interface between citizens and the environment. Policies must incentivise the delivery of environmental public goods, including the preservation of Europe's natural and cultural heritage. These consist of a rich diversity of habitats of flora and fauna, and landscape amenities which depend to a large degree on farming and forestry."*

Regarding Electricity and Gas Infrastructure, the GCDP 2022-28 outlines several Policy Objectives. These objectives consistently emphasize the importance of careful consideration of residents, landscape and amenities. Those protections are integral to the quality of life of residents, but they are only effective if the planning authority scrutinises an applicant's assessments rather than accepting subjective judgements of sensitivity and significance at face value.

EG1 – Enhancement of Electricity Infrastructure: "*Support and promote the **sustainable** improvement and expansion of the electricity transmission and distribution network that supply the County, **while taking into consideration landscape, residential, amenity and environmental considerations***". [Emphasis added]

EG2 – Delivery of Electricity and Gas Infrastructure: "*Support the provision and extension of electricity and gas transmission networks within the county which are critical to the economic development of the County* ***subject to environmental quality, landscape, wildlife, habitats or residential amenity***". [Emphasis added]

EG4 – Ireland's Grid Development Strategy – "*Support the implementation of Ireland's Grid Development Strategy,* ***while taking into account landscape, residential, amenity and environmental considerations".*** [Emphasis added]

In conclusion, the chapter concedes a significant landscape and visual effect, then reduces it to "Not Significant" by relying on a "low sensitivity" classification it states two different ways;

i. Landscape characterisation (the GCDP itself says cannot be relied on for a specific site);

ii. Reliance on deciduous screening that would take years to materialise, and only bloom for half the year.

On a proper assessment of this site's specific context, the development represents a significant and incongruous visual intrusion into a sensitive rural landscape, contrary to the landscape and amenity objectives of the GCDP, and to the proper planning and sustainable development of the area.

12. Other Material Considerations

12.1. Related Entities

12.1.1. Irish Energy Storage Association

The 2024 EIAR[215] acknowledges Lumcloon Energy as a founding member of the Irish Energy Storage Association (IESA). The two companies share the same office and a crossover of consultants. It's worth noting that;

- Nigel Reams is the Director of this proposal's applicant - Coolpowra Flex Gen.
- Nigel Reams is also a Director of the IESA (Appendix 12.1.1. Director of IESA:).
- In 2023, the CRU conducted a consultation of National Energy Demand Strategy[216].
- In their response[217], the IESA suggests that LDES technology could replace the use of fossil-fuel peaking plants within a few years.

We have a situation where the director of the IESA is forecasting the end of the fossil fuel peaking plant, while also submitting a planning application for the largest fossil fuel peaking plant the state has ever seen, with a lifespan of 25 years. It is difficult for the planner to stack up the position put forward by the applicant's director, with the need case for the development presented to ACP;

IRISH ENERGY STORAGE ASSOCIATION

IESA Response to

National Energy Demand Strategy Consultation Document

CRU2023148

The Irish Energy Storage Association welcomes the opportunity to respond to the National Energy Demand Strategy Consultation Document. We commend CRU on this very comprehensive document which pulls together well the various strands of many individual initiatives. We are in agreement, generally, with the document and have very little to comment on the individual questions although we make a number of key points below. We have already responded to some of the individual detailed consultations on the relevant initiatives.

Key Points

- We very much welcome the initiatives by EirGrid on the procurement of LDES and by ESBN on their NNLC program. We appreciate the sense of urgency behind their drive to implement them as quickly as possible.
- In Terms of prioritising the various proposals, a procurement process for Medium Duration Energy Storage (2-10hrs) could provide a significant volume of Bulk Energy Shifting capability within a few years. This would be at a scale to make a meaningful contribution to reducing wind/solar curtailment, alleviating grid congestion and replacing the use of fossil fuel peaking plant.

12.1.2. Coolpowra Solar Limited

[215] 2024 EIAR: 1.1.
[216] https://www.cru.ie/publications/28200/
[217] https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/IESA_Response_to_National_Energy_Demand_Strategy_Consultation_CRU2023148_V1.0.pdf

"Coolpowra Solar Limited"[218] has been set up since 2023. It has not been put forward before any planning authority yet. We wonder if projects like this, or Cloudy DS as discussed in chapter 6, have a bearing on the applicant's desire to make the construction road permanent.

12.2. FI Response Notes

12.2.1.IFI

6. You are advised to consult with the IFI regarding the works proposed including proposals for stream crossings and demonstrate evidence of such consultation in the response.

RESPONSE

All stream crossings will be carried out according to the IFI *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*[2]. All proper mitigation measures will be implemented to ensure that any works carried out have minimal impact upon water quality by adherence to the advice given in this document.

Guidelines are not the same as consultation. This is unanswered.

12.2.2. FRMP

FI Item 3

Significant concerns have been raised regarding fire safety from the proposed development at this site. Please address the following-

a. Submit a Fire Risk Management Plan (FRMP) to include

i Demonstration of how the potential risk of fire occurring on the site would be addressed and minimised with particular regard to the proximity of the separately proposed Reserve Gas Fired Generator, Above-ground Gas Installation and connections on this site.

ii Preventative measures for potential causes of fire hazard and evaluate the associated risk of same.

iii Specific measures to reduce the risk of a fire occurring onsite including the safe storage and maintenance of flammable substances and materials, the intended method(s) of extinguishment, and the installation of fire safety equipment and apparatus (fire alarms, detection systems, methods of suppression, etc.).

iv The FRMP should be prepared by a suitably qualified technical expert advisor. Details and qualifications to be submitted.

The applicant did not provide an FRMP (Fire Risk Management Plan). It provided an FRA (Fire Risk Assessment), which is not the document ACP asked for. Not only this, it dealt exclusively with the BESS – not the combination effects as outlined in (a)(i) above. There are no quantitative methods present to deal with the matters outlined – qualitative procedural steps at a high-level are grossly inadequate for this site and surrounding community. Item (a)(iv) also directs that the FRMP is prepared by a suitably qualified technical expert advisor – the applicant has conducted an FRA using its in-house staff, as was also the case for the ERP;

[218] https://www.solocheck.ie/Irish-Company/Coolpowra-Solar-Limited-742965

ii. *A suitably qualified technical expert advisor should prepare the ERP. Details of qualifications and experience to be submitted.*

12.2.3. Galway County Council – Fire Services

The Applicant is advised to consult with Fire Services section of Galway County Council in this regard and to demonstrate same in their FI response.

RESPONSE

The Fire Services Section of Galway County Council was contacted by telephone on a number of occasions by the applicant in January 2026. Due to their unavailability, the applicant was unable to speak directly with the relevant person. The applicant will continue efforts to arrange a meeting with the Fire Services Section of Galway County Council to discuss the submission Fire Risk Assessment and Emergency Response Plan submitted for the purposes of planning.

There are two issues in play here;

- The applicant appears to have relied on telephone alone, not email.
- It had six months to complete this task – to July 10th – but submitted the FI response five months early on January 30th.

Galway County Council Fire Services will also be acutely aware of a Lithium-ion fire that occurred in Claregalway in January 2025. This resulted in a significant emergency response ordeal, temporary business closures and injuries to firefighters, some of whom remained out of work as of one year later[219].

12.2.4. AA / NIS (FI Item 3)

FI Item 3

Please review the Appropriate Assessment Screening Report and Natura Impact Statement submitted in light of this Further Information request and include consideration of the following-

b. *potential for significant in-combination effects arising from proposed project 2 the LDES (BESS) i.e. firewater management strategy etc.*

c. *all potential pathways from the site to Barroughter Bog SAC e.g. potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog.*

d. *potential pathways to Lough Derg North-East Shore SAC and Lough Derg (Shannon) SPA and mitigation measures already proposed that may mitigate concerns to such designated sites.*

[219] https://www.connachttribune.ie/news/claregalway-battery-fire-fall-out-still-goes-on-5612745

An Appropriate Assessment Screening Report and Natura Impact Statement has been prepared and submitted in response to this Further Information request. The reports include consideration of the following:

- potential for significant in-combination effects arising from proposed project 2 the LDES (BESS) i.e. firewater management strategy etc.
- all potential pathways from the site to Barroughter Bog SAC e.g. potential for atmospheric pollution (including nitrogen) from the RGFG and potential flooding of watercourses near the bog and subsequent infiltration and/or interception of the bog.
- potential pathways to Lough Derg North-East Shore SAC and Lough Derg (Shannon) SPA and mitigation measures already proposed that may mitigate concerns to such designated sites.

Per ACP's 320916 website[220], we cannot find such an Appropriate Assessment to address this. We see the highlighted AA below which pre-dates the ACP FI request by six weeks, and could not have addressed these specific questions;

It also seems related to the construction road and not the BESS / OCGT as requested;

12.2.5. Private Roads

ii. Having regard to Schedule 5, Part 2, Class 10 (dd) clarify if the proposed internal roads (permanent and temporary) are private roads in respect of the proposed construction, detail the total length of same and revise the EIAR accordingly if required.

RESPONSE

The proposed internal roads (permanent and temporary which run from the public roads to the gate of each project compound) exceed the 2,000m threshold as set out under Class 10(dd). The relevant length is c.2,200m which is taken as the aggregate centreline length of the private road elements proposed. Additional private roads within each of the three project compounds total c.1,185m. This includes any spurs/branches and internal sections that form part of the overall development (temporary and permanent).

[220] https://www.pleanala.ie/publicaccess/EIAR-NIS/320916/Response%2004-02-26/Report%20for%20the%20purposes%20of%20Appropriate%20Assessment%20Screening%2004-02-26.pdf?r=906263660356

A question must be asked – notwithstanding the rest of the site issues – how suitable is a site that requires c.3,385m of road construction. The applicant is proposing three separate entrances onto the L8763 esker ridge (a geological and geomorphological site that is "highly vulnerable to contamination by human activities" according to EPA (section 10)), together with a new entrance onto the N65, 1km north of an existing junction.

For context, 3.385km is approximately the distance from the proposed new entrance to the centre of Killimor village and the length of this road is another material environmental consideration not discussed in the EIAR with specific regards to the climate act.

12.2.6. Bird Survey

> iii. Justify the findings of the submitted Winter bird surveys and the risk of the proposed development having regard to the fact that such surveys did not commence in October as detailed.

The applicant's response to this ACP request seems to start with a conclusion and then assemble support for it. It is worth noting that the survey in question was only originally late because of "the late appointment of Eire Ecology"[221].

That is an administrative matter within the applicant's own control, and the justification now advanced in the FI response does not sit with that earlier admission. Administrative shortcomings should not be given the opportunity to lead to environmental shortcomings.

The applicant had a substantial period of six months to respond to FI matters and returned it within three weeks. On that basis, an ACP direction to carry out a bird survey in October, would be deemed most unwelcome to an applicant. This might provide further context on the applicant's response.

12.3. Incomplete 2024 Application

In terms of completeness, many deficiencies were identified with the applicant's 2024 EIAR. A number are set out in this overall observation and were previously raised by both ACP (FI request) and GCC (in its report to ACP and its refusal).

For completeness, we have assembled a non-exhaustive list of analyses the applicant carried out between July 2024 and December 2025. These analyses post-date the original application and pre-date ACP's Further Information request. They indicate that the work necessary to support the 2024 applications was not complete at the time those applications were submitted.

[221] 2024 EIAR: 6.3.5.5.

Addendum	Category	Dated (YYYY-MM)
Appendix 2.4	Site Investigation: Trial Pits	2024-09
Appendix 3	Soakaway Results	2024-09
Appendix 4	Dynamic Probes Site Investigation	2024-09
Appendix 5	Rotary Cores / Boreholes	2024-09
Appendix 6	Plate Test Records	2024-09
Appendix 7	Groundwater Monitoring	2024-10 & 2024-11
Appendix 7.1.	Ground Investigations Report	2024-12
Appendix 8	Labatory Testing (Site)	2024-10
Appendix 9	Geophysical Survey	2024-12
pp 6-4	Biodiversity Study	2025-03
pp 6-5 & pp 6-15	Bat Survey	2025-08
pp 6-16	Birds Survey	2025-08
pp 13-12	Road Defection Inspection	2025-10

Further, Addendum Appendix 17.3 (Fire Risk Assessment and Emergency Response Plan) is dated January 2026, but no dates are given for when the draft was prepared or when it was finally signed off. It may therefore have been prepared in advance of ACP's FI request. It's noted that these items neither deal with the combination effects specified by ACP's FI request, nor provide the actual document requested by ACP (FRMP).

The timing of these analyses bears on completeness in two ways;

i. the analyses post-dating the original application show that the work needed to support the 2024 EIAR was not complete when the application was submitted;

ii. the analyses pre-dating the FI request, yet relied upon in the response to it, indicate that the specific matter ACP raised has not in fact been addressed since the document was prepared before the request was made. The Appropriate Assessment and Natura Impact Statement, dealt with at section 12.2.4 of this observation, are the clearest example: documents dated November 2025 cannot have been prepared to answer a request issued afterwards.

12.4. CRU Submission

Since 2021's call for 2GW of new gas-fired generation, the CRU has been routinely submitting to planning authorities in support.

A Freedom of Information request to the CRU (Appendix 12.4. CRU Submissions on RGFGs:) shows that the CRU does not track new gas-fired generation that was successful in the planning pipeline – but only within the Capacity Remuneration Market ("CRM") of the Single Electricity Market.

In its own words, the CRU is "*only aware of capacity procured in the CRM, not in the planning system or external.*"

The significance of this is twofold.

i. CRU's support on new gas-fired generation is a view on **capacity adequacy** – **not on planning or environmental acceptability** (i.e. emissions, traffic, European sites etc.). The CRU assesses whether further generation capacity is needed for security of supply; it does not assess the matters within ACP's remit i.e. the proper planning and sustainable development of the area.

A submission that the system "needs capacity" is not a submission that **this** development, in **this** location, is acceptable.

ii. Time. CRU's support rests on adequacy data that has since moved on. The CRU acts on the same resource-adequacy data as EirGrid's Generation Capacity Statement (now "AIRAA"). At the time of CRU's submission to the Coolpowra application (July 2024), the adequacy position indicated approximately 1,390 MW of risk-adjusted capacity secured by 2028 (highlighted below), implying a shortfall of some 600 MW in terms of 2GW;

Table 5.1: Ireland assumptions for new conventional plant capacities in adequacy studies (rated MW)

Ireland		2024	2025	2026	2027	2028
Gas turbine	GCS2023 risk adjusted capacity	330	200	290	0	570
	Total successful in capacity auctions	230	1,280	120	1,270	N/A

The CRU's 2024 submission to the Coolpowra application was made on the view that a further ~600MW of capacity was then required, and to signal support for the application entering the capacity market.

As set out in section 4.1. Climate Action Plan 2025 & All-Island Resource Adequacy Assessment 2026-2035 of this observation, the same referenced adequacy position has since changed, and the 2 GW target is on course to be surpassed according to the same table. We are now two years on from the original application and **the need the CRU's submission was based on, no longer exists**.

Taken together, the CRU's submission speaks to a capacity question based at a point in time and does not bear on the planning and environmental acceptability of this development, which is the question before ACP.

We further note that the CRU has since been engaged in legal proceedings with the applicant, arising from the applicant's repeated failure to qualify in the CRM described above. Those proceedings raised significant technical issues as to the viability of the project, as set out in section 7.1 of this observation.

This carries a particular implication. In the past, a generating plant that failed to secure a capacity contract in the CRM would generally not be built i.e. without a contract there was no route to construction. That is no longer the case as there is now an alternative LEU / data centre route.

The relevance for ACP is this; the CRU's support was premised on a capacity need that no longer exists, and the plant has since failed to qualify for the capacity market it was said to serve. Yet if it were somehow permitted, the LEU avenue remains a viable option or perhaps the primary option as outlined in the applicant's letter to CRU (Appendix 6 – Lumcloon Energy Letter to CRU (RE: CRU/202504)).

We ask ACP to bear in mind that the capacity-need case the CRU's submission is based upon has fallen, but the data-centre route remains, along with the environmental consequences of a fossil-fuel plant that the system no longer requires.

12.5. Fire Risk Assessment

The problem is not that fire goes unaddressed. A Fire Risk Assessment and Emergency Response Plan are provided[222], along with a consequence and Technical Land-Use-Planning study[223]. The problem is that the assessment's conclusion of acceptability cannot be tested on this record.

The risk case rests on the consequence study's frequency analysis. It puts a major-accident-to-the-environment scenario at an unmitigated frequency of 3.3×10^{-4} events per year, which the applicant places in the "tolerable if ALARP" region of the CDOIF risk matrix. Once "protection layers" are credited, that figure falls to 1.65×10^{-7} events per year, in the "broadly acceptable" region.
But those protection layers are themselves deferred. The firewater and contaminated-water containment "will be detailed and confirmed at detailed design stage (including isolation strategy, capacities, discharge controls)." Transformer containment is treated the same way, and "further risk assessment at detailed design (including QRA where appropriate)" is promised. A "broadly acceptable" figure reached by crediting protections that have not yet been designed cannot be relied upon at the point of determination.

12.6. Previous Appendices from 2024 East Galway Gas Plant Concern Group 2024 Observation

For further reading, we attach in appendix 12.4; four appendices which were also attached to previous East Galway Gas Plant Concern Group's previous observation;

i) Technical Note from Dr. Pamela Bartley (Hydro-G)
ii) Letter from Respiratory Consultant, Dr. Andrew Scott
iii) Legal Note from FP Logue
iv) Ecological Observations from Ecologist Anne Marie Mahon

We draw ACP's attention to FP Logue paragraphs 34-36.

[222] 2026 ADD: Appendix 17.3
[223] 2026 ADD: Appendix 17.2

13. Conclusion

As laid out in the beginning of this observation; we are an ordinary rural community, and we did not go looking for any of this. Three enormous projects around our homes on greenfield, unzoned, unserviced agricultural land with no history of energy generation and no history of heavy industry.

We have raised many material matters throughout this observation, many of which we consider sufficient in themselves to warrant a refusal;

Project Splitting

- Dependencies on separate applications; some yet to be advanced.
- One development has been presented as three developments.
- EIAR does not assess AIS-GIS connection; gas pipeline; Uisce Eireann water connection.

Need Case does not hold

- EirGrid's AIRAA shows that the 2030 2GW target of reserve gas-fired generation is on course to be surpassed.
- There is ample capacity in the planning pipeline already excluding Coolpowra.
- The SEM committee's goal is to procure security of supply while ensuring that consumers do not pay for more capacity than is needed.
- IEA warn against the building of new fossil fuel power plants.
- IESA (same Director as applicant) suggests LDES will replace the need for fossil fuel peaking plants

Project purpose.

- One purpose has been put to the planning system, and a fundamentally different primary purpose has been put to the energy regulator, namely data-centre activity.

Climate and emissions.

- The emissions figures are materially incorrect.
- Material contravention with the Ireland's current and future carbon budgets.
- Would contribute ~30% of the 2030 electricity sectoral emissions ceiling limit alone.
- The next carbon budget is likely to remain at this level, therefore the project would further breach 2031-2035.
- Wider concern of fossil-fuel lock-in and stranded-asset risk.
- Not compliant with the EU Taxonomy.
- Local region likely to experience ~64% of Ireland's 2030 sectoral emissions limit level should this project be approved

- Regulation (EU) 2024/573: SF_6 2032 deadline.
- Plant not compatible with renewable gases. Renewable gases will be reserved primarily for hard-to-decarbonise sectors.

Alternatives and Site Selection.

- ACP: Unzoned, unserviced site that would require significant justification.
- GCDP has designated a strategic economic corridor for large infrastructure elsewhere.
- Greenfield land brought forward with no genuine alternatives assessed.
- Developer-led planning
- Applicant's own historic site selection methodology finds this site "Unsuitable".
- Project is in technical breach of the adjacent substation's capacity constraint.
- Gas connection is 25km away and was omitted from EIAR.
- Served by a restricted road that serves into a junction with poor visibility and inadequate local road.
- Requires almost 3.5km of private road construction.

Roads, traffic and safety.

- A new access onto a national secondary road has not been shown to be structurally or operationally safe,
- Contravention to DoECLG's 2012 Spatial Planning and National Roads Guidelines: 2.5; 1.5; 3.4;
- Fails to DoECLG's 2012 Spatial Planning and National Roads Guidelines: 2.6;
- Contravention to GCDP: NR4; NR1; NNR2; NNR6; NNR7; DMS.28; DMS.33;
- Contravention to Proper Planning & Sustainable Development;
- Traffic assessment is unsupported;
- No collision data referenced;
- Killimor village not assessed.
- No consents for works on N65/L8763 junction
- Senior ESB engineer considered a peer abnormal load undeliverable by Irish roads. Applicant has not demonstrated otherwise
- Material underestimation of required HGVs
- Haulage route not assessed in terms of structural safety (M50; M4; M6; N65; L8763)
- Heathlawn bridge & road omitted from addendum
- N65 - Intensification; precedent;

- TII objection;
- GCC'S Road Traffic Engineer objection;

Water, flooding and European sites.

- Addendum AA predates ACP's FI requests;
- Addendum AA omits Barroughter Bog SAC while admitting hydrological connectivity;
- Addendum AA does not address BESS / OCGT / original site combination effects to European sites;
- AA / NIS maintains same measures as refused by GCC (reason 2);
- Stream diversion;
- Main site and new construction road highly vulnerable to contamination by human activities

Completeness

- Much of the analyses post-dates the 2024 application submission, and pre-dates ACP's FI request (i.e. 2024 application was advanced prematurely)
- Repeated deferral of assessments (road haulage, road structure, ALARP/Comah, Fires)
- Inadequate BESS fire modelling

Local impacts.

- Noise
- Land-take e.g. applicant purchased 70ac for a road it doesn't need. The community are very concerned by the applicant's land-take assembly of ~300ac and what it could mean long term.
- visual impact and residential amenity will be carried by the people who live here for the entire life of the development.

We could go on. We do not raise these lightly as we are conscious of what a grant would mean. What is proposed here can never be undone. Greenfield agricultural land would be permanently industrialised on a site that nothing in any development plan ever suggested for it. The State would be committed to fossil generation deep into a period in which its own budgets require the opposite, with the risk of a stranded asset ultimately falling on the public. Abnormal loads and heavy goods traffic would be directed onto a road the local authority and TII have repeatedly refused to open to far smaller development. Designated European sites and a drinking-water source for much of the State would be exposed on the strength of an assessment scoped only to an access road. These proposals would set a dangerous precedent across the country's planning system.

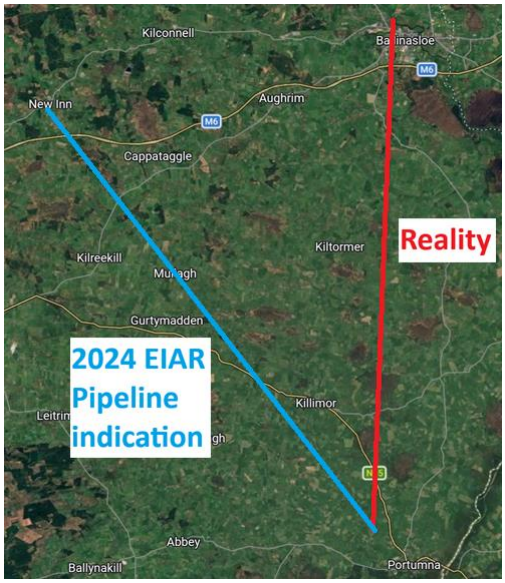
We have set this out as carefully and as fairly as we can. In light of the concerns raised throughout this observation, we are respectively asking the Commission to refuse the three applications. We make that request not out of reflexive opposition, but because we cannot see how consent could safely or lawfully be granted on it. We respectfully ask the Commission to weigh the documentary record on its merits, and to refuse these planning applications.

Contributors:

Michael Gohery, Paul Madden, Eamonn O'Hara, Padraig Gohery, David Rourke, Conor Broderick, Hubert Gordon, Veronica Curtin, Valerie-McCole Madden, Martin Knox, Anne Marie Mahon, Fred Logue, Dr Pamela Bartley, Jack O'Sullivan and Dr. Andrew Scott.

APPENDICES

Appendix 3.



At a basic desktop level, a gas main from Ballinasloe (per GNI in Kiltormer 2025) would cross the GCDP 2022-2028's "Special" Shannon Environs landscape on route to site, and may further interfere with;

the following SAC's:

- Ardgraigue Bog (SAC Code 002356)
- Glenloughaun Esker (SAC Code 002213)

following SPA's:

- River Suck Callows (SPA Code 004097)

the following watercourses (many other watercourses will likely be impacted);

- River Suck
- Kilcrow River
- Lawrencetown Stream
- Cloonescragh River

the following Natural Heritage Areas;

- Suck River Callows (NHA Code 000222)
- Killure Bog (NHA Code 001283)
- Ballinasloe Esker (NHA Code 001779)
- Capira/Derrew Bog (NHA Code 001240)
- Moorfield Bog (NHA 001303)
- Cloonoolish Bog (NHA Code 000249)
- Eskerboy Bog (NHA Code 001264)

Appendix 4.1.

Background on Ireland's new flexible gas-fired generation target of 2GW by 2030

2021

Ireland Electricity Grid Operators EirGrid (ROI) & SONI (NI) publish All-Island Generation Capacity Statement 2021-2030. This statement examines the likely balance between electricity demand and supply during the years 2021 to 2030.

Ireland experienced eight amber alerts through 2020-21 due to a variety of reasons including prolonged outages at two large gas generators due to technical problems and the impact of Covid-19 on maintenance schedules, limited interconnector support from the UK and periods of very low wind.

The statement also predicted that in the run up to 2026, around 1,683* megawatts (MW) of generation will retire in ROI, with a further 476 MW retiring in NI;

Plant (ROI / NI)	MW	Predicted Closure Year
Aghada (ROI)	90	2023
Tarbet (ROI)	590	2023
Moneypoint (ROI)	885	2025*
Edenderry (ROI)	118	2023
Kilroot (NI)	476	2023
Total	**2,159**	

*ACP since granted Moneypoint permission to convert its primary fuel source from coal to Heavy Fuel Oil (HFO), extending its operational period from late 2024 until the end of 2029

2021 (29th September)

The Commission for Regulation of Utilities (CRU) publishes an information paper on the All-Island security of electricity supply, which outlined the challenges facing the electricity market at the time. This was published in tandem with Eirgrid & SONI's aforementioned Generation Capacity Statement.

CRU recommends for the procurement and delivery of at least 2000 MW of additional flexible gas-fired generation capacity by 2030 at the latest. CRU believes that the implementation of this Programme over the coming months and years, with appropriate contingency measures, will address the capacity shortfall identified in the Generation Capacity Statement. CRU also recognises the delivery of two new electricity interconnectors: the 700MW Celtic interconnector to France and the 500MW Greenlink interconnector to Great Britain, which will further support electricity security of supply.

2021 (30th November)

Department of the Environment, Climate and Communications (DECC) publishes a Policy Statement on Security of Electricity Supply.

This Statement was developed following the CRU declaration of an electricity security of supply crisis. It stated that the development of new conventional generation (including gas-fired and gas/oil/distillate-fired generation) is a national priority and should be permitted and supported to ensure security of electricity supply and support the growth of renewable electricity generation.

It supported the retention of existing conventional electricity generation capacity until the new conventional electricity generation capacity is developed to ensure security of supply.

It stipulated that the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid.

2023 (20th December)

Department of the Environment, Climate and Communication publishes the Climate Action Plan 2024. The Electricity Chapter (ch.12) notes the 2 GW target, which remains static since it became a 2030 target back in 2021. The Plan does not provide an update on how much of this 2 GW has been achieved to date.

One year on, CAP 2025 referred to the same target with no update on its progress

2026

In response to the CRU's September 2021 direction to generate 2,000 MW of new gas-fired capacity (quickly adopted as Government policy), developers have clearly capitalized on what amounted to an open invitation. As a result, the island is on course to far exceeded its original target at the expense of both consumers and climate goals.

It would be reasonable to expect that these new gas-fired power plants would be strategically located in regions with specific characteristics, i.e:

- Zoned land
- Brownfield sites
- Existing energy-production infrastructure
- Close proximity to gas pipelines
- Close proximity to heavy energy users

Unfortunately, this is not always the case. There has been a rise in developers targeting greenfield, unzoned sites often lacking even the basic prerequisite infrastructure. These developers are systematically submitting applications to various planning authorities;

- persistently citing the CRU's directive for 2,000 MW of gas-fired generation and the DECC's corresponding policy, which is itself rooted in the CRU's 2021 call.
- asserting that these gas plants are "a national priority" and warrant approval regardless of local environmental suitability.

These claims are leading to an abnormally high approval rating. In many recent cases, I've noticed planning authorities citing the 2GW target in the planners reports with no context on its expected delivery as advised by the TSO.

Appendix 4.2.

CATEGORY	LOCATION	MW	OPERATOR	STATUS	AUTHORITY	REFERENCE
COMPLETED	Dublin (3 × FlexGen ADGT)	192	ESB	Completed 2024	Dublin CC	EIRGRID
COMPLETED	Grange Castle, Co. Dublin	115	Grange Backup Power	Completed 2025	South Dublin CC	SD15A/0061 /EP2
COMPLETED / UNDER CONSTRUCTION	Edenderry, Co. Offaly	116	Cushaling Power	Operational Target 2026	Offaly CC	EIRGRID
COMPLETED / UNDER CONSTRUCTION	Castlelost, Co. Westmeath	275	Lumcloon Energy / Vitol	Operational Target 2026	Westmeath CC	21515
COMPLETED / UNDER CONSTRUCTION	Athlone, Roscommon	100	Bord Gáis	Operational Target 2026	Roscommon CC	2460393
COMPLETED / UNDER CONSTRUCTION	Parklands, Dublin	125	Bord Gáis	Operational Target 2026	South Dublin CC	SD21A/0167
UNDER CONSTRUCTION	Tarbert, Co. Kerry	350	SSE	Operational Target 2027	ACP	318540
UNDER CONSTRUCTION	Ringsend, Dublin	299	ESB	Operational Target 2027	Dublin CC	3137/23
UNDER CONSTRUCTION	Finglas, Dublin	293	Kilshane Energy	Operational Target 2027/28	ACP	317480
UNDER CONSTRUCTION	Platin, Co. Meath	170	SSE	Operational Target 2027/28	ACP	319278
COMPLETED	Kilroot (NI)	700	EP	Completed 2024	NI	
ACTIVE EMERGENCY GENERATION (–2029)	Northwall, Huntstown, Shannonbridge, Tarbert	653	ESB	Government signed into approval and operational since 2022/23	ACP	313918, 313117, 315836, 315838
PLANNING APPROVED	Aghada, Co. Cork	299	ESB		Cork CC	23/5104
PLANNING APPROVED	Tarbert, Co. Kerry	600	Shannon LNG		ACP	319566
PLANNING APPROVED	Bellacorick, Co. Mayo	114	Constant		Mayo CC	2360028
PLANNING APPROVED	Tynagh, Co. Galway	350	EP		ACP	317810
PLANNING APPROVED	Tynagh, Co. Galway	299	EP		ACP	313538
PLANNING APPROVED	Rhode, Co. Offaly	710	Bord na Móna		ACP	319023
PLANNING APPROVED	Kentstown, Co. Meath	180	Polarisgate	Granted by Meath CC, appealed to ACP	Meath CC	2460842
WITH PLANNING AUTHORITY	Athenry, Co. Galway	334	Bord Gáis	ACP (Successful at Capacity Auction T-4 2028/29)	ACP	324113
WITH PLANNING AUTHORITY	Kilshane, Co. Dublin	680	Kilshane Energy	Pre-planning consultation with ACP	ACP	324305
WITH PLANNING AUTHORITY	Moneypoint, Co. Clare (S1)	>300	ESB	Pre-planning consultation with ACP	ACP	323736
WITH PLANNING AUTHORITY	Moneypoint, Co. Clare (S2)	>300	ESB	Pre-planning consultation with ACP	ACP	323737
WITH PLANNING AUTHORITY	Coolpowra, Co. Galway	1,155	Lumcloon Energy	With ACP since June 2024 (Rejected from Capacity Auction T-4 2028/29)	ACP	320095

Appendix 4.3.

