



### Objection

Objector:	Mr. Colin Doyle
Objector Address:	12 Cottage Gardens, Station Road, Station Road, Ennis, .
Objection Title:	Dr Colin Doyle -Objection and Oral Hearing Request
Objection Reference No.:	OS011824
Objection Received:	16 January 2025
Objector Type:	3rd Party
Oral Hearing Requested?	Yes

### Application

Applicant:	Data And Power Hub Services Limited
Reg. No.:	P1165-01

See below for Objection details.

Attachments are displayed on the following page(s).

Office of Environmental Sustainability  
EPA Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
Co. Wexford

Colin Doyle

15 January 2025

A Chara,

I wish to object to the proposed IE licence determination for P 1165-01 for Data and Power Hub, Dublin due to the climate impact identified by the Agency, for which no satisfactory mitigation has been proposed.

I also request an Oral Hearing to specifically deal with the issues raised here.

Justification for Oral Hearing:

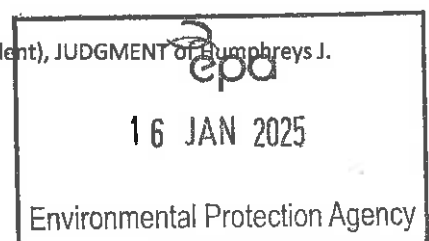
- Since 2021 the Agency has additional responsibilities under Section 15 of the Climate Act to ensure alignment of its decisions with the national Climate Action Plan (CAP). The procedures for such decision making have not been publicly set out by the Agency, and have not been subject to examination by the public, and only very recently has Section 15 been subject to interpretation by the High Court <sup>1</sup>. The Oral Hearing would provide an opportunity to explore this important aspect in public in the interest of transparency.
- My objection includes a number of complex matters, such as the validity of the flexible generation claims by applicant, whether the EU ETS counts as a mitigation in the national CAP context, whether Condition 7 mitigations can ensure alignment with the national CAP. These aspects could most effectively be clarified by expert witnesses, subject to questioning.
- It would also provide an opportunity for the Agency to respond to and if necessary correct any significant errors and omissions prior to a final decision.

I enclose a cheque for €226 to cover the objection and oral hearing.



Dr. Colin Doyle

<sup>1</sup> COOLGLASS WIND FARM LIMITED (Applicant) AND AN BORD PLEANÁLA (Respondent), JUDGMENT of Humphreys J. delivered on Friday the 10th day of January 2025, [2025] IEHC 1



## **Introduction – Overview of Grounds for Objection**

My main concern is with respect to the impact of the Power Generation Facility (PGF) and Data Centre in the context of the national Climate Action Plan 2024 (CAP24). I agree with the assessment in the Inspector's Report (IR) that there would be an associated climate impact.

While I agree with the conclusion on climate impact, the treatment of climate impact in the IR was deficient, with significant omissions and errors, such that it does not form a reliable basis for a decision to grant an IE licence by the Agency.

I accept that the EU ETS will ensure GHG mitigation in the EU context. I reject claims in the IR that the EU ETS would ensure compliance with national targets set out in CAP 24 or that sectoral requirements of CAP 24 would serve to control GHG emissions from the PGF or data centre.

Condition 7 of the proposed Determination is inherently incapable of achieving any meaningful GHG mitigation.

The claim that the PGF represents a contribution to the state's flexible gas-fired generation target is not credible. Given that the PGF is accompanied by an approximately matching electrical load within the same site, it is incorrect and highly misleading to claim any contribution to the state's flexible generation target and to use this as a justification for granting an IE licence.

Regarding air quality, the modelled concentrations due to the site activities are close to limit values, and cumulative concentrations exceed limit values. It is unclear if the mitigation measures in the Proposed Determination will ensure compliance.

### **Comments on Legislative Background**

Up to 2021 the procedures for assessing an IE application could be confined to consideration of emissions which had potential impacts on air quality, water quality, and other local or regional environmental receptors. Up to that year, GHG emissions were considered only in the context of the GHG permit regulations. For developments which would operate in the EU ETS there were no GHG limits set (unless concentrations were so high that there was a risk of local pollution). In principle any potential impacts in terms of local or regional pollution could always be mitigated by appropriate technology and through setting emission limits. For an IE licence application made in accordance with the regulations there was therefore generally no inherent reason why a licence should not be granted.

