**OBSERVATION/SUBMISSION TO PLANNING APPLICATION**

**Case Reference:** 324113

Oliver Freeney
Castlelambert,
Athenry,
Co Galway
H65 RX77

To: An Coimisiún Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Date: 23 April 2026

**Re: Observation to the proposed development of open-cycle gas turbine (OCGT) and generator with ancillary equipment.**

Location: Pollnagroagh and Rathmorrissy (Townlands), Athenry, Co. Galway

Applicant: Bord Gáis Energy Limited

**Dear Sir/Madam,**

My residence is 980 M from the proposed site of the Cashla Peaker Plant (Athenry).

## Personal Statement:

As a local homeowner living in Castlambert Athenry less than 1Km from this proposed site, I have grave concerns about this development as a Husband, Father and active member of our community. From the outset, Bord Gais have done a poor job in communicating this development for all the community concerned. This may not be intentional, but the company has a responsibility for this type of development and a duty of care to the concerned citizen living in close proximity of such a development. Since 2014, I am on 2 inhalers for asthma that I developed in adulthood, Ventolin Evohaler and Relvar Ellipta, and the thought of the emissions from a power plant close to be is greatly concerning for my health.

On the 28th of April 2025, I met with the liaising officer and one of the landowner's concerned where they provided me information about this small power plant that was being build as a back up to the grid that will run for about 50 to 60 hours per year. I asked were people informed about this proposed development and was told there were 2 open events planned over the next few weeks, personally I had not heard about the power plant or planned up coming events

The liaising officer told me this was being advertised in the Tuam Hearld, to my surprise as this would NOT be considered a local paper to Athenry. I explained this to him and explained that this should be in the Connacht Tribune as this is what the locals would read in the Athenry catchment area. The Tuam Hearld is located 30km north of Athenry and would not typically be within this catchment. I directed them that this should be advertised in the Connacht Tribune as this is the Athenry Catchment area and located just 15 km from Athenry. This was 1 week before the 1st open event, this did not happen and this is very disappointing.

### 2.2.7 Newspaper advertisement

To further promote the public information events, a newspaper advertisement was published in the Tuam Herald on Wednesday, 30th March 2025. The advertisement included:

Furthermore, I did not receive any leaflet or information about the event prior. When I asked the liaising officer about this, it was explained they were let down by a 3rd party delivery company and apologised about this. At a meeting held with Bord Gais on the 16th of October 2025, we were informed that 25 A3 size posters that are referenced on Page 45 from the submission as show below were distributed by a 3rd party firm also. I never saw any of these posters, my family never saw any of these poster, I have asked close to 50 people if they saw these, and not one person I spoke to has ever seen these posters and it would be interesting to find out if these

were put up in the first place? Again, might be considered a small matter, but communicate engagement has not been fulfilled.

When raising the question about community engagement (or lack off) at a meeting on the 16th of October, I was informed that everyone within a 2 km area deemed in the ''affected area'' received communication by form of a leaflets on communication about open events.

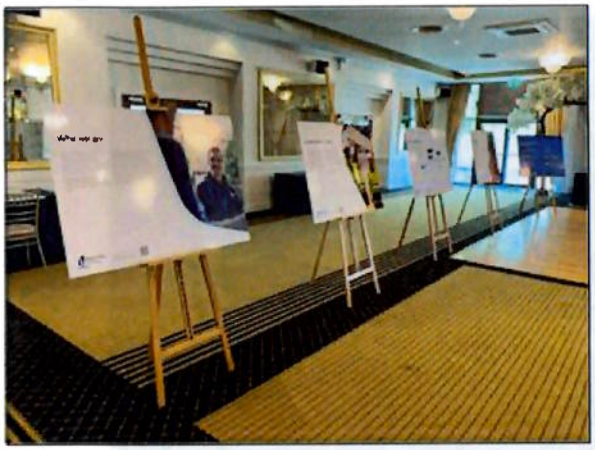
**Poster distribution locations in Athenry**

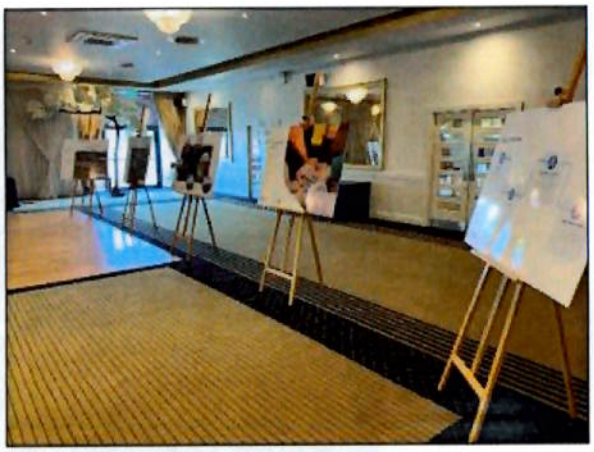

Later in the meeting, the Communication officer explained that they have a Community Fund in place to assist local organisation and that they have reached out to all community groups within a 5 km radius of the site. At which point I asked 'Why reach out 5 km radius of the proposed site offering ''Money'' and just reach out 2 km to locals and residence of the proposed site? I found this very uneasy to say the least.

I did attend the second event in May 2025 and my opinion it was of a very poor standard and technical question were unable to be answered, particularly around emissions and then learning diesel would be stored onsite as a back-up for up to 72 hours, felt like a tick the box exercise. The 3rd event held in December 2025, there were more specialised consultant available, this event was only arranged after pressure from local concern group and politicians on the poor job of engaging up to that point. My big take away, was the amount of Diesel stored onsite in the tanks, of 3.5 million litres of diesel, this I was told is for 72 hours back-up. When calculating

this back, that is 48,000 litres of fuel per hour. How is this environmentally friendly? To understand the scale of this, a domestic 8-wheeler delivery truck carries 20,000 Litres, and a articulated container carries 40,000 litres. Does this mean as the storage tanks empty, more than 1 articulated truck per hour will be delivering diesel?

This is the level of information provided for a €350M investment, the largest Power Plant of its kind in all of Ireland, a highly polluting Open Cycle Gas Turbine.