FOI emails between Lumcloon Energy and SEM regarding T-4 Capacity Market qualifications followed by CRU's notice to EirGrid RE: T-4 Capacity Market qualifications.

i. 2027/28 T-4 Capacity Auction

Email in which Lumcloon Power © (pre-Coolpowra Flex Gen project rename), issues a dispute notice to SEM, acknowledging the decision not to qualify the three OCGT units. Decision was upheld.

From: [redacted]
Sent: Wednesday, July 19, 2023 12:40 PM
To: CapacityMarketDisputes <CapacityMarketDisputes@sem-o.com>
Cc: [redacted]; CRMsubmissions@cru.ie; CRM Submissions <CRMsubmissions@uregni.gov.uk>; [redacted]
Subject: Dispute Notice: 2027/28 T-4 Capacity Auction Lumcloon Power (C) Ltd Qualification.

CAUTION: This email originated from outside of the organisation. Do not click on links or open attachments unless you recognise the sender and know the content to be safe.

Dear Sir/Madam,

Lumcloon Power (C) Ltd wishes to lodge a dispute notice in relation to the decision not to qualify three new units for the upcoming T-4 2027/28 capacity auction.

Please find attached the completed dispute notice form.

Kind regards,

[redacted]
(on behalf of Lumcloon Power (C) Ltd)

Lumcloon Energy Ltd
[redacted] / www.lumcloonenergy.com

ii. 2028/29 T-4 Capacity Auction

Email in which Coolpowra Flex Gen Ltd, issues a dispute notice to SEM acknowledging the decision not to qualify the same three OCGT units. Decision was upheld.

From: [redacted]
Sent: Monday, September 9, 2024 4:20 PM
To: CapacityMarketDisputes <CapacityMarketDisputes@sem-o.com>
Cc: CRU <info@cru.ie>; CRMsubmissions@cru.ie; [redacted] Lumcloon Energy [redacted] Lumcloon Energy [redacted] Lumcloon Energy [redacted]
Subject: Coolpowra Flex Gen Ltd: submission of notice of dispute: T-4 2028 29 qualification decision.

CAUTION: This email originated from outside of the organisation. Do not click on links or open attachments unless you recognise the sender and know the content to be safe.

Dear Sir/Madam,

Coolpowra Flex Gen Ltd wishes to lodge a dispute notice in relation to the decision not to qualify three new units for the upcoming T-4 2028/29 capacity auction.

Please find attached the completed dispute notice form.

Kind regards,

[redacted]
(on behalf of Coolpowra Flex Gen Ltd)

<image001.jpg>
[redacted] www.lumcloonenergy.com

iii. 2029/30 T-4 Capacity Auction

In April 2025, the CRU issued a notice to EirGrid regarding qualification changes, in which applicants must now provide evidence of granted planning permission by the qualification application date. The applicant did not have this so could not qualify.

CRU Ref: D/25/9470

Re: Security of Supply Direction to EirGrid regarding grid connections for projects successful in the L1-2: Ireland Locational Capacity Constraint Area in the 2029/30 T-4 Capacity Auction;

Accordingly, and as provided for in CRU/20/060, the CRU directs EirGrid to issue a grid connection offer to any applicant located in Ireland that is successful in the T-4 Capacity Auction for 2029/30 and that has provided evidence of granted

CRU An Coimisiún um Rialáil Fóntas Commission for Regulation of Utilities

planning permission for the unit[1] by the Qualification Application Date for the 2029/30 T-4 Capacity Auction.

Appendix 5.3. Logue 40-47

Fred Logue paragraphs 40-47 from 2024's East Galway Gas Plant Concern Group OCGT (320095) Observation

Alternatives

40. The EIAR does not comply with the EIA Directive in relation to alternatives.

41. EIA requires the mandatory assessment of alternatives which is aimed at providing a concrete opportunity to minimize the Project's environmental impact. The Commission's 2017 Guidance summarises the obligation as follows:

    - The EIA Directive requires Developers to describe the reasonable Alternatives that have been identified and studied and to compare their environmental impacts against the Project option chosen. This is an important aspect of the EIA Report and one that often challenges practitioners and Developers. Alternatives have to be 'reasonable', meaning that feasible Project options meet the Project's objectives.

    - The 2014 amendments to the Directive now require the EIA Report to include a description of the reasonable Alternatives (as opposed to an 'outline') studied by the developer who holds the pen. They also suggest types of Alternatives, such as Project design, technology, location, size, and scale.

    - The approach to identifying Alternatives is highly Project-specific. Some Alternatives are overarching and may be identified in plans and programmes (e.g. transport plans or regional development programmes) or by the Competent Authority at the EIA Scoping stage. Others might concern the technical design and are identified by the Developer. In cases, EIA practitioners may identify Alternatives and propose them to the Developer. The process of identifying and assessing Alternatives is iterative and requires some flexibility and good communication between all parties.

    - Consultation with the public is usually very important both for identifying and assessing Alternatives. A clear presentation of Alternatives, and how they have been assessed, also lends transparency to the process and can improve public acceptance and support for Projects.

    - The environmental assessment of Alternatives should be targeted and focused on the comparison of impacts between several options and presented as such in the EIA Report.

42. The purpose of the identification of alternatives is to minimize the environmental impact and logically therefore requires alternatives that reduce the need for mitigation as far as possible. The developer's superficial treatment of alternatives complies with neither the letter nor the spirit of Article 5(1) of the EIA Directive.

43. In fact the EIAR's treatment of alternatives is no more than a self-serving justification for why the Developer says that there is no alternative location other than the land parcels that it has already assembled through a connected company. Needless to say the developer's own land-holding is not a relevant factor in the consideration of alternatives.

44. The developer misunderstands the purpose of the do-nothing alternative. The Commission Guidance states that the "do-nothing" scenario is heavily based on the Baseline. In the EIAR section on alternatives there is no reference at all to the baseline and its evolution if the project were not to proceed.

45. It is implausible that the project is site-specific to the extent that alternative locations do not have to be considered. The long list of comparable gas projects set out in Annex 3 amply demonstrates that this claim is unfounded. As indicated at length in the EIAR the project aims to address issues with the all-island electricity system as well as national and EU climate change policies. It simply cannot be the case that the only suitable location just so happens to be on a large area of land owned by a company connected to the developer.

46. The consideration of alternative technologies and alternative layouts is equally deficient and is improperly expressed as a justification for the project configuration. For example, there are no alternatives which might have lower carbon emissions, an alternative of renewable-ready technology has not been considered. Alternatives that don't involve the diversion of a water body or the removal of large amounts of hedgerow have not been examined.

47. In light of the above the EIAR does not comply with Article 5(1) of the EIA Directive.

Appendix 5.5.4 - Noise

The Environmental Section / Climate Units recommended that the applicant's proposed development night-time noise operational impact of "+6dB above existing background" receives careful consideration by ACP

We found significant shortcomings in the 2024 EIAR's noise chapter that render the applicant's assessment inadequate. Noise is of material importance to this proposal and its effect on the wider area which, particularly for south and west of the site, is situated in a quiet region of the country with night-time noise exhibiting lower decibel (dB) levels than Cirrus software can report. All EIAR references are to the original 2024 EIAR;

The Galway County Development Plan (2022-2028): 14.7.2: Energy Strategy, states that '*it is essential to ensure that energy demands are met without compromising environmental quality*'.

The applicant's 2024 EIAR's noise chapter is misleading and does not adhere to best practices. It appears to present results more favourably to the applicant than reality, lacking thorough research and providing inadequate analysis. The methodology and data interpretation used are questionable, raising concerns about the reliability and accuracy of the findings.

Area Definition:

The Coolpowra EIAR: Section 11.3, states;

> *'Accordingly, based on proximity to the N65, it [site] does not fall within the specified criteria for defining 'quiet areas' as set out in NG4'*

The EPA Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4, January 2016), states;

> *'The location of the proposed development should be screened in order to determine if it is to be located in or near an area that could be considered a 'Quiet Area' in open country according to the Agency publication Environmental Quality Objectives. This will involve determining if the following criteria are satisfied:*
>
> *….*
>
> *• At least 5 km from any National Primary Route'*

For an area to be considered quiet, NG4 points out that the site should be at least 5km from a "National **Primary** Route" [emphasis added]. The applicant used the N65 as a criterion to qualify the development site as 'Low Background Noise' instead of 'Quiet'. The N65 is not a national primary route. It is a national secondary route, forming part of a network which is secondary to the main arterial classified as national primary routes. The applicant also noted this key distinction in EIAR: Section 13.3. National Primary Roads are numbered from N1 to N50. National Secondary Roads are numbered from N51 to N99. This can be seen in section 2.2 of Guidelines for Classification and Scheduling of Roads in Ireland.

Assessment Impact:

A quiet area definition raises two issues with the applicant's noise report;

1) The assessment methodology. According to NG4:

> *'it is recommended that long term noise measurements be undertaken. It is recommended that this should involve unattended noise measurement at a minimum of two locations **for a period of at least two weeks** at each location (measurements should ideally be concurrent). A sufficient number of locations should be monitored in order that a robust picture of all NSL's within the vicinity of a proposed development is obtained and assessed'*

The closest the applicant got to this was unattended monitoring for the following approximate durations (EIAR: Section 11.2.1):

- 2- day period at NMP1 and NMP2 from 13.30 hrs on the 22 April 2024, to 15.40 hrs on the 24 April 2024,
- 4-day period at NMP3 and NMP4 commencing between 13.00hrs on the 22 April 2024 to 17.30 hrs on the 26 April 2024.

This would be considered inadequate when compared to the criteria for assessment.

2) The limits on the results.

As mentioned above, the applicant has adopted the low background noise model with the following limits;

- Daytime (07:00 to 19:00hrs) – 45dB;
- Evening (19:00 to 23:00hrs) – 40dB;
- Night-time (23:00 to 07:00hrs) – 35dB.

However, according to NG4, the true recommended noise limit criteria for this area should read;

Table 1 Recommended Noise Limit Criteria

Scenario	Daytime Noise Criterion, dB $L_{Ar,T}$ (07:00 to 19:00hrs)	Evening Noise Criterion, dB $L_{Ar,T}$ (19:00 to 23:00hrs)	Night-time Noise Criterion, dB $L_{Aeq,T}$ (23:00 to 07:00hrs)
Quiet Area	Noise from the licensed site to be at least 10dB below the average daytime background noise level measured during the baseline noise survey.	Noise from the licensed site to be at least 10dB below the average evening background noise level measured during the baseline noise survey.	Noise from the licensed site to be at least 10dB below the average night-time background noise level measured during the baseline noise survey.
Areas of Low Background Noise	45dB	40dB	35dB
All other Areas	55dB	50dB	45dB

NG4 requires that the average background noise levels for a specific period are calculated as the arithmetic average of the measured LAF90,15min values during the relevant period; consider below, which represents the reported night-time assessment results from the 'long-term' NMPs (EIAR-VOL3_APP11);

Location	Assessment Duration	Average (dB)	Modal (dB)	Predicted noise from licensed site (considering ABP320095 project only)
NMP1	2D	29	27	~32
NMP2	2D	29*	20	~28
NMP3	4D	26*	25	~21
NMP4	4D	30	23	~27

20 is the minimum value that Cirrus software will calculate for LA90,15min. Lowest values within these 15-minute intervals were 17 – 18 dB,* ***hence average baseline dB is inflated.*

It should follow, that the night-time noise from the licensed site is to be at least 10dB below the values highlighted above. This would require having the following limits;

Location	Average (dB)	Licensed site limit
NMP1	29	19
NMP2	29*	<19
NMP3	26*	<16
NMP4	30	20

**20 is the minimum value that Cirrus software will calculate for LA90,15min. Lowest values within these 15-minute intervals were 17 – 18 dB, hence average baseline dB is inflated, and site limit should be lower.*

Bringing in the BESS side of the project, the applicant's **combined noise assessment** appeared to conveniently fall narrowly under the 35dB 'low background' night-time noise limit across all 40 NSRs. Therefore, adhering to the more stringent night-time limits above presents a significant challenge. Bear in mind that according to EPA's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4, January 2016);

> '*it is important to note that noise emissions are more likely to cause disturbance and/or annoyance during periods when the background noise is relatively low [and] periods when receptors are less tolerant of noise (e.g. night-time, weekends, and bank holidays)*'

Best Practice:

The applicant has chosen 'Night-time' hours as 23.00–**07.00hrs**. EPA's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4, January 2016)[224] states that '*Night–time measurements should*

[224] https://www.epa.ie/publications/monitoring--assessment/noise/NG4-Guidance-Note-(January-2016-Update).pdf

*normally be made between 23:00hrs and **04:00hrs**, Sunday to Thursday, with 23:00hrs being the preferred start time*' [Emphasis added].

Observing NMP1 (EIAR reported 29dB) & NMP2 (EIAR reported 29dB) for example. The Noise Assessment results (EIAR-VOL3_APP11) which reports dB levels over 15-minute intervals, shows the significance of the statement above. It's clear why EPA would point this out for best practice, as 4am-7am appears far more congruent with day-time measurements than **best-practice night-time results** (11.15pm-4am);

NMP:	NMP1 (dB)		NMP1 (dB)	
Time:	11.15pm-4am	4.15am-7am	11.15pm-4am	4.15am-7am
April 22nd	27dB	33dB	20dB	42dB
April 23rd	28dB	34dB	20dB	44dB

The applicant's additional 4am-7am timeframe only to serves to raise night-time levels which in turn lowers the impact of the proposed site's sound emergence.

Additionally, the 'quiet area' limitations would become even more stringent than previously stated. For example, NMP2's average night-time noise reported would go from 29dB (reported) to 20dB (i.e. **lower than 20 in reality, considering this is minimum reportable value with Cirrus software**). This lowers the permitted noise from the licensed site level on this location to 10dB, whilst the predicted noise from the licensed site for this project alone is ~28dB. Bear in mind, the predicted noise levels are at operational periods, and completely omit the significantly larger noise levels at initiation and termination of this facility (which will be its nature) – another glaring omission from the EIAR.

Regarding the applicant's chosen timings and their violation of the EPA's NG4 recommendations, I must draw attention to the relevant provision in the Galway County Development Plan 2022-2028;;

> ***NP4: Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise" [Emphasis added]***

General Noise Notes:

A) **EIAR-VOL3_APP11**; '*Unattended monitoring was conducted at the following NMPs for the following approximate durations … 4-day period at NMP3 and NMP4 commencing between 13.00hrs on the 22 April 2024 to 17.30 hrs on the 26 April 2024*' .

- NMP4 data is absent from 22/04 19:30 to 24/04 12:50. This omits ~40hrs of data including two nights.
- NMP3 data is absent from 23/04 18:15 to 24/04 14:44. This omits ~21hrs of data including one night.

There was no explanation given for these omissions?

B) Once more bringing in a relevant point from the GCC project; I note the following in the Coolpowra EIAR for NSR 30 (rural dwelling);

- Project 1 gives a predicted noise level of 27dB (*Table 11.21*);
- Project 2 gives a predicted noise level of 32dB (*Table 11.23*);
- Project 3 gives no significant noise sources
- All three projects **combined give a noise level of 26dB** (*Table 11.24*);

I must question the reliability of this data. How can the combined noise level be lower than the individual contributions? Is this type of mathematical modelling and data reliable for assessing potential impacts on the local community?

C) **Lack of clarity**;

As per EIAR_VOLUME 1; 11.2.2; the noise predictions analyse the projects at a 'continuous operational level' – this statement seems to be missing from later versions. I believe the assessment overlooks the distinct nature of the noise generated during the initiation and termination stages of these projects, which is far more intense than the noise levels considered during the project's operational phase. e.g. have they accounted for starter motors, emergency diesel generators, breaker operation, synchronous condenser initiations?

D) **Predicted Noise Levels at each NSR as a result of Project 2** (Coolpowra EIAR; Table 11.23);

'The existing modal values for night-time background (LA90,8hrs) range from 20 – 27 dB. Based on the predicted values for NSRs 1-3, 6, 34 and 39 where unattended monitoring took place, this indicates that the magnitude of impact during part of the night-time period may be +6 dB above background. The magnitude of impact indicates a likely adverse impact depending on context'.

We can see that even the applicant admits an "adverse impact" on the NSRs, however, in line with the rest of the EIAR, proceeds to downplay it by stating;

'However, it should be noted that the units will operate intermittently as a back-up. The times of operation **may** not be during the night-time and therefore **may** occur when higher background levels occur. Therefore, an adverse impact is not expected to occur when the frequency of operation, i.e. context, is taken into consideration. In summary, the predicted noise levels for all NSRs are **likely** to be below the following recommended day, evening and night-time noise limits for low background areas' [Emphasis Added]

There is a missing context here. Real people could be under this project's shadow for the rest of their lives. The words "may" and "likely" are of no use to these people. The applicant seems willing to manipulate the narrative and overlook critical details to push this initiative forward, regardless of its impact on the community.

The disregard evidenced by the applicant along with 'significantly adverse' sound levels would severely contravene the standards of Galway's County Development Plan 2022-2028. Galway is one of the most rural counties in Ireland, with 'almost 78% of the population living in the rural areas'. The GCDP discusses how its aim of 'strengthening sustainable rural communities whilst protecting the rural countryside from over development will be a key priority'.

E) Policies & Frameworks on Noise

As referenced by the applicant, the modal noise for these areas ranges from 20*-27dB (*although 17-18dB was regularly experienced – 20 is the minimum value that Cirrus software will log). If approved, even under the applicant's questionable methodology the operational sound emergence from this development will give in excess of +10 dB above background (EIAR: Section 11.7.2). In the applicants own wording, again; "*the magnitude of impact indicates a likely **significant adverse impact***".

Galway's County Development Plan 2022-2028; 7.9.2 - Noise;

"*The Environmental Protection Agency Act 1992, identifies noise as a form of environmental pollution and contains provisions for dealing with noise "**which is a nuisance, or would endanger human health or damage property or harm the environment**.""* [Emphasis Added]

NP1: To implement the Galway County Council Noise Action Plan in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.

*NP4: Restrict development proposals causing noise pollution in excess of **best practice standards** and regulate and control activities likely to give rise to excessive noise"* [Emphasis Added]

Directive 2002/49/EC of the European Parliament and of the Council relates to the assessment and management of environmental noise and is commonly referred to as the Environmental Noise Directive or END. The aim of the Directive is: "*to define a common approach **intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise***" [Emphasis Added]

Environmental noise exposure can significantly impact human health, research from the World Health Organisation (WHO) and the European Environment Agency (EEA) shows that environmental noise contributes to:

- Cardiovascular disease - including hypertension, coronary heart disease (CHD), acute myocardial infraction (AMI) and stroke;
- Cognitive impairment – including the impact on children's reading and education;
- Sleep disturbance – i.e., interference with sleep and awakenings;
- Annoyance – i.e., becoming or increasingly disturbed or bothered by noise; and
- Wellbeing – i.e., impacts on quality of life and mental health.

Appendix 5.6.1 – Bord na Mona Derrygreenagh – Alternatives EIAR Quotes

"The site benefits from a current valid planning consent for a gas fired thermal power plant on the existing Derrygreenagh Works lands. Planning consent was granted in 2010 under Strategic Infrastructure Development (SID) (Ref: 19.PA0011) with an extension of appropriate period under Section 42 Planning and Development Act until 11 April 2025. While planning consent will soon expire, the principle of power generation development on the site is established. A comprehensive site selection process was undertaken as part of the extant permission. The constraints and facilitators outlined in that assessment continue to be relevant."

Source: BnM/Derrygreenagh Environmental Impact Assessment Report – Volume I January 2024, 3.4.8.

"Alternative sites were considered for Tier 1 (Regional Site Selection), Tier 2 (per National Spatial Strategy) and Tier 3 (a more detailed appraisal of locations within the selected zone) in support of the existing site location and the extant planning consent."

Source: BnM/Derrygreenagh Environmental Impact Assessment Report – Volume I January 2024, 3.4.9.

"It should be noted that the Site of the Proposed Development, within an existing industrial setting, is on land which is zoned for Economic Development witing the Strategic Development Location in the Offaly County Development Plan (CDP) 2021-2027."

Source: BnM/Derrygreenagh Environmental Impact Assessment Report – Volume I January 2024, 3.4.12

"Eirgrid has indicated that it wishes to locate a 400kV substation node in the Midlands to re-enforce the supply and a node at Derrygreenagh would fulfil this requirement."

Source: BnM/Derrygreenagh Environmental Impact Assessment Report – Volume I January 2024, 3.4.16

"In a regional context Bellacorrick in Co. Mayo, Edenderry Co. Offaly and Derrygreenagh Co. Offaly were assessed with the proximity to appropriate gas and electricity infrastructure being substantive considerations. The 2nd tier assessed alternative sites in terms of the AthloneTullamore-Mullingar gateway with suitable lands owned by the applicant located outside the geographical triangle formed by the towns. In the final, localised assessment in the Derrygreenagh area three locations were examined, all of which are classified as brownfield sites with the preferred site chosen due to superior ground conditions, direct access onto the R400 and existing screening … The site is currently in commercial use associated with the peat industry and has direct access to the R400. It has historical links to the energy industry with peat from the adjoining bogs used in the Edenderry power station. The immediate vicinity is characterised by cutaway bog and quarrying activity and is sparsely populated with the nearest dwelling being 1.1km to the south-east of the site. The site is in proximity to the gas supply line which is 8km to the north of the site."

Source: ACP's planner report for the referenced 19.PA0011, p33

Appendix 5.6.3 - Policies concerning use of brownfield/industrial sites & change of land use.

- Climate Action Plan 2023; Section 12.1.3 supports the 'use of brownfield sites' in order to 'supply a growing amount of Ireland's electricity demand and offset emissions from fossil fuel'.

- Galway County Development Plan 2022-2028; CGR 11 states that:
  'It is a policy objective of the Planning Authority to establish a database of strategic brownfield and infill sites so that brownfield land re-use can be managed and coordinated across multiple stakeholders as part of an active land management process'.

- Project Ireland 2040 (National Planning Framework); Section 9.2 states;
  'The extent to which we prioritise brownfield over greenfield use, encourage the use and reuse of buildings in urban and rural areas, and reduce sprawl, will all help to increase the efficiency of land use and the pace of soil sealing i.e. the covering of the ground by an impermeable material which can result in soil degradation'.

- Project Ireland 2040 (National Planning Framework); NPO 53 seeks to:
  'Support the circular and bio economy including in particular through greater efficiency in land management, greater use of renewable resources and by reducing the rate of land use change from urban sprawl and new development'.

- The EU Territorial Agenda 2023 (41), with consideration of local communities and environments, states that:
  'energy production, mining, industrial activities, transport and other infrastructure developments, particularly when uncoordinated, can cause severe problems. Changes in land use and landscapes may fragment natural habitats and ecological corridors.

- Land Use Policy is an international and interdisciplinary journal concerned with the social, economic, political, legal, physical and planning aspects of urban and rural land use. It defines 'Land take' as:
  'the change in the amount of agricultural, forest and other semi-natural and natural land taken by urban and other artificial land development. Land take will be the first cause of biodiversity loss worldwide (Pereira et al., 2010; Seto et al., 2012). Land take also increases habitat degradation, pollution, as well as CO2 emissions (Eglin et al., 2010; Foley et al., 2005; Guo and Gifford, 2002)'.

Appendix 5.6.4 – Lumcloon OCGT – Alternatives EIAR Quotes

"The [Offaly County Development Plan, Chapter 20] expresses that it is Council policy to seek to encourage the redevelopment of sites (brownfield) as an alternative to building on new undeveloped sites."

Source: Lumcloon Energy 2008 EIAR.pdf, 5.3.5.

"More favourable conditions relating to a brownfield site in proximity to services became available through decommissioned sites owned by the ESB. R and R Mechanical Ltd submitted a prequalification tender for sites at Great Island, Tarbert, Shannonbridge and Lanesboro, but was unsuccessful in its bids. The brownfield site at the old Ferbane power plant, which was completely demolished in 2004, came on the market in 2008 for which R and R Mechanical Ltd tendered and were successful in acquiring the site."

Source: Lumcloon Energy 2008 EIAR.pdf, 1.5.1.1.

"Once the former ESB power station site in Lumcloon had been identified as potentially suitable, an appraisal of other sites within the midlands of Ireland (Athlone–Tullamore–Mullingar gateway) was undertaken. The following sites within the midlands region were identified as sites which could be suitable for the proposed development:

1. *Ferbane Business and Technology Park — ITM Ref 612638 724974*
2. *IDA Business Park, Athlone — ITM Ref 606596 740091*
3. *IDA Business and Technology Park, Srah, Tullamore — ITM Ref 632693 725935*

All three alternative sites are zoned for industrial use and are in close proximity to the gas (i.e. within 20 km kilometres of the gas network) and high voltage electricity grid. Four sites were assessed following consideration of local and national planning and development policy. The sites at Ferbane, Athlone, and Tullamore are zoned for industrial use, but are not owned by the applicant. The site at Lumcloon is located on part of the fully decommissioned former ESB owned power station site and is considered brownfield."

Source: Lumcloon Energy 2008 EIAR.pdf, 1.5.1.2.

Appendix 6 – Lumcloon Energy Letter to CRU (RE: CRU/202504)

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Dear Sir / Madam,

Thank you for the opportunity to respond and engage with you in relation to your consultation paper titled 'Large Energy Users connection policy' (CRU/202504).

Please see below our response enclosed, covering the key questions posed by yourselves as part of the consultation paper.

Further to our response, we would like to inform the CRU that we are willing to cooperate further as needed in relation to the points outlined below and for further discussions pertaining to the consultation paper respectively.

Kind Regards,

Nigel Reams

Managing Director

Lumcloon Energy

Introduction and Overview:

From the establishment of the first data centre in the late 1990's, Ireland has emerged as a significant hub in the global data centre industry, leveraging its strategic location, favourable climate, and supportive economic policies to attract major technology firms over the course of the last decade[225].

As of April 2024, the country hosts 82 operational data centres, with an additional 14 under construction and planning approval granted for a potential 40 more (with the definitive approval status of these currently unknown)[226].

Economic Outlook

To date, the data centre sector has substantially contributed to Ireland's economy. A 2018 study commissioned by Industrial Development Authority (or "IDA") estimated an economic contribution of €7.13 billion since 2010[227]. These facilities have also generated employment, directly employing approximately c.16,000 people as of 2022, with the number rising to c.27,000 when including contractors[228].

Energy Consumption and Environmental Concerns

In line with the sentiment outlined in the policy paper (CRU/202504); as critical infrastructure, data centres have increasingly become the focus of national energy security and resilience discussions. With the primal concern being the establishment and connection of data centres within a concentrated region, namely the Dublin area, posing systematic risks in relation to elements such as energy demand, network congestion and operational continuity.

Furthermore, the rapid expansion of data centres has led to significant energy consumption, accounting for 21% of Ireland's electricity usage in 2023, up from 5% in 2015. This surge poses challenges to Ireland's climate objectives, which include a 51% reduction in greenhouse gas emissions by 2030 and achieving net-zero emissions by 2050. In response, the government has implemented measures such as pausing new data centre developments near Dublin until 2028 to alleviate pressure on the national grid[229][230].

Labour Market

In response to the energy consumption and environmental concerns, the CRU has released the proposed decision document with the intention of introducing new planning and connection protocols for LEUs. Bringing with it additional requirements and consideration in relation to location, timing and the justification of load requirements. Requiring a refection not only on energy balancing priorities but also concerns around system resilience and critical infrastructure protection.

In summary, the policy aims to increase regulation on the local industry, with seemingly limiting involvement from system operators and the authority. Other than a currently changing and potentially changing ruleset (for the further development of the policy).

Changes regarding the regulation and requirements of the industry in turn places an impact on planning (for both existing and future initiatives) and delivery of large capital projects, of which we consider ours. The impact further ripples into the already constrained labour market present in Ireland, with only c.10 sub-contracts (currently delivering on other accounts and across other industries) able to repeatably and reliability execute against the scope and scale for the timeous construction of these sites and delivery of these projects.

[225] How Irish companies built the cloud — and billions rained down
[226] Data Centres in Ireland - Public Policy
[227] Data Centres in Ireland - Public Policy
[228] Data Centres: A Cornerstone of Ireland's Foreign Direct Investment and Economic Growth
[229] Ireland embraced data centers that the AI boom needs. Now they're consuming too much of its energy
[230] AI-fuelled cloud storage boom threatens Irish climate targets, report warns | Ireland | The Guardian

Future Market Outlook

Despite these challenges, the data centre industry in Ireland is expected to continue to grow (albeit not understanding the impact of increasing regulation and policy). Investments are projected to reach USD 4.22 billion by 2029, with a compound annual growth rate (CAGR) of 4.06% from 2023 to 2029[231].

Our Future Projects

In line with the growth of the future market outlook above, Lumcloon Energy is in the process of expanding operations through two dispatchable power generation projects, namely, Coolpowra and Castlelost.

With the intention of supporting the data centre industry, the CRU and the SOs, both projects have flexible combined power delivery of up to 1,710 MW (excluding storage):

- **Coolpowra Flex Gen**

  Upon the estimated completion in Q3 of 2029, the Coolpowra project will deliver up to 1,155MW of generation capacity to the Oldstreet substation (a 400kV grid connection). Generation configuration uses three, non-islanded, turbines terminated through overhead transmission lines.

- **Castlelost Flex Gen**

  The Castlelost project will deliver up to 275 MW of generation capacity to the 220 kV Maynooth – Shannonbridge line. Generation configuration makes use of five, nonislanded, turbines terminated through overhead lines.

- **Admiral DC & Associated Dispatchable Generation**

  Upon the estimated planning completion in Q1 of 2026, the Admiral project will deliver up to 160 MW dispatchable generation through high efficiency gas powered fuel cells, 120 MW solar onsite, 250 MW x 2 hr storage through the use of high efficiency batteries. This will be connected to a 220 kV grid connection located at Castlelost 220 kV substation and subsequently terminated through the use of 220kV Maynooth - Shannonbridge line.

The construction and operation will provide direct support in providing either on site, or proximate, generation to data centres along with potential upgrades to support the authority and SOs, such as, long duration energy storage, synchronous condensers, and Solar PV on nearby lands.

With the estimated / expected lifespan of these sites expected to be in the region of 30 years we believe that the above outlines our vested interest in the regulation and policy development but also the industry in general.

Engaging With the CRU

As outlined in the *Economic Outlook* section above, Lumcloon Energy in addition to up to 27,000 individuals in Ireland have a vested interest in the development, roll-out and execution of this policy and associated regulations.

Questions:

In line your / the CRU's request as part of CRU202504, page 85, our responses in relation to Q1 through to Q7 is outlined below. As part of these responses, we aim to provide the CRU with a reasonable and achievable considerations.

These responses aim to take into consideration the CRU's remit and responsibilities (which has matured from its establishment in 1999), namely to; ensure the security of supply, drive a low carbon future, empower and protect customers and enable our people and organisational capacity.

Q1. Comments are invited from interested parties in relation to the topics covered in Section 2 **Constrained regions** of the electrical system and security of supply.

In Section 2 of the document titled (CRU/202504), reference is made to four areas of key concern which have increased over the course of the last 10 years (c. 2015 to 2023), namely, 1) regional constraints on the electrical system (particularly in the Dublin region), 2) continuing and increasing data centre demand, 3) existing and planned generation capacity and 4) network

[231] Ireland Data Center Market Size, Growth, Forecast 2024-2029

planning and management. All relating to concerns in relation to the security of supply for the Irish energy network in general, one of the key areas under the CRU's remit (and subsequently those of the SOs to execute against). The impact on this is further exacerbated by constraints of supporting infrastructure required to migrate data centres to less-constrained regions, as outlined in CRU/2024001 (e.g. high speed and stable connections and / or the proximity to other data centres).

Conversely, investments decisions in data centres are ramping up quickly at global scale and any lack of prompt decisions and actions will lead to opportunities losses for Ireland. This is outlined and supported in our introduction above.