Since the Climate Act 2021<sup>2</sup>, and adoption of legally binding national carbon budgets, the legislative framework within which the Agency assesses IR applications has changed. I note that in recent years the Agency has considered climate impacts in more detail, as required under Section 15 of the Climate Act. Where an adverse climate impact is identified, the Agency seeks to describe mitigations or to set mitigation conditions, such that the IE licence can be granted. In contrast to for example air quality impacts, where there is always scope

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<sup>2</sup> Climate Action and Low Carbon Development (Amendment) Act 2021

for effective mitigation, in the case of significant climate impacts there may be situations where there is no possibility of effective mitigation to ensure alignment with the national objectives set out in CAP24.

## **Climate Impact**

### **GHG Emissions and Impact of PGF**

1. As the Agency is aware the PGF was not subject to a climate impact assessment at the planning stage (SD20A/0324). The IE application which was made in October 2021 contained no data on GHG emissions from the PGF. At the planning stages for the data centre (SD20A/0324) and the substation (ABP 309773-21) EIARs were submitted which purported to be cumulative assessments. Regarding these EIARs the IR states:

“Each EIAR contains a cumulative assessment of the three projects: the ICT installation, power generation installation and the new substation/grid connection works.” (IR, p. 6)

“Air and Climate is addressed Chapter 10 of both EIARs and in other licence application documents received from the applicant.” (IR, p.49)

2. The above statements are misleading, as the two EIARs referred to did not contain any estimate of GHG emissions nor impact assessment for the PGF. Following a request for further information (FI) by the Agency the applicant provided GHG data and a basic assessment of the climate impact of the PGF in September 2024 (SWECO Report, Response to EPA Request for Information, dated 17/9/24, p. 13-16).
3. The climate impact assessment presented in the IR was based on this FI GHG data. This data appears to have been accepted without review by the Agency. Based on my analysis I conclude that the direct GHG emissions stated in the FI response were underestimated by a factor of more than two, and the indirect emissions were underestimated by a factor of more than three, as detailed further on.

### **Omission of GHG Information from Inspector's Report**

4. In Section 6 of the IR, emissions to air are discussed. While there is very detailed consideration of channelled emissions to air and the impact on air quality, spanning 14 pages, there is no mention of GHG emissions or climate impact in this section. It would have been informative to have included and commented upon the further information on GHG submitted by the applicant in September 2024. This further information included a description of the basis upon which the GHG calculations and assessment were performed which would be of assistance to the public in understanding the results, and essential to the Agency in reaching a decision. In particular it is regrettable that Table 4 and Table 5 of the FI response were omitted from the IR.

### **Calculation of GHG Emissions**

### **Indirect Emissions from Data Centre**

5. Emission factors for gas and for the electricity grid were presented in Table 4 of the FI response. For calculation of indirect emissions the applicant has assumed that all of the targets in CAP 24 are achieved, and consequently uses a low emission factor of 100g/KWh for 2030. This assumption, which is commonly made in EIARs, is highly questionable.
6. In my view indirect emissions for new data centre loads connected to the grid should be calculated on an assumption of additional fossil fuel electricity generation, as matching renewables cannot suddenly appear on the grid to serve any arbitrary new load. Only when deployment of renewables are reliably on track to the 80% target would it be valid to assume a low grid emission factor.
7. The lowest indirect emissions would be based on efficient gas CCGT generation. For the data centre load of 90 MWe stated in the FI the GHG emissions would amount to over 300,000 tonnes/year, which is more than three times the indirect emissions estimated for 2030 in Table 5 of the FI response.
8. I submit that the above approach is justified as published data, one can conclude that the rate of growth in data centre power demand has greatly outpaced the growth in renewable electricity on the grid. Recent SEAI data<sup>3</sup> shows that renewable electricity supply has grown by only 2 TWh over the five years from 2019 to 2023. CSO figures for the same period show that data centre power consumption increased by 3.8 TWh.