**Solar.**

3 years ago I invested in Solar panels for my home in my own effort to reduced costs, produce clean energy and do my bit for the Enviornment. In that time frame I have gone from being a imported of an average of 6000kws units of electricity per annumn to producing close to 7,0000kws of electricity. In this period, our home has become a net exporter of electricity. When I read about the emmissions coming from a potential peaker plant in close promxity, this feels terribbly demorralising as we have invested in clean energy for our home. I also raise a concern that the emmission coming from the Peaker Plant, will also effect the efficicnety and life span of my PV Solar panels. Research carried out by Edgar Hernando Sepúlveda-Oviedo of the Université Fédérale de Toulouse, CNRS, UPS, Toulouse in 2024 stated that Smog has an impact on the performance of PV panels;

*Smog and air pollution significantly damage the efficiency and lifespan of photovoltaic (PV) panels, with studies indicating energy production losses ranging from 15% to over 50% in highly polluted areas. These damages are primarily caused by the deposition of Particulate Matter (PM) and other pollutants, commonly known as soiling, which creates a grime layer that obstructs sunlight and can lead to long-term degradation. (Oviedo, 2024)*

Should we really consider potentially reducing the dependance of a renewable electricty, which would reduce the output off my PV panels, any more more homeowners, and in turn force me back using power from the to the grid form this Fossil fuel produced Electricity.

I don't claim to be an expert in the area of Gas Powered power plants and never had any real reason to reseach them until May 2025. After attending the public event it has resulted in me spending the last 9 months researching Power plants, Peaker Plants, Gas Fired Power Plants, Diesel back up plants and finally Open Cycle Gas Turbine. The more reseach I have done, the greater my fears and anxity level have become to having a Gas and Diesel power plant lass than 1 km from my family home, in a totally unsuatable site in a green field that currently does not have road access to. Of course I have been accused of NIMBYism like the majority of people that express concerns with large scale developments that are close to their residence. I am not anit- development and support projects of growth for our country to move forward. My father worked very closely with the NRA with regard to a CPO of his farm lands in 2008 that now the M18 passes through, and I see the benefits of this developments in terms of improved Road Infrastructure for Ireland.

When we consider the location, located between the intersection of the M6, M17 and M18 motorways, that again does not have any access. I fail to understand how this is a suitable site that is located down a private road only suitiable for single car access. The visual impaitment of a 30M chimney stack with emmissions coming from it, eapecially as Open Cycle Gas Turbines are much higher pollutants when compared to Closed Cycle Gas Turbines. I would have a major concern regarding the Proposed Plant, especially an Open Cycle turbine which has been proven to be amongst the dirtiest producing power plants of its kind.

# Open Cycle Gas Turbines (OCGT)

### Efficiency:

- 35-42% thermal efficiency
- Means: Only 35-42% of fuel energy becomes electricity
- 58-65% of energy WASTED as heat

### Startup Time:

- Fast: 10-30 minutes from cold start to full power, this appears to be where the diesel comes in to kick in fast.
- Can ramp up/down quickly

### Operating Cost:

- Higher per kWh, because inefficient, this will result in higher electricity cost for homeowners.
- More fuel needed per unit of electricity, higher cost to bring fuel into the country as we are dependent on imports for all fuels associated with this power plant. Corrib Gas field will run dry in 2034 at the latest.
- Higher carbon cost- EU ETS - pay per tonne $CO_2$

### Emissions:

- 400-450g $CO_2$ per kWh
- Plus NOx, CO, PM, VOCs

# Closed Cycle Gas Turbine (CCGT)

### Efficiency:

- 55-63% thermal efficiency
- Nearly DOUBLE the efficiency of OCGT
- Only 37-45% of energy wasted (vs. 58-65% in OCGT)

### Startup Time:

- Slower: 1-4 hours from cold start (steam cycle takes time)
- Warm start: 30-60 minutes
- Less flexible than OCGT

### Capital Cost:

- In certain cases, 3 times the cost compared to OCGT, depending on size course, but are we potentially deciding on people's health and the environment based on cost???
- More complex to operate, no planned employees schedule at the Cashla Peaker plant when operating, is this the reason for such a plant?
- Larger footprint required, has this selected site really been planned and thought through properly? This pieces of infrastructure did not feature in the Galway County Development plan 2023- 2029. The proposed development is a total contradiction to the local plan.

### Operating Cost:

- Lower per kWh (because more efficient)
- Less fuel per unit of electricity
- Lower carbon cost

### Emissions:

- 350-380g $CO_2$ per kWh
- 15-20% less $CO_2$ than OCGT for same electricity
- Still emits NOx, CO, PM, VOCs (but less per kWh)
- Open Cycle turbines are Bad for the Environment, Bad for Climate and Bad for human health.

## Dual Fuel at Cashla Peaker Plant

Diesel burning, which is listed as low sulphur diesel, low sulphur diesel is the only diesel automobiles run off within the EU since 2006, just so it doesn't sound like a 'newer' cleaner innovation. The diesel burning dimensions of this application are extremely serious: The NIS (Section 1.5.1.1.5) confirms that mandatory testing on diesel backup fuel will occur for up to 18 hours per annum. This is presented as a statutory minimum under the Eir Grid Grid Code. However, the applicant has not addressed the following questions that the Board is obliged to have answered:

- **When will diesel burning occur?** The EirGrid Grid Code mandates testing but does not restrict unplanned diesel use during gas supply interruptions, pipeline outages, or periods of low gas pressure. The plant is designed to run on diesel whenever gas is unavailable — and the frequency and duration of such events over a 24-year operating life has not been assessed. In the year of 2024, when this project was proposed, if we are even considering an interruption to Gas of a Gas power peaker plant, does this not even answer the question about this being the wrong type of power plant? As a society, we are innovating on green alternatives annually, why would we take this good work away by compounding climate change with 2 fossil fuels (Gas and Diesel) at the Cashla Peaker Plant.
- **What emissions will diesel burning produce?** Diesel combustion in a 334MW OCGT generates substantially higher NOx, SO2, particulate matter (PM10 and PM2.5), and black carbon per unit of energy than natural gas. The EIAR air quality chapter does not present a separate quantified assessment of diesel-firing emissions at residential receptors. The 18 hours/annum figure may be the planning minimum, but it is not the operational maximum — and the difference matters enormously to the community downwind of this plant. This cannot be allowed to happen and reads as if it's an open cheque book for burning diesel.
- **Why is 5,470–6,003 tonnes of diesel being stored for 18 hours of annual testing?** The NIS (Section 1.3.5.1) discloses diesel storage sufficient to run a 334MW OCGT at full load continuously for many months. The stated justification — 18 hours of annual testing — is wholly disproportionate to the volume stored. The applicant has failed to explain this and must explain, and the Board must be satisfied, that the true intended diesel burning frequency has not been systematically understated in the application documents.

