

CLIENT: EDGECONNEX IRELAND LIMITED1

ADVISORY NOTE AS PART OF APPEAL AGAINST DECISION OF SOUTH DUBLIN COUNTY COUNCIL IN RELATION TO PLANNING REFERENCE SD22A/0333

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¹ This advice note is intended for EdgeConnex Ireland Limited. No reliance by any other person should be placed on the advice contained herein.

ADVISORY NOTE AS PART OF APPEAL AGAINST DECISION OF SOUTH DUBLIN COUNTY COUNCIL IN RELATION TO PLANNING REFERENCE SD22A/0333

1 Appeal

- 1.1 We have been instructed by EdgeConneX Limited (the "Applicant") regarding its appeal to An Bord Pleanála (the "Board") of a refusal by South Dublin County Council (the "planning authority") of planning application reference SD22A/0333 for DUB06 dated 20 July 2023 (the "Decision").
- 1.2 This advisory note addresses that part of the reasoning set out in the Decision which is underlined and highlighted in bold text in the below extract from the Decision. The other reasons provided in the Decision are addressed separately in the substantive appeal document.
 - *1. Having regard to the existing insufficient capacity in the electricity network (grid), the lack of a fixed connection agreement to connect to the grid, the lack of significant on site renewable energy to power the proposed development, the lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland, and the reliance on a gas powered plant to provide energy to the development, it is considered that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDET Objective 2 and Section 12.9.4 of the South Dublin County Development Plan 2022-2028. In this regard the proposed development, would, therefore, be contrary to the proper planning and sustainable development of the area."
- 1.3 The CE Report concludes that the alleged existing insufficient capacity in the electricity network (grid) and lack of a fixed connection agreement to connect to the grid was contrary to EDE7 Objective 2. At page 24 of the CE Report, it states:

"In terms of EDE7 Objective 2 the applicant states in their submission that this has been fully complied with, however, the applicant has not demonstrated this. It is noted that EDE7 Objective 2 requires detailed consideration and assessment under each relevant section of the policy. Particular concern is maintained in relation to the third and fourth sub-point of this policy as the development plan places a key emphasis on the requirement for a Data Centre to be sustainable, with a key requirement for the applicant to demonstrate that there is sufficient capacity within the relevant water, wastewater and electricity network to accommodate the use proposed.

Concerns are especially maintained in respect to electricity and the Planning Authority notes that the Government, within the recently published a statement titled "Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy -July 2022". The document sets out that while fully acknowledging the vital role Data Centres play in the modern economy, in the short term, there is only limited capacity for further data centre development, as the key state bodies, regulators and the electricity sector work to upgrade our infrastructure, connect more renewable energy and ensure security of supply."

1.4 While it is clear that the planning authority has had regard to grid capacity in relation to section 34(2)(a)(i) of the PDA, the provisions of the South Dublin County Development Plan 2022 – 2028 (the "Development Plan") (in particular EDE7 Objective 2), the planning authority's

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interpretation and application of this Objective goes beyond its statutory remit in consideration of proper planning and sustainable development.

- 1.5 It is clearly not within the remit of the planning authority to determine capacity allocation or connection to the electricity grid, or indeed the operation and management of contracted grid capacity. This falls squarely within the remit of the two state licensed entities which determine applications to connect to the grid and maintain and operate the grid, namely ESB Networks Limited at distribution level as the licensed Distribution System Operator ("DSO") and EirGrid pic at transmission level as the Transmission System Operator ("TSO").
- 1.6 The planning authority further appears to conflate a determination by the DSO and TSO that the greater Dublin area is constrained by a determination that there is insufficient capacity for the proposed development.
- 1.7 In June 2020, version 2.0 of the Data Centre Connection Offer Process and Policy¹ ("DCCOPP") was published, which updated the July 2019 version following consultation with industry. Section 4.1 of DCCOPP is titled 'Data Centre Flexible Demand' and it provides clarity on the flexible arrangements entered into by data centre operators in what are identified as "constrained ereas". This section provides clarity on the definition of a "constrained area", as follows:

"EirGrid identify constrained areas as areas where there is a risk or potential risk that the level of demand may be greater or has the potential to become greater than the level of supply currently available or that will be available in the coming years. At present, EirGrid has identified the greater Dublin region as constrained."