### **Direct Emissions from PGF**

9. The FI response calculated the direct GHG emissions from the PGF to be 180,922 in 2030 (Table 5). I have detected a significant error in this calculation, which results in an underestimation of more than a factor of two in direct GHG emissions.
10. There is an additional smaller error in the assumption of a declining gas emissions factor to 2030, based on assumed growth in biomethane as a fuel in 2030. Unfortunately, there is at present no clear pathway with supporting measures to achieve the CAP24 target for biomethane by 2030. Existing biomethane production is only 1% of the 2030 target<sup>4</sup>. But even in the unlikely event that the target is achieved, it would not contribute to decarbonisation of electricity generation.

<sup>3</sup> Mid-Year Review of Ireland's Energy and Related Emissions in 2024, SEAI, September 2024

<sup>4</sup> National Energy Projections 2023 Report, SEAI , p.51

National policy on renewable gases is that they will be allocated for large heat loads which are hard to decarbonise, rather than for electricity generation.<sup>5</sup>

11. Correcting for the above errors I calculate the direct GHG emissions from the PGF to be approximately 460,000 tonnes/year (based on annual electrical energy output of 1008 GWh, as per the FI response).

### **Scale of GHG Impact**

12. Table 5 in the FI response presented the calculated direct and indirect GHG emissions from 2026 to 2030, along with an indication of the scale of the impact, in terms of the percentage of the emissions ceiling for the Electricity Sector in 2030. It is evident from this table submitted by the applicant that emissions would be quite significant in 2030, amounting to 8.6% of the emissions ceiling, even with the underestimations mentioned above.
13. Expressing impact as a percentage of the indicative emissions ceiling in 2030 is a reasonable method for assessing impact relative to the CAP24 target, rather than as a percentage of the sectoral emissions in 2023, as was done in the IR section 15.4.7.
14. Considering the direct and indirect GHG emissions separately, the scale of the impacts are as follows:

Direct PGF emissions: 14% of 2030 ceiling

Indirect Data Centre emissions: 2.6% of 2030 ceiling  
(based on emission factor in FI) assumption)

11% (based on CCGT assumption)

15. Neither the further information nor the IR consider criteria for assessing the scale of climate impact (such as for example IEMA guidelines). However, it is clear from the magnitude of the above percentages of the sectoral emissions ceiling that the adverse impact in the context of Ireland's CAP24 target would be significant in accordance with IEMA guidelines.

### **Climate Impact Assessment in Inspector's Report**

16. Regarding direct GHG emissions the IR states:

"The impact of these direct emissions will contribute to climate change and therefore are considered significant." (IR, p. 49)

Regarding total GHG emissions the IR states:

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<sup>5</sup> As there is no provision for a segregated a biomethane grid, it would be allocated to heat loads using market mechanisms such as a renewable heat obligation scheme

"I consider that the impact of direct and indirect CO2 emissions from the installation are controlled under EU ETS legislation and the sectoral requirements of CAP 2024. The direct, indirect and cumulative effect of CO2 emissions on climate are significant and mitigation measures are therefore required." (IR, p. 49)

17. The above assessment was based on the GHG estimates provided in the FI, which as discussed above were underestimates. Presentation of the impact as a 2.7% of sectoral emissions in 2023 on page 49 of the IR was misleading, tending to understate the impact. It should have been presented as a percentage of projected 2030 emissions (8.6%), as was done in Table 5 of the FI (albeit underestimated).
18. Likewise, providing electricity sectoral emissions data for 2022 and 2023 without qualifying comments tended to create the impression of rapid emissions reductions. The Agency will be aware that three quarters of the emission reductions were due to net electricity imports from the UK, which are accounted as zero carbon in Ireland's GHG inventory. These imports are still trending upwards, and one could expect even lower sectoral emissions in 2024. But this is not good news, as relying on electricity imports from the UK is not a long-term sustainable model, as it is not within national control. Depending on wholesale pricing differentials, the net imports could suddenly come to an end, and sectoral emissions would then rebound significantly.
19. The IR goes on to discuss the Climate Action and Low Carbon Development (Amendment) Act 2021 and the legally binding 51% reduction in national GHG emissions by 2030 (re 2018), and the carbon budgets for the Electricity Sector. EPA projections of exceedance of these sectoral budgets are referred to, from which can be reasonably concluded that the emissions from the PGF and Data Centre will add to these exceedances.
20. Selective references are made in the IR to the Government Statement on The Role of Data Centres, which seek to justify granting an IE licence, despite an identified climate impact. The Government Statement in question is not as straightforward as presented, and in fact envisages circumstances in which data centre developments may need to be curtailed. This is clearly communicated in the Executive Summary:
 