It is our opinion that the situation requires urgent intervention, measures and actions along with a fair and transparent underlying policy (i.e. LEU Policy) which supports in achieving the CRU's mission, whilst also taking into consideration the socio-economic impact of the data centre industry locally. In which the policy must ensure that confidence is maintained both locally and internationally to further drive investment in the industry.

To achieve this, Lumcloon Energy is of the opinion that, albeit increased transparency (such a those referenced for UK Power Networks, etc.) as outlined in CRU/202504 would be beneficial as part of the planning, application and consultation process, that it will not necessarily drive observable impact to stakeholders other than the CRU and SOs. As such, our key suggestions here are:

1. Decisions to expedite Network Planning, including reinforcement works, delivery of new infrastructure, or addressing security of supply and constraint issues.
2. Decisions to provide a clear roadmap with timelines and milestones for the next 5, 10, 15 years. Make available a detailed list of conditions and requirements to assist LEUs developers understanding in advance how the restrictions will affect their business.

It is our belief that this would be achievable through continuous engagement with the CRU along with the respective SOs for the co-development of the LEU policy. For the avoidance of doubt, we are of firm belief that conducting **only** a Market Intelligence exercise would not equate to a fair and transparent policy. In support of this, we draw attention to CRU/202504, page 07, where it is stated that 'as part of the PR6 process there is no planning to cover increases in LEU demand outside of organic growth', it is not our belief that a market intelligence exercise, but rather further engagement with the market would have supported in the mitigation of this occurrence.

Furthermore, Instead, it is strongly advised to identify a proactive solution for grid modernisation and expansion and prioritise its implementation. This can include urgent development of a strong grid infrastructure and incentives to replace outdated dispatchable capacity with new capacity. Such a solution can become to foundation to achieve the future targets to integrate 20 GW of offshore wind by 2040 and at least 37 GW by 2050 as per the Government Policy statement "Accelerating Ireland's Offshore Energy Programme".

Q2. Comments are invited from interested parties in relation to the topics described in Section 3 Proposed decision on **electricity connections**.

In section 3 of the document titled (CRU/202504), reference is made to four key areas primarily pertaining to electricity connections, namely, Proximate generation, participation in the wholesale electricity market, location and mandatory demand curtailment. For the avoidance of doubt, we consider other areas in section 3 (e.g. flexible demand and demand flexibility) to be addressed in Q3 – Q7.

Comments posted under Section 3 of CRU/202504 have several direct implications for data centre developers across the end-to-end value chain. It is our opinion that the requirement for data centres to provide dispatchable generation or storage imposes significant financial and logistical burdens on developers, potentially slowing down the pace of new projects and even redirecting them overseas if these become non-competitive globally.

To maintain the attractiveness of the market locally, it is our opinion that it would be beneficial to consider incentives or other support for integrating renewable energy solutions and advanced storage technologies. Furthermore, clearer guidelines and support for navigating the regulatory requirements and technical specifications could facilitate smoother and more cost-effective project developments.

Adjustments to these policies could enhance grid stability and capacity while also fostering the growth of the data centre sector in a sustainable manner. To expand the comments on the proposed decision below are few items that can improve the outcome for data centres development:

1. **Flexibility in Generation Requirements**: While the need for dispatchable onsite generation or storage ensures grid stability, it could strain developers financially (further exacerbated by seasonality and non-constant

generation requirements). A solution would be to allow phased compliance, where developers can gradually increase their onsite generation capacity in alignment with their operational scale-up.

2. **Streamline Consents/Licenses process**: With additional regulations and requirements for projects in Ireland, the total application process for various consents and licenses increased significantly the period required for their delivery. At this stage, it would be very important to optimise and reduce processing times of these applications. Particularly, the relationship between different consents/licences should be analysed and changed to streamline and enable concurrent progression of various consents/licences required.

3. **Clearer Regulatory Guidelines**: Providing detailed, easily accessible guidelines on connection requirements, including technical specifications and compliance timelines, would help developers plan better and manage costs more efficiently.

4. **Incentives for Renewable Integration**: Offering tax rebates, subsidies, or expedited permitting processes for data centres that invest and implement in renewable energy sources like solar, wind, or biomethane could alleviate initial setup costs and promote sustainability.

5. **Partnerships for Grid Development**: Encourage public-private partnerships to develop necessary grid infrastructure, reducing the individual burden on developers and ensuring better integration of new data centres into the existing grid. Alternatively, all grid modernisation and expansion plans of EirGrid need to be expedited.

6. **Technical Assistance Programs**: Formation of programs to assist data centres in understanding and implementing technical requirements for connection to the electricity grid could streamline processes and reduce delays. EirGrid clinics with detailed insights to the connection point(s) will be beneficial. Few clinics per project are desired to allow for few rounds of questions and answers for stronger feedback and insights.

These enhancements would not only support the growth of the data centre industry but also contribute to the overall resilience and sustainability of the energy grid.

Section 3 :- Further Clarification Required:

In addition to the above, we are of the opinion that multiple terms / concepts throughout the course of Section 3 require clarification / further explanation. For the avoidance of doubt, these are listed below:

1. The notion of “proximate generation” requires a rigorous definition to avoid misinterpretation and subjectivity. This clarification should, at minimum, aim to provide the; a) definition of proximate generation (i.e. electrically proximate), b) all associated constraints and exceptions, and c) all calculations associated if applicable to ensure that future connection requests (which are reviewed on a case-by-case basis) is done so fairly and transparently.

2. The paper outlines the requirements for generators and distribution centres to participate in onsite and proximate generation. Furthermore, it outlines the need for said generators to participate in the Day Ahead Market (DAM) and Balancing Market (BM) whilst subject to a Capacity Remuneration Mechanism (CRM) with little to no elaboration pertaining to the means in which this will function. It is of our view that additional explanation / consideration be placed in relation to:

    a. The cost associated with dispatchable energy generation, compared to large scale network generation and how this will be compared with current costs associated in the Capacity Remuneration Mechanism. In general, given the nature of data centres, the energy quality required for optimal functionality typically exceeds those required by the general market. This requirement heightens generation equipment costs as well as increases the cost of typical operation. Albeit CRU/2005004 points to the CRM supporting in recouping capital cost, key consideration must be taken in relation to the economies of scale in participating in this market.

    b. As outlined in CRU/2025004, the onsite and proximate generation will have “contractual requirements” in relation to performance and availability and minimum expected reliability. It would be beneficial to better understand the alignment with the existing and changes required to the grid code, whether these will be exposed to more changing requirements and whether there are new and specific performance indicators (both technical and commercial).

c. **Capacity Remuneration Mechanism:**

i. Expansion on whether the CRM market will change due to the inclusion of bespoke generation sites, established as part of the despicable and / or proximate generation requirements. ii. The approach which will be taken in introducing a new generator type or classification and the technologies required as part of the CRM market. iii. Whether data centre generation will have a different set of criteria compared to the existing generation market (particularly in relation to the legal / regulatory contractual obligation held with these organisations).

iv. Whether there will be a minimum purchasing agreement with the implementation of onsite / proximate generation to allow for the recouperation of capital relating to MIC equivalent generation.

v. Confirmation as to what the approach will be in the scenario where generation is not successful in participating with the CRM market.

vi. The dependencies between the capacity auction contract, grid connection, and planning permission and how these will be processed effectively to keep LEUs confidence to advance their project development.

vii. Forecasts and / or studies outlining how the additional, added generation will impact the demand curve for the current, medium- and long-term future whilst also supporting the initiatives of the CRU as outlined above. viii. An anticipated approach and timeline (considering the timelines offered to other generators historically) to ensure that data centres and generators are adequately prepared for their participation in the CRM arena. Ideally with a fair and transparent ramping period. Prior to the issue of this approach and timeline, we would like to propose that SOs engage with the market to ensure that capabilities and requirements are adequately scrutinised and accounted for.

d. **Day-Ahead Market and Balancing Market:**

i. Additional expansion / clarification would be required on the impact of this generation and the support it would provide to the existing generation market and contractual obligations which already exists in said market. ii. Clarification, an additional study and / or an expansion on the impact of participation in the day ahead market in relation to potential cannibalisation where the existing generators are displaced due to competition. Particularly in the instance where grid demand becomes reliant on the dispatchable generation related to data centres, offsetting the very purpose of the bespoke developed generation.

3. Clarification on whether there is a need for an additional set of de-rating factors for the technologies used due to the influence of on-site and proximity generation.

4. Clarification on whether there would be a benefit from reduced and / or no system (connection) charges given the configuration of localised power flow during dispatch hours.

5. It is not clear whether the proposed policy will impose a requirement on LEUs to apply for MEC connections that will be larger (or significantly larger than their MIC needs. The principles around these connection agreements should be laid out in the document. “The ramping up of a new data centre demand connection towards a full MIC” should be clarified in terms of ramp rates, export capacity etc. For example, a DC project may request a larger MIC in a phased delivery approach and for initial phases have a lower consumption. Will it still be required for these initial phases to provide a full MEC even if the consumption for a period will be significantly lower than MIC? At times will it be any requirements to dispatch to full MEC even if the DC consumes less? What if a project request 2 MICs for redundancies from DC to grid node? What are the principles in such cases?

6. For LEUs with onsite generation there should be the flexibility to choose to accept a level of dispatchable generation considering such LEUs could provide also a level of demand flexibility at the grid connection. The connection requirements, in particular the requirement to provide dispatchable generation must be relaxed where an LEU will accept a more flexible grid connection. This could be a good alternative for locations where export capacity proximate to the LEU is not sufficient. In some cases, a solution using some proximate or onsite dispatchable generation should be used together with a complimentary flexible demand connection, potentially with some (behind the meter) onsite non-dispatchable generation.

7. Clarification is required on whether there will be requirement for LEUs to apply for MEC connections in addition to their MIC needs. Requiring both MIC and MEC will restrict the number of potential locations for development due to grid constraints, which are different for demand and generation e.g. some locations may have significant capacity to support additional demand (MIC) but have limited/no capacity for additional generation (MEC) (adding additional demand in suitable areas could alleviate constraints which are the cause of dispatch-down of renewables). The principles around these connection agreements should be laid out in the document. "The ramping up of a new data centre demand connection towards a full MIC should be clarified in terms of ramp rates, import capacity etc. For example, a DC project may request a larger MIC in a phased delivery approach and for initial phases have a lower consumption.

8. The principles of dispatchable generation should be clarified in the policy. During this clarification, it would be beneficial to understand whether generation may be dispatched independently of LEUs demand. Given the requirements to participate in all electricity markets.

9. There are no incentives proposed for merits of building LEUs projects in close proximity to renewable generation and storage. In fact, renewable generation is not dispatchable and does not contribute to project merits in obtaining consents, while storage de-rating factors are very low requiring significant investments to fulfil MEC requirements as proposed in the decision (MW derated generation for MW load). Therefore, gas-fired/ (gas related) generation can possible be the only option to implement the generation requirements.

10. Clarification and /or confirmation on whether and how the LEUs policy will affect the Private wire policy and process.

11. Whether the authority (CRU) expects any potential breach in Third Energy Package directives and anti-competitive practices for entities owning significant energy production and demand.

12. A standard definition of what would be considered 'new generation' across both existing and newly established infrastructure, along with how this would be associated with 'proximate' generation (e.g. generation which is not yet operational).

13. Clarification and confirmation as to the possibility of auto-qualification for the capacity market (in order to both fast track the application and approval process) at the date of the policy roll out and potential further development of the LEU policy. This is particularly due to the ability to meet MIC requirements and essentially proximately feed data centres if and when required. Furthermore, it would be beneficial to understand whether applications (albeit decided on a case-by-case basis) will be subject to a defined and transparent set of criteria for market participants to work against.

Clear answers and / or clarifications to the points outlined above will form a strong foundation for the LEUs policy implementation, along with bringing substantial confidence and clarification to the market.

Q3. Comments are invited from respondents as to whether there should be a **minimum level in terms of MIC** below which this policy, or elements thereof, should not apply and, if so, what would be a reasonable minimum level of MIC? (e.g. by CRU 0.5 MW or 1 MW)

Throughout the course of the paper (CRU/202504), data centres are distinguished by key characteristics (regardless of MIC), examples being continuous power usage profile and the ability to quickly scale up energy usage compared to other LEUs. Inviting comments on whether a minimum threshold for Maximum Import Capacity (MIC) should exempt some data centres from LEUs policy requirements opens a key discussion for tailoring regulations.
However, in the instance where this is implemented, a reasonable MIC threshold should be set where the impact on the grid is minimal or less restricted. Such a threshold should be set based on detailed grid impact studies and industry input to balance regulatory goals with economic viability. However, it is suggested that MIC threshold is made dependent on the size of the power line capacity.

For example:

1. At distribution level with MV levels less than or equal to 38 kV: MIC>1MW
2. At 110kV line: MIC>5 MW
3. At 220kV line: MIC>10 MW

4. At 400kV line MIC>20 MW

Q4. Comments are invited from respondents on the proposed approach of providing the System Operators with the ability to require **demand flexibility from data centres** on the local system as deemed necessary on a case-by-case basis.

In the context of CRU/202504, our understanding in relation to demand flexibility for data centres is the ability to adjust energy consumption in response to signals from the grid and in so the System Operators. Including but not limited to shifting demand during peak periods or when the grid is under stress. It is however noted that in the context of the document this engagement is single sided from the SO's point of view but not that of data centres.

The proposed approach that gives System Operators the ability to require demand flexibility from data centres on a case-by-case basis presents both challenges and opportunities for organisations and operations.

The affected Data centres developers can encounter significant disadvantages in planning uncertainty (unpredictability in operational planning and capital expenditure, which may not result in the expected return on investment as outlined in GCS forecasts provided by the respective SO), potentially increased costs (on-demand flexibility measures will necessitate increased investments in technology and infrastructure and in addition to other requirements of delivering dispatchable generation in addition to the periodic operations and maintenance of equipment), operational complexity (varying demand could complicate data centre management and impact overall service delivery quality).

In point 6 of our response to question 2 we provided a suggested approach relating to this question topic also.

To minimise the impact a range of solutions are proposed:

1. **Data availability**: A comprehensive set of data and maps should be made available showing capacities and constraints at every single node and line of the grid. Knowing in advance MIC capacities available will allow LEUs to better planning the locations of their new developments without the need of extensive engagements with SOs or long waiting times for approval. This will allow greater transparency in the applications process with SOs assessment on a case-by-case basis.

2. **Clear Guidelines and Predictability**: Establish clear criteria and thresholds for when demand flexibility would be required, helping developers plan and budget effectively.

3. **Incentives for Compliance**: Offer tax incentives, rebates, or reduced utility rates for data centres that comply with demand flexibility requirements, offsetting some of the costs. This can greatly incentivise developers to contribute to 30% demand flexibility target by 2030.

4. **Long-term Agreements**: Encourage long-term agreements between data centres and System Operators to stabilise expectations and investments on both sides.

These measures can help mitigate the potential downsides of the proposed regulatory approach, making it more feasible for developers to meet flexibility requirements without excessive burden.

Q5. Comments are invited from interested parties in relation to the topics described in Section 4 **Gas connections**.

There are no proposed decisions in relation to gas connections and therefore it is suggested to remove this section from LEUs policy. If GNI forecasts a rapid increase in the gas demand, it is suggested to develop a separate policy that shows the path to expedite the growth of gas infrastructure, gas decarbonisation, and future gas connections requirements. We would however like to take this opportunity to suggest consideration of an improved approach to capacity management and planning for the system.

Q6. Comments are invited from interested parties in relation to the proposed approach described in Section 5 **Proposed direction to System Operators.**

This section 5 attempts to describe how SOs should ensure network stability, handle demand surges, and integrate renewable energy sources. Developers might find challenges with potential operational restrictions or requirements for additional investments in grid compatibility. Solutions could include clearer communication of technical requirements, support for infrastructure upgrades, and mechanisms for cost-sharing. These suggestions would help refine the approach to better support developers and enhance grid management.

The proposal outlines actions that System Operators (SOs) should undertake to facilitate the integration of more data centres in Ireland. These actions include enhancing grid infrastructure to manage higher loads, implementing advanced grid management technologies for better demand response, and ensuring sufficient redundancy systems to maintain stability.

Regulator Actions: The regulator should set clear guidelines and performance standards for SOs, provide oversight to ensure compliance, and possibly incentivise the development of renewable energy sources within these infrastructures.

Proactive measures by SOs, guided by regulatory frameworks, are crucial for aligning data centre expansion with national energy policies and sustainability goals.

To assist developers in expanding data centres without regulatory or operational blockages, below are several proposed solutions:

1. **Streamlined Permitting**: Establish a fast-track permitting process specifically for data centres, reducing bureaucratic delays.

2. **Infrastructure Credits**: Offer tax incentives or credits for investments in grid-enhancing technologies, such as energy storage systems that help manage load and contribute to grid stability.

3. **Collaborative Planning**: Implement a structured dialogue between developers, SOs, and regulators to align grid capacity expansions with the planned growth of data centres without the need to impose “a state-led approach”.

4. **Advanced Grid Technologies**: Encourage the adoption of smart grid technologies that can dynamically manage energy flows and integrate renewable sources efficiently, reducing the load on traditional grid systems.

5. **Shared Energy Facilities**: Promote the development of shared renewable energy facilities, like solar farms or wind parks, that can be directly linked to data centres to mitigate their impact on the public grid.

The focus on such strategies can facilitate significant economic growth while maintaining grid stability and sustainability.

Q7. Comments are invited from interested parties in relation to Section 6 **Future potential evolution of LEU policy**.

This section in LEUs policy emphasises the importance of anticipating changes and adapting strategies accordingly. A state-led approach, while providing structured guidance and potentially ensuring uniformity, might not be flexible enough to quickly adapt to rapid technological advances or the unique needs of diverse LEUs as well it could undermine healthy competition. This rigidity can stifle innovation and delay responses to market and environmental changes.

As has been historically observed; in the instance where private organisations are subject to high levels of regulation, oversight and effectively ‘state-led’ initiatives, a stagnation in the economic development of said industry is observed with an associated slow-down for innovation.

A such, we would like to emphasise our caution in relation to this and have provided some critiques regarding a state-led approach in the data centre industry:

1. **Slower Implementation**: Government processes can be slower due to bureaucratic requirements, potentially delaying necessary updates or adaptations to the policy as energy technologies evolve.

2. **One-Size-Fits-All Strategy**: State-led strategies may not adequately address specific regional or sector-specific challenges, missing opportunities for localised or tailored solutions that could be more effective.

3. **Inhibition of Competitive Practices**: Overly prescriptive regulations may limit competition and innovation by setting too many constraints or barriers for new entrants and existing players looking to innovate.

Alternative possible solutions:

- **Public-Private Partnerships (PPPs)**: These can leverage private sector efficiency and innovation alongside public sector oversight, combining strengths to accelerate development and implementation. Examples of these being collaborative planning and development of infrastructure and activities such as price reviews to ensure comprehensive coverage of the industry and impact on downstream decisions.

- **Adaptive Regulatory Frameworks**: Implement regulations that are designed to evolve based on predefined triggers or periodic review processes, ensuring that policies remain relevant and responsive.

- **Stakeholder Engagement**: Regularly engage with a broad range of stakeholders to ensure that the policy framework reflects the current needs and potential future direction of the energy sector.

- **Transparency and Forecast**: Regular publications from Government, regulator and system operators can become a solid platform to allow developers choose best locations that satisfy the needs of the power grid and overall country's developments.

These solutions aim to create a more dynamic and responsive policy environment that supports the growth and sustainability of LEUs without the constraints typically associated with a state-led approach.

A state-led approach to developing data centres can seriously inhibit economic growth by creating a less flexible regulatory environment that might deter investment. For instance, strict state controls and slow bureaucratic processes can delay project approvals and increase costs, making Irish space less attractive to investors especially those with agile mindset.

To attract more investment in Ireland's data centre business, policies should be more market-driven, offering incentives for sustainable practices and ensuring quicker project approvals. This approach could position Ireland more competitively on the global stage, leveraging its existing strengths in technology and business-friendly policies.

Appendix 6.3 – FOI Request

Lumcloon Energy Email to EirGrid and regarding Coolpowra, in which CCGT conversion capability is stated;

Killian, Paul

From: [redacted]
Sent: Friday 11 August 2023 15:12
To: Downey, Aodhagan
Cc: [redacted]

Subject: Lumcloon Power (C) Ltd: high level timeline for project delivery.
Attachments: 20230810 LPL C concept timeline r2.4.pdf

Hello Aodhagan,

We are keen to show our concept for the capacity delivery including grid and gas connections.

The chart shows durations and sequences which are based on our recent experience delivering [redacted] We have used reasonably conservative estimates for durations and added some explanatory notes on each task line. Activities relating directly to the grid have orange task bars, gas use yellow.

We would value engagement with EirGrid on this topic, particularly in the process of identify the most convenient connection option [redacted]

The project in question has been conceived to fit in with the [redacted]

1. The plant will have three independent generation units. These will be state of the art F class gas turbines operating in open cycle.
2. The gas turbines selected will be capable of accepting blended natural gas and hydrogen in future.
3. The plant will be configured so that it could be adapted to add combined cycle capability to 1, 2, or 3 units. This involves designing future spacing and connections.
4. The individual units will be capable of operating as synchronous condensers when not operating as OCGT (or CCGT).
5. [redacted]

Please review the attached, we are available to discuss further.

Kind regards,

[redacted]

On behalf of Lumcloon Power (C) Ltd.

[redacted]

Lumcloon Energy Ltd

Appendix 6.4 – Cloudy DS

Certificate of Incorporation on Change Of name

Number: 701308

I hereby certify that

CLOUDY H2 LIMITED

having, by a Special Resolution of the Company,
and with the approval of the Registrar of Companies,
changed its name, is now a
LTD - Private Company Limited by Shares

under the name

CLOUDY DS LIMITED

and I have entered such name on the Register accordingly.

Given under my hand at Dublin, this

Friday, the 17th day of January, 2025

Maureen O'Sullivan

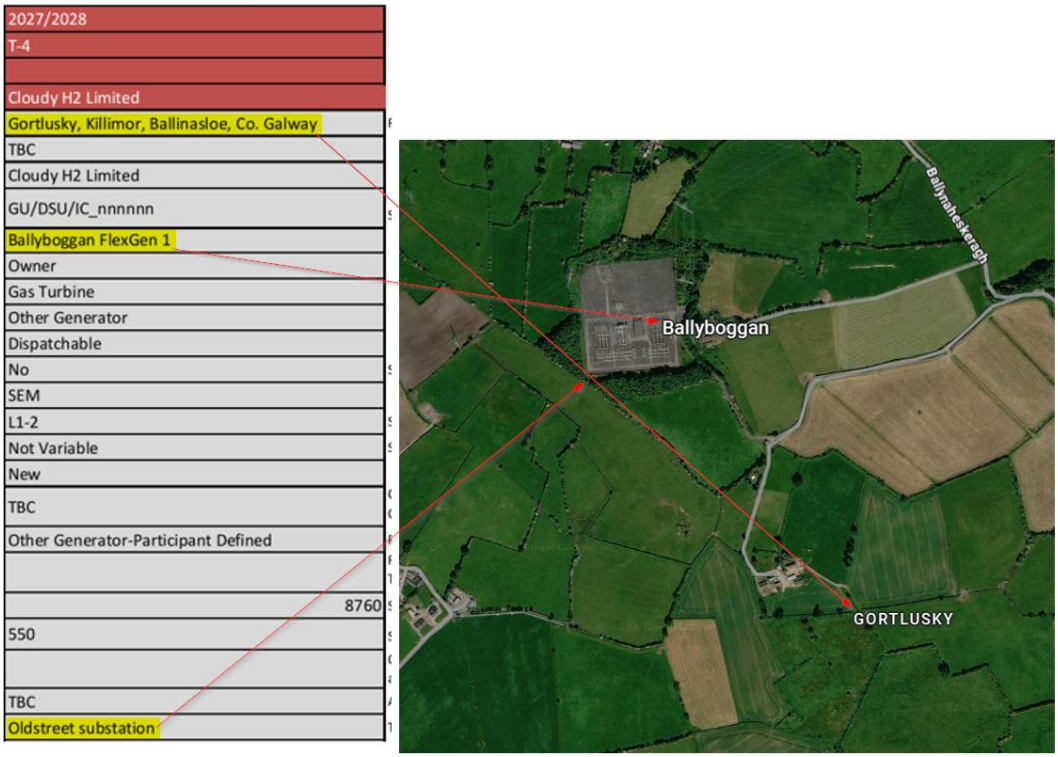
For Registrar of Companies

C32a Capacity - Unit Qualification Data (CU)

A separate Candidate Unit "CU" tab must be completed for each Candidate Unit seeking individual qualification. Please duplicate this tab as required.
Please complete all fields in grey.
Fields with white text and red background are derived and do not require entry.
Please refer to the glossary of terms for description of each attribute in the spreadsheet.

Capacity - Candidate Unit 1 Qualification

Capacity Year	2027/2028	
Capacity Auction	T-4	
Party ID *(if known)*		
Party Name	Cloudy H2 Limited	
Site address for Unit	Gortlusky, Killimor, Ballinasloe, Co. Galway	For new units, please provide an OS map of the proposed site
Participant ID	TBC	
Participant Name	Cloudy H2 Limited	
Capacity Market Unit ID	GU/DSU/IC_nnnnnn	Same as Candidate Unit ID, except in the case of CAU where there is more than one Candidate Unit as part of the CMU
Candidate Unit ID	Ballyboggan FlexGen 1	
Unit Ownership	Owner	
Technology Class	Gas Turbine	
Unit Type	Other Generator	
Unit Control Classification	Dispatchable	
Clean Unit Classification	No	See CMC Glossary for definition of "Clean"
Capacity Zone	SEM	
Locational Capacity Constraint Area	L1-2	See Initial Auction Information Pack for further details on LCC Area. See CMC C.2
Variable Unit Classification	Not Variable	See CMC Glossary for definition
Capacity Seeking Qualification	New	
Connection Agreement Reference Number	TBC	Connection Agreement Reference Number to be used to establish the Connection Point for Locational Capacity Constraint
Capacity Methodology	Other Generator-Participant Defined	Please specify the methodology used for the Initial Capacity values. See CMC Section C.3.2
Duration in hours (Daily) 24 hrs max		Requirement for storage units based on their duration at full output and Demand Side Units based on Maximum Down Time in accordance with SEM-18-030. Leave it blank if it doesn't apply
Duration in hours (Annual) 8760 hrs max	8760	See notes on Annual Run Hour Limits in 'Read Me' tab. Leave it blank if it doesn't apply
CO_2 Specific Emissions (g/kWh)	550	See notes on Emissions in 'Read me' tab. Leave it blank if it doesn't apply
CO_2 Annual Emissions (kg/kWe)		Only required where Specific Emissions > 550 g/kWh. See notes on Emissions in 'Read me' tab. Leave it blank if it doesn't apply
Generator Unit Name	TBC	As stated in the Connection Agreement. N/A for DSUs
Connection Point	Oldstreet substation	Transmission or Distribution Station which the Generator Unit is normally connected



FOI request between applicant (Lumcloon Energy; Coolpowra) and EirGrid from 2023.

A 2023 C32a Capacity - Candidate Unit Qualification form under the name “Cloudy H2 Limited” shows the Coolpowra turbines seeking to qualify for the T-4 2027/28 Capacity Auction (Ballybough is the adjacent townland). Two things stand out here;

- the duration in run hours (annual) is set to 8760 (i.e. full-time).
- The party name, “Cloudy H2 Limited” - now Cloudy DS - a data centre / cloud infrastructure storage subsidiary of Lumcloon Energy.

Appendix 8.1. Knox Submission

Note by Martin Knox (10 Cottage Gardens, Ennis, Co. Clare, V95 YFN5) on behalf of the East Galway Gas Plant Concern Group (EGGPCG)

Developer: Coolpowra Flex Gen Ltd

Location: Coolpowra, Cooldorragha, Coolnageeragh, Ballynaheskeragh, Gortlusky & Sheeaunrush, Co. Galway.

Scope of the development: Reserve Gas-Fire Power Generator plus GIS Electrical Substation and Energy Storage System

Power station installed capacity: 1.155 GW using natural gas to power the three open cycle gas (OCGT) turbines which are 39% efficient with a claimed demand rate of 20.14kg/sec. However the 20.14kg/sec burn rate is incorrect. Using EPA/EU ETS methodology, the correct GHG emissions tonnage is ~ 900,000 tonnes per annum (excluding diesel and methane leaks)

Environmental Impact: Major adverse with no mitigation

Outcomes:

(a) Increased GHG emissions,
(b) Increased threats to national climate goals, energy security, the carbon budgets and the Climate Act.
(c) Increased cost to customers and the likelihood of significant penalties on the tax-payer.
(d) Clear social justice impacts

None of these foreseeable outcomes are considered by the developer, with no control measures identified and put in place.

The Further Information (FI) provided does not provide any reassurance as to the claimed need for this development, or to demonstrate that it will not have an adverse climate impact.

Greenhouse Gas (GHG) Emissions

If running continuously it would emit large quantities of GHG annually. There was a gross error in the EIAR which has not been corrected in the FI. In the EIAR it was claimed that emissions would be 586,400 tonnes of GHG per year (tCO2/yr) in Table 15.2. This is a gross error (incorrect burn rate) and warrants careful consideration by the planning authorities, the actual number is closer to 900,000 tonnes per year.

The analysis of GHG impact in the EIAR is flawed, as the developer failed to consider the impacts outlined above.

The Electricity SEC for CB3 (2031-2035) is not yet known, but if it reduces in proportion to the national indicative budget, it's likely to be in the region of 15 Mt GHG or 3 MT per year. This development alone would consume 30% of the annual Electricity SEC budget by itself for this period. The climate impact of such large emissions would undoubtedly be major adverse in addition to placing a catastrophic

financial burden on the state. The planning authorities must consider the climate and financial impacts of this project to be unsustainable and unjust, running directly contrary to climate justice.

The aspirational schedule of mitigation (EIAR addendum v4 Final reports):

> *"This consolidated schedule has been prepared to provide a clear description of (i) the features (if any) of the proposed development (as amended) and (ii) the measures (if any) envisaged to avoid, prevent or reduce and, where feasible,* ***offset likely significant adverse effects on the environment."*** [Emphasis added].

The schedule refers to offset measures, but none is proposed.

Projection of GHG emissions 25 years into the future as presented in the EIAR (Table 15.2) raises significant questions which have not been clarified in the FI. Ireland aims for net zero carbon emissions in 2050, which is slightly less than 25 years away. Yet the lifetime GHG emissions stated in Table 15.2 assume constant GHG emissions over a 25-year period. To align in any meaningful way with national climate targets the emissions from the proposed development would need to taper off rapidly in the 2030s. No glide path has been indicated for this reduction, and no credible mechanism has been described. The EIAR and Addendum mention the possibility of fuelling with biomethane/green hydrogen. However, national policy envisages prioritisation of these renewables gases for hard-to-decarbonise sectors of the economy, where direct electrification is not feasible. In any event, green hydrogen relies on renewables' and so is therefore in competition with renewables for the grid: biomethane quantities in the quantities required are a long way off.

NEED FOR DEVELOPMENT: CLAIMED RENEWABLE TRANSITION

The EIAR and FI say that the development will support the target of 70% renewables and argue that it will be necessary to have this backup generation to facilitate increased renewables. The EIAR states "*the proposed development would have a positive impact on climate*." (EIAR, 15-8). In stating this, the developer is implying that the proposed development will enable additional variable renewables generation, which would have the effect of reducing emissions from existing fossil fuel power plants by an amount greater than the emissions from the development. This is rather a big claim, and would need to be demonstrated quantitatively, but there is no such analysis present in either the EIAR or in the FI.

APPENDIX 4.1 Fire Risk Assessment or Environmental Risk Assessment: Sections 1-13. Section 5.9 Considers diesel and battery fire threats only. Threats to the environment by the emission ~ 900,000 tonnes annually from the combustion of methane (including gas fugitive emissions leakage, and gas-oil use) have not been considered in the risk assessment. The assessment is incomplete having ignored the climate threats of the planned GHG emissions. The developer seems to omit addressing clear foreseeable consequences of the development, inconsistent with the State's obligations under the Climate Act and other relevant climate legal requirements and national climate protection strategies.