- 1.8 Section 3 of DCCOPP sets out the connection offer process for data centres which includes an overview of the process and confirms:
 - *5. The connection offer then issues to the customer after Stage 2 and if accepted will book that customer's required capacity on the transmission system."
- 1.9 This was the process and policy in place when the Applicant entered into its connection agreement for the connection of the Grangecastle Business Park Extension, Dublin 22 (the "Facility") to the transmission system in August 2020² (the "Connection Agreement"). The Connection Agreement represents contracted capacity within an identified constrained area which the TSO saw fit to allocate to the Applicant in accordance with its statutory duties and functions.
- 1.10 This is a regulated agreement which is subject to the 'General Conditions of Connection and Use of the System' and which provides for the connection of the Facility to the transmission system and to transfer electricity to the Facility through the transmission system.
- 1.11 The TSO is responsible for connection to the transmission system and allocation of capacity by way of Connection Agreement. Section 34 of the Electricity Regulation Act 1999 (as amended) (the "1999 Act") provides:

"Terms for connection to and use of transmission or distribution system.

34(1) Subject to subsection (4), where an application is made to the Board by any person, the Board shall offer to enter into an agreement for connection to or

https://www.eirgridgroup.com/site-files/library/EirGrid/Data-Centre-Connection-Offer-Process-and-Policy_v2_July-2020.pdf

² granted under SDCC Planning Ref. SD21A/0042.

The Government Statement provides a pathway towards new data centre development subject to the following considerations:

"Within the constraints of sectoral emissions obligations, these principles set out the positive role that data centres can play, subject to meeting the requirements set out under the applicable planning and grid connection processes."

The Proposed Development falls under the extant Edgeconnex Grid Connection Agreement with EirGrid in respect of the Campus Facility. Additionally, the Permitted Development establishes the Power Plant, which is scaled as permitted to cover the Proposed Development, and which does not fall to be reconsidered under the current application.

Notwithstanding that the power strategy for the campus is already established, as set out below, the Proposed Development is considered to align fully with the Government Statement, and Edgeconnex (of which the First Party is a group company) continues to pursue its commitment to reaching net zero provision of data services, including as a signatory of the Climate Neutral Data Centre Pact.

The Government Statement sets out six principles that should inform and guide future data centre development. The First Party and the Proposed Development meets these on the following basis:

Economic impact

"The Government has a preference for data centre developments associated with strong economic activity and employment."

Edgeconnex (of which the First Party is a group company) is a leading, highly experienced developer and provider of data centres worldwide. As well as having already commenced development on the first phase of the already Permitted Development on the Facility Campus, creating c. 250 construction jobs over a prolonged construction period, the Proposed Development in combination with the Permitted Development will create c. 200 full time positions in the areas of IT, finance, project management and security on this campus, with further employment based on the eastern campus. Both the Permitted Development and the Proposed Development will support future Irish investment by the First Party in Ireland creating resilient IT infrastructure and will further support the attractiveness of Ireland as a location for ongoing foreign direct investment.

The Government Statement itself specifically recognises the major economic impact of data centres and cloud infrastructure in Ireland, stating the following:

"Data centres represent a core digital infrastructure for both Ireland's and Europe's digital economies and for strengthening Ireland's position as a strategic international location for IT services. This is the infrastructure that lies behind all digital aspects of our social and work lives, including video calling, messaging and apps, retail, banking, travel, media, and public service delivery in areas such as healthcare and welfare.

Data centres enable digital economies through hosting critical software and data that allows the world's leading companies to run their businesses, organise their supply chains, pay their staff, and host video conferencing applications. These are the suite of technologies and services that have facilitated the digitalisation of our economy, our work lives and many of the online applications, services and platforms widely used across society. During the pandemic, they enabled business and communities to quickly move to a remote model. Data centres also host and deliver entertainment and content services into homes.