"The capacity constraints experienced by our electricity system today, and the binding carbon budgets that require rapid decarbonisation of energy use across all sectors, necessarily mean that not all existing demand for data centre development can be accommodated." (p. 2)
21. One of the core principles in the Government Statement relates to a preference for data centres which can demonstrate renewables additionality. There is no reference to this in the FI or the IR. The principles set out in the Government Statement also strongly imply that not all proposed data centre developments would necessarily align with the national objectives.

## **Mitigation**

22. The EU ETS is presented as a mitigation in section 15.4.7 of the IR. But as discussed further below, the ETS is not capable of driving GHG reductions for the PGF, nor of ensuring that Ireland's GHG emissions follow a downward trajectory towards the CAP 24 targets. Nor is Condition 7 capable of achieving reductions in GHG emissions from either the PGF or the Data Centre. The IR also sets out an argument that emissions from a facility such as the PGF were already allowed for in the EPA GHG projections. I do not accept this argument, or that the PGF/Data Centre combination represents the flexible gas-fuelled generation envisaged in CAP24. These points are expanded on in the following sections.

### **EU Emissions Trading System (ETS)**

23. A number of references are made in Section 15.4.7 of the IR to the emissions from the PGF and data centre being covered by the EU-ETS, including the following concluding statements:

"Given the installation is subject to EU ETS legislation and the conditions set out in the RD, I consider that the impact of direct and indirect CO2 emissions from the installation will be controlled."

"I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable effects in terms of climatic factors."

24. The above statements which rely on the ETS are true in the context of GHG emissions within the EU region. The additional GHG emissions will inevitably be squeezed down through market forces and reduced emissions allowances. We do not need to know where in the EU the emission reductions will occur, but most probably in regions with low efficiency power generation where there is scope for upgrade, and also quite likely in member states with lower GDP/capita, where the increasing costs of emission allowances provides an extra incentive to invest in decarbonisation.
25. The statements in the IR regarding the ETS are however not valid when considering the national GHG reduction objectives, as set out in the legally binding carbon budgets and CAP24. Appealing to the EU ETS as a mitigation misses the point that to comply with the national legally binding carbon budgets and to achieve the targets in CAP24 the state needs to control and reduce its GHG emissions within the national boundary. There is no benefit to the state's decarbonisation targets for example if a lignite power station in Poland can no longer afford to buy emission allowances and shuts down, resulting in GHG reductions which offset emissions from the PGF and data centre.



26. As the Agency is aware, the ETS operates on an EU wide basis with the objective of achieving targeted reductions in GHG emissions from the overall EU ETS sector. There is a robust implementation mechanism based on annually declining emissions allowances which guarantees that the reduction target will be achieved.
27. There is however no mechanism within the ETS to drive emission reductions in a member state to match any national targets which may apply, such as those in CAP24. Nor is there any mechanism in the ETS to force individual operators to achieve reductions in their GHG emissions. Operators within the ETS are free to produce whatever GHG emissions they require, provided they pay for the allowances.
28. The PGF and data centre would be constructed in accordance with best available technology and energy efficiency principles. This leaves no scope for emissions reductions in response to increasing carbon prices.
29. Therefore it is not valid to claim that ETS could mitigate either direct GHG emissions from the PGF, or could reliably reduce indirect emissions in Ireland resulting from the data centre.