- **The Industrial Emissions Directive (IED, 2010/75/EU)** requires continuous emissions monitoring during operation (confirmed by the NIS, Section 1.5.1.1.3). Monitoring records diesel emissions, but it does not prevent them. The community downwind of this plant — including the residential areas of Athenry — will breathe those emissions. No monitoring system protects lungs from diesel particulates.

## Rejections of Similar Plants:

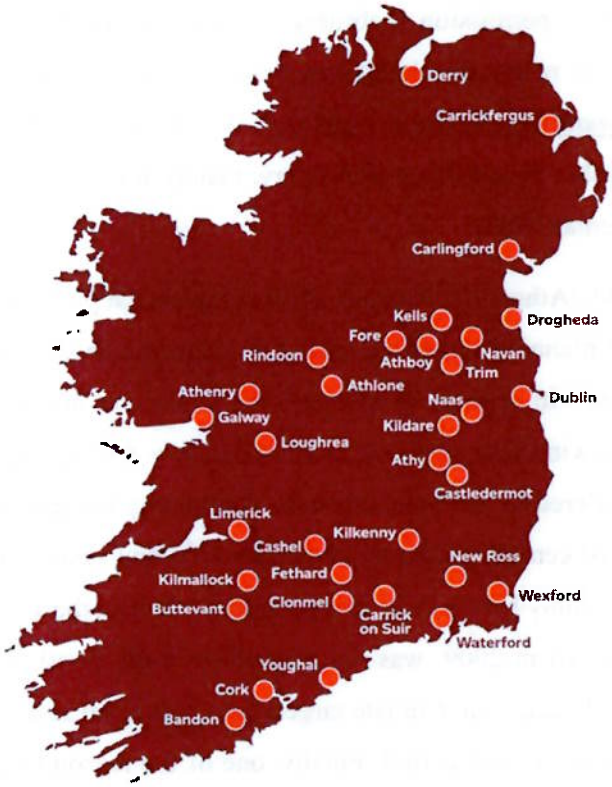
**Equinix Dublin Gas Plant** — Refused for Being Contrary to National Climate Obligations,

An Bord Pleanála refused planning permission (February 2025) for Equinix's proposed gas-powered data centre in Clondalkin, Dublin, ruling that long-term operation of gas-fired generation would be ***'inappropriate and contrary to national climate obligations'***. We have to take the same stance here for this Open Cycle Gas Turbine Cashla Peaker Plant in Athenry, mainly for reasons listed above with the impact to environmant and on human health.

In 2009, a similar project in Cashla/Athenry 200 megawatt, was rejected at planning stage in 2009, after very substantial community and planning objection, including concerns about proximity to a densely populated area, proximity to national schools at Lisheenkyle, Carnmore and Cregmore, air quality impacts, and the site's location upwind of the historic town of Athenry. On these grounds alone, it hard to see a larger Peaker Plant considered for the area, when the community has grown from 3206 in 2006 census to 4603 by 2022 on the last census, grown by more than 40% and school numbers have grown. A 65% larger Power Plant will certainly have a more compounding effect on the air quality of the region. I further note that the plant rejected in 2009, was not planned to burn diesel, so this was not even considered when planners rejected back then. Climate targets have tightened since 2009 and renewable technologies have made huge strides in this period. Finally, one of the reason listed was the potential damage to the heritage setting of Athenry. Please note Cashla Peaker Plant is 2KM closer to the Town of Athenry, one of a few medieval towns left in Ireland, with Old Castles, Protected Walls, An Arch and an Old Monastery to name a few. In the next phase I will focus on the Medieval, heritage town of Athenry.

## Impact on the Historic Town of Athenry — Ireland's Finest Medieval Walled Town

Athenry, located approx. 2.5 to 3km from this site, is one of 4 only remaining Historical towns in Ireland. Athenry is one of the best-preserved medieval towns in Ireland. The castle and surrounding town were built c.1235, and majority of the medieval wall surrounds the town, with portions of the wall 2.5KM from the proposed peaker plant. Athenry is also one of 33 other towns on the Island of Ireland (North and South) that is listed as a Walled Towns of Ireland. (Heritage Council, 2026)




Do we really want to put a 30 Metre chimney stack with emissions from fossil fuels on these old walls, especially as research has shown diesel pollution, especially nitrogen oxides (NOx) and fine particulate matter (PM2.5) significantly affects old walls. (EPA.Gov 2025) Furthermore, to compounds this, the prevailing wind in County Galway is from the west and south-west, this is not disputed. Under these prevailing conditions, every plume of exhaust gas, every combustion emission — whether from natural gas or diesel — will be carried directly over the medieval town of Athenry. Finally, the fabric of Athenry's medieval walls is composed of limestone. Acid deposition from this plant will, over 24 years of operation, cause irreversible harm to a protected heritage asset of national importance.

## Bat Survey Carried out on the application

Bat Survey — One Survey Across One Season is extremely scant based on the quantity of noises recorded.

**13 Nights in June 2025

Table 3-1 of the NIS discloses the full survey record for bats. It is limited to:

- One bat activity survey (1no.): Static detectors deployed 04/06/2025 to 17/06/2025 — 13 nights, mid-summer only.
- Preliminary Bat Roost Assessment/Bat Suitability Assessment: Single walkover on 07/02/2025 — midwinter, when bats are in torpor.
- No autumn surveys to assess swarming/mating behaviour, this is key and should have been carried out.
- Ash Dieback, Dying trees often provide enhanced roosting opportunities

No autumn survey was carried out. No spring survey was carried out. No dedicated emergence or re-entry surveys were carried out. The BCT Good Practice Guidelines (4th Edition, 2023) — the standard against which survey adequacy is assessed in Irish planning law — require surveys across multiple seasons and dedicated emergence/re-entry surveys wherever roost suitability exists. Furthermore, the reference of data provided by 2006 survey is too old, 19 years after last assessment is too long a period when considering the average lifespan of native Irish bats as 7-8 years.