More broadly however, data centres are also the means by which Ireland's major technology companies process and store companies' most sensitive and strategic assets. They are also the means by which they are transitioning their businesses to the cloud, making Ireland critical to their global presence. Investments by technology multinationals in large, long-life assets such as data centres further secures the presence of the global technology sector in Ireland.

Ireland is home to a significant cluster of digital infrastructure and service providers. To maximise the benefits of technology advancements including from 5G, AI [Artificial Intelligence] and virtual reality, Ireland will need to continue to facilitate sustainable data centre development and the associated technological and economic spillovers."

The Government Statement, under this principle, also notes that any data centre development should accord with the provisions of the relevant Regional Spatial and Economic Strategy and the NPF. The Proposed Development is aligned with the policies of the Regional Spatial and Economic Strategy for the EMRA and the NPF

National Strategic Outcome 6 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation.

The following objective, relating to ICT infrastructure (including datacentres) is included under National Strategic Outcome 6:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The current application proposes the provision of a new data centre building, in a location which is well suited and serviced to accommodate such a use. The NPF further states under National Strategic Outcome 6:

"Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data centres. This sector underpins Ireland's international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources."

Having regard to the above, the NPF is clearly favourably disposed to the location of ICT infrastructure in Ireland, and the Proposed Development, which comprises of such ICT infrastructure, is therefore considered to be wholly in accordance with this key body of national planning policy, and as set out in section 6(i)also with regional planning policy under RSES.

It is submitted that the subject site is an appropriate location for the development of new ICT infrastructure development having regard to the site's zoning, its strategic and accessible location in close proximity to the national road / motorway network.

In the context of this first criteria, it is important to first note that the Government Statement itself highlights the positive national economic impact that data centre development has had (and consequently can continue to have) in Ireland. It states the following:

"Digital Infrastructure such as data centres underpins our technology sector, which is increasingly cloud based. Ireland's technology sector accounts for €52 billion (16%) of gross value added and employs 140,000 people — equivalent to 6 per cent of total national employment with 40 per cent growth over the last five years.

A CSO publication, Information and Communications Technology: A Value Chain Analysis 2019, highlights the economic contribution of the ICT sector. In 2019, output for the ICT sector amounted to €128bn. Total exports of services from the sector were some €121.4bn from both foreign and domestic firms, with domestic ICT companies exporting 37 per cent of their output. Technology companies invested €46bn in fixed capital assets in 2019, with R&D investment of €1.392 bn."

The Government Statement also sets out that data centres do not represent 'optional economic infrastructure', and states the following:

"Data centres are not a separate or optional economic infrastructure – they are integrated into our datadriven knowledge economy and information society. Digital infrastructure should be assessed in the context of the total economic value it gives rise to, including employment across the value chain, as well as its role in underpinning the evolving data economy. Our data-driven technology sector drives innovation, productivity, and overall economic activity. The data stored in Irish data centres underpins an increasing base of employment intensive businesses."

In addition, the Proposed Development will support an extensive ecosystem of equipment suppliers, operations, maintenance and service providers, a significant proportion of which will be based in Ireland.

Global cloud service providers employ thousands of highly qualified professional staff in Ireland, in well paid employment. The Proposed Development would therefore contribute towards maintaining Ireland's position as a leading exporter of cloud-based IT services, as recognised within the Government Statement.

Therefore, the Proposed Development fully aligns with this principle of the Government Strategy.

Grid capacity & efficiency

"The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints."

This matter is comprehensively addressed under Section 8 of this appeal.

Edgeconnex (of which the First Party is a group company) is an industry leader in data centre energy efficiency. They have enabled waste heat reusage and are in discussions with various Irish and international energy providers specializing in providing solutions in Ireland to maximise opportunities for renewable energy use onsite

The development is subject to an existing connection agreement with EirGrid as detailed within this appeal, which was modified in 2022. The already permitted Power Plant is designed and scaled to alleviate constraints on the grid, and provides for reliable, dispatchable energy supply in line with the provisions of the Government Statement and the CRU direction to system operators requiring generation capacity of this nature for new data centre developments.