#### **Proposed Condition 7**

30. The proposed condition 7 attempts to mitigate climate impact in the national context, but is in fact incapable of achieving any significant mitigation.
31. The PGF and data centre are already designed in accordance with energy efficiency principles and consequently Condition 7.1 will not be capable of achieving any significant improvement in efficiency, or reduction GHG emissions.
32. Condition 7.1.3 requires a gas engine efficiency of at least 44%, which has already been incorporated into the design and into the calculated GHG emissions.
33. Condition 7.2 requires energy audits which would be standard practice, and for a brand new facility would be unlikely to identify any significant increase in efficiency beyond the design specification. There is mention of carbon offsets in 7.2.3 which is a highly contentious theoretical mitigation.
34. Condition 7.3 dealing with alternative energy can easily be complied with by submitting a report within 6 months confirming that there are negligible opportunities for using alternative energy.
35. Condition 7.4 requires that the applicant should have regard to the targets of the most recent climate action plan. The wording "have regard to" has been established in the courts to be a very low bar, and would not require any specific action by the applicant. Moreover, there is no provision within legislation to force an already permitted development to align with the national climate action plan. Condition 7.4

represents an attempt by the Agency to transfer its own Section 15 obligations onto the applicant.

### **Flexible Generation Claims**

36. Despite the identified climate impact, the IR seeks to justify granting an IE licence on the basis that the PGF will contribute towards the 2000 MW of flexible gas-fuelled generation provided for in CAP24, and that any resulting GHG emissions have already been factored into EPA projections. The claimed flexible generation is however purely illusory, and to accept the claim would require one to abandon all critical thinking, and to accept the ridiculous claim by the applicant that the PGF is not connected to the data centre, when it clearly is connected via the substation.
37. I am disappointed that the Agency has gone along with this misrepresentation and even went to the trouble to recount in detail and apparently accept the implausible claims of the applicant in section 3 of the IR. The applicant went as far to reprimand SDCC for thinking that the PGF might be electrically connected with the data centre, which was dutifully quoted in the IR:
 

“It is unclear from the submitted application documents, where this stems from, as no reference to any interdependence is outlined in either the planning report, EIA Report or the Energy Statement. We wish to be extremely clear in this regard in making this response”. (IR, p. 5)
38. To any reasonable person examining the planning documents it would be quite understandable that it would be assumed (as I do) that the PGF is connected to the data centre via the substation.
39. While the Agency may not have review of a planning consent within its remit, the Agency is not obliged to accept arguments and “reasoned conclusions” that are irrational.
40. It appears to me that the applicant has exploited the planning process and used project splitting to persuade the planning authorities that the PGF is an independent generator with an export capacity contract to the grid, and has nothing to do with the data centre. The sequence involved in the project splitting was as follows: permission for PGF on its own (SD20A/0058, December 2020), Data Centre on its own (SD20A/0324, July 2021), Substation to provide for connection of PGF and data Centre to the electricity grid (ABP 309773-21, December 2021).
41. Let us first establish the facts. The PGF, the substation and the data centre are all located within the same site of area 8.2 hectares. The substation is located between and immediately adjacent to the PGF and the data centre. Both the PGF and the data centre are connected to the substation. Underground connections run from the substation for a distance of 940m to the electricity grid.

