

20210907-06-0217

South Dublin County Council
Planning Department
County Hall
Tallaght
Dublin 25

Sent by email to: pregistry@sdblincoco.ie

7th September 2021

Ref.: SD21A/0217
App: Digital Netherlands VIII B. V.
For: 10 year permission for development consisting of removal of an existing unused waste water treatment facility on site and the erection of two data centre buildings, gas powered energy generation compound, and all other associated ancillary buildings and works; the two data centre buildings, DUB 15 and DUB 16, will comprise a total floor area of c. 33,577sq.m over two storeys; the first 2 storey data centre building (DUB15), located to the southwest of the site, will comprise 16,865sq.m data storage use, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space; a second 2 storey data centre building (DUB16), located to the southeast of the site, will comprise 16,712sq.m data storage areas, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space; both data centre buildings will reach a height of 20m; emergency generators and associated emission flues and plant are proposed in compounds adjacent to each data centre building; gas powered energy generation is proposed to the north east corner of the site to provide electricity for the proposed development; the application proposes to re-route and widen an existing watercourse constructed following an earlier planning permission; it is proposed to reroute this watercourse along the eastern and southern boundary of the site; landscaping is proposed to the south of the site to screen the buildings; fencing and security gates are proposed around the site; new access roads within the site are proposed along with 71 car parking spaces and 26 cycle spaces, bin stores, site lighting, and all associated works including underground foul and storm water drainage attenuation and utility cables and all other ancillary works; a Natura Impact Statement will be submitted to the planning authority with the application.

Site: Profile Park, Nangor Road, Clondalkin, Dublin 22

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Directors: Philip Kearney (Chair), Trish O'Connell (Vice-Chair),
Stuart McCaul (Secretary), Aoife O'Gorman (Treasurer), Hugh O'Reilly, John Sweeney

A Chara,

Thank you for referring the above application to An Taisce for comment.

1. Data Centres, Energy Use and Climate

The annual growth in the storage of electronic data is a major global climate and resource consumption issue. Given the intensity of data centres' energy usage, their development requires the most energy-efficient data storage in an appropriate global distribution of locations. By increasing overall energy demand in Ireland through the uninhibited development of data centres, we are actively diluting the end benefit of renewable energy penetration that has been created and added to the grid over the past 20-30 years.

According to Host in Ireland's latest Biannual Report published in May 2021,¹ there are 70 data centres currently in operation in Ireland using 900MW of electricity with a further eight under construction and expected to use an additional 250MW. This proliferation of data infrastructure has largely gone unchecked, and data centres now consume 11% of Ireland's total grid-generated electricity. The Irish Academy of Engineers and EirGrid have projected that this will increase to between 27% and 31% in the next six to eight years.²

Progress to date in decarbonising Ireland's electricity supply notwithstanding, the projected rate of increase of data centre projects around the country is inconsistent with national climate and environmental policy objectives. According to the Irish Academy of Engineers, data centres will add between 1.5 and 3 million tonnes of CO₂ to Ireland's overall greenhouse gas emissions by 2028. This trajectory is incompatible with achievement of Ireland's legally binding EU emissions and renewable energy targets and the realisation of its national climate targets per the Climate Action and Low Carbon Development (Amendment) Act 2021.

Ireland, and critically South Dublin in particular, already hosts an enormous and disproportionate amount of Western Europe's data infrastructure. Therefore, data storage development proposals in South and Dublin and in Ireland more broadly need to be based on appropriate and complete considerations of the direct, indirect and cumulative effects of the development on energy demand and therefore on climate.

Any new data centre development should only be considered if includes direct renewable power generation on site, direct renewable power generation off site with a dedicated grid connection, or a new dedicated renewable addition to the grid in tandem with the project and providing at least the level of the total annual power demand of the data centre.

¹<https://www.hostinireland.com/report#:~:text=Publication%20Date%2011th%20May%202021&text=Host%20in%20Ireland%20is%20an,location%20to%20host%20digital%20assets>.