The permitted power plant as granted under SDCC Planning Ref. SD21A/0042, and as amended under Planning Ref. SD22A/0289 has a dual permitted purpose, as follows:

- 1. to provide continuous power to the permitted and proposed data centres should the EirGrid connection not be realised at the time of commissioning of the facility. This is expected to be a maximum of two years.
- once the Eirgrid connection is realised the gas plant will only ever be utilised to reinforce the national grid.
 In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy.

This is not in conflict with condition 3(iii) of SDCC Planning Ref. SD22A/0289 as that condition requires for the Plant to be removed in totality, for there to be no future need by Eirgrid for the Plant as a back up to the national grid. The permitted plant will therefore provide security of supply to the national grid, where currently renewables cannot, by providing additional capacity under the terms of the flexible connection agreement. Subject to the requirements of the CRU Direction, currently all Data Centre connections being offered by EirGrid in the Dublin region are being offered on a flexible basis. Flexible demand is electrical load for a data centre that must be reduced on instruction from Eirgrid via the National Control Centre (NCC).

The applicant also has a gas connection agreement from Gas Networks Ireland (GNI) to supply the permitted Power Plant.

The Power Plant and Edgeconnex Grid Connection Agreement that will serve the Proposed Development are established and extant, and do not fall to be reconsidered as part of the current application or appeal. The Proposed Development, representing the third phase of an overall data centre campus, will make use of the available capacity in the existing Edgeconnex Grid Connection Agreement and the already permitted Power Plant, which is wholly in accordance with the foregoing principle of the Government Statement.

As part of their wider development, the First Party has also submitted a SID application for and committed to the delivery of a new high voltage substation and grid connection, representing a direct contribution to and development of the national high voltage electricity grid in the area.

Based on the foregoing, full compliance with this principle of the Government Statement is achieved.

Renewables additionality

"The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland."

Edgeconnex (of which the First Party is a group company) goal is to achieve a goal of being net zero carbon by 2030. In order to do so, they are making technology investments that reduce emissions. For example, Edgeconnex (of which the First Party is a group company) has a public commitment to ensure that by 2025 they no longer just offset but ensure that their PPAs match their consumption on an hourly basis.

The First Party is committed to engaging in positive developments for the Irish energy market through their engagement with PPAs. The First Party demonstrates this commitment in the current appeal by noting their willingness to accept a condition attached to any grant of permission for the Proposed Development, requiring that details of PPA's to be submitted to the Planning Authority prior to the operation of the Proposed Development, to demonstrate further engagement in a PPA for renewable energy in respect of the Proposed Development's energy use.

Customers at all their campuses globally can take advantage of renewable energy to reduce their carbon emissions. In Ireland, Edgeconnex (of which the First Party is a group company) is in discussions with potential renewable project providers that will provide additionality to the Irish electric grid.

In addition to the foregoing, it should be noted that the previously permitted Power Plant for the campus, which will also serve the Proposed Development, has been designed to accommodate biogas and hydrogen as fuel sources. The permitted Power Plant thereby directly supports and aligns with this pillar of the Government Statement.

Further details in this respect are provided in the latter sections of this appeal document, and it is confirmed that the Proposed Development complies with the foregoing principle of the Government Statement.

Co-location or proximity with future proofing energy supply.

"The Government has a preference for data centre developments in locations where there is the potential to co-locate a renewable generation facility or advanced storage with the Data Centre, supported by a Corporate Power Purchase Agreements, private wire, or other arrangement."

In relation to this principle, it is noted that the Facility Campus (which the current development will form part of) entails the permitted Power Plant which is designed to accommodate operation on renewable fuel sources.

The Government Statement sets out the following in relation to this principle:

Where the combination of technologies at a generation facility is built to match the demand capacity factor (e.g., endeavouring to match the maximum import capacity with export capacity), the same infrastructure may be able to assist both demand customers and generation facilities (wind/solar/battery farm). This would make efficient use of grid investments, reduce curtailment and potentially enable significant decarbonisation of the data centre. The Government also encourages the co-location of downstream value-adding activities that can make use of carbon, excess heat and other outputs from the data centre activity, such as for horticultural activities or district heating schemes."

As set out in detail later in this appeal document, the First Party is committed to, and would accept a condition requiring, their engagement in CPPAs for renewable energy to support the proposed data centre development in direct compliance with this principle of the Government Statement.