42. Consider now the power ratings of the PGF and data centre. I quote these here in terms of the maximum electrical power ratings for unambiguous comparison, although the same argument would apply for lower power ratings. The PGF has a maximum generation capacity of 116 MW (IR, p. 2). Various power ratings are stated in the application documents for the data centre, which depend presumably on the operating load and whether cooling and facilities are included. However, the maximum power load can be calculated to be 110 MW (based on electricity consumption of 965,000 MWh in Table 8.1 of the IR). It will be noted that the PGF produces marginally more power than is required by the data centre.
43. Now imagine a situation where the data centre is operating and the PGF is not running. The required 110 MWe would flow from the grid along the 940m underground cable to the data centre.
44. Consider what would happen if EirGrid wished to reduce the strain on the grid by instructing the flexible PGF to start generating. Let us say that the PGF produces its maximum output of 116 MW which feeds to the substation. The substation will continue to supply the 110 MW demand from the data centre, which leaves a theoretical 6 MW available for export along the 940m cable to the grid. In this scenario the data centre would be powered solely by the PGF (even though they are allegedly not connected <sup>6</sup>).
45. From the perspective of the grid, the data centre load would disappear once the PGF operates, which would ease strain on the grid as required. I am not an electrical engineer, but from a common sense perspective the combination of the PGF, substation, and data centre behaves remarkably like what EirGrid terms a “net-zero demand” load, which is an essential condition for consideration of a data centre connection to the grid.
46. As explained by EirGrid, there is in fact no moratorium on data centre connections, but a requirement for “net-zero demand”:

“This does not constitute a moratorium for data centres but according to the CRU’s direction, EirGrid can ‘determine whether a connection offer can be made within the system stability and reliability needs of the electricity network.’ It also means that any new data centre demand must also bring equivalent capacity with it which would be intended to largely offset any further growth in data centre. This makes new data centres ‘net-zero demand’ from a GCS adequacy perspective.”

(Ten Year generation Capacity Statement 2023-2032, EirGRID/SONI, January 2024)

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<sup>6</sup> Unless to maintain the pretence of no connection, there is one cable dedicated to export to the grid, and one cable for import – but that would be stretching credulity and in any event there would still be a relatively short connection over a distance of 2 x 940m, and the PGF and data centre would still be effectively connected

47. The conclusion of the above discussion is that the data centre could not have achieved conditions for grid connection in the absence of the PGF.
48. As for contribution to the state's flexible electricity generation, the PGF is almost certainly useless. It is admittedly flexible and gas powered, but it comes at the price of an additional permanent load on the grid, which undoes any potential benefit. I do not believe that the experts who developed CAP24 envisaged that any of the planned 2000 MW flexible generation would entail matching additional loads on the grid.

### **Cumulative Climate Impact**

49. I note that a cumulative impact assessment was carried out as part of the air quality assessment. There was no consideration of cumulative climate impact, which admittedly is harder to define and analyse, due lack of publicly available collated data. While Ireland has legally binding GHG reduction targets, as far as I am aware there is no mechanism in legislation to exert centralised control to ensure that the targets can be met. Each project is assessed individually by the relevant competent authority responsible for the planning consent or licence.
50. Alignment with CAP24 is provided for in the legislation by the relevant bodies performing their functions in accordance with Section 15 of the Climate Act (as amended in 2021).
51. The only state body with ready access within its own records to all of the relevant data on GHG emissions from existing and proposed developments is the EPA. While the Agency has not been designated any responsibility in this matter, I suggest that it should reflect upon how it could use such data to assist it in performing its licensing functions in a manner consistent with the most recent approved climate action plan, the most recent approved national long term climate action strategy, and in the context of the Agency's core purpose of protecting the environment.
52. The consultants who provided the GHG data for the IE licence application would also have had access to a body of EIARs which they prepared for other projects, from which some estimation of cumulative GHG impact could be derived. From public planning application data I have compiled a list of projects, totalling 10 including the present development, for which the same consultants carried out GHG and climate impact assessments. These are shown in the table below. The GHG emissions data in all cases are exactly as stated in the EIARs, and for the present IE application, the data as stated in the FI response, which is an underestimate. I have also identified underestimates of GHG emissions in several of these projects.
53. It can be seen that the cumulative GHG emissions in 2030 for these projects as assessed by just this one consultancy would amount to between 3.5 and 4.2 million tonnes per year, considerably in excess of the indicative electricity sectoral emissions ceiling of 3 million tonnes per year. This illustrates how through a piecemeal planning and licensing process, very large cumulative impacts can develop without being flagged as significant.