COOLPOWRA EIAR VOL-2 CH.15

The climate warming consequences of CO_2 in the atmosphere is therefore largely ignored. Indeed, the applicant merely states that;

> *"when considered in isolation as a stand alone Reserve Power Plant,* ***the proposed development would have a major adverse impact on climate****. However, the Proposed Development would provide additional peak power generation capacity, which would*

contribute to providing a secure energy supply to the national grid. A key element of the national decarbonisation strategy is to target 70% renewable electricity by 2030. To allow this uptake of renewable energy to happen it is necessary to have in place sources of energy generation that can be efficiently utilised to cover any imbalances in supply and demand. Natural gas is a relatively lower-carbon option than coal or peat to provide security of supply, so when viewed in comparison with existing fossil-fuel plants, the proposed development would have a positive impact on climate. Energy security is of national importance and a mix of fuel types and approaches, and the proposed Reserve Power Plant has a role to play in the national strategy and in the achievement of energy security." [Emphasis Added]

To claim that natural gas used to power the plants is less carbon intensive than coal or peat is an obvious straw man: there are currently no coal or peat plants operating in the state.

The developer has not reconciled the contradiction inherent in the increased use of fossil fuels with the national decarbonisation strategy touted in these documents. To support the national decarbonisation strategy, it would be logical to power the plant using renewables only. Continuing use of fossil fuels will necessarily negatively impact national decarbonisation endeavours.

CLIMATE:

This project, as reported by the developer to the CRU is to support the data centre industry.

OCGT Consumption: 20.14kg natural gas per second (developer's incorrect figure). The feed rate is underestimated thereby lowering the CO_2 load on the environment.

This peaking plant is proposed as a back-up in the event of a shortage of supply in the grid due to high demand for electricity. The plant will be running on standby 365, 24/7 and when called upon will operate for 1500 hours (2 months approx.) and 72 hours (3 days) using the secondary fuel, namely, diesel: storage 19,000 tonnes in three tanks supported by 150% tank capacity bunds. The construction phase emissions are calculated to be 28,200 tonnes of CO_2 and 586,400 tonnes per annum during plant operation from the developer's figures in table 15.2 for EIAR-VOL2.

The correct operational emissions figure is greater than this i.e. 900,000 tonnes per annum (39% efficiency open cycle gas turbines) and not 586,400 as reported in Table 15.2, a gross error in a direction that favours the developer. Of course, if the methane used is fracked, then we have an even greater impact on the environment. So yes, the climate impact is correctly identified **as major adverse** but no mitigation, attenuation or offset is proposed.

To claim that the plant will be used as standby generation while at the same time planning to use the energy to supply data centre demands as indicated to the CRU is insincere. Insofar as peaking demand goes, there are already sufficient projects in the pipeline claiming the 2GW of flexible gas 2030 target.

According to Lumcloon Energy's response to the CRU, data centres are considered critical infrastructure;

"In line with the sentiment outlined in the policy paper (CRU/202504); ***as critical infrastructure, data centres have increasingly become the focus of national energy security and resilience discussions****. With the primal concern being the establishment and connection of data centres within a concentrated region, namely the Dublin area, posing systematic risks in relation to elements such as energy demand, network congestion and operational continuity. Furthermore, the rapid expansion of data centres has led to significant energy consumption,*

accounting for 21% of Ireland's electricity usage in 2023, up from 5% in 2015. This surge poses challenges to Ireland's climate objectives, which include a 51% reduction in greenhouse gas emissions by 2030 and achieving net-zero emissions by 2050. In response, the government has implemented measures such as pausing new data centre developments near Dublin until 2028 to alleviate pressure on the national grid". [Emphasis added]

The project will, it appears, contribute to our national goals of 51% reduction in GHG emissions by emitting circa. 900,000 tonnes of GHG into the atmosphere annually. The reasoning is clearly flawed.

Claimed Contribution to 2GW Flexible Generation

The development is claimed to make a contribution to the "at least 2GW" flexible generation required by national policy. However, no evidence has been produced to show that this specific development is required to meet this flexible generation requirement. Information in the public domain indicates that the quantity of flexible generation which has been consented by planning authorities to date.

SEAI projections (National Energy projections 2025, SEAI, September 2025) indicate that the state will fall far short of its renewable electricity target for 2030. Since the variable renewables supply is now expected to be significantly lower than the original targets, it follows that the need for supporting flexible gas generation will be significantly less than the 2 GW figure mentioned in the national CAP. In fact, the SEAI 2025 projections are based on an assumed flexible generation of just 1.4 GW. There would not be a benefit in any additional flexible generation, as according to the SEAI the projected failure to reach renewable electricity targets is due to the delays in delivery of renewables capacity, in particular offshore wind, and not to any shortfall in flexible gas generation.

Elsewhere in the applicant's EIAR (VOL2: 15-7), we are told:

> *"When these emissions are compared to the Irish carbon budgets, the operation phase emissions contribute up to 2% of the annual carbon budget during the projected operation period. If the plant operates using gas-oil, the GHG emissions would be much higher at 42,994,300 tCO2E/yr."* Vol 2 15-7.

The figure cannot be reconciled with any physical scenario (a correct same-basis gas-oil figure is ~775,000 t/yr; even full-time gas-oil is ~6.7 Mt/yr). This raises two items. First, the assessment's realistic gas figure is understated (as set out above), while its gas-oil figure is overstated by a factor of ~ 55. Second, an internally unreliable Table 15.2 that understates one fuel case and grossly overstating the other cannot provide a sound basis for the climate assessment or for the "major adverse / but positive in context" significance conclusion drawn from it.

The applicant compares the operational emissions against 2% of the entire economy-wide carbon budget of 200 $MtCO_2e$ (2026–2030). That is misleading as the relevant ceiling for a power plant is the electricity Sectoral Emissions Ceiling and the second budget period (2026–2030) is 20 $MtCO_2e$.

Existing LEUs already account for approximately 31% of this over the five-year period (of which data centres alone represent 23%).

The proposed development would add approximately 4.5 $MtCO_2e$ over the same period. Taken together, existing large energy users and this development would account for approximately 10.7 $MtCO_2e$ or 53.5% of the electricity sector's entire five-year budget, and approximately 71% of the lower third-period budget of 15 $MtCO_2e$.

This is very concerning. How does the developer intend to take reasonably practical steps to mitigate what is reasonably foreseeable? This development is clearly adding to the problem of potentially missing our national climate targets. The developer has a legal obligation under the Planning Act and the EIA directive to assess cumulative impacts from the development.

This scenario is taken care of by stating that *"A key element of the national decarbonisation strategy is to target 70% renewable electricity by 2030".* Logically it follows that if we continue to rely on fossil fuels we will not reach 70% renewables by 2030. The fact is, growth in fossil fuel demand is currently outstripping national renewables' availability. This project will add to these difficulties. It is the responsibility of An Coimisiún Pleánala to ensure that our national climate interests are served to protect the country from exploitation of national resources and reasonably foreseeable carbon budget exceedances.

The EPA Report, Ireland's Final Greenhouse Gas Emissions 1990-2024[232] states: "Renewables provided 1.6% more electricity in 2024 but, due to increasing demand, there was a decrease in the renewable share in electricity generation from 41.0% in 2023 to 40.0% in 2024, with wind accounting for 32.1% of electricity supply (down from 34.1%)"

So, to rely on the national decarbonisation strategies to take care of an annual emission of ~ 900,000 tonnes is wishful thinking. On the contrary, continuing demand for fossil fuels is hampering the national renewables' effort. To offset the GHG emissions from this facility would require a large excess of the combined outputs from the existing windfarms in Clare and Galway.

CLIMATE RISK ASSESSMENT: Frequency/Severity matrix process as advised by IEMA:

Risk scenarios are not considered on climate impacts such as the following:

1.0 Duration of GHG emissions on climate damage

2.0 The cumulative effects of the site GHG emissions on sectoral emissions ceilings and carbon budgets

3.0 Legal requirements' spirit and intent under the Climate Act as amended.

4.0 Adequacy of the national renewables installed and the increased use of fossil fuels

5.0 The County Development Plan

6.0 The requirement to meet CAP 25 requirements

7.0 Methane used: fracked or unfracked?

8.0 78% of all energy requirements are currently from fossil fuels.

9.0 The use of imported electricity.

10.0 Use of imported gas.

[232] "Imported electricity amounted to 5,062 GWh, which would have resulted in additional emissions of over 1.7 Mt of CO2eq if generated in Ireland"- The EPA *(Ireland's Final Greenhouse gas emissions 1990 – 2024).*

DNV:

> *"Determination of the severity and duration of harm to receptors to determine the consequence level for each unmitigated liquid, gaseous and ignited release event, the severity levels, S1, S2, S3 and S4 for significant, severe, major and catastrophic respectively were established."*

The severity criterion did not apply to GHG emissions on the receptor. Why was this analysis omitted?

D4 was assigned to indicate **long term damage** and S3/S4 severity is **major/catastrophic.** (D4, S4) based on the methodology applied by the developer, should be assigned to the damage GHG's have on climate, yet this was not done and so we have no idea what mitigation was applied. Why? The duration of harm to the environment was not assessed. Similarly, methane releases, standby generator emissions and emergency/maintenance generator emissions were not assessed for environmental impacts.

GALWAY COUNTY DEVELOPMENT PLAN

This development is not consistent with the stated goal in the CDP 2022-2028: (Galway County Council, 2022) sets a vision for County Galway to achieve economic growth with '*a high quality sustainable environment for all*'.

Key strategic aims relevant to the proposed development include Environmental Protection and Climate Change Adaptation. Chapter 14; Climate change, Energy and Renewable Resource set out County Galway's approach "*to reduce the carbon footprint by integrating climate action into the planning system in support of national targets, support indigenous renewable sources in order to reduce dependence on fossil fuels and improve security of supply and the move to a competitive low carbon economy".*

To state that the development is consistent with the above statements is ludicrous and false.

SIGNIFICANT FURTHER INFORMATION

Section 18 Final EIAR and hierarchy of mitigation Construction Phase: Prevention, Reduction, Compensation

The operational phase MITIGATION seems to be dealt with, as follows, and I quote*: "Operational controls will be implemented through applicable standards and management systems, including licensing requirements where relevant".*

Climate impacts mitigation have been completely ignored. The risks associated with climate change and the impacts of huge GHG emissions are not considered in the EIAR. The requirements of the Climate Act must be met. This project cumulatively with other LEU's either operating or in the planning system will certainly ensure that sectoral ceilings and carbon budgets will be exceeded. The alternative is to break the law. No effort is made to assure the Irish people that the budgets will not be affected by this project though the GHG load will contribute to global heating for many hundreds of years.

The developer is clearly in breach of Schedule 6 of S.I. No. 600/2001 - Planning and Development Regulations, 2001 and the EU Directive 2014/52/EU. The developer must present data demonstrating that the development complies with the law. For the reasons set out above, the greenhouse-gas assessment is materially inaccurate and incomplete: the operational emissions are understated on the applicant's

own stated parameters, and upstream and fugitive-methane emissions are omitted entirely. The EIAR therefore does not provide the assessment of climate effects that Schedule 6 and the Directive require.

We are then referred to Table 15.4 of the EIAR (Vol 2) which presents an unusual and clearly unacceptable and non-quantitative method of assessing climate damage, listing the following:

(a) Increase in annual temperature,
(b) increase in summer temperature,
(c) increase in rainfall,
(d) increase in storms frequency,
(e) increase in storms intensity

Needless to say, the significance of all these matters little. This is non-quantitative science, devoid of proper and challenging analysis. The assessment reads as conclusion-led: its starting point is the development's acceptability, and the analysis is assembled to support it - through selective data, favourable comparisons, and significance judgements that reframe an admitted major adverse impact as positive. That is not the evidence-led approach the EIA Directive requires, and it undermines the reliability of an assessment on which the attainment of national climate targets i.e. a 51% reduction by 2030 and net zero by 2050 depends. It is the responsibility of the planning authorities to forensically challenge these EIAR's using the best methods available to them, including independent expertise if needed. Assessments must be science-based and objective. For the reasons presented here I therefore appeal to ACP to deny planning permission in its entirety for this project.

RELEVANT LEGAL OBLIGATIONS:

The Climate Act: As pointed out elsewhere, this project is clearly inconsistent with the 51% reduction in emissions on 2018 baseline by 2030. Under section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended), An Coimisiún Pleanála is required to perform its functions in a manner consistent with the carbon budgets and sectoral emissions ceilings. A grant of permission for a development that materially adds to the projected exceedance would engage that statutory obligation. We're clearly heading for second budget exceedances well flagged by authorities such as the EPA. This project will have legal consequences as set out in the Climate Act 2015 (as amended)?

Directive 2014/52/EU: Annex IV 5 (g), and I quote: *The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.*

Quite clearly this project appears not to comply with cumulative and other effects. Emissions from other sources must be taken into account when counting the emissions from this project. The description should take into account: "*the environmental protection objectives established at Union and Member State level which are relevant to the project*".

Clearly this requirement has not been met.

Relevant policy documents and legal requirements:

- CAP 25

- Climate Action and Low Carbon Development Act 2015 as amended.
- Galway County Development Plan (CDP) 2022-2028
- Safety, Health and Welfare at Work Act and associated regulations.
- S.I. No.600/2001- Planning and Development Regulations 2001.
- EU Directive 2014/52/EU.

Further Note:

Battery Storage compound fire risk management

DNV state: DNV are currently unable to model fires associated with battery energy storage systems (BESSs), however a **qualitative** assessment is undertaken for the likely impacts of BESS fires, based on DNVs experience in risk assessment of these systems.

One has to assume that the compound is unbunded and fire water, in the event of battery fires, will be emitted directly into the environment. All of this needs to be clarified as the release of lithium and other chemicals would have catastrophic impacts on the aquatic environment with SAC/SPAs in such close proximity.

DNV Conclude: "At this stage, no intolerable risks have been identified. However, the facility operator will be required to demonstrate that all risks have been managed and that all reasonably practicable measures have been implemented to reduce the risk".

The ALARP demonstration principle is a key feature of the Control of Major Accident Hazards (COMAH) regulations, and it is likely that further risk assessments will be required as the design of the facility matures, such that the control of risk can be adequately demonstrated.

It should be a requirement that all risks associated with the site, be assessed and controls be identified before an assessment can be made.

Appendix 9.6. Recent N65 Corridor Planning History

i. Abbreviations and conventions

PP&SD: "*proper planning and sustainable development*"; the statutory anchor for every planning decision under s.34 of the Planning and Development Act 2000 (as amended).

NPP&SD: "*not proper planning and sustainable development*". The standard refusal conclusion: that a proposal would be "contrary to the proper planning and sustainable development of the area."

DoECLG 2012 Guidelines: Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012), issued under s.28 PDA 2000.

GCDP: Galway County Development Plan (2015–2021 = older plan; 2022–2028 = current plan).

TII: Transport Infrastructure Ireland.

ABP: An Bord Pleanála.

ii. National policy and statute

DoECLG s.2.5: ***Lands adjoining National Roads with speed limits greater than 60 km/h***

> *"The policy of the planning authority will be to avoid the creation of any additional access point from new development or the generation of increased traffic from existing accesses to national roads to which speed limits greater than 60 kmh apply. This provision applies to all categories of development, including individual houses in rural areas, regardless of the housing circumstances of the applicant."*

DoECLG s.2.6: ***Exceptional Circumstances***

> *A less restrictive approach may be applied only to stretches identified through the development plan review/variation process, in consultation with and on the advice of TII — never on an ad-hoc, site-by-site basis.*

PDA 2000 s.28: ***Statutory guidelines***

> *Basis on which the 2012 Guidelines are issued; planning authorities and An Bord Pleanála must have regard to them.*

PDA 2000 s.34(2)(ba): ***Supersession by Specific Planning Policy Requirements***

> *Where a Specific Planning Policy Requirement of s.28 guidelines differs from the development plan, the guideline applies instead of the plan.*

iii. GCDP 2022–2028 (current plan)

Policy NR 1: ***Protection of Strategic Roads***

> *"To protect the strategic transport function of national roads and associated national road junctions, including motorways through the implementation of the 'Spatial Planning and National Roads Guidelines for Planning Authorities' DECLG, (2012) and the Trans-European Networks (TEN-T) Regulations."*

Policy NR 4: ***New Accesses Directly on National Roads***

> *"The policy objective of the Planning Authority will be to avoid the creation of any additional access point from new development or the generation of increased traffic from existing accesses to national*

roads to which speed limits greater than 60 kmh apply. This provision, in accordance with the relevant TII Guidelines, applies to all categories of development'. Consideration will be given, where appropriate, for the facilitation of regionally strategic projects and utility infrastructure."

RH 15: ***Direct Access to National Road***

"Residential development along National Roads will be restricted outside the 50-60kmp speed zones in accordance with the DoECLG Spatial Planning and National Road Guidelines (2012). Consideration shall be given to the need of farm families to live on the family holding on a limited basis and a functional need to live at this location must be demonstrated… Where there is an existing access, the combined use of same must be considered and shown to be technically unsuitable before any new access can be considered. Access via local roads shall always be the preferred access… An Enurement condition will be attached to grants of planning permission for the above."

DM Standard 26: ***Access to National and Other Restricted Roads for Residential Developments***

DM Standard 28: ***Sight Distances Required for Access onto National, Regional, Local and Private Roads***

iv. GCDP 2015–2021 (older plan — governs the pre-2022 cases)

Objective TI 6: ***Protection of National Routes and Strategically Important Regional Road Networks***

"It is an objective of the Council to protect the capacity and safety of the National Road Network and Strategically Important Regional Road network (listed in DM Standard 19) in the County and ensure compliance with the Spatial Planning and National Roads Planning Guidelines (2012). Galway County Council will not normally permit development proposals for future development that include direct access or intensification of traffic from existing accesses onto any national primary or secondary road outside of the 50-60 kph speed limit zone of towns and villages."

Policy TI 6: ***Protection of Strategic Transportation Infrastructure***

"Seek to protect and safeguard the significant investment made in strategic transportation infrastructure, in particular the network of national roads, the existing rail lines and the Western Rail Corridor."

Policy TI 7: ***Protection of National Road Network***

"Protect the motorway and national road network and national road junctions in line with Government policies. Safeguard the carrying capacity, operational efficiency, safety and significant investment made in the development of the motorway and national road network…"

DM Standard 18: ***Restricted Roads***

Consideration is given to the needs of farm families to reside on a family holding on a limited basis; a functional need to reside at the location must be demonstrated.

DM Standard 19(a): ***National and Strategically Important Regional Road network***

Prohibits development outside the 50/60 km/h speed limits along National Routes, where consideration is given only to substantiated cases for extension/intensification of existing developments.

DM Standard 20: ***Sight distances / visibility splays***

Requires minimum visibility splays of 215 m (unimpeded, both directions) for access at the relevant speed. Forerunner of DM Standard 28.

DM Standard 33: ***Location of new farm buildings***

New farm buildings shall be located within or adjoining existing farmyard complexes

iv. N65 Corridor: Planning Precedent (2016-2025)

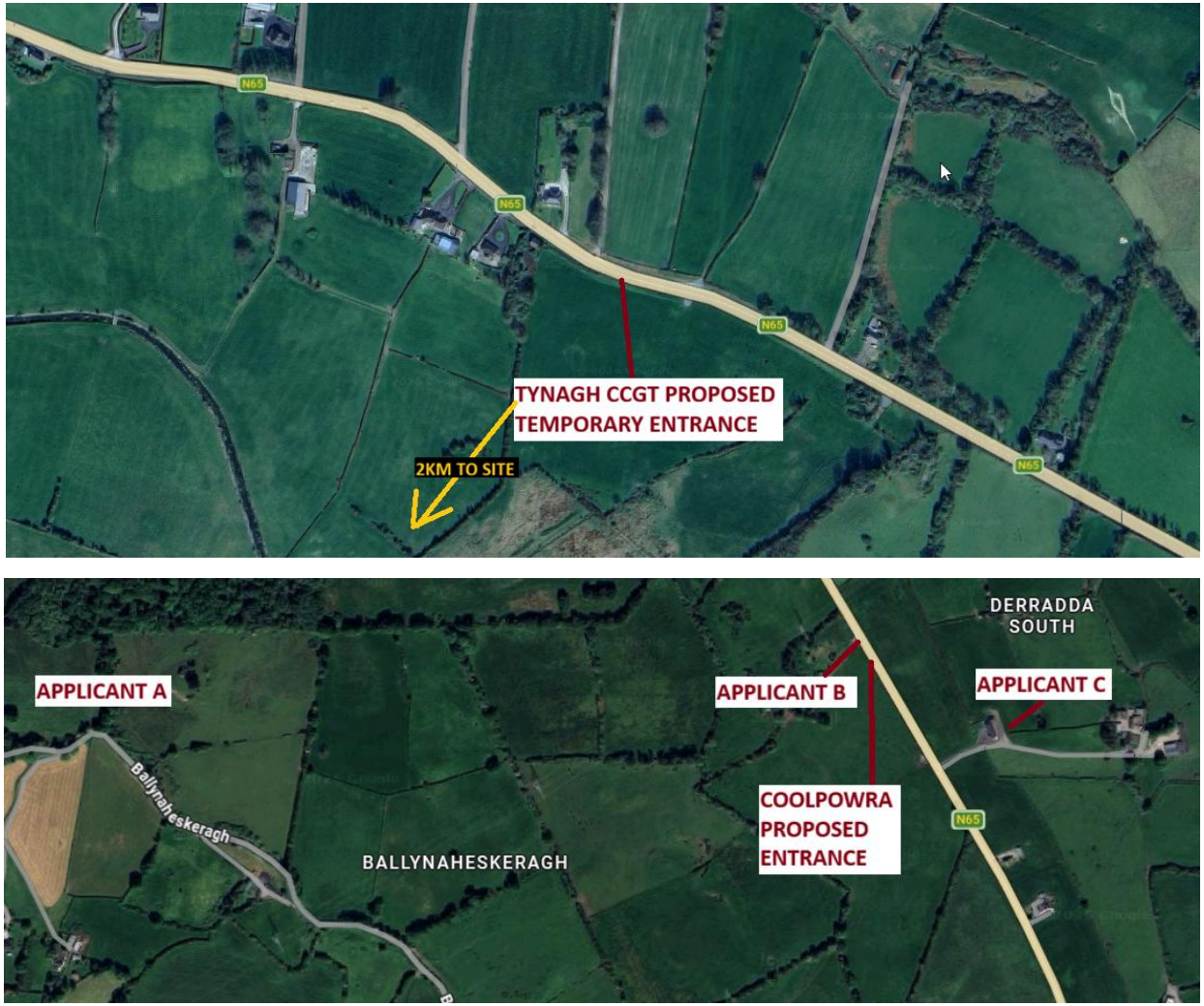
Application ID	Refused / Approved	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags)
GCC 18/411 *Dwelling + demolition of existing dwelling*	**REFUSED** Galway County Council	Not demonstrated.	**NEW** entrance onto N65. (adjacent to existing access)	**DM Std 18;** **Obj TI 6;** **DoECLG s.2.5**; **NPP&SD** *"traffic safety"* *"restricted road"*
GCC 21/523 *Agricultural slatted shed*	**REFUSED** Galway County Council	Yes	**EXISTING** access on N65	**DM Std 19(a);** **DM Std 20;** **DM Std 33;** **Policy TI 6** **Obj TI 6** **NPP&SD** *"additional traffic & turning movements"* *"unsubstantiated intensification of existing access")* *"undesirable precedent"* *"restricted national route"* *"Class 1 controlled route"*
GCC 18/849 → ABP 302543-18 *New house*	**GRANTED** Galway County Council → **TII appealed** → **REFUSED** by ABP	Achievable	**EXISTING** access on N65 Housing need accepted	**Obj/Policy TI 6** **Policy TI 7** **DoECLG s.2.5** **DoECLG s.2.6**. **NPP&SD** *"endanger public safety by reason of traffic hazard"* *"turning movement"*

Application ID	Refused / Approved	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags)
				"intensification" *"undermines and provides precedent for flexibility"* *"restricted roads"*
GCC 18/1748 *Dwelling + demolition of existing dwelling*	**REFUSED** Galway County Council	Not demonstrated	**NEW** entrance onto N65. adjacent to existing access	**Obj TI 6;** **DoECLG s.2.5**; **NPP&SD** *"restricted roads"* *"turning movement"* *"intensification"* *"undesirable precedent"*
GCC 22/60534 *New dwelling house*	**REFUSED** GCC planner's report (recommended refusal)	Yes	**EXISTING** access on N65	**RH 15;** **DM Std 26;** **DoECLG s.2.5**. **NPP&SD** *"endanger public safety… traffic hazard, obstruction of road users"* *"generation of increased traffic from an existing access"* *"precedent"* *strategic restricted route*
GCC 23/61073 *Renovation of derelict dwelling*	**REFUSED** Galway County Council	No (remedial works to achieve sightlines OUTSIDE applicant's control)	**EXISTING** entrance onto N65 off adjacent local road L82421 **Prior house: YES** — renovation of existing derelict dwelling	**DM Std 28;** **Policy NR 1;** **NR 4**; **DoECLG s.2.5;** **NPP&SD** *"additional traffic turning movements… proximal to a National Road Junction"*

Application ID	Refused / Approved	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags)
				"intensification of the national-road access"
GCC 22/60874 *New dwelling house*	**REFUSED** GCC planner's report (recommended refusal)	Yes	**EXISTING** access on N65	**NR 4;** **DoECLG s.2.5**. **NPP&SD** *"intensification"* *"strategic restricted route"*
GCC 23/61280 *New dwelling house*	**REFUSED** GCC planner's report (recommended refusal)	No	**EXISTING** access on N65	**DM Std 28;** **DoECLG s.2.5;** **DM Std 26** **NR 4;** **NPP&SD** *"right turning entry and exit visibility movements" "generation of increased traffic from an existing access" "strategic restricted route"*
GCC 23/60787 *New dwelling house*	**REFUSED** Galway County Council	Yes	**EXISTING** entrance on N65.	**DoECLG s.2.5;** **NR 4** **DM Std 26** **NPP&SD** *"endanger public safety… traffic hazard… extra traffic generated"* *"strategic restricted route"*
GCC 24/60390 *New dwelling house*	**REFUSED** Galway County Council	No	**EXISTING** agricultural entrance on N65	**DoECLG s.2.5;** **NR 4;** **DM Std 28;** **DM Std 26;**

Application ID	Refused / Approved	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags)
				NPP&SD *"generation of increased traffic from an existing access")* *"strategic restricted route"*
GCC 23/61148 → ABP-319000-24 *New dwelling*	**GRANTED** Galway County Council → **TII appealed** → **ABP Inspector recommends refusal** → **GRANT UPHELD** by An Bord Pleanála	Yes	**EXISTING access onto N65** through the existing entrance of the adjacent dwellinghouse	**RH 15** **PP&SD** "no intensification of the existing entrance" **Applicant case:** *"It is essential for the applicant to be located at the location of the proposed site as he is actively involved in farming a farm holding of 33 acres. The applicant … has to visit the farm on numerous occasions often up to 5 times a day to check on cattle for the purposes of animal husbandry.* *In a "no development" scenario the amount of trip generation and turning movements in and out of the access will continue in any event, due to the ongoing use of the farm … The proposal will result in reduced trip generation to and from the existing site entrance onto the N65."*
GCC 25/60984 *New dwelling house*	**REFUSED** Galway County Council	No	**EXISTING** agricultural entrance on N65	**NR 1;** **NR 4;** **DM Std 28;** **DoECLG s.2.5;** **DM Std 26**. **NPP&SD** *"intensification of an existing direct access";* *"additional stop movements"* *"strategic restricted route"*

vi. N65 Corridor: Peer Precedent (2016-2025)



Name & Application ID	Refused / Approved (and by who)	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags) + relevance
Tynagh Energy Ltd GCC 04/4554 *(2004)* *~2,000m temporary construction / haul road + services off N65;*	**REFUSED** Galway County Council	No — applicant submitted no evidence that minimum sight distances could be achieved in both directions at the N65 access. Sightlines were achievable at this location	**NEW** temporary access onto the N65, crossing a third-class road to the former Tynagh Mines / power-plant construction site. **Prior house: N/A**	**Reason 1:** sightlines not demonstrated "*endanger public safety by reason of traffic hazard or obstruction of road users*". **Reason 2: "**restricted route"; *"The proposed access road is off the N65 National Secondary Road, which is a restricted route"* *"The proposed development would, if permitted, contravene materially a development objective as set out in the County Development Plan"* **NPP&SD** **RELEVANCE: closest peer — a power-plant construction road onto the N65, refused on both sightlines and the restricted-route policy. The policy ground stands even if sightlines were remedied.**
Applicant A GCC: 25/60493 *(2025) Land reclamation / infill with imported inert material; Ballynaheskeragh & Heathlawn, Killimor*	**REFUSED** Galway County Council	No	**Access via a narrow local road (L8763)** off the restricted N65 (100 kph). Held to intensify the existing access onto the N65. **Prior house: N/A**	**NNR 1** (Restricted Regional Roads); **NNR 2** (Safeguard Regional & Local Roads); **DM Std 27** (intensification of N65 access via the local road); **DM Std 28** (sightlines); **DM Std 33** (turning movements); **FL 8** (flood), *"Turning movement"* *"Intensification"* **NPP&SD** **RELEVANCE: same townland as the applicant's Coolpowra proposed new construction route. Establishes that routing via the L8763 local road does not escape the N65 intensification objection — and the L8763 is treated as a narrow road that cannot safely absorb the traffic. Also flood concerns.**

Name & Application ID	Refused / Approved (and by who)	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags) + relevance
Applicant B Located at derelict house entrance point where current Coolpowra applicant seeks temporary access onto N65 GCC: 06/1200 *Extension to existing derelict dwelling*	**REFUSED** Galway County Council	Yes **215m ACHIEVABLE via third-party boundary consent** — this applicant secured written landowner approval to set back the adjoining roadside boundary to achieve 215m in both directions	**EXISTING** access onto the N65. **Prior house: YES**.	**Reason 1 (of 3):** restricted national secondary route; development restricted to special fully-substantiated need; not permissible per DC Standard 1 (2003–2009 plan); materially contravene a development objective **NPP&SD** **RELEVANCE: sightlines SECURED (215m via consent yet refused twice on the restricted-N65 policy;** **one of two refusals on the same derelict-dwelling at Coolpowra applicant's proposed new entrance route onto N65**
Applicant B Located at derelict house entrance point where current Coolpowra applicant seeks temporary access onto N65 GCC: 05/4009 *Dormer extension to rear of existing dwelling*	**REFUSED** Galway County Council	Yes	**EXISTING** access onto the N65. **Prior house: YES**.	"restricted-route" "access concerns" **NPP&SD** **RELEVANCE: one of two refusals on the same derelict-dwelling at Coolpowra applicant's proposed new entrance route onto N65**
Applicant C Located directly opposite to where current Coolpowra applicant seeks	**GRANTED** Galway County Council (second attempt at planning after previous	Yes	**EXISTING cul-de-sac** onto N65, serving the applicant's family home & farm — NO new N65 entrance	Housing need substantiated (works the family farm); **NON-INTENSIFICATION OF EXIT:** applicant already lived inside same lane

Name & Application ID	Refused / Approved (and by who)	Sightlines achieved?	Access type / Prior house existing?	Refusal reasons (codes + flags) + relevance
temporary access onto N65 GCC: 08/318 *(2008) Dwelling house, garage*	one for same was refused)		**Prior house: YES** (family home / working farm).	Proposal uses the existing family cul-de-sac, not a new / intensified N65 access; **RELEVANCE: Opposite the proposed Coolpowra N65 entrance - passed only because of an existing non-intensifying access, a genuine housing need, sightlines, and an older (pre-2012-DoECLG-Guidelines) plan which was subject to less stringent compliance requirements.**

Appendix 12.1.1. Director of IESA:

COMPANIES REGISTRATION OFFICE
AN OIFIG UM CHLÁRÚ CUIDEACHTAÍ

Form B1C - Annual Return General

Companies Act 2014
Annual Return to the registrar of companies
Section:343(4)

Submission Reference Number
SR6688420

Company Details	
Date return made up	**12 Sep 2025**
Financial Year From	01 Jan 2024
Financial Year to	31 Dec 2024
The Company	Wishes to RETAIN the anniversary of its existing ARD for next year
Company Number	568088
Company Name	IRISH ENERGY STORAGE ASSOCIATION COMPANY LIMITED BY GUARANTEE
Registered Office	Parsons House, 56 Axis Business Park, Tullamore, Co Offaly.
Company Email Address	cosec@rbk.ie
Company Size	Small
Audit Exemption	Small Company Exemption
Section 137 Bond	No
B67 check	No

Auditors Details (only applicable if filing an auditors report)
Auditor Type
ARN
Auditor Name

Director Details	
Director: 1	
Director Type	Director
First Name	Nigel
Last Name	Reams
Previous First Name	Nigel
Previous Last Name	Reamsbottom
Date of Birth	24 Feb 1978
Nationality	Ireland
EEA Resident	Yes
Occupation	Director

Appendix 12.4. CRU Submissions on RGFGs:

[redacted]

Subject: FW: New flexible fired power plants

[redacted]@cru.ie
Sent: Thursday, July 24, 2025 12:08 PM
To: [redacted]
Subject: RE: New flexible fired power plants

Dear [redacted]

Many thanks for your follow-up query. We are not aware of any of any gas capacity outside the CRM and developer reporting sessions so our original response below would be the same response to your query.