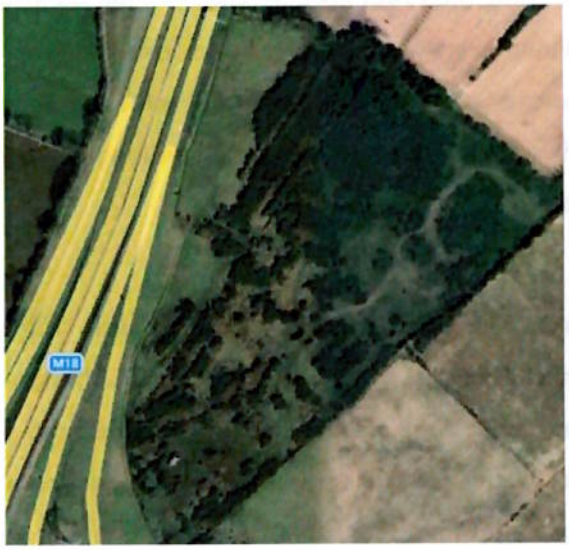
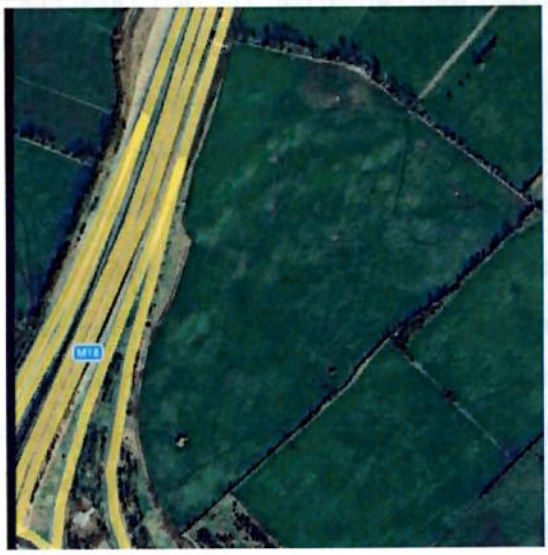
### Lesser Horseshoe Bat and the Habitats Directive

The bat survey report identifies Lesser horseshoe bat (*Rhinolophus hipposideros*) records within approximately 3km of the site. This species is listed under Annex II and Annex IV of the EU Habitats Directive (92/43/EEC), providing strict legal protection under Article 12 — making it an offence to damage or destroy a breeding site or resting place. The species is strongly associated with calcareous landscapes, limestone grasslands, and calcareous springs — precisely the habitat confirmed on this site by the NIS (ER2/FP1 habitat, Section 4.2). The failure to conduct adequate survey effort across the active season means the presence or absence of a roost on or immediately adjacent to the site cannot be established.

**Doing as assessment after Storm Éowyn.**

Storm Éowyn struck in late January/early February 2025, causing widespread and severe structural damage to trees across Connacht, our own home was out of power for 10 days, such was the severity of the storm. The preliminary bat roost assessment was conducted on 07/02/2025 — during or immediately after the worst storm to strike Connacht in living memory. The summer acoustic survey was deployed in June 2025. Neither survey has assessed or accounted for the structural changes to potential roost trees caused by Storm Éowyn. In the report, pictures show of an old barn damaged, unclear if this was damaged during the storm or previously. This should be made clear as unknown what birds or bats may have been living there.

On wildlife overall, I note that this proposed site has been reclaimed extensively over the last 5 years, obviously with a longer-term view of what is currently being planned (Fossil Fuel burning Power Plant). As I was growing up in this townland, my family and I would have walked these fields and they were full of Native Fur's , Bushes and many trees. I would argue any environmental reports taken after this reclamation work would be null void as the wildlife disbursed from this work does not give an accurate view of the animals that lived there previously. See pictures below;

| 2021 Image | 2025 Image |
| --- | --- |
|  |  |

***Images takes from Google Photos and have not been altered in anyway, feel free to review for yourself*

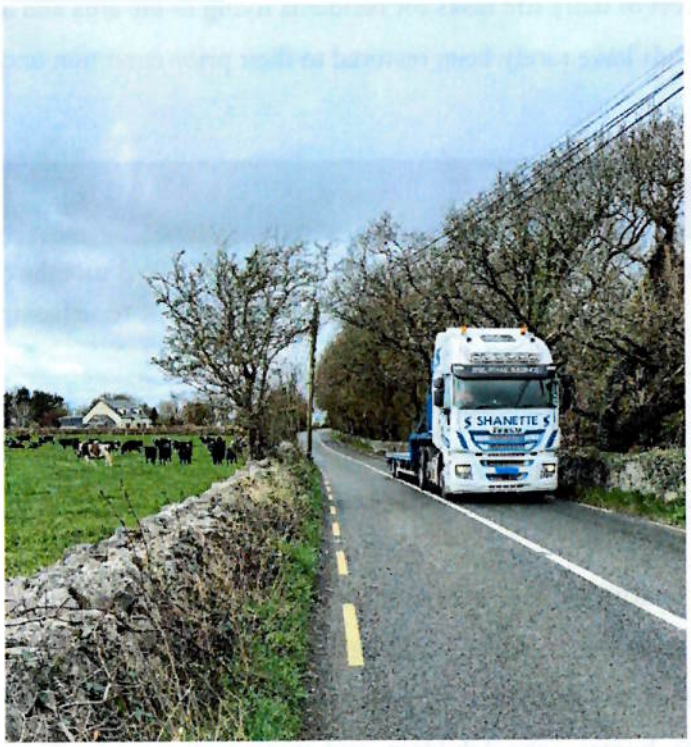
## Road Closures

NIS Table 1-4 and Figure 1-6 confirm full road closures required for the underground grid connection cable. Over the last 15 years we have has many road closures in our area due to construction of 2 motorways. This has a signification effect of daily life tasks for residents living in the area and add additional stress to people's lives. Furthermore, roads have rarely been restored to their prior condition once construction is completed.

| Road | Location | Duration |
|---|---|---|
| L7108 (Lisheenkyle East) | Castlelambert to Lisheenkyle | 3 months cable works + 2 months resurfacing = 5 months total |
| L7109 | Connecting local road | 2 months cable works + 1.5 months resurfacing = 3.5 months total |

Joint Bay JB-08 is confirmed at Castlelambert Bridge (L-3103). The closure of the Castlelambert to Lisheenkyle road for up to five months — adding 13km to every school journey, the reports states 8km but it is actually 13km — is an unacceptable imposition on a rural community with no adequate alternative route. This road serves farms, homes, schoolchildren, and emergency services. The applicant has not demonstrated that the underground cable route could have been designed to avoid this closure. The L3013 road listed as the access road is not a suitable road for the volume of traffic to support the period required for the construction of this site. The entrance is extremely dangerous and is planned on a bend of the road. I drive this road daily, any time a truck meets another truck, the traffic must stop. If a truck meets a tractor, the traffic must stop, a lot of Lisheenkyle school uses this road. Emergency stop on busy road is extremely dangerous and with huge volumes will lead to a serious accident. I am an active cyclist, and I have seen the dangers on this road and tend to avoid it for my own safety as the road is very busy with traffic at all times of the day. Less that 300 meters from the proposed entrance is Coffey Construction, one of Irelands largest construction firms with heavy and wide equipment already on this route. This route really can't take much more, reviewing the EIAR document Volume 2, I find huge deficiencies in this document, and it fails to meet basic standards for traffic impact assessment and contains omissions that have been totally disregarded.

