An Taisce
The National Trust for Ireland

20211004-06-0241

South Dublin County Council
Planning Department
County Hall
Tallaght
Dublin 25

Sent by email to: pregistry@sdublincoco.ie

4th October 2021

Ref.: **SD21A/0241**
App: **Vantage Data Centers Dub 11 Ltd.**
For: **Demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); construction of 2 two storey data centers with plant at roof level of each facility and associated ancillary development which will have a gross floor area of 40,589sq.m consisting of 1 two storey data center (Building 11) which will be located to the south of the site and will have a gross floor area of 24,667sq.m. including 22 emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height; 1 two storey data center (Building 12) which will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915sq.m including 11 emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height; each of the two data centers will include data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility which will provide emergency power to the admin and ancillary spaces; each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators; the overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level; the overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level; single storey step-up substation (38sq.m) as well as 2 single storey switch substations (121sq.m); AGI Gas Regulator compound that include 3 single storey buildings (134sq.m); construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sq.m that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes; the Gas Plant will be located to the**

west of Building 11; ancillary site development works, that will include reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park; other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; a temporary gas powered generation plant within a fenced yard containing 21 generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed; this temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11 at this site that includes an abandoned single storey residential property on the New Nangor Road (R134), Dublin 22; and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 on an overall site of 8.7 hectares.

Site: **In the townlands of Ballybane & Kilbride within Profile Park, Clondalkin, Dublin 22**

A Chara,

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

1. Missing EIAR Chapters

It appears that EIAR Chapters 10-13 as well as part of Chapter 9 have not been uploaded to the planning website, whereas Chapters 1-4 appear to have been uploaded several times. Crucially, the chapters on climate and water impacts are among those not available. As such, An Taisce cannot fully assess the subject proposal. We request that this be rectified as part of a further information stage as the public and other bodies will not have had access to the full EIAR.

2. 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 CO_2 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 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.

The proposal includes a gas-fired power plant, which will exacerbate lock-in to fossil fuels. Compliance with the Climate Action and Low Carbon Development (Amendment) Act 2021 and the impact of continuing fossil gas dependence must be fully assessed.

2.1 Cumulative Impacts

An Taisce submits that impact of a new data centre on climate needs to be considered cumulatively with all other recent and proposed data centre developments, regardless of their location in Ireland. For example, it is reasonable to look at the cumulative impact of an individual data centre on noise in the context of other local proposed and recent developments as noise pollution is only experienced locally. It is, however, unsatisfactory to simply look at the cumulative impact of this data centre on climate within the context of other local developments. The impact on carbon emissions is not spatially bound to the immediate surrounds of the site, and emissions combine cumulatively with other proposed

[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

and recent data centre developments to consistently undermine Ireland's overall greenhouse gas emissions targets. Data centres, each of which contributes a considerable amount to Ireland's overall greenhouse gas emissions compared to the land area they occupy, must therefore be assessed on a macro scale.

3. Impact on the Highly Constrained National Electricity Grid

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 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 July[4], '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 data centre development continue. As the Council is likely aware, the energy supply situation has worsened significantly since then.

[3] https://www.cru.ie/wp-content/uploads/2021/06/CRU21060-CRU-consultation-on-Data-Centre-measures.pdf
[4] https://www.irishtimes.com/news/ireland/irish-news/electricity-supply-concerns-spark-emergency-plans-for-dublin-1.4608199

The proposal's potential role in exacerbating the current electricity supply problem should be fully assessed, particularly in light of 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.

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