Development	Planning ref	GHG Emissions tonnes ktCO <sub>2</sub> eq/year	EIAR Climate Impact Assessment	AWN Report Reference
Engine Node Clonee	R789/20, ABP 307546	591	not stated	Addendum to EIAR , 9.8.2.2
Amazon Drogheda	LB/191735 EPA P1181-01	183	long-term, negative, and imperceptible	EIAR ch.9, p. 24
Tunis Properties LLC, Drogheda	ABP-310729-21	473	indirect, long-term, negative and slight	EIAR, Ch.9, P.24
Crag Wicklow Ltd., Arklow	ABP-311778-21	361	indirect, long-term, negative and slight	EIAR Ch.8, P. 22
Data and Power Hub	SD20A/0058, SD20A/0324 ABP 309773-21 EPA P1165-01	259	8.6% of emissions ceiling in 2030	Sweco FI response, p.16
Art Data Centres Ltd. Ennis	ABP-314474-22	293 - 657	indirect, long-term, negative and slight	EIAR NTS, P.2, and AWN Report to ABP Table 5
Crag Arklow Ltd.	WCC 21/1080 EPA P1202-01	448	direct, long-term, negative and slight	EIAR ch8., p. 20
Universal Developments (Overall Project)	FW22A/0308	196-457	Imperceptible to Slight (original EIAR) minor adverse (FI)	EIAR Ch.9 P. 42 AWN FI response, P. 43
EdgeConnex	ABP-317802-23 EPA P1204-01	331-420	moderate adverse prior to mitigation, minor adverse with mitigation	EIAR May 2023 Table11.10 + Table 11.11
Crag, Clondalkin	SD23A/0158	334	long-term, negative and slight	EIAR 2023 Table 9.11, ch. 9
<b>Total for above 10 developments</b>		<b>3470 - 4183 kt</b>		
<b>Total</b>		<b>3.5 to 4.2 Mt</b> 116% to 139% of indicative emissions ceiling for Electricity Sector in 2030		

Compilation of climate impact assessments conducted by AWN

## Air Quality

54. The air emission modelling submitted by the applicant predicts that the ambient NO<sub>2</sub> concentration at the worst case receptor is 64% of the annual mean limit value due to the proposed development (including background), and exceeds it when the cumulative impact is assessed (up to 116% of AQS). Ambient ground level concentrations are also elevated, particularly with respect to NH<sub>3</sub>. This is clearly of concern.
55. Given the high probability that ambient AQS are met or exceeded, greater certainty would be provided from ambient air quality measurements, particularly NO<sub>2</sub>. It would be expected that these are available from existing licensed facilities in the vicinity. If not, measurements would have been expected as part of the EIAR. It is recommended that monitoring results are reviewed to establish the existing background concentrations (rather than relying on average of Zone A data).
56. Due to the modelled elevated concentrations, mitigation is clearly essential. One proposed mitigation measure is operation of abatement. This is already assumed in the modelling and will have no incremental mitigating effect.
57. Another mitigation measure is the imposition of emission limit values. The proposed NO<sub>2</sub> emission limit value is 45/55 mg/Nm<sup>3</sup> (yearly/daily) based on the BAT – Associated Emission Level range from CID 2021/2326. The BAT-AEL is the emission level obtained under normal operating conditions. From Table 6.1, the modelled emission level (hourly) was 45 mg/Nm<sup>3</sup>, and this gave rise to elevated ambient concentrations. Consequently it raises the question of whether the proposed emission limit values, which are the same as the associated emission level and the assumption for modelling, could give rise to ambient concentrations approaching or exceeding ambient air quality standards. This is a key issue for the health impact on residents in the vicinity.

## Conclusion

In view of:

the identified climate impact, the lack of demonstrated mitigation, evidence of very large cumulative climate impacts from data centres, implausible claims of flexible generation aligned with CAP24, and lack of clarity on AQ aspects,

I ask the Agency to either refuse the IE application, or to revise the Proposed Determination to satisfactorily address these issues.



**Dr. Colin Doyle**

Bank of Ireland   
COLLEGE GREEN DUBLIN 2

90-00-17

Date 15/1/25

Pay Environmental Protection Agency

TALLQUIST LTD 9532

Two hundred and twenty

€226=00

Six Euro



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*Colin Doyle*