Additionally, the Permitted and Proposed Development makes provision for district heating in addition to reusing waste heat on site, which further demonstrates compliance with this principle. We refer the Board to section 8 of this document which sets out the grounds of appeal for further details in relation to the First Party's commitment to securing PPAs, as further evidenced by the correspondence with PPA providers included at Appendix D to this appeal document. The Proposed Development aligns with this principle of the Government Statement on this basis.

On this basis, the development fully complies with the foregoing principle.

Decarbonize data centres by design

"The Irish Government has a preference for data centres developments that can demonstrate a clear pathway to decarbonize and ultimately provide net zero data services."

Edgeconnex (of which the First Party is a group company) is committed to a clear pathway to achieving net zero carbon emissions for operations by 2030 and to drive emission reductions across the entire value chain. In energy, Edgeconnex (of which the First Party is a group company) guiding principles are to minimize energy use through efficient design and operations, and to decarbonize energy supply. The First Party, as recognised under the Permitted Development seeks to utilise cleaner fuels for on-site backup power generation, when they become available.

As set out in further detail below, the First Party is also committed to pursuing PPAs to offset the energy usage of the Proposed Development with new renewable energy generation. It is proposed that the First Party will ensure that long term PPAs for renewable areas and Guarantees of Origin (GOs) as described in Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 will be put in place to promote the decarbonization of the Facility Campus.

Additionally, the permitted Power Plant for the overall data centre campus is designed to use biogas and hydrogen as these fuel sources become widely available. Furthermore, as set out in this appeal document, Edgeconnex (of which the First Party is a group company) is a signatory of the climate neutral data centre pact, which entails binding commitments to achieving decarbonisation and net zero data services.

The proposals are in line with this principle of the Government Statement and the First Party has demonstrated concrete commitment and steps to proactively decarbonise their operations.

SME access and community benefits

"The Government has a preference for data centre developments that provide opportunities for community engagement and assist SMEs, both at the construction phase and throughout the data centre lifecycle."

Edgeconnex (of which the First Party is a group company) is committed to prioritise engagement with local communities to develop innovative solutions to proactively address opportunities and mitigate negative impacts. These include investment in schools, training, and education; sponsorship; support programmes to develop the technology workforce and skills required by its workforce; support local business both directly and indirectly; and supporting creativity and the arts.

In response to this principle, it should be noted that the delivery of the Proposed Development on the subject site will give rise to significant direct and indirect benefits for SMEs in the area during the construction process. Additionally, the operation of the development will give rise to the need for a range of support services and secondary employment, including benefits to SMEs in South Dublin and the wider area.

The Proposed Development will support an extensive ecosystem of equipment suppliers, operations, maintenance and service providers, a significant proportion of which will be SMEs based in Ireland. These SMEs will benefit from the Proposed Development both during the construction and operational phases of the Proposed Development.

The impact of the Proposed Development in terms of the geography of the area, and on the local population in terms of amenity and environmental quality (as referenced within the Government Statement in the context of this principle) will be mitigated in line with the contents of the EIAR. We refer to the EIAR for further details in this regard.

The Proposed Development will give rise to significant benefits for SMEs and the First Party is committed to actively benefiting the local community, in line with this principle.

The First Party is engaging extensively with the local community and is committed to continuing this engagement and involvement going forward.

The First Party have already committed to establishing a public park within the northern part of the Facility Campus as part of phase 2 of the Permitted Development on the overall site. This will establish an amenity for all local residents and visitors to use adjacent and connecting with the canal.

The First Party is committed to advancing the goals behind the Six Principles, as the examples above demonstrate. The First Party's strategy, developments, and operations are aligned with, and supportive of, government policy.

As a responsible company, committed to sustainability and decarbonisation, the First Party wishes to continue to work with the Irish government, all stakeholders and our neighbouring communities, to continue growing Ireland's position as a leader in the digital age for cloud computing, and to maximise the benefits of this investment for society and the economy. Their investment in Ireland will aid revitalisation and progress in the digital age that will support current businesses and attracting new ones, preparing the current and future workforce for high-tech careers at home in Ireland.