Kind regards

Nikki

From: [redacted]
Sent: Thursday 10 July 2025 14:58
To: [redacted]s@cru.ie>
Subject: RE: New flexible fired power plants

Appendix 12.6. Further Reading: Appendices from 2024 East Galway GPCG Observation:

Appendix 5: Technical Advice Note from Dr. Pamela Bartley

Hydro-G

50 Henry St.
Galway

pamela@hydro-g.com

091 449950
087 8072744

29/08/24

TECHNICAL ADVICE NOTE: CEMP, Hydrogeology, Land, Soils, Geology & connection to Conservation Objective Sites

Re: An Bord Pleanala Case Reference: VA07.320094

And

An Bord Pleanala Case Reference: PA07.320095

Applicant: Coolpowra Flex Gen Limited

Proposed Site Location Address: Coolpowra, Cooldorragha, Gortlusky, Ballynaheskeragh & Sheeaunrush, Co. Galway, H53 Y997

To whom it may concern

There is a development proposal described in two planning notices on the Connacht Tribune on Friday, July 5, 2024:

> "The proposed development for which permission under Section 182B is being sought constitutes a 400kV Gas Insulated Switchgear (GIS) electricity substation and High Voltage (HV) transmission lines /cables and electric plant which will connect to the existing 400kV electricity network at the Oldstreet 400kV AIS substation. The proposed GIS electricity substation location is adjacent to a proposed Reserve Gas-Fired Generator and an Energy Storage System (ESS) facility, which are subject to separate concurrent planning applications with An Bord Pleanála and Galway County Council respectively, and this application includes the associated HV transmission Lines /cables and electric plant which connect these projects to the proposed GIS electricity substation. The proposed development will include: (i) demolition and removal of an existing dwelling, outhouses and agricultural sheds; (ii) a two-storey GIS substation building containing battery room, WC, messroom, workshop, generator room, stair cores, cable pits, storeroom, and switchgear rooms within a fenced compound; (iii) HV circuits which will connect the proposed 400kV GIS substation to the existing 400kV network and a 220kV circuit via an overhead lattice steel gantry; (iv) HV circuits which will run from the proposed 400kV GIS substation and connect to a proposed Reserve Gas-Fired Generator Project and an Energy Storage System (ESS) Project (these projects are under separate concurrent planning applications); (v) a 36.0m high communications tower; (vi) a palisade fence to GIS compound perimeter; (vii) a temporary construction compound; (viii) a main entrance connecting to the L8763 public road, (ix) improvement works to L8763 and the junction of the N65/L8763 public roads, (x) all ancillary development

including new internal roads, fencing and gates, car parking, lighting, utilities, lightning protection masts, underground services, landscaping and associated engineering works to provide for the connection of site services and foul and surface water management and drainage."

AND SEPARATELY:

"The proposed development for which permission is being sought constitutes a Reserve GasFired Generator located which is designed to provide power and back up to the power grid. The proposed Reserve GasFired Generator comprises three Open Cycle Gas Turbine (OCGTs) units which will be positioned within a building. The proposed Reserve GasFired Generator location is adjacent to a proposed Gas Insulated Switchgear (GIS) electricity substation and proposed Energy Storage System (ESS) facility which are subject to separate concurrent planning applications with An Bord Pleanála and Galway County Council respectively. The Reserve GasFired Generator will electrically connect to the adjoining 400kV High Voltage (HV) electricity network at the Oldstreet node in Co. Galway. The proposed development will include: (i) demolition of an existing farmhouse, outbuildings and agricultural sheds; (ii) construction of a Reserve GasFired Generator building which will house 3no. 385MW OCGT units, 3no. 45m high stacks with Continuous Emissions Monitoring System (CEMS), 3no. recessed and roof mounted air intake filter houses and ducts, fire suppression skid and distribution system, power control centre and balance of plant (BoP), administration control /building containing a control room, offices administration and welfare facilities; (iii) secondary fuel storage tanks and unloading area (3no. fuel storage tanks, fuel pumping plant, fuel polishing plant, air compressor and fuel forwarding building);(iv) 3no. bunded HV transformers and auxiliary transformers; (v) Air insulated switchgear (AIS) compound containing HV electrical lines /cables, circuit breakers and associated electrical plant; (vi) fin fan coolers with a 7m high noise barrier;(vii) 3no. containerised emergency diesel generators with integrated stacks; (viii) Above Ground Installation (AGI) compound containing above ground pipework, a regulator house enclosure, instrument kiosk, boiler house enclosure and analyser kiosk; gas heater compound; (ix) firewater pump building and firewater storage tank; (x) workshop and stores; (xi) security building;(xii) temporary construction compound); (xiii) a main entrance connecting to the L8763 public road; (xiv) improvement works to the L8763 and the junction of the N65/L8763 public roads; and (xv) all ancillary development including new internal roads, fencing and gates, car parking, lighting, utilities, lightning protection masts, underground services, landscaping and associated engineering works to provide for the connecon of site services and foul and surface water management and drainage.

The author of this report, Dr. Pamela Bartley, is a civil engineer who is respected as a surface water and groundwater specialist with expertise in Environmental Impact Assessment and the associated resultant Environmental Impact Assessment Report (EIAR), catchment evaluations, quarrying to supply rock for roads and housing projects, public water supply and water dependent supporting species and habitats. Dr. Pamela Bartley is known in her own specialist arena, both public water supply and bedrock quarries, to have a skill in legally defensible and justified impact assessment driven by the rules of EU EIA Directive, EPA (2022) Guidelines on EIARs and both Irish Regulations and their parent EU Directives. Pamela's skillset has always founded itself on robust and defensible Site Investigation completed in order to define the interaction between the Lands, Soils, Geology and Water of a proposed development site and the hydrological and hydrogeological connectivity to Conservation Sites and their species and habitats. Pamela is an Expert Service Provider in hydrogeology and Environmental Impact Assessment to large scale regionally important quarries, National Federation of Group Water Schemes and Uisce Eireann.

I wish to draw attention to An Bord Pleanala that there are significant lacunae respect to the information presented for the proposed developers Coolpowra Flex Gen Limited for the site proposed for development at Coolpowra, Cooldorragha, Gortlusky, Ballynaheskeragh & Sheeaunrush, Co. Galway. Information of particular note in relation to Lands, Soils and Geology Chapters of the EIAR, the Water Chapter of the EIAR, the Construction, Environmental Management Plan and the NIS include, as follows:

1. There are no details presented for the applicant in which any Site Investigation supporting the foundations for a two-storey GIS substation building, a 36.0m high communications tower (relating to VA07.320094) and a Reserve GasFired Generator building housing three Open Cycle Gas Turbine (OCGTs) units, fuel storage tanks holding 19,000 cubic tonnes and other buildings (relating to PA07.320095). Without Site Investigation results, the proposal is premature. It is normal in all large-scale engineering projects to provide details for the proposed pads, trenches and other infrastructure. Only Desk Based studies are presented. Yes, there are four Trial Pits / BRE Soak pits but this is equivalent to the scale of Site Investigation required for a single dwelling and an EPA Site Characterisation Form for an on-site domestic wastewater treatment plant.

2. There are no site investigations presented in the Water Chapter either. There are no Site Investigation boreholes investigating pre-development groundwater quality, which is industry standard and the minimum

that should be demanded by any Planning Authority, there are no water quality results, there is no geophysical survey. The proposed development is large scale and high risk. The lack of Site Investigations presents uncertainty that should preclude consent.

3. The development is in a land mass that is the headwater of multiple streams that are WFD and EPA mapped as Moderate Status:

    I. the GORTAHA_010 [IE_SH_25G560730] is Moderate Status (2016-2021) and 3rd Cycle 'Review'

    II. the KILCROW_070 [IE_SH_25K010700] is 'Moderate' Status (2016-2021) and 3rd Cycle 'At Risk'.

    The applicant's agents provide no information with respect to their own Q Ratings or their own water quality sampling. This is contrary to case law. Ireland is fast approaching the 2027 deadline for these river systems. Time is running out. Whilst previously County Council's and The Board MAY have had some justification in permitting development consent in catchments not meeting WFD Obligations, that time has now passed and the nation now has 2 years to bring all rivers to 'AT LEAST' Good Status. However, both rivers associated with the site are reported to be in different catchments: HA 25C and 25B Lower Shannon catchments and yet nothing much is made by the applicant's agents as to the potential of the proposal to actually change catchment dynamics on a catchment divide between 25C and 25B.

4. The applicant's agents propose altering a WFD mapped stream and that is it: no details justifying that their proposal is technically feasible. No evidence of communication with Fisheries, LAWPRO or the EPA. This is not defensible. There is no WFD report to support the development.

5. The multiple streams are important headwaters of four conservation Objective Sites:

    I. River Shannon Callows SAC (Site Code 000216)
    II. Middle Shannon Callows SPA (Site Code 004096)
    III. Lough Derg, North-east Shore SAC (Site Code 002241), and
    IV. Lough Derg (Shannon) SPA (Site Code 004058).

    Whilst the developer's agents state that there are no conservation sites in proximity to the proposed development site, this is factually incorrect. There are direct hydrological pathways from the development site to the commencement of mapping of the Conservation Objective Sites. There is only 6km streamflow distance from the centre of the development site to the Callows SAC and SPA. No actual design detail has been presented for the water management systems or CEMP proposed. The lacunae is undeniable. Headwaters are an extremely important component part of any river water ecosystem. The nature of small streams, and their lack of development, are a critical component of maintaining health in a river system and associated lakes of such importance as Lough Derg.

6. In addition, there are Bat Surveys, Bird Species, Tree Surveys and NIS that acknowledge female and male Kestrels and protected bat species, and then an incorrect conclusion that is subjective on the fact that the CEMP provides the mitigation required. However, the CEMP does not even propose any specific, mathematically supported designs for managing the project. There are repeated assertions in the CEMP that the management systems will be developed upon gaining consent. This would not stand the test of the judiciary. There is ample case law refuting that approach by developers connected to Conservation Objective Sites.

In closing, it is widely published that the current ecological (biodiversity) baseline is very poor. So very poor. Considering the information presented by the European Union in the formal text of the Nature Restoration Regulation (2024), no baseline survey should be founded on any surveys completed in recent years. Surely the baseline was 100 years ago before the current biodiversity crisis was acknowledged. A report for National Parks and Wildlife in December 2023 stated as follows:

- "The global trends of biodiversity loss are reflected in the status of biodiversity in Ireland.

- Ireland's 2019 conservation status assessments for protected habitats and (non-bird) species required under

Article 17 of the EU Habitats Directive, reported that 46% of EU protected habitats and 15% of EU protected species demonstrated ongoing declines over a 12-year period.

- Of those threatened species, the NBAP reported that half of all bee species have undergone substantial decline in population and 63% of bird species in Ireland are declining at alarming rates.
- The decline of these species can be a result of many factors, mainly the deterioration of their natural habitats.
- Ireland's 2019 Article 12 report for the Birds Directive showed that almost 20% of Ireland's breeding bird species are considered to be in long-term decline, where data availability allows such analysis. Some species and/or groups, such as breeding waders, and in particular the Curlew, along with the hen harrier and the Freshwater Pearl Mussel, are under threat, and measures are needed to halt their decline".

Source (Arup, 2023) for National Parks and Wildlife.

NPWS have published that "Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP has been developed with the support, advice and input of the interdepartmental Biodiversity Working Group and the independent Biodiversity Forum. Ireland's 2nd National Biodiversity Conference was held to gather insights and recommendations for the development of the NBAP and a public consultation process was held to provide further opportunities to engage with the Plan.

The 4th NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. The aim is to ensure that every citizen, community, business, local authority, semi- state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature". This National Biodiversity Action Plan 2023-2030 builds upon the achievements of the previous Plan. It will continue to implement actions within the framework of five strategic objectives, while addressing new and emerging issues:

- Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity
- Objective 2 - Meet Urgent Conservation and Restoration Needs
- Objective 3 - Secure Nature's Contribution to People
- Objective 4 - Enhance the Evidence Base for Action on Biodiversity
- Objective 5 - Strengthen Ireland's Contribution to International Biodiversity Initiatives"

Source: https://www.npws.ie/legislation/national-biodiversity-action-plan

It is now a legal requirement to make decisions on the basis of the European Union's Nature Restoration law. The applicant fails to acknowledge the changed legislative landscape. The European Union (2024) REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration and amending Regulation (EU) 2022/869. Clearly sets out targets for the year 2030, i.e. less than 7 years' time. The planning authority's Reasons for Refusal should conclude that there is an unacceptable potential impact on biodiversity and water: The Shannon Callows, Lough Derg. This would be a defensible and justified position. Readers are referred to the full text of the EU statements on what is now required of us as a soceity. https://data.consilium.europa.eu/doc/document/PE-74-2023-INIT/en/pdf.

Again Hydro-G offers that An Bord Pleanala have ample reasons for refusal that are easily justified and it would be contrary to proper planning to permit a large industrial scale battery storage area. A poor current baseline will not be improved in any way by more construction activity of the large scale required to a Conservation Objective lake Lough Derg.

In closing, I wish to provide the planning inspector with recent precedent by the Board in another power plant application, albeit turbines in that case but that is irrelevant because it is the development site and the lack of Site Investigations that is important. Given that there are no Site Investigation Boreholes to the depths below the proposed for the foundations and no water quality determinations for the development site and given the Desk Based study presented, there are lacunae that support a refusal.

A recent refusal by the Board (ABP- 309770-21, Coole Wind Farm, as detailed in Appendix A) provides precedent that Competent Authorities are reviewing the actual situations during construction and realising that no amount of ink on

paper in an EIAR, or in a Response to Further Information or in an Appeal submission in support of the client, should be taken as 'truth' with respect to risks, as follows:

> The Board considered that there is significant uncertainty relating to the effect on soils, water and ecology which precludes assessment of the full environmental effects in accordance with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The proposed development is, therefore, premature.

Yours Sincerely

Pamela Bartley

Dr. Pamela Bartley B.Eng, M.Sc., Ph.D

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Appendix 5. A

Appendix A

Precedent Direction REFUSAL BY An Bord Pleanála

(2024) File ABP- 309770-21.

Coole Wind Farm.

HYDRO ENVIRONMENTAL SERVICES

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Date: 27th October 2022
Our Ref: P1320-2-0010

MKO Ireland
Planning & Environmental Consultants
Tuam Road,
Galway.
H91 VW84.

Attn: Ms. Meabhann Crowe

Dear Meabhann,

Re: Hydrological & Hydrogeological Responses to An Bord Pleanála Further Information Request and Third-Party Submission in relation to the proposed Coole Wind Farm, Co. Westmeath (ABP Ref: 309770-21)

Hydro-Environmental Services (HES) were requested by MKO Ireland (MKO) to respond to a further information request from An Bord Pleanála (ABP) with respect to geological, hydrological, and hydrogeological matters raised in relation to the proposed Coole Wind Farm SID application, Co. Westmeath.

1 Statement of Experience – Wind Farm Drainage

Hydro-Environmental Services (HES) has extensive wind farm drainage and hydrogeological experience relevant to this project. Wind farm environmental impact assessment in respect of geology, hydrology, and hydrogeology has and is a core business area for HES presently and also over the past 18 years. Wind farm drainage design/management requires experience both as a civil/drainage engineer, a hydrologist, and as a hydrogeological specialist. HES have these combined experiences and expertise. HES has worked on over 100 wind farm projects in Ireland and Northern Ireland. Many of these required assessments of existing drainage features and streams and water quality data. HES work at all stages of wind farm developments including feasibility stage, layout design & preliminary drainage design/planning stage, and also at construction management stage.

HES's experience also covers the key area of water quality and drainage controls and mitigation during the construction phase of wind farm developments. HES work at EIAR/planning stage to assist with the development of the optimal site layout which involves the development of hydrological constraints maps and interaction with geotechnical and ecological specialists and with site designers. HES also provide a follow-on consultancy service (if planning is granted and the development proceeds to construction) of detailed drainage design and construction management for drainage during wind farm development/construction stage. This practical on-site experience is invaluable as it has led to development of improved preliminary and detailed drainage layouts and also many improvements/optimisations to standard peatland drainage mitigation measures.

HES specialises in wetland and peatland eco-hydrology. We also complete flood risk assessments for all types of developments across the country.

All these experiences are particularly relevant to this project, and they have been applied through the project development phase, the constraints mapping phase, and EIAR preparation work, including the cumulative impact assessment.

This response submission has been prepared by Adam Keegan and Michael Gill. Adam and Michael prepared the Land Soil and Geology and Water Chapters of the submitted EIAR, and their qualifications, competencies, and experience are already presented in the EIAR.

2 RESPONSE TO ABP ITEM 4 "SOILS AND GEOLOGY AND INTERACTIONS WITH PEAT HARVESTING"

Further peat depth probing and investigations have been completed by MWP in the area of T12. As a result of those investigations, which are outlined in the report entitled "Response to RFI Item 4.1, Coole Wind Farm" (MWP, September 2022), the upper end of peat depths referenced in the EIAR should now be 8.7m. As such peat thicknesses from peat probing, window sampling, and drilling ranged from 0 to 8.7m.

2.1 "Soils & Geology interaction with Peat Harvesting" Item 4.2

Item 4.2 is divided into 7 bullet points (for ease of reference we have numbered those as a) to g)). HES is responding below to items pertinent to the EIAR (Land, Soils & Geology and Water Chapters), namely items (**b**) and (**c**). Item 4.2 is written as follows:

> *"The comments of the Department of Housing, Local Government and Heritage on nature conservation raise a number of issues including the following which are considered of particular relevance to soil and geology and hydrology.*
>
> *b) The potential for impacts on Gariskil Bog and Scragh Bog as a result of the effects of drainage works.*
>
> *c) The need to identify the location of all mitigation measures involved in the construction phase drainage management.*

2.1.1 HES Response to Item 4.2 (b)

As outlined in Section 9.4.1.9 of the EIAR, the potential effects of the proposed development on the Gariskil Bog SAC and Scragh Bog SAC have been carefully considered.

These designated sites are >5km from the Coole Wind Farm, thus the proposed drainage measures incorporated into the Wind Farm design will not impact on them. However, the SAC's are located near the associated grid route.

As set out in Section 9.4.19 of the EIAR, and on Cross-Section X1 and Cross-Section X2 (refer to EIAR Appendix 9.4), Gariskil Bog SAC is situated ~60m from the Grid Connection Route along the L1826. The road (and Grid Connection Route) is ~ 2.5m lower than the raised bog that forms the SAC. The River Inny exists between the edge of the bog and the public road and acts as a hydraulic boundary to groundwater flow. A small stream (a tributary of the River Inny) exists, ~ 230m south of the bridge to the north of the SAC boundary. This stream is culverted under the L1826. The stream flows east, while drainage from the bog will flow west towards the River Inny.

In summary, the potential for hydrological impacts from the Grid Connection Route to Gariskil Bog SAC are limited by:

- The River Inny acting as a hydraulic boundary between the Gariskil Bog;
- The separation distance between the Grid Connection Route and the SAC;
- Local drainage patterns are towards the River Inny and away from the grid connection

trench;

• The grid route ducting (and cable) will be installed in a shallow temporary trench; • No groundwater dewatering will be required to install the grid connection trench; and,

• The base of the temporary trench is above the invert of the River Inny which is located between the SAC and the Grid Connection Route.

As set out in Section 9.4.1.9 of the EIAR, Scragh Bog SAC/pNHA is situated ~320m from the Grid Connection Route at its closest point. Land-use between the Grid Connection Route and the

Scragh bog is typically agricultural with some residential dwellings along the N4 road. There is a considerable amount of grass verge/shrubbery along the N4 roadside. Given the distance relative to the ~1.2m deep trench and the intervening land use, there is no direct or indirect hydrological pathway to the Scragh Bog SAC/pNHA, any excess surface water would infiltrate to ground within several metres of the road, based on permeability/groundwater recharge values mapped by the GSI.

In summary, the potential for hydrological impacts from the Grid Connection Route to Scragh Bog SAC/pNHA are limited by:

• The separation distance between the Grid Connection Route and the SAC; • There are no direct/indirect hydrological pathways between the Grid Connection Route and Scragh Bog SAC/pNHA;

• The grid route ducting (and cable) will be installed in a shallow temporary trench; • No groundwater dewatering will be required to install the grid connection trench; and,

• The shallow nature of the temporary trench along Grid Connection Route.

The proposed mitigation measures to eliminate any potential impacts on these SAC's are given in Section 9.4.1.9, and are summarised briefly as follows:

• Drainage control measures will be put in place during the excavation and construction of the grid route;

• Sediment control measures used during the construction such as silt bags, the covering of exposed soils and the avoidance of works during heavy rainfall; • Mitigation measures related to spills/chemical releases, *i.e* petroleum products will be put in place during the construction;

• No groundwater dewatering is required during grid route construction; • All trenching works are proposed at or very near existing ground levels with minimal ground disturbance proposed; and,

- No deep foundations are proposed near the SAC's or along the grid route in general.

Section 9.4.1.9 of the EIAR concludes, and we, HES, continue to assert, that with the implementation of the mitigation measures (as outlined in the EIAR and as summarised above), no significant hydrological or hydrogeological impacts on designated sites are anticipated from the proposed development.

In addition to the above, and in response to paragraph 1.3.5 of the Departments (DAU) submission, the type of drainage impact encountered by Regan et al (2019)[1] at Clara Bog SAC cannot occur at Gariskil Bog SAC nor at Scragh Bog SAC/pNHA, as in this instance the proposed grid connection trench will be 1.2m deep, it will be a transient and temporary excavation, and it will not intercept or drain the local groundwater system.

2.1.2 HES Response to Item 4.2 (c)

The locations of proposed mitigation measures to be implemented within the Coole Wind Farm site during the construction phase including check dams, attenuation ponds, settlement ponds, silt fences, and collector and interceptor drains are shown in Drawings D101 to D107 (EIAR Appendix 4.9).

The implementation of these mitigation measures is listed in detail in Section 9.4.1.1 of the EIAR. The concluding paragraph of Section 9.4.1.1 states:

[1] *Regan, S., Flynn, R., Gill, L., Naughton, O., & Johnston, P. (2019). Impacts of groundwater drainage on peatland subsidence and its ecological implications on an Atlantic raised bog. Water Resources Research.*

"The potential for the release of suspended solids to watercourse receptors is a risk to water quality and the aquatic quality of the receptor. Proven and effective measures to mitigate the risk of releases of sediment have been proposed above and will break the pathway between the potential sources and the receptor. The residual effect is considered to be - Negative, indirect, imperceptible, temporary, low probability impact on the water environment within the Wind Farm Site, along the Grid Connection Route and near other ancillary works (River Inny, Glore River, River Deel, Monkstown stream, Lough Derravaragh).

For the reasons outlined above, no significant effects on the surface water quality are anticipated."

Mitigation measures proposed along the grid route are also described in the EIAR (Section 9.4.1), and include the temporary use of appropriate interceptor drainage, which will be continuously implemented along the grid route during construction, as the route progresses. The mitigation measures implemented will be specific to the ground conditions/slope and related to the antecedent weather (*i.e* during periods of low/no rainfall, management of surface water will not be required). The EIAR includes the following requirements:

- No deep foundations are proposed near the SAC's or along the grid route in general.

Section 9.4.1.9 of the EIAR concludes, and we, HES, continue to assert, that with the implementation of the mitigation measures (as outlined in the EIAR and as summarised above), no significant hydrological or hydrogeological impacts on designated sites are anticipated from the proposed development.

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"The potential for the release of suspended solids to watercourse receptors is a risk to water quality and the aquatic quality of the receptor. Proven and effective measures to mitigate the risk of releases of sediment have been proposed above and will break the pathway between the potential sources and the receptor. The residual effect is considered to be - Negative, indirect, imperceptible, temporary, low probability impact on the water environment within the Wind Farm Site, along the Grid Connection Route and near other ancillary works (River Inny, Glore River, River Deel, Monkstown stream, Lough Derravaragh).

For the reasons outlined above, no significant effects on the surface water quality are anticipated."

Mitigation measures proposed along the grid route are also described in the EIAR (Section 9.4.1), and include the temporary use of appropriate interceptor drainage, which will be continuously implemented along the grid route during construction, as the route progresses. The mitigation measures implemented will be specific to the ground conditions/slope and related to the antecedent weather (i.e during periods of low/no rainfall, management of surface water will not be required). The EIAR includes the following requirements:

• The majority of the Grid Connection Route is >50m from any nearby watercourse, apart from a section of the N4 alongside Lough Owel and at bridges along the Grid Connection Route. It is proposed to limit any works in any areas located within 50m of any watercourse/waterbody including the stockpiling of excavated soils and subsoils

• A constraint/buffer zone will be maintained for all crossing locations where possible, whereby all watercourses will be fenced off.

• Source controls such as silt bags, silt fences, filter fabrics and interceptor drains will be installed where required.

• No batching of wet-cement products will occur along the grid route works or near other ancillary construction activities. Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place;

• Where possible pre-cast elements for culverts and concrete works will be used; • No washing out of any plant used in concrete transport or concreting operations will be allowed on-site;

• Refuelling or maintenance of machinery will not occur within 100m of a watercourse; • Fuels stored on site (along grid route) will be minimised;

• Any diesel or fuel oils stored at the temporary site compound will be bunded. • Mitigation measures relating to the use of biodegradable drilling fluids such as Clear Bore are included in Section 9.4.1.10 if directional drilling is deemed necessary. • The hydrological regime locally will not be affected by the proposed works and so the regime of the SACs, SPAs, NHA and pNHAs will not be affected.

• No groundwater dewatering is proposed during grid route construction. Any rainwater removal will be temporary and at a very shallow depth above the groundwater table. • All building and trenching works are proposed at or very near existing ground levels with minimal ground disturbance proposed.

• No deep foundations are required or are proposed. As such there will be no interruption or blocking of shallow or deep groundwater pathways below the site (grid route).

The potential for the release of suspended solids to watercourse receptors is a risk to water quality and the aquatic quality of the receptor. Proven and effective measures to mitigate the risk of releases of sediment have been proposed above and will break the pathway between the potential sources and the receptor. These mitigation measures are included in the submitted CEMP, and during the construction phase works will be supervised and overseen by an ECoW. The residual effect is considered to be - Negative, indirect, imperceptible, temporary, low probability impact on the water environment within the Wind Farm Site, along the Grid Connection Route.

2.2 "Soils & Geology interaction with Peat Harvesting" Item 4.4

Item 4.4 is written as follows:

> *"It is considered that more detailed information should be provided relating to water quality monitoring proposals specified in Section 9.4.1.1 of the EIAR. In particular, a suite of parameters to be monitored and the limits to be met should be specified."*

2.2.1 HES Response to Item 4.4

The paragraphs relating to water quality monitoring in Section 9.4.1.1 of the EIAR states:

> *"During the construction phase, field testing and laboratory analysis of a range of parameters with relevant regulatory limits and EQSs should be undertaken for each primary watercourse, and specifically following heavy rainfall events (i.e. weekly, monthly, and event based)."*

To supplement this, the following suite of parameters will be monitored:

Parameter	EQS	Event	Methodology
Visual Inspection	No abnormal change	Daily	Field Inspection and photographic record.
pH	4.5<pH>9.0	Weekly	Field Measurement (Handheld probe)
Dissolved Oxygen	No abnormal change	Weekly	Field Measurement (Handheld probe)
Conductivity	No abnormal change	Weekly	Field Measurement (Handheld probe)
Temperature	No abnormal change	Weekly	Field Measurement (Handheld probe)
Ammonia	High Status ≤0.04mg/L Good Status ≤0.065mg/L	Monthly	Accredited Laboratory Analysis
Nitrate	-	Monthly	Accredited Laboratory Analysis
BOD	High Status ≤1.3 mg/L Good Status ≤1.5 mg/L	Monthly	Accredited Laboratory Analysis
Total Petroleum Hydrocarbons	Below Detection Limit	Monthly/ Following potential hydrocarbon spill	Accredited Laboratory Analysis
Orthophosphate	High Status ≤0.025 Good Status ≤0.035		
Alkalinity	No abnormal change	Monthly/ Following potential cement leaching	

The inspections, monitoring, and sampling will be undertaken at the locations WF_SW1 – WF_SW5 show in Figure 9-9 of the EIAR. These sampling points are located along both the Glore River and

River Inny.

2.3 Soils & Geology interaction with Peat Harvesting" Item 4.5
Item 4.5 is written as follows:

> *"You are requested to clarify the layout and management arrangements for the operational drainage structure."*

2.3.1 HES Response to Item 4.5
The drainage system as outlined in drawings D101-D107 (Refer to Appendix 4-9 and 9-3 of the EIAR) will be utilised and maintained during the operational phase of the proposed Wind Farm. The maintenance and management of the drainage system will be included within the overall maintenance regime of the Wind Farm.

Coole Wind Farm Ltd will have the responsibility for maintaining the drainage system at the operational wind farm. The maintenance of the wind farm will incorporate the activities associated with keeping the drainage system operating effectively.

The drainage maintenance regime will include:

- The inspection and maintenance of swales and settlement ponds;
- Inspecting cross-drains for any blockages, and removal of any blockages identified; •

Inspecting and maintaining outfalls to existing field drains;

- Inspecting the existing roadside drains for any obstructions, and removal of any obstructions identified;
- Inspecting the progress of the re-establishment of vegetation and where required testing the water quality at the outfalls periodically; and,
- Inspection and regular cleaning of drainage channels and settlement ponds. Drainage inspections and maintenance will be in completed accordance with CIRIA C697 SuDS and Maintenance Manual.

Note, weekly inspections will be required during the construction period. Monthly inspections will be completed for one year following construction, and then on a quarterly basis thereafter during the operational lifetime of the Wind Farm.

2.4 Soils & Geology interaction with Peat Harvesting" Item 4.6
Item 4.6 is written as follows:

> *"It is noted that the heading of Section 8.5.1.2 of the EIAR includes reference to the alteration of peat/soil geochemistry. Please clarify how this topic is assessed under that heading or if it is addressed elsewhere in the submitted documentation"*

2.4.1 HES Response to Item 4.6

The alteration of peat/soil geochemistry is included under Section 8.5.1.2 as "Contamination of soil by leakages and spillages and alteration of Peat/Soil Geochemistry".

It is understood that this may have been misinterpreted as being separate items and should be renamed "Contamination of soil by leakages and spillages and ***resulting*** alteration of Peat/Soil Geochemistry".

This section considers the possibility of hydrocarbon spills from the use of on-site fuel/oil and the potential impact on the Peat/Soil geochemistry as a receptor. A potential fuel/oil spill could alter the peat/soil geochemistry by lowering or raising the pH (depending on the specific type of hydrocarbon), by potentially reducing dissolved oxygen via the creation of an oil film and in a more general sense from introducing a range of hydrocarbon molecules which would not otherwise be present.