² <http://iae.ie/wp-content/uploads/2019/08/Data-Centres-July-2019.pdf>; <https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf>

The proposal to power the data centre with natural gas will exacerbate lock-in to fossil fuels. This is incompatible with national climate policy and law, notably the Climate Action and Low Carbon Development (Amendment) Act 2021. The applicant's Air Quality and Climate Impact Assessment Report does not address compliance with the 2021 climate legislation nor does it address the impact of continuing fossil gas dependence, the proposed source of the gas, and consequent emissions. Further information should be sought in this regard.

We also note that the energy and climate reports states that electricity produced by burning natural gas, as is proposed for the initial phase of the development, produces fewer emissions than other fossil fuel sources. This is misleading – natural gas only has lower emissions at the point of combustion. The extraction, processing and transport of natural gas involve high levels of methane leakage, which is a much more potent greenhouse gas than CO₂. As such, the burning of natural gas for electricity generation has a higher emissions impact than the burning of coal or oil. The assessment of the climate impact of the proposal must take this into account.

2. Future Connection to the Highly Constrained National Electricity Grid

The applicant states that they plan to connect the proposed facility to the national electricity grid by 2025. It does not appear that any assessment has been conducted regarding the feasibility or impact of this proposal.

The Commission for the Regulation of Utilities (CRU) and EirGrid have both recently expressed serious concerns regarding data centre energy use and the implications for Ireland's energy security. In discussing the increasingly precarious condition of the national grid, the CRU went so far as to warn of the possibility of rolling blackouts due to data centre energy demand in particularly grid-constrained areas, including in the Greater Dublin Area.

Both the CRU and EirGrid have stated the need for a review of data centre grid connection policies across the country as a result of their skyrocketing energy demand. The CRU has recently concluded a public consultation on this issue,³ and we would draw the Council's attention to following excerpts from their consultation paper:

"The CRU is concerned that continuing to allow data centres to connect in accordance with current arrangements will significantly impact the ability of the electricity system to meet the reasonable demands of all consumers including data centres."

"According to the most recent draft [Generation Capacity Statement], it may not be possible to secure sufficient generation capacity with the necessary certainty to meet the projected rapid increase in electricity demand in the coming years and it is evident to the CRU that additional intervention is necessary now to ensure that security of supply is maintained. After this winter 2021/22, the CRU intends to carry out a wider review of the assumptions underpinning capacity requirements and

³ <https://www.cru.ie/wp-content/uploads/2021/06/CRU21060-CRU-consultation-on-Data-Centre-measures.pdf>

forecasted demand to better understand demands of the electricity system for the medium to longer term.”

“Due to the rapid, disproportionate impact the increase in data centre connections has compared to other sectors of large energy user industries, the supply security and financial risk to the energy consumer is increased.”

As highlighted by the *Irish Times* in early July⁴, ‘emergency plans’ are being devised by the Government for Dublin’s electricity supply following concerns raised by grid operators with regard to potential power outages, should the current growth trajectory of ‘power hungry’ data centre development continue.

The proposal’s potential role in exacerbating the current electricity supply problem should be assessed, given the plans to connect it to grid and the aforementioned projections on the continued increases in data centre energy use. We submit that granting permission for the subject proposal in advance of resolving grid capacity and data centre grid connection policy issues would be premature.

3. Sub-Threshold EIA

In evaluating the applicant’s EIA screening and determining whether a sub-threshold EIA is warranted, it is submitted that the Council should also consider the following:

- Potential impacts to the national grid and the security of electricity supply (falling under considerations of material assets);
- Potential cumulative impacts to climate and material assets in combination with other existing and proposed data centres in the Greater Dublin Area and across Ireland.

Please acknowledge our submission and advise us of any decision made.

Yours sincerely,

Phoebe Duvall

*Planning and Environmental Policy Officer
An Taisce – The National Trust for Ireland*

⁴ <https://www.irishtimes.com/news/ireland/irish-news/electricity-supply-concerns-spark-emergency-plans-for-dublin-1.4608199>