Imagine of a truck on this road, already on the white line, with little or no space left between the truck and the wall the othe side. The site entrance is also on top of bend, coming into a dip. Surely not a safe access for heavy equipment and construction arriving on HGVs




**Traffic and Transportation- P469 to 505,** The document is titled "Traffic and Transportation" but contains NO actual Traffic Impact Assessment (TIA).

**What a TIA Must Include (TII Guidelines):**

**1. Junction Capacity Analysis:**

- Assessment of ALL affected junctions
- None provided, why is this? Deemed not required, or again part of a rush application?

**Critical Junctions Not Assessed:**

- L3103 / Site Access junction (new junction - no design, no capacity analysis)
- L3103 / R339 junction (construction traffic routing through here)
- R339 / N6 junction (abnormal loads routing)
- R348 / M6 junction (Exit 17 - abnormal loads)
- L7109 / R339 junction (diversion route)
- L7108 / L3103 junction (diversion route)

**2. Traffic Modelling:**

- None Provided
- No PICADY/ARCADY analysis (standard UK/Irish junction modelling)
- No queue length predictions
- No delay calculations
- Impossible to assess impact without modelling

**3. Turning Movement Counts:**

- Does not appear to have been completed
- Only one Automatic Traffic Counter (ATC) on L3103 (Figure 10-5)
- ATC only measures through-traffic, not turning movements
- Cannot assess junction impacts without turning counts

**Baseline Traffic Data - Inadequate:**

**Section 10.4.1 (Page 480-481):**

- Single ATC survey on L3103 (13 February 2025)
- One day of data only, very scant on detail not acceptable. Will not have captured Athenry Mart volume of traffic. West of Ireland still not fully recovered from storm Éowyn by then
- One location only, hard believe on location monitored. This assessment appears to be a tick the box rather than an actual attempt to gather quantitative data

**Problems:**

**a) Temporal Coverage:**

- One day is statistically invalid
- Industry standard: Minimum 7 days , to capture weekly variation and best average
- No seasonal variation assessed (February data doesn't represent summer/harvest and school midterm)

**b) Spatial Coverage:**

- Only L3103 surveyed
- No data for:
    - R339 (abnormal load route)
    - R348 (abnormal load route)
    - L7109 (cable route, diversion route) high volume of children (240) use this route for Lisheenkyle school and staff (50) The school does not have a bus for children
    - L7108 (cable route, diversion route) C&F tooling employee 300 staff, how can this route not be assessed properly and the impacts.
- Cannot assess impact on routes with no baseline data, report is too scant in detail to be used for such an enormous Strategic Infrastructure Development

## Critical Safety Issues Not Assessed:

### 1. Sight Lines:

- No visibility splays shown on drawings
- Trees to be removed (Section 10.5.2.1) - but how many? Where?
- Stone wall to be demolished - but what about rebuilt wall? Affects visibility?
- No sightline assessment = dangerous junction, the bends on this road are extremely dangerous as is, without added a construction site entrance and exit that will not have full visibility to the road.

### 2. Junction Design:

- No geometric design shown
- No radii, tapers, priority markings
- 6m wide access road (Section 10.5.2.1) - but junction bell-mouth design?
- Substandard design risk

### 3. Speed:

- What is speed limit on L3103? (Not stated)
- Affects required sight distance
- Cannot assess safety without knowing speed

### 4. Accident History:

- No collision data reviewed
- Is L3103 a high-accident route?
- New junction will worsen existing problem, too tight for trucks to enter and exit without impeding current road suers. I would appeal for this application to be rejected on the road network alone planning authority should not grant permission for unsafe junction

# NO Environmental Assessment of Traffic Impacts

EIAR Directive (2014/52/EU) Requirements:

Must assess traffic-related environmental impacts:

- Air quality (vehicle emissions, noting that the construction traffic will be from heavy equipment, trucks , loading equipment etc.
- Noise (traffic noise)
- Vibration (HGVs on local roads)
- Community severance (road closures dividing communities)

**Specific Omissions:**

**1. Air Quality:**

- 6,000-8,500 HGV movements (not stated in this document, but typical for such construction)
- 100 worker car trips/day (Table 10-2)
- Emissions: NOx, PM10, PM2.5, CO2
- No quantification
- No assessment against air quality standards

**2. Noise:**

- HGVs on narrow rural roads = significant noise
- Residents within 50m of roads affected
- No noise modelling appears to have been completed?

# Construction Traffic appears to be underestimated and inadequate assessed

## Construction Traffic Generation - Figures Don't Add Up

### Section 10.4.4.1.3 (Page 484) - Heavy Vehicle Trips:

### Earthworks Calculation:

- 13,000 $m^3$ earthworks
- Density: 2 tonnes/$m^3$ = 26,000 tonnes
- 20 tonnes/vehicle = 1,300 vehicle trips
- Over 6 months = 2 vehicles/hour
- Return trips = 4 two-way trips/hour
- PCU factor 3 = 12 PCU/hour

### This looks to be incomplete:

### 1. Only Accounts for Earthworks Export:

- What about material IMPORT?
    - Aggregate for roads/hardstanding
    - Concrete (ready-mix trucks)
    - Steel reinforcement
    - Structural steel
    - Equipment
- Earthworks is tiny fraction of total construction traffic

### 2. Realistic Construction Traffic (Based on Similar Projects):

### For OCGT Plant + 8.1km Cable Route:

### Phase 1 - Site Preparation (6 months):

- Earthworks: 1,300 trips (as stated)
- Aggregate import: 500-800 trips (NOT COUNTED)
- Total: ~2,100 trips

**Phase 2 - Foundations (12 months):**

- Concrete: 2,000-3,000 trips (ready-mix trucks - NOT COUNTED)
- Reinforcement steel: 200-400 trips (NOT COUNTED)
- Total: ~2,500 trips

**Phase 3 - Structures (12 months):**

- Structural steel: 300-500 trips (NOT COUNTED)
- Cladding/roofing: 200-300 trips (NOT COUNTED)
- Total: ~600 trips

**Phase 4 - Equipment (12 months):**

- Turbine, generator, transformers: 50-100 abnormal loads (MENTIONED but not quantified)
- Support equipment: 300-500 trips (NOT COUNTED)
- Total: ~500 trips

**Phase 5 - Cable Route (9 months):**

- Cable delivery: 200-400 trips (NOT COUNTED)
- Excavation spoil: 500-800 trips (NOT COUNTED)
- Backfill material: 500-800 trips (NOT COUNTED)
- Total: ~1,500 trips

**Potential Total: ~7,200+ HGV TRIPS (vs. 1,300 claimed)**

**Average Daily HGVs:**

- Over 18 months construction
- ~15-20 HGVs/day average
- Peak periods: 50-100 HGVs/day

*Document is potentially Underestimated by Factor of 5+, why?*

# Road Capacity Analysis

**Section 10.4.2 (Page 482):**

"The existing capacity of the R3103 was analysed in accordance with... Design Manual for Roads and Bridges... 'Traffic Capacity of Urban Roads'... the two-way capacity of the L3103 (classified as UAP4) is 1,500 vehicles per hour."