With the implementation of the mitigation measures outlined in the EIAR (Section 8.5.1.2), the assessed impact of this potential source is *"Negative, imperceptible, direct, short-term, low probability effect on peat and subsoils and bedrock"*.

3 RESPONSE TO 3RD PARTY SUBMISSIONS

3.1 DAU Submission Point 2.3

T1, T3 and T4 are close to the River Gore and Inny and associated features including Lough Bane pNHA. The Department is concerned about the potential impacts from the siting of a turbine with regard to the drainage impacts on this pNHA.

3.1.1 HES Response to DAU Submission Point 2.3

Potential impacts on Lough Bane pNHA have been assessed within Section 9.4.1.9 of the EIAR. Lough Bane pNHA is upgradient of the wind farm site therefore it is hydraulically disconnected from the Wind Farm site in terms of surface water. There is also a high bank and a number of deep drains separating the Wind Farm Site from the pNHA and the groundwater gradient at the Wind Farm Site is not in the direction of Lough Bane.

Please note Lough Bane was specifically targeted for investigation and monitoring during the EIAR process. Piezometers were installed to the south and southeast of the Lough, and seasonal monitoring was undertaken (refer to Sections 9.3.7.1 and 9.4.1.9). Hydrochemical monitoring was also completed in Lough Bane.

Impact assessment with respect to T2 was also undertaken at Section 9.4.1.9 of the EIAR. This concluded:

> *"The hydrological regime locally will not be affected by the proposed works and so the regime of the SACs, SPAs, NHA and pNHAs will not be affected as:*

- *No groundwater dewatering is proposed during construction. Any rainwater/surface water removal will be temporary and at a very shallow depth.*
- *All building and trenching works are proposed at or very near existing ground levels with minimal ground disturbance proposed.*
- *No deep foundations are required or are proposed. As such there will be no interruption or blocking of shallow or deep groundwater pathways below the site."*

Therefore there will be no hydrological or hydrogeological impacts on designated sites.

3.2 Other 3rd Party Submissions

A total of 41 no. 3rd party submissions were received in relation to ABP Ref: 309770-21. Of these, 10 no. submissions contained comments relating to Soils & Geology or Hydrology/Hydrogeology.

The main hydrological/hydrogeological issues raised in those 10. no. submissions can be distilled down to the following themes:

1) Due to the emplacement of the turbine hardstands, a large volume of groundwater will be displaced, which will create a rise in the groundwater level, which will in turn flow to the River Glore/Inny and could cause flooding.
2) All surface water from the site flows towards the Inny/Glore River, which are headwaters of Lough Derravaragh. The proposed works will have a negative impact on water quality in these rivers, and thus the downstream lake.
3) The proposed development will have a negative effect on the hydrology/hydrogeology of Lough Bane, Gariskil Bog, Scragh Bog, and other designated sites.

3.2.1 HES Response to 3rd Party theme 1) issue:

- The installation of the turbine hardstands and its potential impacts on the water environment has been assessed in Section 9.4.1.1 (Construction) and 9.4.2.1 (Operation).
- The primary mechanisms for alteration of the water environment is considered to be excavation during the construction phase which has been carefully assessed in Section 9.4.1.1 and the emplacement of relatively impermeable concrete hardstands which has been carefully assessed within Section 9.4.2.1.
- The emplacement of the turbine hardstands will not displace a large volume of water, in the context of the overall bog basins. Any displacement of water caused by turbine installation will be a singular, localised occurrence, before the groundwater table recedes back to its static level, controlled by the surrounding drainage channels.
- The emplacement of a 600m3 turbine hardstand will displace ~450 m3 of water.

- Over a 523 hectare site, assuming each of the 15 no. turbines require the same approximate volume of concrete/lean mix, this will displace a volume of water leading to an average initial rise of 0.0012m, just over 1 millimetre.
- The groundwater will then recede back to its initial conditions with no further change in groundwater levels.
- For context, there is a ~ 20cm annual range in groundwater levels across the bogs.

On this basis, it is considered that implying the hardstands will displace a volume of water which could have any potential impacts on downstream hydrology/hydrogeology is shown to have a negligible impact on groundwater levels. This issue will not create or generate a potential significant impact.

3.2.2 HES Response to 3rd Party theme 2) issue:

- The potential effects on downstream receptors such as the River Inny, River Glore and Lough Derravaragh has been assessed in detail in Sections 9.4.1.1 to 9.4.1.10 of the EIAR. Robust and effective mitigation measures have been included within the EIAR which will break the pathway between source and receptor. These mitigation measures are outlined briefly in Section **Error! Reference source not found.** above.
- Through the implementation of these mitigation measures. there will be no significant effects on surface water quality as a result of the proposed development, including the River Inny, River Glore, and Lough Derravaragh.

3.2.3 HES Response to 3rd Party theme 3):

- Refer to Section **Error! Reference source not found.** above, i.e. response to Item 4.2 (b)

4 RESPONSE SUBMISSION SUMMARY:

- A robust and detailed EIAR for the proposed wind farm development was submitted with the SID application.
- A detailed drainage plan outlining the location of drainage mitigation measures has been submitted (Appendix 4-9 and 9-3 of EIAR).
- We have comprehensively responded to and addressed all matters raised by the Board, and by Statutory and non-statutory submissions.
- There is significant water related mitigation outlined in the EIAR to ensure that water quality

protection is upheld.

- All (water-related) mitigation as outlined in the EIAR will be included in the CEMP and implemented on-site.
- We have comprehensively addressed the matters raised in the DAU submission relating to Lough Bane; and,
- The submitted EIAR concludes, and HES continue to assert, that through the implementation of the proposed groundwater and surface water protection related mitigation measures, this proposed development will not have significant impacts on the hydrology/hydrogeology of the Wind Farm Site, nor the Grid Connection Route, nor any downstream receptors such as the River Inny, River Glore and all nearby designated sites.

5 Closure

We trust the above response meets your requirements. Please contact the undersigned if you have any questions regarding the above.

Yours sincerely,

Adam Keegan
Hydrogeologist
B.Sc., MSc.

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Appendix 5. B

An Bord Pleanála

Board Direction
BD-015822-24
ABP-309770-21

The submissions on this file, the internal Ecologist Report prepared following the submission of further information
and the Inspector's report were considered at a Board meeting held on 13/03/2024.

The Board decided to refuse permission, generally in accordance with the Inspector's recommendation, for the following reasons and considerations.

Reasons and Considerations

Having regard to

(a) the nature of the proposed wind farm drainage, which utilises the existing peatlands drainage system within and outside of the site boundary, which has not been authorised by a grant of permission

(b) the continuance of peat harvesting as the baseline scenario for the EIAR, including bird collision risk assessment and the assumed continuance of this land use

(c) the uncertainty as to the effectiveness of the proposed mitigation measures in dealing with the combined issues of construction works on exposed peat and the wider exploited peat basins

(d) if, hand peat harvesting is to cease permanently, there has been no assessment of the implications of a peatland rehabilitation plan on the local biodiversity as part of the EIA or in the NIS

(e) the uncertainty relating to future land use at the 'optioned lands'

(f) the absence of evidence of sufficient legal control to support the management proposals for the 'optioned lands'

(g) the information presented in relation to peat depth

The Board considered that there is significant uncertainty relating to the effect on soils, water and ecology which precludes assessment of the full environmental effects in accordance with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The proposed development is, therefore, premature.

Furthermore, on the basis of the information provided by the applicant in relation to site drainage proposals and collision risk modelling for birds, and in the absence of an assessment of the future land use together with the proposed development, the Board cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on European Site Lough Derravaragh Special Protection Area (Site Code: 004043), or any other European Site, in view of the site's Conservation Objectives.

Having regard to the above, the Board was not satisfied that the proposed development would not adversely affect the integrity of the above-mentioned European Site in view of the site's conversation objectives.

In such circumstances the Board is precluded from granting permission.

Schedule of Costs

In accordance with the provisions of section 37H(2)(c) of the Planning and Development Act 2000, as amended, the amount due to be recouped from the applicant is €19,883.

Board Member _____ **Date:** 13/03/2024

Peter Mullan

Appendix 4: Letter From Respiratory Consultant

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05/08/2024

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An Bord Pleanala ,
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To Whom It May Concern,

I am writing to express my serious concerns regarding the planned construction of a power plant in Portumna, proposed by Coolpowra Flex Gen Ltd. The company has submitted three planning applications, each addressing different sections of this significant project. These applications include:

1. Proposed 400kV Gas insulated SwitchGear electricity substation and high voltage transmission lines/cables and electric plant. (An Bord Pleanla Ref VA07.320094)
2. Proposed Reserve Gas-Fire Power Generator (An Bord Pleanla Ref: PA07.320095)
3. LDES storage and Synchronous Condenser (Galway CoCo. Reference: 2460845)

As a Respiratory Consultant working in Nenagh but living in Portumna, I am particularly concerned about the potential health impacts that such a project might have on the residents of Portumna and surrounding areas. The construction and operation of power plants, especially those involving fossil fuels like gas-fired generators, can lead to the emission of a variety of volatile organic compounds (VOCs) and other pollutants. These emissions can significantly impact air quality and public health.

Examples of Studies on Emissions from Gas-Powered Plants:

1. **Emission Characteristics of Gas-Fired Power Plants in China**

- **Study:** Zhang, X., Wu, L., & Xu, T. (2018). *Emission Characteristics of Gas-Fired Power Plants in China.*Atmospheric Environment, 175, 180-188.
- **Findings:** This study analysed the emission characteristics of gas-fired power plants in China. The primary pollutants identified were nitrogen oxides (NOx), carbon dioxide (CO2), carbon monoxide (CO), volatile organic compounds (VOCs), and particulate matter (PM). The study highlighted that while gas-fired plants emit lower levels of sulfur dioxide (SO2) compared to coal-fired plants, the emissions of NOx and VOCs are significant contributors to air pollution and photochemical smog formation.

2. **Volatile Organic Compound Emissions from Natural Gas-Fired Power Plants**
   - **Study:** Bar-Ilan, A., Grant, J., & Parikh, R. (2008). *Volatile Organic Compound Emissions from Natural Gas-Fired Power Plants.* Journal of the Air & Waste Management Association, 58(8), 1047-1056.
   - **Findings:** This study focused on the emissions of volatile organic compounds (VOCs) from natural gas-fired power plants. It found that VOCs such as formaldehyde, benzene, toluene, and xylene were emitted during the combustion process. These compounds are known to contribute to ground-level ozone formation and have potential health impacts.

3. **Greenhouse Gas and Air Pollutant Emissions of Chinese Natural Gas-Fired Power Plants: Results from On-Site Measurements**
   - **Study:** Shen, X., Sun, Z., & Liu, J. (2020). *Greenhouse Gas and Air Pollutant Emissions of Chinese Natural Gas-Fired Power Plants: Results from On-Site Measurements.* Science of The Total Environment, 710, 136353.
   - **Findings:** This study provided on-site measurements of emissions from natural gas-fired power plants in China. It reported that CO2 was the dominant greenhouse gas emitted, along with NOx and CO. The study also identified trace emissions of VOCs and methane (CH4), highlighting the need for effective emission control technologies to mitigate their environmental impact.

4. **Assessment of Atmospheric Emissions from Natural Gas-Fired Power Plants in Turkey**
   - **Study:** Altay, H., & Kunt, F. (2016). *Assessment of Atmospheric Emissions from Natural Gas-Fired Power Plants in Turkey.* Environmental Science and Pollution Research, 23(12), 12189-12197.
   - **Findings:** This study assessed the emissions from natural gas-fired power plants in

Turkey, identifying CO2, NOx, and CO as the primary pollutants. It also noted the presence of trace VOCs and PM, although at lower levels compared to coal-fired plants. The study emphasised the importance of adopting cleaner technologies and emission reduction strategies.

These studies collectively illustrate the typical emissions profile of natural gas-fired power plants, highlighting the presence of pollutants such as NOx, CO2, CO, VOCs, and PM. While natural gas plants generally emit lower levels of some pollutants compared to coal-fired plants, they still contribute significantly to air pollution and climate change.

As a Respiratory Consultant Specialist, I frequently treat patients suffering from chronic respiratory diseases such as asthma, chronic obstructive pulmonary disease (COPD), and pulmonary fibrosis, all of which severely impact their quality of life. The European Respiratory Society (ERS) has identified air pollution as a major public health concern across Europe, highlighting its role in exacerbating respiratory diseases and increasing mortality rates. The ERS reports that pollutants like nitrogen oxides (NOx), sulfur dioxide (SO2), and particulate matter (PM) significantly contribute to respiratory illnesses and have been linked to approximately 400,000 premature deaths annually in Europe (European Respiratory Society, 2019).

Similarly, the Irish Thoracic Society's publication *Respiratory Health of the Nation 2018* emphasises the detrimental effects of air pollution on respiratory health in Ireland. The report outlines how emissions from industrial sources, including power plants, lead to higher rates of hospital admissions for respiratory conditions and increased mortality. It underscores the urgent need for effective emission control measures and the adoption of cleaner energy alternatives to protect public health and improve the quality of life for those affected by respiratory diseases (Irish Thoracic Society, 2018).

Physiological Effects of Pollutants on the Human Respiratory System:

Gas-fired power plants emit various pollutants that can have significant physiological effects on the human respiratory system. The following analysis outlines how these chemicals impact respiratory health, supported by evidence from scientific studies and case studies from gas plants worldwide.

Carbon Monoxide (CO)

- **Physiological Effects:** Carbon monoxide binds with hemoglobin to form carboxyhemoglobin, reducing the blood's oxygen-carrying capacity. This can lead to

hypoxia, affecting critical organs such as the brain and heart.

- **Evidence:** A study in Atlanta, Georgia, demonstrated that increased levels of CO are associated with higher rates of hospital admissions for respiratory diseases. The study highlighted a correlation between elevated CO exposure and respiratory-related emergency visits (Peel et al., 2005). The World Health Organization (WHO) has identified CO as a contributor to respiratory exacerbations and increased hospital admissions due to its role in reducing oxygen delivery to tissues (WHO, 2021).

Nitrogen Dioxide (NO2) and Particulate Matter (PM)

- **Physiological Effects:** NO2 and PM are significant respiratory irritants. They cause inflammation of the airways, worsen asthma and COPD symptoms, and contribute to cardiovascular diseases.
- **Evidence:** The European Respiratory Society (ERS) has shown that exposure to NO2 and PM2.5 is linked with increased hospital admissions for respiratory and cardiovascular diseases across Europe (Brunekreef & Holgate, 2002). A comprehensive review by WHO also found that exposure to PM2.5 is associated with increased mortality and hospital admissions for respiratory and cardiovascular conditions (WHO, 2013).

Sulfur Dioxide (SO2)

- **Physiological Effects:** Sulfur dioxide is a potent respiratory irritant that causes bronchoconstriction and increases mucus production, exacerbating conditions such as asthma and COPD.
- **Evidence:** The WHO outlines the impact of sulfur dioxide on respiratory health, noting that exposure to SO2 can cause significant bronchoconstriction and respiratory symptoms, particularly in individuals with asthma and COPD.

Benzene

- **Physiological Effects:** Benzene is a known carcinogen that can cause respiratory tract irritation and is strongly linked to hematological malignancies such as leukemia.
- **Evidence:** Research in industrial settings, such as petrochemical industries, has shown that benzene exposure increases the risk of cancer, particularly leukemia. A study by Lan et al. (2004) documented the haematotoxicity of benzene, emphasising its carcinogenic potential and respiratory health risks.

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Formaldehyde

- **Physiological Effects:** Formaldehyde exposure can cause irritation of the respiratory tract and asthma-like symptoms. It is classified as a probable human carcinogen.
- **Evidence:** Formaldehyde exposure is linked to increased respiratory symptoms and cancer risk in industrial areas with significant emissions. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 carcinogen, indicating sufficient evidence for carcinogenicity in humans (IARC, 2012).

Long-Term Environmental and Health Impact:

The cumulative effects of these pollutants pose a significant threat to public health, particularly affecting vulnerable populations such as children, the elderly, and those with pre-existing respiratory conditions. The environmental impact, including air and noise pollution, will degrade the quality of life for the residents of Portumna and surrounding areas. The long-term health effects include chronic respiratory diseases, increased cancer risk, and overall decreased quality of life due to persistent pollution exposure.

Methane

- Methane (CH4) is the primary component of natural gas and is a significant greenhouse gas emitted during the extraction, processing, and transportation of natural gas. While methane itself is not directly harmful to human health "at typical ambient concentrations", its indirect effects on climate change can have profound health impacts. Methane is over 25 times more effective than carbon dioxide at trapping heat in the atmosphere over a 100-year period, making it a potent contributor to global warming and climate change (IPCC, 2021). The resulting climate changes can lead to increased frequency and intensity of extreme weather events, such as heatwaves and floods, which pose direct and indirect risks to human health. These risks include heat-related illnesses, respiratory disorders from increased ground-level ozone and particulate matter due to higher temperatures, and the spread of vector-borne diseases (Smith et al., 2014). In terms of evidence, a study by Howarth (2014) highlights that methane emissions from natural gas systems significantly contribute to the overall greenhouse gas footprint of natural gas, emphasising the need for better management practices to minimise leaks and reduce emissions. Thus, while methane itself does not cause physiological harm through direct inhalation, its role in climate change has substantial implications for human health globally.

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Ground-Level Ozone Formation:

- Ground-level ozone is a harmful air pollutant formed through complex chemical reactions between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in the presence of sunlight. Unlike the protective ozone layer in the upper atmosphere, ground-level ozone is a significant component of smog and poses a variety of health and environmental risks. Major sources of NOx and VOCs include vehicle emissions, industrial facilities, power plants, and chemical solvents. When these pollutants are emitted into the atmosphere, sunlight triggers photochemical reactions that lead to the production of ozone. Ground-level ozone can cause respiratory problems, exacerbate asthma and other lung diseases, and reduce lung function, especially in vulnerable populations such as children and the elderly. Additionally, it can harm ecosystems, damage crops, and reduce biodiversity. Measures to control emissions of NOx and VOCs, such as improving fuel efficiency, implementing industrial emission standards, and promoting the use of clean energy sources, are essential to reduce ground-level ozone formation and its associated health impact (WHO, 2006), (EPA, 2023).

Recommendations:

Given these potential health risks, it is crucial to conduct a comprehensive health impact assessment as part of the planning and approval process for this project. This assessment must evaluate both the short-term and long-term impacts on the health and well-being of the local community.

While I understand the importance of energy development for economic growth and stability, it is vital to balance this with the health and well-being of the community. Health considerations must be prioritised in any decision-making process regarding this project.

Alternative Solutions
Given the substantial health and environmental risks, I urge the planning authorities to reconsider the current proposal and explore more sustainable and cleaner energy alternatives.

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Conclusion:
While the need for energy development is recognised, it must not come at the expense of public health and environmental integrity. Prioritising renewable energy sources not only aligns with global climate goals but also ensures a healthier, more sustainable future for our community.

I strongly recommend halting the current plans for the gas-fired power plant and focusing on renewable energy alternatives. I am available for further discussion and consultation on this matter. Thank you for considering these concerns.

Yours sincerely

A Scott

Dr. Andrew Scott

Respiratory and General Internal Medical Consultant
Nenagh Hospital
IMC 400409

Please be advised that this letter represents my personal professional opinion as a Respiratory and General Internal Medicine Consultant Specialist. It does not reflect the views or policies of my employer, the Health Service Executive (HSE), and should not be interpreted as an official statement from the HSE.

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FPLOGUE SOLICITORS

29 August 2024

To:	Mr Paul Madden
Re:	Legal note to be included with your submission to An Bord Pleanála
Applicant:	Coolpowra Flex Gen Limited
Proposed Development:	(1) Proposed 400kV Gas insulated SwitchGear electricity substation and high voltage transmission lines/cables and electric plant. (Ref VA07.320094) (2) Reserve Gas-Fire Power Generator (Ref PA07.320095)
Development address:	Coolpowra, Cooldorragha, Coolnageeragh, Ballynaheskeragh, Gortlusky & Sheeaunrush, Co. Galway

A Chara

1. I have reviewed the various planning applications submitted to Galway County Council and to An Bord Pleanála, I also note that the project includes an application for a gas pipeline which has yet to be specified. There will also need to be an IED Licence from the EPA.

2. There are two development proposals before the Board as summarised above, a Gas Insulated Switchgear (GIS) substation and a Reserve Gas-Fired Power Generator comprising three Open Cycle Gas Turbine (OCGT) rated at 385 MW each (total 1,155 MW) as well as significant ancillary development. A separate application has been made to Galway County Council for a Long Duration Energy Storage (LDES) facility with a 400MW capacity.

3. An extension to the gas transmission network of up to 25km will also be required, although the route of this pipeline has not been identified in the planning file and no information is presented in relation to the design of this infrastructure and the likely significant effect on the environment apart from the identification of indicative routes.

4. The area of the application site is 42.3 ha.

5. The gas-fired power plant part of the project would be one of, if not the biggest, power station in the country if permitted.

Need for the development/policy issues

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6. The EIAR contains sections setting out detailed justification for the proposed project by reference to national and EU energy and climate change policy. This is backed up with unsubstantiated claims that the project is "low carbon" and that it will "assist with transition towards 80% renewable sources by 2030 and achieving climate neutrality by 2050". No evidence is produced to substantiate these claims nor is there any evidence to show that this particular project is compatible with the relevant policies.

7. On the one hand the EIAR claims that this project is aimed at complying with relevant all-island and EU electricity policy but on the other hand that the project is so site-specific that alternative locations need not be considered as part of the EIAR. This is but one of many contradictions in the file.

8. The developer describes the project as being composed of three individual projects which it says are independent of each other. On the other hand, the justification for the proposed development and the environmental assessment treat the proposed development as a single project (see further below in relation to alternatives). At the very least the material on the file doesn't identify which of the proposed sub-projects actually is required under the cited policy documents.

9. The EIAR refers to the inclusion by the European Commission of "fossil gas" under the transitional activity category of the Taxonomy Regulation[1] to "allow us to accelerate the shift from more polluting activities, such as coal generation, towards a climate-neutral future, mostly based on renewable energy". The implication from this statement at §1.2 of the EIAR is that the project is environmentally sustainable from the point of the view of EU energy and climate policy.

10. Article 3 of the Taxonomy Regulation sets criteria which are required for the purposes of establishing the degree to which an investment is environmentally sustainable. These are:

    a. contributes substantially to one or more of the environmental objectives set out in Article 9 in accordance with Articles 10 to 16;
    b. does not significantly harm any of the environmental objectives set out in Article 9 in accordance with Article 17;
    c. is carried out in compliance with the minimum safeguards laid down in Article 18; and
    d. complies with technical screening criteria that have been established by the Commission in accordance with Article 10(3), 11(3), 12(2), 13(2), 14(2) or 15(2).

11. The European Commission is empowered to adopt delegated acts to specify in more detail which economic activities are environmentally sustainable. To that end it has adopted the Taxonomy Delegated Regulation[2] which was amended in 2022 with the inclusion of Section 4.29 of Annex 1 in relation to "Electricity generation from fossil fuels"[3].

12. No information is presented to demonstrate and the project or any part of it qualifies as environmentally sustainable under the Taxonomy Regulation. In any event no information is

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[1] REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32020R0852)

[2] Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (Text with EEA relevance)Text with EEA relevance OJ L 442 9.12.2021 p.1 (Consolidated version as of 1 January 2024 is available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02021R2139-20240101)

[3] The text of Section 4.29 is set out in Annex 1 for the convenience of the Board.

presented to address the Technical Screening Criteria (**TSC**). This is an important framework in the instant case since if the project doesn't satisfy the TSC then it is, by definition, not environmentally sustainable or a transition activity and therefore would be contrary to the proper planning and sustainable development of the area and also there would be significant effects on the environment from the project (see further below). It is also the case that in-so-far as the project is based on a national policy justification for fossil gas capacity, these policies only envisage capacity that is environmentally sustainable under the Taxonomy Regulation.

13. The developer points to the Eirgrid SONI Ten-Year Generation Capacity Statement 2023 to 2032 for policy support which refers to a CRU programme developed in 2021 to meet power generation shortfalls through a combination of short-term measures and longer-term market based enduring solutions. This programme outlines the delivery, through the all-island capacity auctions, of over 2,000 MW of enduring flexible gas-fired generation capacity, which is renewable gas ready by 2030. The OCGTs proposed by the developer are not renewable gas ready since they require modification to use renewable gas. Therefore, the project proposed does not accord with national policy.

14. There is no specific policy basis for the proposed development at this location in the Galway County Development Plan 2022 to 2028 (**CDP**). While the developer points to general policies in relation to infrastructure, energy and climate change, there is nothing in the CDP which supports the proposed site as the location for one of Ireland's largest power stations. Similarly, there is nothing in the Strategic Environmental Assessment of the CDP to support the location of a large power station at this rural location.

15. In fact, the CDP identifies the location as being in the rural settlement and farmland band in terms of economic development (Map 5.1 of the CDP). The CDP identifies the areas linking the Key Towns and Athenry as being those ear- marked as the economic engine of the County.

16. The developer cites the National Development Plan as relevant policy. In fact, this is an irrelevant policy since the Government has indicated that it does not set the framework for development consent.

17. It is striking that despite the claim that the project is addressing national policies aimed at providing certain amounts of flexible gas-fired generation capacity and battery storage capacity there is absolutely no information about existing, permitted and pending projects including those from the same developer which would also provide this capacity. In other words, there is no information on the file through which it can be established whether and to what extent this capacity has already been provided by existing and pipeline projects.

18. In the case of the gas-fired generator this is a critical factor owing to scale of what is proposed and the risk that excess fossil-fuel generation capacity could be permitted over and above the limited amount envisaged by national policies. As we will set out below in more detail the EPA's projections for national carbon emissions have only taken into account 1.3 GW of net gas-fired generation added by 2030 and even in that scenario very serious exceedances of the carbon budgets are envisaged with the EPA calling for increased emissions reductions if we are to stay within carbon budgets for Budget period 2.

Content of the Planning Application

19. Considering the scale of the project, the documents on the planning file lack any real detail and do not provide adequate plans and particulars of the proposed development or of the likely significant effects on the environment.

20. The plans and particular provided are more akin to an application for outline permission and simply do not provide anything near the level of detail required for a project of this scale. For

example, no details are provided in relation to the proposed realignment of a water body on the site; the geotechnical information is limited to a small number of pits with no bore holes showing the profile of the soil or bedrock which would be required for a very large project such as this. In fact, there is absolutely no detail about the level of excavation and underground structures that are proposed. While Regulation 214(3) of the Planning and Development Regulations 2001 is noted, this provision does not remove the requirement for adequate particulars of underground structures given that in the instant case this detail would be needed under the EIA Directive, Habitats Directive and Water Framework Directive.

21. This application should be contrasted with the application made by Bord na Móna Powergen Limited at Derrygreenagh in Offaly for a 710MW gas-fired power plant (Board reference 319023) which apmply illustrates the deficiencies in the present planning application.

Environmental Impact Assessment

Need for EIA

22. While the developer correctly identifies that the gas-fired power plant requires EIA it failed to identify the entire project as requiring EIA since it is urban development outside of a business district or other built-up area involving an area greater than 20ha and therefore requires mandatory EIA under Paragraph 10(b)(iv) of Part 2 of Schedule 5 of the Planning and Development Regulations.

Project Splitting

23. The project, or part of it, is functionally dependent on the extension of the gas transmission network by up to 25km. While this part of the project is the responsibility of Gas Networks Ireland, this does not remove the obligation on the Board, as competent authority, to carry out an environmental impact assessment of the entire project including the gas connection. While the EIAR purportedly includes this aspect of the project, there is no environmental information presented and the route itself has not even been identified.

24. Before development consent is given there must be an EIA of all of the environmental effects of the entire project. It is impermissible to split a project in the way proposed, see by analogy *Ó Grianna v An Bord Pleanála* [2014] IEHC 632 where the construction of wind turbines and the grid connection were held to be a single project because the windfarm could not be operated without the grid connection, which the developer had not sought permission for.

Content of the EIAR

25. Article 5(1) of the EIA Directive sets out the minimum set of information to be provided by the Developer in the EIAR. The case law has held that this information must include information that shows that the project is compatible with the applicable substantive requirements of environmental law, for example the Water Framework Directive (WFD), the Habitats Directive, National and EU and Irish Climate Change law and so on. Effects on the environment which infringe environmental legislation would be significant in any case .

26. The competent authority's task under the EIA Directive is to use the information in the EIAR to carry out an independent assessment of likely significant effects on the environment, including by reference to the criteria set out in substantive environmental law. The competent authority's task is not confined to simply checking the contents and/or reciting the conclusions of the EIAR. If there is an absence of data including baseline information which is required to be produced by the developer or other public authorities or others the competent authority cannot carry out such an independent evaluation.

27. Article 5(1) of the EIA Directive requires that the developer shall, with a view to avoiding duplication of assessments, take into account the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report.

28. Article 5(3)(b) of the EIA Directive requires that the competent authority shall ensure that it has, or has access as necessary to, sufficient expertise to examine the environmental impact assessment report. The Board is invited to provide a statement of its expertise in its decision so that this can be verified by the public concerned.

29. Article 3(1) of the EIA Directive requires that the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects on the environment of a project. As explained in more detail in the Commission Guidance on the Environmental Impact Assessment Report[4], the aim of the EIAR report is to provide prudent information for both decision-makers and for people affected by the project. The EIAR must therefore communicate effectively with these audiences.

30. In this case the EIAR runs to 417 pages not including appendices, but despite its length fails to give any impression of the environmental impacts that are likely to arise, how they are proposed to be mitigated or offset and an objective or scientific evaluation of the efficacy of the mitigation or compensation measures. Overall, the EIAR lacks detail on the types of environmental impacts from this type of facility, fails to provide quantitative details of the likely emissions and impacts and tacitly assumes that all mitigation is 100% effective without providing an objective scientific basis for this assumption. Despite its length, if there is core information on environmental impacts, it is buried in the report.

31. Despite the fact that there is extensive information published on the emission characteristics of various types of large combustion plants throughout Europe, the characteristics of various processes and the best available techniques in this industry to protect the environment, none of this is referenced in the EIAR[5]. Despite the ready availability of up-to-date scientific information about large combustion plants throughout Europe, the EIAR does not use this information to provide a realistic characterisation of the emissions and other environmental impacts.

32. There is virtually no information on the construction management plan which has been left over to be drafted post-consent. There is no information on underground works and excavations for a proposal to build Ireland's largest power plant alongside an LDES facility and a High Voltage switching station, equally there is virtually no information on cumulative effects.

33. In reality the decision-maker has no idea reading the EIAR as to what the likely significant effects are, either quantitatively or qualitatively and whether and to what extent the mitigation is effective. In fact it seems to be a tacit assumption that all proposed mitigation is 100% effective but this cannot be the case based on the information referred to above. In its current form, the contents of the EIAR cannot form the basis of a lawful EIA or decision to grant planning permission.

Competency of the experts preparing the EIAR

34. Mr Staunton is primarily responsible for the preparation of the EIAR[6]. However it appears that Mr Staunton has a business relationship with Mr Reams who is the beneficial owner of the developer. In that sense Mr Staunton is not competent to prepare the EIAR since a reasonable person would

[4] European Commission, 2017

[5] See, for example, Thierry Lecomte, José Félix Ferrería de la Fuente, Frederik Neuwahl, Michele Canova, Antoine Pinasseau, Ivan Jankov, Thomas Brinkmann, Serge Roudier, Luis Delgado Sancho; Best Available Techniques (BAT) Reference Document for Large Combustion Plants; EUR 28836 EN; doi:10.2760/949 (https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC_107769_LCPBref_2017.pdf).

[6] Page 1-16 of the EIAR.

have a reasonable apprehension in relation to the independence of Mr Staunton in the preparation of the EIAR given this relationship, which was not disclosed in the EIAR.