The Proposed Development therefore fully conforms to this current government policy and will adhere to any future government policy.

iv. Climate Action Plan 2023 (the "Climate Action Plan")

The First Party recognises the need to balance the demand for development with climate action and resilience that is reflected in both the Council's own Climate Action Plan 2019; as well as the national Climate Action Plan 2023. This Climate Action Plan has replaced the Climate Action Plan 2021, that contained policies and long term aims that were based on continuing to facilitate data centre development, subject to certain criteria, and future reviews, up to 2030. The Climate Action Plan 2023 recognised and took account of the changes in demand for electricity over the next 10 years; and that this will alter the profile for demand and recognises that the forecast growth in data centres will represent a challenge to Ireland's emissions targets.

Government policy set out under the Climate Action Plan, states that the strategy in the short and medium term on large energy users, such as data centres, will have to be moderated to protect security of supply and ensure consistency with the carbon budget programme.

We respectfully submit that the County Development Plan, following the Ministerial Direction reflects this and requires data centre applications, such as the Proposed Development, to be considered on their individual merits having regard to EirGrid and CRU policy but also the criteria set out under Policy EDE7 Objective 2 of the County Development Plan.

7. Decision of the Planning Authority

The decision of the Planning Authority to refuse permission was made on the 20th July 2023, following the above Al request and our comprehensive response. It is notable that all other aspects of this complex application were considered as acceptable or able to be addressed via a condition of planning. The two reasons for refusal cited by the Planning Authority were:

- 1. Having regard to the existing insufficient capacity in the electricity network (grid), the lack of a fixed connection agreement to connect to the grid, the lack of significant on site renewable energy to power the proposed development, the lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland, and the reliance on a gas powered plant to provide energy to the development, it is considered that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 Objective 2 and Section 12.9.4 of the South Dublin County Development Plan 2022-2028. In this regard the proposed development, would, therefore, be contrary to the proper planning and sustainable development of the area.
- The proposed development does not comply with GI1 Objective 4, GI2 Objective 2, GI2 Objective 4, NCBH11 Objective 3 and GI5 Objective 4 the South Dublin County Development Plan 2022-2028 in relation to the retention and protection of existing green infrastructure and provision of green infrastructure.

We respectfully submit that the two reasons for the refusal of permission relate to Policy EDE7, Objective 2, and the impact on green infrastructure, both of which we will comprehensively address under the following section of this appeal.

8. Grounds of appeal

The full grounds of appeal together with the arguments, reasons and considerations upon which these are based are set out below. For clarity and ease of reference we propose to deal with each individual element of the decision to refuse permission as stated in the Notification of Decision to Refuse Permission of South Dublin County Council and outline our response to each element in turn.

REASON FOR REFUSAL NO. 1

The first reason for refusal was as follows:

1. Having regard to the existing insufficient capacity in the electricity network (grid), the lack of a fixed connection agreement to connect to the grid, the lack of significant on site renewable energy to power the proposed development, the lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland, and the reliance on a gas powered plant to provide energy to the development, it is considered that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 Objective 2 and Section 12.9.4 of the South Dublin County Development Plan 2022-2028. In this regard the proposed development, would, therefore, be contrary to the proper planning and sustainable development of the area.

This reason for refusal stems from Policy EDE7, Objective 2 and section 12.9.4 of the County Development Plan. We note that this policy objective contains ten objectives that are required to be demonstrated. In their assessment of the Al submitted in relation to the application, the Planning Authority concluded that all other elements were acceptable but that the application should be refused based on elements that related to:

- i. having regard to the existing insufficient capacity in the electricity network (grid);
- ii. the lack of a fixed connection agreement to connect to the grid;
- iii. the lack of significant on-site renewable energy to power the Proposed Development;
- iv. lack of evidence provided in relation to Power Purchase Agreements (PPAs) in Ireland; and
- v. the reliance on a predominately gas-powered plant to provide energy to the development

We respectfully submit that their conclusions relating to the above matters were both incorrect and indicate a misunderstanding of how connection agreements and PPA's work and operate. In addition to this planning response to this aspect of the decision, we include a legal advice note from Mason Hayes & Curran LLP (Appendix A).