**Critical Errors:**

**1. Wrong Classification:**

- L3103 is a rural road, not urban, I live just off this road and can category state it is rural
- DMRB TA 79/99 "Traffic Capacity of URBAN Roads" (emphasis added)
- Does not apply to rural roads

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**2. Agricultural Access - Ignored:**

Rural area = active farming all around this area, Tillage beside Coffey Construction, Diary herd, Beefs herd and sheet. This is a very divers farming Rural area and the below has not been considered:

- Tractors, slurry tankers, combine harvesters
- Need to access fields multiple times daily

# Flood Risk Assessment August 2025.

The Rathmorrissey area sits on a huge bedrock of limestone with active waters and lakes underground. A family member drilled a well 286ft on his farmland in close proximity of this proposed site, so I understand the importance of this natural resource. The appears to be insufficient investigation on the hydrologist report.

**No Site-Specific Hydrological Data**

**Topographical Analysis Inadequate:**

- Section 3.3 states levels range from 59mOD to 54mOD, falling southeast
- No assessment of natural drainage pathways
- No assessment of surface water accumulation areas
- No consideration of shallow depressions common in karst terrain

**Local Hydrology Section (3.4) Deficient:**

- Identifies River Clarin 3.9km away
- No identification of local streams, drainage ditches, or field drains
- No assessment of groundwater flow directions
- No investigation of springs or seeps

**Missing Data:**

- No borehole data or groundwater monitoring, **this would appear to be a very critical part of any assessment??**
- No infiltration testing in karst terrain
- No assessment of seasonal water table fluctuations
- No rainfall-runoff modelling
- No modelling for potential of acid rain, considering how much in rains in Ireland, particularly in the West of Ireland (240 day min)

# INADEQUATE ASSESSMENT OF CLIMATE CHANGE

## No Future Flood Risk Assessment

### Planning Guidelines Requirement:

- Guidelines require assessment of flood risk "in the future"
- No climate change allowances applied
- No assessment of increased rainfall intensity
- No consideration of changing groundwater regimes

### Operational Life to 2050:

- Section 3.2 states operational life "up to and including 31st December 2050"
- 25-year operational period with no future flood risk assessment
- Climate projections show significant increases in extreme rainfall for Ireland

### Fuel Storage:

- Section 3.2 mentions "two bunded fuel tanks (approximately 11.1m high)"
- No assessment of bund adequacy in flood conditions
- No assessment of pollution risk if flood overtops bunds

### Motorway Drainage:

- Site immediately adjacent to M6/M17 junction
- No assessment of motorway drainage discharge points
- No assessment of whether motorway drainage could affect site
- No assessment of cumulative runoff from impermeable motorway surfaces
- Climate Action Plan 2024 - Electricity Sector

| Year | Target |
|---|---|
| 2030 | 80% renewable electricity |
| 2035 | 95%+ renewable electricity (implied) |
| 2050 | Net-zero (100% clean) |

If electricity is 80% renewable by 2030, remaining 20% must be:

- Existing gas plants (already built or close to being completed)
- Interconnectors (zero-emission from Ireland's perspective)
- Battery storage
- Not new gas plants, and certainly not ones that burn diesel.
- Galway County Development Plan 2022-2028

## Climate Policy (Chapter 5):

- Policy 5.1: "Support the transition to a low carbon economy"
- Policy 5.2: "Facilitate renewable energy development"
- No policy supporting new fossil fuel generation

**Energy Policy:**

- Focuses on renewable energy
- Solar, wind, biomass
- No provision for new gas generation, again certainly not diesel ones
- This development conflicts with climate policies of Development Plan.
-

**Interconnectors:**

- Celtic Interconnector (Ireland-France) - approved, under construction to open by 2028. In 2024, Ireland generated 45.3% of its electricity demand from fossil fuels according to SEAI (SEAL, 2025) Compare this to France where they have minimal power coming from Fossil fuel, in the same year of 2024, just 5.2% coming form Fossil fuels

- Additional interconnectors planned for the Island of Ireland.
- Import zero-carbon electricity when Irish renewables low
- If Ireland achieves 95% renewable by 2035 (on track for net-zero)
- Gas peaker becomes economically unviable, 'White Elephant'
- Permission until 2050 creates stranded asset

**No Greenhouse Gas Emissions Assessment**

**A) Operational Emissions:**

- No calculation of CO2 emissions per MWh generated
- No estimate of total emissions over 25-year life
- No assessment of methane leakage (natural gas supply chain)
- OCGT emissions typically 400-450 gCO2/kWh (vs. 0 for renewables)

**Research on Living Near Combustion Sources:**

**Harvard School of Public Health Studies:** (Jyotsna S. Jagai, Kristen M. Rappazzo, et al., 2011)

- Health effects detected up to 10 km from pollution sources
- Highest impacts within 0-5M km
- See link: https://pmc.ncbi.nlm.nih.gov/articles/PMC4517698/

## General Population and Human Health.

As alluded to previously, as a father living in the community, I have major concerns with regard to the local community and the human health that can be caused by the emissions from this power plant. After reviewing the Population & Human Health assessment it would appear there are some fundamental issues not addressed and underestimates the risks to our local community. Air Quality Health Impacts appear to be Downplayed and Dismissed, and this concerns me and my family. Especially as the World Health Organization (WHO) states: "There is NO safe level for particulate matter (PM)"

**Section 4.4.1.1.2 (Page 214) - Construction Phase:**

"Provided the dust minimisation measures are adhered to, the predicted residual air quality impacts during the construction phase are short-term, direct, negative, localised and not significant."

**Section 4.4.1.2.2 (Page 231) - Operational Phase:**

"Detailed air dispersion modelling... determined that pollutant concentrations will be in compliance with the relevant limit values. Therefore, emissions from the Proposed Project will have a direct, long-term, negative and not significant impact on air quality.