35. According to a search on the Companies Register, Mr Staunton is a 5% shareholder in Schwungrad Energie Limited whose directors are Sharon and Nigel Reams (see attached Company printout). According to the Companies Register, this company is 75% owned by Javah Energy Holdings Limited which is 100% owned by Mr Reams. The developer, Coolpowra Flex Gen Limited, is owned 90% by Javah Energy Holdings Limited and 10% by Mr Reams personally.

36. In light of the business relationship between Mr Staunton and Mr Reams, who controls both Schwungrad Energie Limited and the developer, Mr Staunton is not competent (per Article 5(3)(a) of the EIA Directive) to prepare the EIAR.

Scoping

37. The applicant did not seek a formal scoping opinion from the competent authority. While the EIAR states that various public authorities were contacted as part of an alleged scoping exercise, this correspondence is not on the file.

38. There is reference to correspondence with prescribed bodies, but these letters and responses are not included with the EIAR. Therefore, it cannot be established whether scoping in compliance with Article 5(2) of the EIA Directive was carried out which requires the developer to provide information "in particular on the specific characteristics of the project, including its location and technical capacity, and its likely impact on the environment". The public concerned was not consulted for the purpose of scoping.

39. The upshot of this is that issues with the content of the EIAR that could have been addressed at scoping stage will now have to be addressed during the planning permission procedure as set out in more detail below.

Alternatives

40. The EIAR does not comply with the EIA Directive in relation to alternatives.

41. EIA requires the mandatory assessment of alternatives which is aimed at providing a concrete opportunity to minimize the Project's environmental impact. The Commission's 2017 Guidance summarises the obligation as follows:

- The EIA Directive requires Developers to describe the reasonable Alternatives that have been identified and studied and to compare their environmental impacts against the Project option chosen. This is an important aspect of the EIA Report and one that often challenges practitioners and Developers. Alternatives have to be 'reasonable', meaning that feasible Project options meet the Project's objectives.

- The 2014 amendments to the Directive now require the EIA Report to include a description of the reasonable Alternatives (as opposed to an 'outline') studied by the developer who holds the pen. They also suggest types of Alternatives, such as Project design, technology, location, size, and scale.

- The approach to identifying Alternatives is highly Project-specific. Some Alternatives are overarching and may be identified in plans and programmes (e.g. transport plans or regional development programmes) or by the Competent Authority at the EIA Scoping stage. Others might concern the technical design and are identified by the Developer. In

cases, EIA practitioners may identify Alternatives and propose them to the Developer. The process of identifying and assessing Alternatives is iterative and requires some flexibility and good communication between all parties.

- Consultation with the public is usually very important both for identifying and assessing Alternatives. A clear presentation of Alternatives, and how they have been assessed, also lends transparency to the process and can improve public acceptance and support for Projects.

- The environmental assessment of Alternatives should be targeted and focused on the comparison of impacts between several options and presented as such in the EIA Report.

42. The purpose of the identification of alternatives is to minimize the environmental impact and logically therefore requires alternatives that reduce the need for mitigation as far as possible. The developer's superficial treatment of alternatives complies with neither the letter nor the spirit of Article 5(1) of the EIA Directive.

43. In fact the EIAR's treatment of alternatives is no more than a self-serving justification for why the Developer says that there is no alternative location other than the land parcels that it has already assembled through a connected company. Needless to say the developer's own land-holding is not a relevant factor in the consideration of alternatives.

44. The developer misunderstands the purpose of the do-nothing alternative. The Commission Guidance states that the "do-nothing" scenario is heavily based on the Baseline. In the EIAR section on alternatives there is no reference at all to the baseline and its evolution if the project were not to proceed.

45. It is implausible that the project is site-specific to the extent that alternative locations do not have to be considered. The long list of comparable gas projects set out in Annex 3 amply demonstrates that this claim is unfounded. As indicated at length in the EIAR the project aims to address issues with the all-island electricity system as well as national and EU climate change policies. It simply cannot be the case that the only suitable location just so happens to be on a large area of land owned by a company connected to the developer.

46. The consideration of alternative technologies and alternative layouts is equally deficient and is improperly expressed as a justification for the project configuration. For example, there are no alternatives which might have lower carbon emissions, an alternative of renewable-ready technology has not been considered. Alternatives that don't involve the diversion of a water body or the removal of large amounts of hedgerow have not been examined.

47. In light of the above the EIAR does not comply with Article 5(1) of the EIA Directive.

Transboundary Effects

48. The Project is part of the all-island electricity network and therefore may have likely significant transboundary effects, particularly on material assets. There ought to have been transboundary consultation both with the public concerned in Northern Ireland and the relevant public authorities in that jurisdiction.

Hedgerows

49. The project involves the removal of more than 500m of hedgerows, including a large section of the riparian zone of a water body, which is a length that would be significant in and of itself. There is no detailed assessment of the hedgerows by reference to the relevant guidelines published by

the Heritage Council[7] or in relation to the impact of the removal of hedgerow that forms part of the riparian zone of the water body. Therefore, the EIAR does not contain sufficient information to carry out an assessment of the impact from hedgerow removal.

Badgers

50. No detail is provided on badger surveys other than a statement (§6.3.5.1) that there were no badger setts along field boundaries which would be disturbed and no signs of badgers in the study area. However, no details of the "study area" or the study methodology and results are presented. It does appear that only a limited study area was identified using a desk-study, however the details of the areas highlighted in the desk study are not to be found in the EIAR.

Bats

51. A bat survey report prepared by Eire Ecology is included in Appendix 6 to the EIAR. It says that surveys were undertaken "in line" with the BCT Good Practice Guidelines, 4th edition 2023 and Irish Wildlife Manual 134 (Marnell F, 2022). It is also stated that trees were assessed with reference to (Andrews, H 2018).

52. §2.3 states that there is a maternity roost in a building located 56m to the north that is proposed to be demolished by the ESB with a new bat building located 180m proposed to the north. Both have good connectivity to the subject site.

53. It is stated that all surveys were conducted at appropriate times of the year. This is incorrect. Trees were examined in January and February 2024 with static detector surveys carried out in May 2024 as well as emergence surveys from the buildings on 1 May 2024 and emergence surveys from trees with high roosting potential on 23 May.

54. Table 8.3 of the 2023 BCT guidelines specifies the minimum recommended number of repeats for activity surveys with at least one night-time bat walkover (NBW) per season (spring, summer and autumn) and, depending on suitability of the habitat, data from automatic bat detectors to be collected for a minimum of five consecutive nights per season in appropriate weather conditions for bats. In the case of moderate or high suitability habitat the frequency increases to five consecutive nights per month.

55. Marnell indicates that bat detector and emergence counts in spring (Mar to May) are of limited use for buildings and are rarely useful for trees (Table 3).

56. There are other issues with the bat report. There is no assessment of the relationship between the bat roost to the north of the site and the subject site and whether the viability of this roost depends on the subject site. The report doesn't rule out the possibility that the removal of a large amount of foraging and commuting habitat won't endanger the viability of this roost. Similarly, there is no information at all in the EIAR on the conservation status of the identified bat species at local, regional, or national level.

57. The EIAR is therefore deficient and contains lacunae which means that the impact on bats cannot be assessed and the competent authority cannot determine whether the project is compatible with the strict protection of bats under Article 12 of the Habitats Directive.

Water Framework Directive

[7] https://hedgerows.ie/wp-content/uploads/2019/11/HAS-Publication-Final-March-2013.pdf

58. In relation to the Water Framework Directive (**WFD**) a number of obligations arise on both the developer and the competent authority.

59. EU law requires the EIAR report to contain the data that are necessary in order to assess the effects of a project on the status of the bodies of water concerned in the light of the criteria and requirements laid down in, inter alia, Article 4(1) of the Water Framework Directive (Case C-535/18 IL).

60. The documents in the file that are made available to the public must make it possible for that public to obtain an accurate impression of the impact that the project at issue will have on the status of the bodies of water concerned in order for it to be able to verify compliance with the obligations arising from, inter alia, Article 4 of the Water Framework Directive. In particular, the data provided must be such as to show whether, having regard to the criteria established by that directive, the project at issue is liable to result in a deterioration of a body of water.

61. An incomplete file or data that are scattered, incoherently, across a multitude of documents are not such as to make it possible for the public concerned to participate effectively in the decision-making process and, therefore, do not satisfy the requirements stemming from Article 6 of the EIA Directive.

62. When considering applications for planning permission, the planning authority is involved in making operational the program of measures as envisaged by Article 4(1) of the WFD. This provision imposes two separate objectives. First, in accordance with Article 4(1)(a)(i) WFD, the Member States are to implement the necessary measures to prevent deterioration of the status of all bodies of surface water (obligation to prevent deterioration). Second, pursuant to Article 4(1)(a)(ii) and (iii), the Member States are to protect, enhance and restore all bodies of surface water with the aim of achieving good status by the end of 2015 at the latest (obligation to enhance).

63. The upshot of this is that the competent authority is required, unless a derogation is granted, to refuse authorisation for an individual project where it may cause a deterioration of the status of a body of surface water or where it jeopardises the attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive.

64. The concept of deterioration means that there is deterioration as soon as the status of at least one of the quality elements, within the meaning of Annex V to the WFD, falls by one class, even if that fall does not result in a fall in classification of the body of surface water as a whole. However, if the quality element concerned, within the meaning of that annex, is already in the lowest class, any deterioration of that element constitutes a 'deterioration of the status' of a body of surface water.

65. Good surface water status means the status achieved by a surface water body when both its ecological status and its chemical status are at least "good".

66. Ecological status is an expression of the quality of the structure and functioning of aquatic ecosystems associated with surface waters classified in accordance with Annex V of the WFD.

67. Good surface water chemical status means the chemical status required to meet the environmental objectives for surface waters established in Article 4(1)(a) WFD, that is the chemical status achieved by a body of surface water in which the concentration of pollutants do not exceed the environmental quality standards established in Annex IX and under Article 16(7) WFD and under other relevant Community legislation setting environmental quality standards at Community level.

68. The EPA also records information on the risk of waterbody not meeting WFD objectives. These are classified as "not at risk", "at risk" and "review".

69. A waterbody is "at risk" when either it is currently not achieving the WFD environment objective of Good or High ecological status or that there is an upward trend in nutrients or ammonia and if this trend continues the waterbody status will decline by the end of the WFD cycle and will fail to meet its environmental objective.

70. A waterbody is "not at risk" when it is achieving its environmental objective of either High or Good Status and there is no evidence indicating that there is a trend towards status decline.

    a. A waterbody can be considered as "Review" for three reasons :

    b. The waterbody does not have status assigned to it yet, it is referred to as an unassigned waterbody, and therefore there is not enough evidence to determine if it is At Risk or Not At Risk.

    c. The waterbody has shown some slight evidence or improvement, but more evidence is needed before it can be considered as Not At Risk.

71. Measures are planned or have already been implemented for the waterbody and no further measures should be applied until there is enough time to assess if these measures are working.

72. The EPA has documented Ireland's National Water Quality Monitoring Programme 2022 to 2027 under the WFD[8]. The results of this monitoring programme are available on the WFD Application[9] which is not in the public domain. The EPA has refused to grant FP Logue access to the WFD monitoring data. In any event in an EIA or EIA screening procedure the developer is required to obtain the monitoring data for all affected water bodies and to include it in the EIAR or EIA Screening report as the case may be.

73. The Q values reported by the EPA are from a legacy monitoring that is not derived from WFD criteria[10]. Therefore they are of limited value in terms of EIA or EIA Screening which is concerned with compliance with the WFD.

74. While the developer is required to provide sufficient information to the competent authority. The competent authority is nonetheless required to carry out an independent assessment of the project in light of the above and to provide a reasoned decisions of sufficient detail such that a member of the public and a court can be satisfied that the project will not entail a breach of Article 4 WFD.

75. With that in mind, the following is required having regard to the methodology set out in Part V of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (the **Surface Water Regulations**).

76. First the competent authority must identify the relevant measures in the programme of measures applicable to an affected waterbody and whether the achievement of the project at issue is compatible with those measures.

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[8] https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/irelands-national-water-quality-monitoring-programme-20222027.php

[9] https://wfd.edenireland.ie/

[10] https://www.catchments.ie/epa-publishes-water-quality-q-value-results-for-rivers-surveyed-in-2022/

77. Second the competent authority must identify the quality element values for the biological and physico-chemical status and determine the current quality ratios as well as whether they satisfy the criteria in Schedule 5 and the values relative to those criteria.

78. Third, the competent authority must analyse and determine what pollutants may be emitted into the waterbody and must calculate the effect of that pollution on the quality elements and environmental quality standards.

79. Fourth the competent authority must also consider hydromorphological characteristics and the relevant quality elements such as the hydrological regime, river continuity, and morphological conditions.

80. If mitigation measures are specified, it is for the developer in the first instance to provide sufficient details of the characteristics of the mitigation measures and technical details about the range over which they are effective and objective information about their effectiveness. The standard required is one of scientific certainty. It cannot be assumed that mitigation measures will be 100% effective. Any mitigation measures which are qualified with phrases such as "as far as possible", "where practicable", "minimize" etc are not scientifically certain since they leave an unspecified discretion to the developer as to the extent of their deployment.

81. It is only if the competent authority is satisfied as a matter of scientific certainty with Article 4 compliance will it have jurisdiction to grant permission. Otherwise, it is required as a matter of EU law to refuse permission.

82. Furthermore if the competent authority decides to grant permission for a project that involves discharges to a waterbody that is liable to cause water pollution, Regulation 7 of the Surface Water Regulations requires it to lay down emission limits in the planning permission that satisfy the requirements set out in that regulation.

83. SuDS is often identified as a mitigation measure to control discharges of pollution into surface waters. However this does not remove the requirements outlined above for a scientific assessment of the project in light of Article 4 WFD.

84. First, it is clear that urban run-off contains pollution including polycyclic aromatic hydrocarbons (PAH)[11]. It is also clear that urban run-off contains suspended solids and a myriad of other pollutants[12].

85. Second research shows that SuDS measures to control pollution are not 100% effective and depend critically on maintenance. For example research shows that petrol interceptors are only around 70% effective in removing suspended solids and that they don't cope well with particles of less than 25µm in diameter[13].

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[11] Nature Based Solutions to the Management of Rainwater and Surface Water Runoff in Urvan Areas – Best Practice Interim Guidance (Department of Housing, Local Government and Heritage, undated) page 46

[12] See, for example, Alexandra Müller, Heléne Österlund, Jiri Marsalek, Maria Viklander, *The pollution conveyed by urban runoff: A review of sources*, Science of The Total Environment, Volume 709, 2020 (https://doi.org/10.1016/j.scitotenv.2019.136125)

[13] Julia Zakharova, Hamid Pouran, Andrew Wheatley & Mohammed Arif (2023) Assessment of oil-interceptor performance for solid removal in highway runoff, Environmental Technology, 44:2, 197-210, DOI: 10.1080/09593330.2021.1968040 (also at https://cris.brighton.ac.uk/ws/portalfiles/portal/33637040/Zakharova et al Assessment of oil interceptor 2021.pdf)

86. Third, it is common knowledge that petrol interceptors and silt traps require regular maintenance and cleaning, particularly after heavy rainfall[14],[15],[16],[17]

87. Any maintenance program must be based on controlling the emission of pollutants otherwise there is no guarantee of its efficacy. Therefore, any decision to grant planning permission must impose emission limits on stormwater outfalls as well as regular monitoring of pollutants. In fact, such a requirement arises under Regulation 7 of the Surface Water Regulations.

88. As a final matter, it is clear under EU law that the assessments under the EIA, Habitats and SEA Directives are not substitutable for one another although the may be coordinated and/or draw from the same data. The reasons for this is that these assessments examine different aspects of the environment and the assessments must be clearly distinguished.

89. The information provided by the Developer is not sufficient for the Board to carry out an independent assessment as it is required to do.

90. The Developer refers to the GORTAHA_010 river water body. It appears that the developer proposes diverting this waterbody and incorporating it into the drainage system for the proposed development. This would make it a heavily modified water body. In fact the EIAR completely fails to address hydromorphology at all. The diversion of the water body as proposed is contrary to the WFD unless a derogation is granted. Any such derogation must be granted in advance of the EIA.

91. The EPA does not monitor GORTAHA_010 and has assigned a status of "moderate" based on modelling with "low confidence". This treatment is contrary to the procedure set out in the WFD which requires monitoring of individual quality elements and concentration of pollutants which are used to assign a status and against which compliance with Article 4(1) (as interpreted in the Weser judgment) must be assessed. In the absence of baseline information which is required by the WFD, the Board cannot carry out a lawful assessment in relation to water quality of GORTAHA_010.

92. The Developer refers to the KILCROW_070 river water body. This water body is monitored by the EPA but the developer has nor provided the monitoring results or provided details of the likely impacts from the proposed development on this water body. The EPA has refused to disclose the monitoring data to the author of this letter.

93. It is also noted that the developer disagrees with the EPA's analysis of the local catchments and asserts that the EPA's data is incorrect. It does this without providing the relevant scientific basis for the claim. The Board is required to use the EPA's data and cannot rely on bald assertions by the developer as seems to be proposed in the EIAR. If there is an issue with the EPA's sub catchment data this must be evaluated by the EPA.

94. Furthermore there is a systemic issue. Ireland is now two-years late in producing the third-cycle River Basin Management Plan which records the programme of measures under Article 11 WFD. In the absence of this plan and in the absence of a lawful programme of measures, the Board cannot carry out an independent evaluation of the project's compliance with Article 4(1).

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[14] https://www.linkedin.com/pulse/guide-oil-petrol-interceptor-cleaning-tricia-craig/

[15] Flood Management Information: Silt Trap, Farming and Wildlife Action Group Southwest, 2017 (https://norfolkriverstrust.org/wp-content/uploads/2019/10/H2L-Information-Sheet-07-Silt-Trap.pdf)

[16] The SUDS Manual, CIRIA C753, Chapter 32

[17] Planning for SUDS, CRIA C687 Chapter 6

95. Overall, the information presented in the EIAR is deficient and cannot provide a basis for the Board to carry out an independent assessment of the project for the purposes of the WFD. In the absence of the requisite information the application should be refused.

Climate change

96. While the EIAR makes a big deal about the supposed benefits of the project in terms of climate change, the reality is quite different.

97. While the EIAR states that the IEMA methodology has been used[18], there are two issues with this. First, one of the functions of the EIAR is to assess compliance with substantive legal requirements and this is not dealt with in the IEMA guidance, the EIAR therefore has not correctly identified the scope of the assessment of climate change. The second point is that IEMA cautions against using an inappropriate comparator for the purpose of the assessment of significance. The EIAR fails on both counts.

98. First of all, there is no evidence or data to show that the project complies with substantive climate change law. It is doubtful that it is a transitional activity and/or environmentally sustainable as a matter of EU law since it does not appear to satisfy the TSCs for fossil gas under the Taxonomy Delegated Regulation. Therefore, the claims that the project makes a contribution to climate change mitigation are unfounded.

99. Second the mention of flexible gas generation in the Climate Action Plan 2024 is premised on such generation being "renewable gas ready". The project does not satisfy this requirement and therefore is not compatible with this plan. The Board is required to ensure that its decisions are consistent with the Climate Change Action Plan 2024.

100. Third the EIAR indicates that operating emissions amount to 616 ktCO2e per year, accumulating to 15.4 MtCO2e over the project lifetime. The EIAR admits that this is a significant adverse effect on climate but says that because it has relatively lower carbon emissions compared to coal or peat it will have a positive impact on climate. This is a bizarre conclusion.

101. The EIAR also compares operational GHG gas emissions with the total national budget, this is contrary to the IEMA methodology and also fails to provide sufficient data to show that the project in fact complies with carbon budgets and sectoral ceilings.

102. The IEMA guidelines state "*The crux of significance therefore is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050*". Therefore, the identification of the comparable baseline is a critical part of the assessment.

103. Section 6.4 of the IEMA Guidelines deals with contextualising a project's carbon footprint and states that "*the contribution of most individual projects to national-level budgets will be small and so this context will have limited value*". The guidelines note that the available contextual information base is rapidly developing pointing to sector initiatives, locally set carbon budgets etc.

104. However the EIAR does precisely what the IEMA Guidelines advise against, it compares the project GHG emissions to coal and peat and to the total national carbon budget and therefore, unsurprisingly yet incorrectly, concludes that the GHG impact is "not significant" per IEMA guidance.

[18] "Assessing Greenhouse Gas Emissions and Evaluating their Significance" (IEMA 2022)

105. It is obvious that using coal and peat as comparators is not correct. There is no basis for the assumption that if the project is not built the power that it is proposed to generate will be sourced from the most carbon intensive fuels.

106. Even the comparison with the carbon budget is incorrect since the analysis fails to carry over the excess emissions from Budget period 1 into Budget period 2. The EPA estimates that emissions in the first period will exceed the budget by between 19 and 26 MtCO2e[19], therefore the baseline in the second period is in fact between 174 and 191 MtCO2e. With this carry over Budget 2 is projected to be exceeded by between 85 and 135 MtCO2e. The EPA states that far higher emissions reductions will be needed to comply with Budget periods 2 and 3.

107. The EPA's WEM scenario projection is based on only 1.3 GW of net gas-fired generation capacity added by 2030.

108. A more appropriate comparator is emissions from Energy Industries and the sectoral ceilings. For electricity the sectoral emission ceiling between 2024 and 2030 is 20 MtCO2e with emissions in 2030 of 3 MtCO2e[20]. On this basis the annual emissions would be 20% of the emissions from the electricity sector in 2030.

109. Therefore even based on the limited information in the EIAR, the project fails to comply with national climate change law under the Climate Action and Low Carbon Development Act 2015 since it is not consistent with the Carbon Action Plan 2024; the carbon budgets; or sectoral emissions ceilings.

Cumulative Impacts

110. As mentioned above there is no information on file about existing or pipeline gas or battery projects (even those from the same developer) and therefore there is insufficient information for the Board to carry out a cumulative assessment of the project. By way of example Bord na Móna Powergen Limited provided an extensive survey of existing and pipeline gas projects in it is application for a 710 MW Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant (pending case 319023)[21]. An extract from the EIAR for this project is included in Annex 3 for reference.

111. At least in the case of the gas-fired project it is clear that there are more than enough existing and pipeline projects to meet and exceed national policy and that the cumulative impact on climate from the project is significantly adverse and is contrary to national climate change law and policy since the project will provide fossil fuel capacity in excess of that required by national policy and is therefore not consistent with the Climate Action Plan 2024 and national carbon budgets.

112. In any event the Board is required to carry out a cumulative assessment of the impact of the existing and permitted gas-fired power station projects, including in relation to climate change and carbon emissions and compliance with substantive climate change law. However it appear

[19] Ireland's Greenhouse Gas Emissions Projections 2023-2050 (EPA, 2024)
https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-GHG-Projections-Report-2022-2050-May24--v2.pdf

[20] Sectoral Emissions Ceilings, September 2022
https://www.gov.ie/pdf/?file=https://assets.gov.ie/234926/2ebb2431-d558-4a54-a15c-605817c37b2f.pdf#page=null

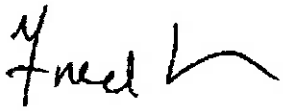
[21] https://www.pleanala.ie/publicaccess/EIAR-NIS/319023/EIAR%20and%20NTS/EIAR%20Appendices/EIAR_Appendix_19A_List%20of%20Cumulative%20Impact%20Projects.pdf?r=419335

abundantly clear that there will be significant adverse impacts on climate and the project is not consistent with Irish climate change law.

Conclusion

113. In light of the above issues, the permission cannot be granted.

Yours sincerely



Fred Logue BSc, PhD, MInstP, MIEMA, CEnv

Annex 1 – Text of Section 4.29 of Annex 1 to the Taxonomy Delegated Regulation

4.29. Electricity generation from fossil gaseous fuels

Description of the activity

Construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels. This activity does not include electricity generation from the exclusive use of renewable non-fossil gaseous and liquid fuels as referred to in Section 4.7 of this Annex and biogas and bio-liquid fuels as referred to in Section 4.8 of this Annex.

The economic activities in this category may be associated with several NACE codes, notably D35.11 and F42.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An economic activity in this category is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.

Technical screening criteria

Substantial contribution to climate change mitigation
1. The activity meets either of the following criteria: (a) the life-cycle GHG emissions from the generation of electricity using fossil gaseous fuels are lower than 100 g CO2e/kWh. Life-cycle GHG emissions are calculated based on project-specific data, where available, using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life-cycle GHG emissions are verified by an independent third party. Where facilities incorporate any form of abatement, including carbon capture or use of renewable or low-carbon gases, that abatement activity complies with the criteria set out in the relevant Section of this Annex, where applicable. Where the CO2 that would otherwise be emitted from the electricity generation process is captured for the purpose of underground storage, the CO2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of this Annex. (b) facilities for which the construction permit is granted by 31 December 2030 comply with all of the following: (i) direct GHG emissions of the activity are lower than 270g CO2e/kWh of the output energy, or annual direct GHG emissions of the activity do not exceed an average of 550kgCO2e/kW of the facility's capacity over 20 years;

(ii) the power to be replaced cannot be generated from renewable energy sources, based on a comparative assessment with the most cost-effective and technically feasible renewable alternative for the same capacity identified; the result of this comparative assessment is published and is subject to a stakeholder consultation;

(iii) the activity replaces an existing high emitting electricity generation activity that uses solid or liquid fossil fuels;

(iv) the newly installed production capacity does not exceed the capacity of the replaced facility by more than 15 %;

(v) the facility is designed and constructed to use renewable and/or low-carbon gaseous fuels and the switch to full use of renewable and/or low-carbon gaseous fuels takes place by 31 December 2035, with a commitment and verifiable plan approved by the management body of the undertaking;

(vi) the replacement leads to a reduction in emissions of at least 55 % GHG over the lifetime of the newly installed production capacity;

(vii) where the activity takes place on the territory of a Member State in which coal is used for energy generation, that Member State has committed to phase-out the use of energy generation from coal and has reported this in its integrated national energy and climate plan referred to in Article 3 of Regulation (EU) 2018/1999 of the European Parliament and of the Council (1) or in another instrument.

Compliance with the criteria referred to in point 1(b) is verified by an independent third party. The independent third-party verifier has the necessary resources and expertise to perform such verification. The independent third party verifier does not have any conflict of interest with the owner or the funder, and is not involved in the development or operation of the activity. The independent third party verifier carries out diligently the verification of compliance with the technical screening criteria. In particular, every year the independent third party publishes and transmits to the Commission a report:

(a) certifying the level of direct GHG emissions referred to in point 1(b)(i);

(b) where applicable, assessing whether annual direct GHG emissions of the activity are on a credible trajectory to comply with the average threshold over 20 years referred to in point 1(b)(i);

(c) assessing whether the activity is on a credible trajectory to comply with point 1(b)(v).

When undertaking the assessment referred to in point 1(b), the independent third party verifier takes into account in particular the planned annual direct GHG emissions for each year of the trajectory, realised annual direct GHG emissions, planned and realised operating hours, and planned and realised use of renewable or low carbon gases.

On the basis of the reports transmitted to it, the Commission may address an opinion to the relevant operators. The Commission shall take those reports into account when performing the review referred to in Article 19(5) of Regulation (EU) 2020/852.

2. The activity meets either of the following criteria: (a) at construction, measurement equipment for monitoring of physical emissions, such as those from methane leakage, is installed or a leak detection and repair programme is introduced; (b) at operation, physical measurement of emissions are reported and leak is eliminated. 3. Where the activity blends fossil gaseous fuels with gaseous or liquid biofuels, the agricultural biomass used for the production of the biofuels complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001 while forest biomass complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive.	
Do no significant harm ('DNSH')	
(2) Climate change adaptation	The activity complies with the criteria set out in Appendix A to this Annex.
(3) Sustainable use and protection of water and marine resources	The activity complies with the criteria set out in Appendix B to this Annex.
(4) Transition to a circular economy	N/A
(5) Pollution prevention and control	The activity complies with the criteria set out in Appendix C to this Annex. Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for large combustion plants. No significant cross-media effects occur. For combustion plants with thermal input greater than 1 MW but below the thresholds for the BAT conclusions for large combustion plants to apply, emissions are below the emission limit values set out in Annex II, part 2, to Directive (EU) 2015/2193.
(6) Protection and restoration of biodiversity and ecosystems	The activity complies with the criteria set out in Appendix D to this Annex.
(1) Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1)	

Annex 2 Details of Schwungrad Energie Limited (CRO, 28 August 2024)

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SCHWUNGRAD ENERGIE LIMITED

Company Details

Company	536800
Previous Name(s)	
Registered Office	PARSONS HOUSE 56 AXIS BUSINESS PARK TULLAMORE CO OFFALY. TULLAMORE, OFFALY, R35K744, IRELAND
Eircode	R35K744
Type	LTD - Private Company Limited by Shares
Date Incorporated	16/12/2013
Last Annual Return	30/09/2023
Next Annual Return Date	30/09/2024
Bond Expiry Date	

Designation	Normal
Date of Designation	16/12/2013

Register of Particulars of Charges Including Mortgages Pursuant to Sections 409, 411 and 413 of the Companies Act 2014 in Respect of the Above Named Company. It should be noted that charge notifications that are not realised will be rejected and therefore can leave a gap in the sequential numbering of charges.

Number of Registered Charges: 1
Number of Charge Notifications: 0

Directors & Secretaries

Name	Address	Role	Date From	Date To
COLM STAUNTON	Clogher, Clogher, Claremorris, Claremorris, MAYO, Ireland	Director	16/12/2013	09/02/2017
COLM STAUNTON	Clogher, Clogher, Claremorris, Claremorris, MAYO, Ireland	Secretary	16/12/2013	09/02/2017
MERVYN KEEGAN	14 CASTLEFIELD, STONEBRIDGE, DROMAHAIR, CO. LEITRIM	Director	16/12/2013	15/06/2015
LEA COLLINS	83 ROS CAOIN, ROSCAM, GALWAY	Director	15/06/2015	01/05/2024
Nigel Reams	AN GRIANAN, CHARLEVILLE ROAD, Tullamore, OFFALY, Ireland	Secretary	09/02/2017	
Nigel Reams	AN GRIANAN, CHARLEVILLE ROAD, Tullamore, OFFALY, Ireland	Director	09/02/2017	
Sharon Reams	AN GRIANAN, CHARLEVILLE ROAD, Tullamore, OFFALY, Ireland	Director	01/05/2024	

Charges

Number of Registered Charges: 1

CHARGE 1 Security Assignment dated 24 January 2020 between (1) Schwungrad Energie Limited and (2) Rhode Energy Storage Limited

Date Registered 06/02/2020 **Date Created** 24/01/2020 **Date Acquired** **Sub No.** 14141440

Amount Secured

Particulars of Property	Pursuant To A Security Assignment Dated 24 January 2020 (the "assignment") Between (1) Schwungrad Energie Limited (the "assignor") And (2) Rhode Energy Storage Limited (the "assignee"), The Assignor, As Legal And Beneficial Owner And As Security For The Payment, Performance And Discharge Of The Secured Obligations Thereby Assigned And Charged, By Way Of First Fixed Charge, In Favour Of The Assignee All Of The Its Rights, Title, Interest And Benefit In And To The Contract Subject To Such Terms, Conditions, Covenants And Obligations As Are Set Out In The Assignment As More Particularly Described In The Further Particulars Of This Form C1. There are further particulars listed on the C1 form for this charge. You must inspect the image of submission number 14141440 to see those particulars.