**Operational Emissions** are Grossly Understated upon review of the document. What the plant will emit (from Air Quality chapter, not detailed here):NOx (nitrogen oxides): Causes respiratory disease, asthma exacerbation PM2.5 and PM10 (particulate matter): Causes cardiovascular disease, lung cancer, premature deathCO (carbon monoxide): Toxic, causes cardiovascular stress VOCs (volatile organic compounds): Some carcinogenic. Any potential impact to the air quality to all overlives should never be accepted at any level. As a society we have worked very hard to reduce our emission, carbon footprint and air quality, at no point should we accepted, this could be compromised, when there are alternatives.

**Health Impact Over 25 Years**: 25 years of intermittent but regular emissions Cumulative exposure to pollutants Long-term health effects:

- Increased respiratory disease
- Increased cardiovascular disease
- Increased cancer risk
- Reduced life expectancy.

**Water Contamination Risk – Appears to be Inadequately Assessed**

**Section 4.4.1.1.3 (Page 214) - Water Quality:**

"Following the implementation of the proposed mitigation measures... the residual effects on the water environment are expected to be slight, temporary, and not significant. As such, no significant negative population or human health effects are anticipated."

Critical Problems:

1. Karst Hydrology - Unique Contamination Risk:

**Flood Risk Assessment (separate document) confirms:**

- "Kartsified bedrock outcrop or subcrop" (FRA Section 4.1.4)
- Rapid groundwater flow through fissures
- Spills reach groundwater quickly

**Health Implications:**

- Fuel tanks on site (11.1m high, thousands of liters)
- Fuel spill in karst = rapid groundwater contamination
- Groundwater = drinking water source (wells, springs)
- Contaminated water = disease, poisoning

**Assessment:**

- No quantification of contamination risk
- No assessment of population relying on groundwater
- No health impact assessment of contaminated water

## Section 8.11 - "Note on Potential for Future Emissions Reductions"

### Opening Statement (Page 437):

"However it should be noted that the Air Quality impact assessment (Chapter 7), Climate impact assessment (Chapter 8) and EIAR have not relied on the following text, which is provided for information purposes only."This reads conflicting and the Assessment is based on 100% natural gas, why hasn't the Diesel been modelled into this? There are also claims future biomethane/hydrogen will reduce emissions, but doesn't assess that scenario, But uses it to justify "not significant" conclusion which is extremely scant on detail.

### Air Quality Chapter - Systematic Underestimation and Misleading Assumptions

### OPERATIONAL HOURS ASSUMPTION - ABSURDLY LOW (100 HOURS/YEAR)

- Provides electricity during peak demand periods, the report constantly lists 100 hours modelling, this appears flawed
- In Ireland electricity demand peaks are typically:
    - Daily: 7-9am, 5-7pm (4 hours/day)
    - Seasonally: Winter months (heating demand)
    - Renewable gaps: When wind/solar insufficient

### The document simultaneously claims:

1. Modelling is based on "continuous operation" (100 hours/year), there is no modelling built in for the higher end of operating? Why is this not considered? Will a plant really be built to provide capacity for just 100 hours per annum? The 100 hours modelling only speak about running time. I do not see a reference to the diesel burn off that need to be done as diesel needs to be burned of between 4 and 6 months depending on the conditions it is stored at, at 72 hours back of diesel, needing to be burnt off at least twice per year, 144 hours, including the 100 hours running, the modelling is totally unrealistic and report lacks clarity for those living close to this. This would mean the applicant is misleading and under reporting on the emissions, should be 250% higher, at a minimum.

## Emissions Standards- Misleading Presentation

### Section 7.2.3.2.7 (Page 372) - Emission Limit Values:

"The turbine has potential to operate in excess of 500 hours per annum using natural gas as an OCGT and thus the emissions will need to comply with the ELVs outlined in BAT 44 and Table 24 of the LCP BAT. Daily average and yearly average ELVs are proposed for **NOX and CO** as follows:- **NOX: 50 mg/Nm³ (daily average) and 35 mg/Nm³ (yearly average)** - **CO: 100 mg/Nm³ (daily average) and 40 mg/Nm³ (yearly average)**"

"The emissions concentrations for NOX and CO utilised for dispersion modelling have been derived from the **daily average ELVs**, as a conservative basis for determining air quality impacts. The daily average ELVs are higher than the yearly average ELVs and are therefore a conservative basis for determining air quality impacts."

### Critical concern for me:

1. Daily vs. Yearly Averages - Misleading:

- Document models DAILY averages (50 mg/Nm³ NOX, 100 mg/Nm³ CO)
- But plant must comply with YEARLY averages (35 mg/Nm³ NOX, 40 mg/Nm³ CO)
- Daily averages are 43% higher for NOX, 150% higher for CO

### Why This Matters:

- Modelling uses HIGHER emissions than plant will produce, again the Diesel burning and testing is not included here, this gives false impression of ''conservative" assessment but ignored the long-term exposure (25 years plus)

### The Real Health Impact:

- Health effects from air pollution are cumulative
- Long-term exposure (yearly average) is what causes:
    - Respiratory disease
    - Cardiovascular disease

    - Cancer
    - Premature death
- Yearly average emissions will be than daily, but the but total exposure over 25 years will be higher.

**Health Impact Assessment**

**Section 7.4.2.1.1 (Pages 384-391) - Human Health Results:**

**$NO_2$ (Nitrogen Dioxide):**

**Table 7.15 (Page 385):**

- Annual Mean $NO_2$: 7.1 µg/m³ (18% of limit)
- 1-hour Mean $NO_2$: 36.9 µg/m³ (18% of limit)

**Document Conclusion:**

"The results demonstrate that ambient ground level concentrations of $NO_2$... are in compliance with the relevant air quality standards"

**Critical Problems:**

**1. "Compliance No Health Impact"**

- EU limit values are NOT health-based thresholds
- They are POLITICAL compromises (health vs. economics)
- WHO states: "There is NO safe level for air pollution"

**Scientific Evidence:**

- Every increase in $NO_2$ increases health risk (even below EU limits)
- $NO_2$ causes respiratory harm at levels even below EU limits
- Vulnerable groups (children, elderly, asthmatics) harmed at lower concentrations

**Zone D suburban traffic locations** (Birr, Carrick-on-Shannon)

**Proposed Project Location:**

- Adjacent to M6-M18 motorway interchange, we already have the motorway to deal with
- Major traffic pollution source
- NOT "rural background", potentially a flawed comparision