Person Entitled Details	**Charge Party**	**Charge Party Relation**
	Rhode Energy Storage Limited	Person Entitled

Satisfactions	**Satisfaction Status**	**Date Registered**	**Satisfaction Type**

Shareholders

Type	Name	Percentage
Company	JAVAH ENERGY HOLDINGS LIMITED	75.00
	PETER DUFFY	10.00
Person	COLM STAUNTON	5.00
	FRANK BURKE	5.00
Person	LEA COLLINS	5.00

Documents

Status	Sub #	Submission	A/Cs To Date	Date Effective	Date Received	Date Scanned
Registered	SR2461310	Form B10 - Change Director or Secretary Details		01/05/2024	20/05/2024	N/A
Registered	SR2085263	Form B1C - Annual Return General	31/12/2022	30/09/2023	15/11/2023	N/A
Registered	SR2085263	FINANCIAL STATEMENT	31/12/2022	30/09/2023	15/11/2023	N/A
Registered	SR2085263	Financial Statement Certificate	31/12/2022	30/09/2023	15/11/2023	N/A
Registered	SR1398012	Financial Statement Certificate	31/12/2021	30/09/2022	07/10/2022	N/A
Registered	SR1398012	FINANCIAL STATEMENT	31/12/2021	30/09/2022	07/10/2022	N/A
Registered	SR1398012	Form B1C - Annual Return General	31/12/2021	30/09/2022	07/10/2022	N/A
Registered	SR1374581	Form B10 - Change Director or Secretary Details		27/09/2022	28/09/2022	N/A
Registered	SR626494	Financial Statement Certificate	31/12/2020	30/09/2021	01/11/2021	N/A
Registered	SR626494	Form B1C - Annual Return General	31/12/2020	30/09/2021	01/11/2021	N/A
Registered	SR626494	FINANCIAL STATEMENT	31/12/2020	30/09/2021	01/11/2021	N/A
Registered	SR195230	Form B10 - Change Director or Secretary Details		07/04/2021	13/04/2021	N/A
Registered	14587846	Account details	31/12/2019	30/09/2020	05/10/2020	N/A
Registered	14587846	B1 ANNUAL RETURN	31/12/2019	30/09/2020	05/10/2020	N/A
Registered	14587846	ACCOUNTS CERTIFICATION PAGE	31/12/2019	30/09/2020	05/10/2020	N/A
Registered	14141440	C1 MORT/ CHARGE CREATED BY IRISH COMPANY		24/01/2020	06/02/2020	N/A
Registered	14141440	Certificate of Charge Companies		24/01/2020	06/02/2020	N/A
Registered	13905919	ACCOUNTS CERTIFICATION PAGE	31/12/2018	30/09/2019	24/10/2019	N/A
Registered	13905919	B1 ANNUAL RETURN	31/12/2018	30/09/2019	24/10/2019	N/A
Registered	13905919	Account details	31/12/2018	30/09/2019	24/10/2019	N/A
Registered	13052900	ACCOUNTS CERTIFICATION PAGE	31/12/2017	30/09/2018	08/10/2018	N/A
Registered	13052900	Account details	31/12/2017	30/09/2018	08/10/2018	N/A
Registered	13052900	B1 ANNUAL RETURN	31/12/2017	30/09/2018	08/10/2018	N/A
Registered	12839936	B73 REQUEST TO CHANGE A COMPANYS NARD		16/06/2018	09/07/2018	N/A
Registered	12839912	B1 ANNUAL RETURN		16/06/2018	09/07/2018	N/A
Registered	12647544	B10 CHANGE IN DIRS/SEC		06/04/2018	12/04/2018	N/A
Registered	12647489	B2 CHANGE IN SITUATION OF REG OFFICE.		30/03/2018	12/04/2018	N/A
Registered	12531126	G1 SPECIAL RESOLUTION		23/06/2017	02/02/2018	N/A
Registered	12531126	AMENDED CONSTITUTION		23/06/2017	02/02/2018	N/A
Registered	12531122	G2E-ORDINARY RESOLUTION		23/06/2017	02/02/2018	N/A
Registered	12277354	B10 CHANGE IN DIRS/SEC		22/09/2017	27/10/2017	N/A
Returned	12074874	B1 ANNUAL RETURN	31/12/2016	16/06/2017	14/07/2017	N/A

Returned	12074874	Account details	31/12/2016	16/06/2017	14/07/2017	N/A
Returned	12074874	ACCOUNTS CERTIFICATION PAGE	31/12/2016	16/06/2017	14/07/2017	N/A
Registered	11954878	B77 AUTHORISE AGENT		22/05/2017	22/05/2017	N/A
Registered	11954873	B77 AUTHORISE AGENT		22/05/2017	22/05/2017	N/A
Registered	11676234	B10 CHANGE IN DIRS/SEC		09/02/2017	27/02/2017	N/A
Registered	10968281	B1 ANNUAL RETURN	31/12/2015	16/06/2016	14/07/2016	N/A
Registered	10968281	Account details	31/12/2015	16/06/2016	14/07/2016	N/A
Registered	9937930	Account details	31/12/2014	16/06/2015	13/07/2015	N/A
Registered	9937930	B1 ANNUAL RETURN	31/12/2014	16/06/2015	13/07/2015	N/A
Registered	9876994	B10 CHANGE IN DIRS/SEC		15/06/2015	17/06/2015	N/A
Registered	9249339	B1 ANNUAL RETURN		16/06/2014	17/06/2014	N/A
Registered	9237474	B77 AUTHORISE AGENT		10/06/2014	10/06/2014	N/A
Registered	9182554	B5 RETURN OF ALLOTMENTS.		09/04/2014	01/05/2014	N/A
Registered	9182552	AMENDED CONSTITUTION		09/04/2014	01/05/2014	N/A
Registered	9182552	G1 SPECIAL RESOLUTION		09/04/2014	01/05/2014	N/A
Registered	8976892	COMPANY CONSTITUTION		16/12/2013	10/12/2013	N/A
Registered	8976892	A1 APPLICATION TO REGISTER AS A NEW COMPANY,		16/12/2013	10/12/2013	N/A
Registered	8976892	Migrated Certificate		16/12/2013	10/12/2013	N/A

End of Particulars

Annex 3 List of gas-fired power plants submitted or approved as of February 2024 (source EIAR in case 319023)

Appendix 19A

List of Cumulative Impact Projects

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Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
Westmeath CC 21386	construct a residential development of 9 no dwellings	Clear Premier Homes - Dublin Road, Rahanine, Rochfortbridge	Granted 22/02/2022 Permitted	500 metres (53.419365), (-7.29393)
Westmeath CC ABP-309112-21	Development for the storage and seasoning of biomass logs.	Bord na Mona Energy Ltd, Toar, Rarthgarrett, Tyrellspass	Granted 11/05/2021 Permitted	5 Km (53.399924, -7.229027)
Westmeath CC 22247	construction of a logistics warehouse	Dumper Depot Ltd, Farthingstown, Rochfortbridge	Granted 21/02/2023 Permitted	200 metres (53.409771, -7.294865)
Westmeath CC 21371	Construct 18 no 2 storey terrace dwellings	Mark Kelly - Castlelost, Rochfortbridge	Awaiting decision Submitted	0.15km (53.414073, -7.304919)
Westmeath CC 2260051	Phased extraction of sand and gravel (wet working). An EIAR and NIS has been submitted.	Kilsaran Concrete Unlimited Company - Farthingstown Townland, Mongagh Bridge, Rochfortbridge	Awaiting decision Submitted	330 metres (53.403116, -7.268718)
An Bord Pleanala - WCC ABP-312783	220kV Gas Insulated Switchgear (GIS) Electrical substation and two 220kV underground transmission cables	Lumcloon Energy Ltd - Kiltotan and Collinstown and Oldtown, Rochfortbridge	Granted 09/09/2022 Permitted	1.09 Km (53.399307, -7.320995)
Offaly CC 22490	construction of a materials recovery facility for the processing of up to 90,000 tonnes per annum of waste	Oxygen Environmental Unlimited Company - Derryarkin, Rhode, Co. Ofally	Awaiting decision Submitted	180 metres (53.378761, -7.273885)
Offaly CC 23277	To import soil and stone not exceeding 25,000 tons over a period of 2yrs for the purpose of raising existing ground levels	Knockdrin and Derrygreenagh Townslands, Rhode, Co. Offaly - Tony McCabe	Awaiting decision Submitted	800 metres (53.385101, -7.247576)
Offaly CC 19176	Erection of a guyed wind monitoring mast, 100m in height, for a period of six years.	Bord na Mona Powergen Ltd - Derrygreenagh, Rhode	Granted 11/06/2019 Operational	550 metres (53.386166, -7.262591)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
Offaly CC 18324	The filling of lands with inert waste for the purpose of land reclamation and all associated ancillary facilities.	Kilmurray Pre-Cast Concrete Ltd - Derryarkin, Rhode	Granted - 24/10/2019 Operational	400 metres (53.378856, -7.277439)
Offaly CC 1849	Development consisting of the extraction of sand and gravel from a greenfield area. An EIAR and NIS has been submitted	Kilmurray Pre-Cast Concrete Ltd - Derryarkin, Rhode	Granted 29/03/2018 Permitted	1.4 Km (53.380454, -7.276262)
Offaly CC 1925	Extension to the south west and south east of the existing sand and gravel pit upgrading	Derryarkin Sand and Gravel DAC, Derrygreenagh Knockdrin Garr and Carrick townlands, Rhode.	Granted 21/03/2019 In Construction	850 metres (53.401126, -7.236346)
Offaly CC 2171	Continuation of use of an internal haul road which connects two areas of an existing sand and gravel pit.	Kilmurray Pre-Cast Concrete Ltd - Derryarkin, Rhode	Granted 12/04/2021 Operation	1.48 Km (53.377529, -7.280928)
Offaly CC 21247	A 23-year permission for a 44.0 hectare extension to an existing authorised sand and gravel pit. An EIAR has been submitted	Kilmurray Pre-Cast Concrete Ltd - Derryarkin, Rhode	Granted 18/02/2022 Permitted	900 metres (53.377529, -7.280928)
Offaly CC 20237	Development of a combined heat and power generating biomass gasification plant.	Newleaf Energy Ltd, Coolcor, Rhode	Granted 06/05/2021 Permitted	950metres (53.361662, -7.217303)
Offaly CC 20238	An energy storage facility designed to provide system support services to the electricity grid on a 2.7-hectare site.	Rhode Energy Storage Ltd - Coolcor, Rhode	Granted 20/05/2021 Permitted	950 metres (53.358677, -7.215405)
Offaly CC 19161	Development of an energy storage facility designed to provide 20mw	Schwungrad Energie Ltd - Coolcor, Rhode, Co. Offaly	Granted 04/06/2019 Permitted	950 metres (53.358783, -7.214572)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
Offaly CC 22664	Construction of a 110kv substation, clonin, rhode, co. Offaly CC.	Eirgrid PLC - Derryiron 110kV Substation, Clonin, Rhode	Granted 23/02/2023 Permitted	1.4 Km (53.358077, -7.214119)
Offaly CC 19315	Continued use of an existing guyed wind monitoring mast, 100m in height for a further period of three years.	Bord na Mona Powergen Ltd - Ballybeg Bog, Derryiron	Granted 23/08/2019 In Operation	1.1 Km (53.362031, -7.238157)
An Bord Pleanala - OCC ABP-309491	110kV substation, associated 110kV underground grid connection, cabling and associated works	OBM solar Ltd - Srah, Coolcor and Clonin, Rhode	Granted 13/10/2021 Permitted	650 metres) (53.369471, -7.202099
An Bord Pleanala - OCC ABP-304925	Solar pv energy development within a site area of approximately 15ha.	Highfield Solar Ltd - Clonin, Rhode	Granted 11/03/2021 Permitted	800 metres (53.351203, -7.219196)
An Bord Pleanala - OCC ABP-315436	Application for Leave to Apply for Substitute Consent for peat extraction and all associated bog development works.	Bord na Mona - Derryhinch, Drumman, Derryarkin and Ballybeg Bogs located in Counties Meath, Westmeath and Offaly.	Awaiting decision Submitted	3.26 Km N/A
Offaly CC 20494	10 year permission for the construction of a solar PV development	OBM Solar Ltd.Srah Greenhilld and Wood, Rhode	Granted 26/04/2021 Permitted	4.29 Km (53.374935, -7.199065)
Offaly CC 21488	a 10 year permission for the construction of an extension to the permitted solar pv and battery storage development permitted	OBM Solar Ltd.Srah Greenhilld and Wood, Rhode	Granted 10/12/21 Permitted	500 Metres (53.374489, -7.181083)
Offaly CC 22446	Retention Permission for continuation of use for an existing guyed wind monitoring mast	Bord na Mona Powergen Ltd, Ballybeg Bog, Derryiorn, Co. Offaly	Granted 05/12/2022 In Operation	950 metres (53.361890, -7.239347)
Offaly CC 21364	Solar panels ground floor mounted on support structures within an area of 1.73Ha.	Paschal Kavanagh, Clonin, Rhode, Co. Offaly	Granted 22/02/2022 Permitted	200m (53.350305, -7.222358)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
Westmeath CC 21515	The development comprising 275MWe reserve gas-fired generator. An EIAR has been submitted.	Lumcloon Energy Ltd, Kiltotan and Collinstown and Oldtown, Rochfortbridge, Co Westmeath	Granted 11/05/2022 Permitted	650(m 53.398068, -7.322707)
Westmeath CC 21532	The Energy Storage System (ESS) development. Permission is sought for 10 years. An EIAR has been prepared.	Lumcloon Energy Ltd, Kiltotan and Collinstown and Oldtown, Rochfortbridge, Co Westmeath.	Granted 11/05/2022 Permitted	0.65km (53.399997, -7.320505)
Offaly CC 20331	The storage and seasoning of biomass logs followed by chipping of the seasoned logs on a site area of 5.6 ha	Bord na Mona Energy Ltd, Croghan Biomass Facility located in the townlands of , Drumcaw or Mountlucas, Co. Offaly	Granted 30/03/2021 Permitted	3.45km (53.295391, -7.227656)
Offaly CC 22607	Retention of flood lights and a new provision of an astroturf and gym.	Daingean GAA Club, Townparks Philipstown , Daingean, Co. Offaly	Granted 06/06/2023 In Operation	4.75km (53.301585, -7.291392)
Offaly CC 21552	Retention permission for construction of a grain storage shed with solar panels placed on south facing roof plane	Moore Feeds Ltd, Old Crohan, Crohan, Rhode, Co. Offaly	Granted 10/05/2022 In Operation	3.6km (53.343706, -7.292167)
Offaly CC 21404	An extension and redevelopment to the rear of croghan community centre	Croghan Local Development Group, Cannakill Croghan , Rhode, Co. Offaly	Granted 20/08/2021 In Operation	3.2km (53.344336, -7.287285)
Westmeath CC 186396	Extension to an existing Nursing Home incorporating 25 new bedrooms.	Bethany House Nursing Home, Bethany House Nursing Home, Main Street, Tyrrellspass, Co. Westmeath.	Granted 23/02/2019 Permitted	4.25km (53.387720, -7.381134)
Westmeath CC 2153	Construction of 3 no semi-detached 2 storey houses and 2 number	YMS Building Services Ltd, Main	Granted 10/24/2021 Permitted	4.1km (53.387520, -7.379878)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
	semi-detached bungalows.	Street, Tyrrellspass, Co. Westmeath.		
Westmeath CC 206372	Permission for minor alteration and a single storey classroom extension.	St. Anne's National School, Tyrrellspass, Co. Westmeath	Granted 24/02/2021 In Operation	3.6km (53.387993, -7.37392)
Westmeath CC 206180	permission for a proposed sports and recreational development adjacent to existing GAA pitch and clubhouse.	The Trustees of Tyrrellspass GAA Club, Mullingar Road, Tyrrellspass, Co. Westmeath.	Granted 25/02/2021 In Construction	3.4km (53.393983, -7.384098)
Westmeath CC 196169	Development consting of cut and fill of soil material located in the adjoining field North West to the Tyrrellspass GAA grounds.	The Trustees Of Tyrrellspass GAA Club, Mullingar, Tyrellspass, Co. Westmeath.	Granted 28/11/2019 In Construction	3.4km (53.393839, -7.384672)
Westmeath CC ABP-309112	Retention works for an existing biomass facility until 2030.	Bord na Mona Energy Ltd, Toar, Rathgarrett, Tyrellspass, Co. Westmeath	Granted 11/05/2021 In Construction	4.3km (53.366641, -7.34734)
An Bord Pleanal - OCC PA19.PA003 2	A 15-year planning permission, for development of the Yellow River Wind Farm (96MW)	Green Wind Energy Ltd Rhode, Co. Offaly	Granted with conditions - 03/06/2014 In Construction	4.5km (53.376440, -7.203008)
An Bord Pleanala - OCC/WCC/MCC TBC	Regularise the planning status of the peat extraction works that have been carried out at Derryhinch, Drumman, Derryarkin and Ballybeg Bogs which form part of the Derrygreenagh Bog Group	Derryhinch, Drumman, Derryarkin and Ballybeg Bogs Bord na Mona PLC	Potential Project	N/A
An Bord Pleanala - OCC TBC	Emerging project to deliver a range of low to zero carbon energy generation and storage assets across a land bank of over 3000ha	Derrygreenagh Bog Group	Potential Project	N/A

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
An Bord Pleanala - OCC TBC	Emerging project to deliver a range of low to zero carbon energy generation and storage assets across a land bank of over 5ha	Rhode Energy Park	Potential Project	N/A
An Bord Pleanala - WCC TBC	Emerging project consisting of a gas connection corridor for Castlelost	Castlelost	Potential Project	N/A
Applications relevant to the LVIA				
Offaly CC ABP-301619	Up to 12 no. Wind turbines with a tip height of up to 169 meters and all associated foundations and hardstanding areas	Moanvane Wind Farm Ltd	Granted 21/11/2018 In Construction	15km (53.376467, -7.620957)
Westmeath CC ABP-309770	Proposed development of up to 15 wind turbines and laying of approximately 26km of underground electricity cabling	Coole Wind Farm Limited within townlands of Camagh, Carlanstown, Coole, Clonrobert, Clonsura, Doon, Monktown, Mullagh, Newcastle and other townlands, Co. Westmeath	Awaiting decision Submitted	29.5km (53.726108, -7.384841)
Westmeath CC ABP-300686	10 year permission for a 13 turbine windfarm with a 30-year operational life. An EIAR and NIS accompanied this application.	Coole Wind Farm Limited within the townlands of Coole, Monktown, Camagh (Fore by), Doon, Clonsura, Mullagh, Bokerquill, and Joanstown.	Granted 26/03/2019 Permitted	29.5km (53.726108, -7.384841)
An Bord Pleanala - WCC ABP-316212	Proposed development of 26 wind turbines and associated works	Bord na Móna Powergen LTD. at the Ballivor Bog Group, County Meath and County Westmeath	Due to be decided on 05/10/2023 Submitted	20.5km (53.56221, -7.0852)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
An Bord Pleanala - WCC ABP-311565	Wind Farm Development including 9 turbines and all associated works	Bracklyn Wind Farm Ltd.	Granted 07/07/2022 Permitted	22km (53.5885, -7.10349)
List of gas-fired plants submitted or approved				
An Bord Pleanala - KCC ABP 311233	10-year permission for Shannon Technology and Energy Park consisting of power plant (600MW)	Shannon LNG Limited Ballylongford, Co. Kerry	Awaiting decision Submitted	170.4Km (52.581139, -9.451418)
Dublin CC 2697/20	Permission for alterations to the existing North Wall Power station, reducing from approximately 270MW to 230 MW.	Electricity Supply Board (ESB) North Wall Power Generating Station	Granted 28/08/2020 Permitted	69 Km (53.349897, -6.211220)
Fingal CC FW20A/0053	Proposed development for a 75 MWe aero derivative gas fired turbine for the generation of electricity	The Electricity Supply Board Corduff Road, Dublin	Granted 18/11/2020 Permitted	59.7 Km (53.415820, -6.383481)
Cork CC 186919	A 55 MWe (electrical output) aero derivative gas fired turbine	The Electricity Supply Board Aghada Generating Station, Co. Cork	Granted 20/12/2018 Permitted	181.6Km 51.835890, -8.231771
An Bord Pleanala - KCC ABP PA0028	Combined Heat and Power (CHP) Plant (500 MW).	Shannon LNG Limited Ballylongford, Co. Kerry	Granted 09/07/2013 Permitted	170.4Km (52.581139, -9.451418)
South Dublin CC SD15A/0061	10 year permission for the construction of a 115MW Peaker Power Plant	Grange Backup Power Ltd. Grange Castle Business Park, Dublin	Granted 22/05/2015 In Construction	52 Km (53.329163, -6.445452)
South Dublin CC SD16A/0398	Amendments to previously granted planning permission reducing the capacity from 115MW to 96MW	Grange Backup Power Ltd. Grange Castle Business Park, Dublin	Granted 27/02/2017 In Construction	52 Km (53.329163, -6.445452)
Fingal CC FW19A/0090	Proposed development consisting of the installation of 10 No. containerised gas fired generating units	Energy Stability Services Ltd Fingal, Co. Dublin	Granted 10/01/2020 Permitted	62 Km (53.417738, -6.321123)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
Fingal CC FW20A/0219	Amendments to the original permission, for a gas peaking facility with 10 no. containerised gas fired generating units (20MW)	Energy Stability Services Ltd Fingal, Co. Dublin	Granted 07/04/2021 Permitted	62 Km (53.417738, -6.321123)
South Dublin CC SD20A/0058	Demolition of the existing single storey house and construction of a gas powered Power Plant with 110MW	Data & Power Hub Services Ltd. Newcastle, Co. Dublin	Granted 17/12/2020 Permitted	51.2Km (53.320306, -6.467268)
Dublin CC 3624/20	The development will consist of a 75 MWe (electrical output) aero derivative gas fired turbine for the generation of electricity	The Electricity Supply Board (ESB) Poolbeg Generating Station, Dublin	Granted 22/06/2021 In Construction	71Km (53.339350, -6.187806)
South Dublin CC SD22A/0025	Retention and continuance of the use for a further two years of the temporary gas powered generation plant	EdgeConneX Clondalkin, Dublin	Granted 12/05/2022 Operational	51.2Km (53.327808, -6.452795)
South Dublin CC SD21A/0167	Construction of a gas fired power plant with an electrical output of up to 125MW	Greener Ideas Limited Baldonnel, Dublin	Granted 30/08/2022 Permitted	52.6Km (53.315332, -6.442654)
Roscommon CC 22234	Permission for revisions and alterations of a gas fired power plant to change the output to 102MW	Greener Ideas Ltd Athlone, Co. Roscommon	Granted 18/08/2022 Permitted	48.8Km (53.416387, -7.992473)
An Bord Pleanala - DCC ABP 313918	Temporary emergency electricity generating plant, operating on natural gas for up to 500 hours per year	Minister for the Environment, Climate and Communications North Wall Power Generating Station, Dublin	Granted 13/09/2022 Operational	67.8Km (53.349658, -6.211078)
An Bord Pleanla - OCC ABP-315836	Emergency Electricity Generation for the installation of up to 450MW at two sites	ESB West Offaly Power Station, Co. Offaly	Granted 29/03/2023 Permitted	53.7Km (53.273976, -8.039946)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
	Shannonbridge enerating stations.			
An Bord Pleanala - KCC ABP-315838	Emergency Electricity Generation for three OCGT plants with a total output capacity (net output) of 150 MW.	SSE Generation Ireland Limited Tarbert, Co. Kerry	Granted 29/03/2023 Permitted	164.7Km (52.589165, -9.364249)
Fingal CC ABP-317480	The construction of a Gas Turbine Power Generation Station with an output of up to 293 Megawatts	Kilshane Energy Ltd Finglas, Dublin	Awaiting decision Submitted	60.9 km (53.422018, -6.332694)
An Bord Pleanala - DCC ABP 314778	Emergency Electrcity Generation for a gas generator to provide a an output of 50MW	Department of the Environment, Climate and Communications Huntstown Power Station, Dublin	Granted 16/12/2022 Operational	61.34 Km (53.411656, -6.326212)
Dublin CC PWSDZ3074/ 23	Construction of an OCGT generating unit with an output of 299MW	ESB Engineering and Major Projects Adjacent to the Dublin Bay Power Generating Station, Dublin	Awaiting decision Submitted	69.6 Km (53.339633, -6.203504)
Dublin CC 3137/23	Construction of an OCGT generating unit with an output of 299MW	ESB Poolbeg Generating Station Dublin	Awaiting decision Submitted	70.5Km (53.339641, -6.190983)
Mayo CC 2360028	The development will consist of a 114 Megawatt gas fired peaking power plant	Constant Energy Ltd. Bellacorick, Co. Mayo	Awaiting decision Submitted	166.7Km (54.135088, -9.540216)
Cork CC 235104	Construction of an OCGT generating unit with an output of 299MW	ESB ESB Aghada Generating Station, Co Cork	Awaiting decision Submitted	180.4Km (51.834575, -8.236088)
Meath CC 2360212	The Proposed Development will comprise a 170MW (electrical output) Open Cycle Gas Turbine (OCGT) Power Plant.	SSE Generation (Ireland) Ltd Platin, Duleek, County Meath	Awaiting decision Submitted	65.2Km (53.675596, -6.386260)

Planning Authority and Reference	Description of Development	Applicant / Address	Status Potential / Submitted / Permitted / In-Construction / Operational	Distance from the overall project and Latitude and Longitude
An Bord Pleanla - GCC ABP-317810	Construction of an OCGT plant with an output of 350MW	EP Energy Developments Ltd Tynagh, County Galway	Awaiting decision Submitted	78km 53.166765 - 8.383199

Appendix 7: Ecological Observations

Anne Marie Mahon is an ecologist and environmentalist based in Portumna, Co. Galway. Anne Marie is well-published in scientific literature and has been interviewed by and written for a wide range of media outlets. See https://cuanenvironmental.com/index.html#content4-1o for more.

The following are her observations in support of this submission:

The development site

Bats are an Annex IV protected species under the EU habitats Directive affording strict protection. The Applicant's EIAR (6.3.5.3) states it consulted The National Biodiversity Data Centre (NBDC) database for details of bat records held for the site and the surroundings. A comparison of records taken from NBDC and records from the Vincent Wildlife Trust and other sources for Portumna Forest Park revealed a high discrepancy in species, demonstrating the unreliability of the NBDC databases when used alone. The field survey was a single event and limited in range (2 km), when in fact a bat feeding range can be up to 5km. Interruptions in the bats feeding range and impact to prey items constitutes a failure to protect the species itself, therefore impacts to surrounding habitat are also significant. The Bat Mitigation Guidelines for Ireland (Irish Wildlife Manuals NO. 25) show a roadmap of the main steps involved in ensuring that bat issues are properly considered in developments requiring planning permission, detailing measures to be taken when evidence of use by bats exists. Eirgrid's Emergence survey (3.3.1) dated the 28th July, August (2022) confirms in details the presence of bats at the dwelling on the proposed site, which requires input from the NPWS and more in depth surveys.

Failure to conduct appropriate bat surveys breaches compliance with the EU Habitats Directive (92/43/EEC) and Europe's 'Action Plan for the Conservation of All Bat Species in the European Union 2018-2024'as well as the Galway County Development Plan's policy objective NHB1. It is also policy objective NHB9 to "Seek to protect Bats and their roosts, their feeding areas, flight paths and commuting routes"

There are buzzards nesting adjacent to the site and this species is afforded strict protection under the EU Birds Directive. Spelling errors of the bird species in the report (meadow pit instead of meadow pipet?) indicates a lack of professionalism concerning such a significant application. There are 3 confirmed Barn Owl nests in very close proximity to the proposed development and this area is a significant nesting and breeding ground for the Barn Owl (pers. Comm Barn Owl Project).

The applicant';s EIA is discredited by their admission that "Winter bird surveys would normally start in October", however due to the late appointment of Eire Ecology, these surveys were not carried out' (6.3.5.5). This is unacceptable and a hinderance to assessing the risks biodiversity of the site and the surrounding area and SAC's in close proximity. The surveys carried out from January to May 2024 are not sufficient and the outdated guidelines used for the EIAR should be replaced with the updated Bird Survey Guidelines for assessing ecological impacts (2023) to ensure coherence with the EU EIA Directive (2011/92/EU as amended by 2014/52/EU). Bird Survey & Assessment Steering Group (2023) Bird Survey Guidelines for assessing ecological impacts, v.1.1.1. https://birdsurveyguidelines.org/

The presence of drainage ditches and water courses within the site create a major risk to the surrounding aquatic and terrestrial biodiversity. The objective of the EU Water

Framework Directive (WFD) is to protects and prevent deterioration. The proposal to develop at this site with 2 water courses present as well as plans to reroute part of the Treananearla Stream, breaches these objectives and creates an increased risk to the Kilcrow river and the River Shannon.

The Eurasian Otter (Lutra lutra) is protected by Irish law (wildlife act amended 2000) and classified as Annex II and IV species of the EU habitats Directive (92/43/EEC), affording strict protection inside and outside of protected areas.
Considering the feeding range of the otter (2-15km) and the proximity of otter records to the site, particularly on the kilcrow river (NPWS records, OPW records), less than 4 kms for the proposed development, it is probable that the otter uses the Treananearla Stream and connected drainage ditches within the proposed site as a feeding ground. This has been acknowledged by Eirgrid during the AA screening stage. The direct flow from the site to the Kilcrow river (2 km from the development) via the Treananearla Stream provides a direct pathway of point and/or diffuse sources of pollution during construction and operational phases of the proposed development. This creates a risk of direct impact from point source input due to spillage of fuel or chemicals and indirect impacts due to consumption of contaminated prey items or reduction in prey populations (salmonoids and eels) associated with reduced water quality. As a biodiversity indicator species, the presence of the Otter in this location with recent sitings (pers. Comm) on the Kilcrow river indicates healthy fish populations and in turn healthy macroinvertebrate populations on which they feed.

Macroinvertbrate populations are sensitive particularly to sedimentation and chemical pollution. As the main risks to otters are the availability of food as well as resting and denning sites, any risk to water quality, affecting availability of prey items would be a failure to protect the Eurasian otter and therefore a breach in the compliance EU Habitats Directive (92/43/EEC). While the applicant notes some measures to decrease risk of sedimentation during the construction phase to reduce risk, without an adequate survey of populations present it is not possible to calculate risk without knowledge of the severity of the consequences. A full survey for river fish and invertebrates should be carried out as there is a possibility of the presence of protected species such as the river Lamprey (Annex II and IV EU Habitats Directive (92/43/EEC). In the interim, the Precautionary Principal must be Observed.

Surveys for evidence of otters during the EIAR were not detailed and the statement “There were no signs of otters in the site or along the stream or drainage ditches” (Halston EIAR 6.3.5.2) does not provide the effort warranted for this red list species. Short-distance, single-visit, presence-absence surveys are known to create false negatives (Long & Zielinski 2008). A systematic search for spraints as carried out by NPWS which provided previous records is required. Historical evidence breeding exists for the kingfisher (Annex I EU Birds Directive) along the kilcrow river (NBDC)*

Natura 2000 sites
It is a fact that there is a direct pathway via the Kilcrow river from the proposed site to the Lough Derg North-East shore SAC and via a second water course to the Shannon SPA. Any pollution derived from the development site will affect these protected area and breach EU legislation, resulting in infraction from the European Commission. The conclusion in the Natura Impact Statement that impact is unlikely is derived from the presumption that the likelihood of a pollution event be it of point of diffuse in nature is low. However, a lack of knowledge regarding the risks involved in the technologies proposed and known risks detailed in this document will in fact change the scenario for these protected areas to high risk and hinder compliance with the EU Habitats Directive (92/43/EEC) & EU Birds Directive

(79/409/EEC, as amended by Directive 2009/147/EC). Furthermore, there is a lack of a mitigation plan in the case of a pollution event.

Based on the information submitted within the NIS report, one cannot be confident beyond all reasonable scientific doubt that the proposed development will not have a significant adverse impact on EU protected sites. There is a critical need for NPWS to review and assess the application, given the likelihood of a significant development impact given the proximity of the application site to two EU protected sites. A full assessment of habitats and biodiversity on site, including field work and measurements should be conducted.

Furthermore, risk to human health exist due to potential exposure of pollution via the river linkages from the proposed site to the bathing area in Portumna (EU Bathing Water Directive (2006/7/ EC). Risk to contamination of drinking water exist from any due to high ground water vulnerability within the site (plans to cover over will not suffice) and an aquifer which stretches north from Portumna is likely to put human health and breach the regulations as outlined in the European Drinking Water Directive (98/83/EC).

***NBDC= National biodiversity data Centre**