**Document's Own Admission (Section 7.3.2, Page 375):**

"However, due to the proximity of the Proposed Project to the M6-M18 interchange, background concentrations from Zone D suburban traffic locations (the monitoring sites heavily influenced by traffic emissions in Zone D) have also factored into the estimation of an appropriate background concentration"

**But:**

- M6-M18 interchange is MAJOR traffic source
- NOT "suburban traffic"
- More comparable to URBAN traffic

**Comparison:**

**Zone D suburban traffic (Birr, Carrick-on-Shannon):**

- $NO_2$: 10-13 µg/m³ (Table 7.9)

**Zone C urban traffic (not assessed):**

- $NO_2$: 15-25 µg/m³ (typical for urban areas near motorways)

**Long-Term Cumulative Exposure missing:**

- 25 years of operation
- 500 hours/year, at a minimum, most likely be higher based on precedence set with Peaker Plants
- 12,500 hours total exposure

**Health Impact Over 25 Years:**

- Increased respiratory disease
- Increased cardiovascular disease
- Increased cancer risk
- Reduced life expectancy, after this happens, all too late.

**Assessment: Not done**

**Health Sensitivity:**

- Children: HIGH sensitivity to air pollution (developing lungs)
- Elderly: HIGH sensitivity to air pollution (compromised health)
- Asthmatics/COPD: HIGH sensitivity to air pollution (existing conditions)
- Pregnant women also in danger based on research available

**Assessment of Health Impact on Vulnerable Groups:**

**Section 7.4.1.1.2 (Page 384):**

How can:

- 10-100 high sensitivity residential properties within 20m
- + High risk of dust soiling
- Low risk of human health impacts?

This is ILLOGICAL and CONTRADICTORY

The company proposing to run this site, is not planning to have Staff on hand to operate this power plant and will be remotely monitored from their Athlone site currently under construction. This is 65km away and raises major health and safety concerns. What happened when sensors fail as they do, what happens when routine maintenance tasks to be completed are not carried out? In 2021, Bord Gais flagship site in Whitegate was out of service for almost 1 year due to technical fault, this is a fully staffed site. No contingency plans for a site that is monitored remotely, could lead to bigger technical and greater risks.

# Conclusion.

I would strongly appeal to An Coimisiun Pleanala to reject this planning application, based on my own research, this application appears to have been rushed and there is a lot of missing information that has not been considered at all. A large-scale power plant of this size, would need to have conducted assessments over a much longer period, at least 2 years and possibly 3. Up until the last week of the open event (May, 2025), the liaising officer was still negotiating with additional landowners to gain access to the site. The first two open events held were very poorly advertised, very poorly ran and lacked technical experts to answer questions to the local community. They have secured just one entrance point to the site, across a green field, this alone cannot be ignored from health and safety point of view. If there were an accident, and that one entrance was not accessible, how to gain access to put out a fire if the entrance is blocked or destroyed because of fire from a potential explosion? Having a Peaker Plant on top of a Gas line must also be a major concern, if this goes wrong, it goes very wrong and imagine the devastation in the area with such an explosion. The likelihood can be very low, but if it did happen the impact would be catastrophic for the area.

The road as outlined in the report, really is not suitable and is in fact a danger to all that use it if this plant is given permission. I cannot stress this enough; the entrance is on a bend that is not safe to access based on the drawings submitted. As argued previously, I feel this has been rushed through without proper assessment from the outset, it just feels so wrong, especially with the Inter-Connector due to come online from France within the next 2 years, clean energy with just 5.2% produced from Fossil fuels. As I write this, the world is currently suffering the impacts of the energy crisis triggered by the US-Israel war on Iran, imagine an Ireland producing electricity from alternatives, and the alternatives are there. We have all suffered with Energy price increases with the various wars this past 4 years, and not limited to Oil, Natural Gas has increased in priced during this period having a knock on to electricity prices. The Cashla Peaker Plant will certainly not make Electricity any cheaper, in fact will make it more expensive due to production from this inefficient Open Cycle Gas Turbine peaker plant, compounded by the potential fines from EU for not meeting our emission targets up until 2050 as we are supposed to be net zero by then. Net Zero in 24 years' time and we are considering a diesel and gas generator to be built just does not stack up. I am a parent of two young children, I want them to grow up safely in the family home I have built for them, on family land, that they are now the 4$^{th}$ Generation of family roots in the

area. I want them to attend primary and secondary school over the next 15 years in a clean air environment, and I fear for this as schools are within 2.5km and 3.1km from the site respectively.

On my own 4 points of focus listed in the report, Population & Human health, Traffic and Transport, Air Quality and the Climate, there has been a theme of under reporting throughout the whole report submitted, and diesel modelling not included at all. It really does feel a rushed planning application. What is the rush? Such a large scale project needs to be assessed to its core and all the risked considered for ALL Stakeholders involved. I am a stakeholder living 980 Meters from the plant, and didn't event receive information about the first 2 open events. We have already met the governments targets to get 2GW of Gas-Powered electricity generation for the grid, we have exceeded this 2-fold on what has been approved in planning since this was announced in 2021, 4GW is now approved, why exceed this? Within a 65 KW radius we have the potential of having 4 Power Plants, 3 in East Galway and 1 in Athlone, why is the West of Ireland being disproportionately hit with these Projects? Is this really the correct type of power generation we want in Ireland? We have made massive strides in terms of renewable green alternatives; this is a step backwards. As set out above, I have invested in solar PV panels, and our property is now a net exported of clean electricity annually. Imagine, 2026, we are talking about burning diesel to produce electricity, and not just diesel, the burning of Fossil Fuels feels so wrong in a power plant in Ireland, the 9$^{th}$ ranked country in 2022 for the lowest annual average PM2.5 concentrations with 8 $\mu g/m^3$, and 10$^{th}$ overall in the Greenest country in the world (Greenmatch, 2022). I also add, Ireland was ranked 7$^{th}$ in the world of global competitiveness in 2025, and this is relevant as Key Performance Indictors (KPI's) included in competitiveness, basic infrastructure & indigenous energy production. Our indigenous energy comes from our renewable sources within the island of Ireland, please keep this in mind. I argue, is this the correct location for such a site? Intersected between 2 busy motorways? On the Heritage Medieval town of Athenry, is this what the Fields of Athenry will become? I don't deny we need to increase our Electricity to support the grids demand but is this the correct way to go about it. A potential 'white elephant' that won't be allowed to run as Ireland strides to reach net zero by 2050, again I would urge planner to wholeheartedly reject this application for the safety, health and environment in East Galway.

*Yours Sincerely,*
*Name: Oliver Freeney*
*Date: 23 April 2026*

References:

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