Existing insufficient capacity in the electricity network (grid)

The Planning Authority in its decision has stated that it has had regard to the "existing insufficient capacity in the electricity network (grid)" in relation to making its decision. The First Party submits that it is not within the planning authority's remit to determine whether there is sufficient capacity on the national grid. Nevertheless the First Party has obtained a connection agreement from EirGrid in respect of the Facility Campus (which includes the Permitted Development and Proposed Development) - i.e. the Edgeconnex Grid Connection Agreement.

EirGrid, in accordance with policy directions from the CRU, develop policy criteria that grid connection applicants are required to satisfy in order to obtain a grid connection agreement. These policy criteria are largely designed to take into account capacity constraints on the National electricity grid.

In this regard, it is respectfully submitted that the only reasonable interpretation of this policy criteria is demonstration of compliance with national policy in this area, specifically EirGrid policy, as determined in accordance with policy directions from the CRU.

The First Party has satisfied these policy criteria, which is clearly evidenced by the Grid Connection offer and subsequent Edgeconnex Grid Connection Agreement and the First Party respectively submits that the Planning Authority should be satisfied that EirGrid (as TSO for the Irish transmission system electricity grid and therefore the appropriate authority on this matter) has determined that the Facility Campus can connect to the grid and the Planning Authority should not have its own regard to this matter in its assessment of the First Party's Planning Application.

We have set out EirGrid's policy criteria in more detail below.

In addition, we refer the Board that the original Edgeconnex Grid Connection Agreement of the First Party was made in 2019, and entered into in 2020 and was subsequently amended in 2022 that were primarily technical changes but that the terms of the Agreement remained the same. We can confirm that the Edgeconnex Grid Connection Agreement has been signed, the Bond paid, and all connection charges are fully paid.

The permitted Power Plants are scaled to ensure that the Permitted Development and the Proposed Development being progressed by the First Party will not result in further capacity issues on the electricity network, the overall development will in fact add to the resilience and stability of the grid.

Are there constraints that warrant a refusal of permission?

It is not in question that there are restrictions and constraints, outside of the planning process, that govern the ability of a data centre to operate, including in relation to connections to the national grid. Currently all Data Centre connections being offered by EirGrid in the Dublin region are being offered on a flexible demand basis where dispatchable energy generation is provided on site.

EirGrid have also noted the following in relation to Data Centre Connections under DCCOPP:

- 1. Flexible demand will be available to customers seeking to connect in constrained areas.
- 2. Capacity review to be performed following the annual T-4 capacity auction to determine if additional firm access can be made available.
- Firm capacity will be provided for data centres where on-site dispatchable generation is made available to EirGrid.
- 4. Connection offers are based on planning permission for a site and must line up with the capacity sought.
- 5. Flexibility will be allowed for MIC ramping in constrained areas.

These policies of EirGrid are driving the need for on-site dispatchable generation on all data centre sites to ensure security of supply for the grid as a whole (see point 3), until such time as transmission and generation capacity short-falls are addressed.

On-site dispatchable energy generation capacity is already provided to the Proposed Development by the permitted Power Plant granted under the Permitted Development, which is unaffected by the current proposals representing the third logical phase of the overall development of the First Party's landholding. Therefore, the overall dispatchable generation element of the overall Facility Campus is established under the extant permission and does not fall to be reconsidered as part of this application or appeal process.

This is a critical point to consider when assessing any new application for a data centre, and even more critical when considering the Proposed Development, given that the Facility Campus is already permitted for an onsite dispatchable generation plant (the Power Plant) with capacity to initially provide continuous power to the Permitted and Proposed Development should the EirGrid connection not be realised at the time of commissioning of the facility. The Power Plant also has the capacity once the EirGrid connection is realised to reinforce the national grid. In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy.

EirGrid have stipulated that this generation must be capable of running continuously for an extended period of time and not limited by fuel reserves. Currently, this policy rules out the ability for renewables to fully power any data centre development in Ireland and is reflective of the EirGrid policy for allowing connection agreements where on-site dispatchable power is provided.

The First Party has sought to maximise use of renewables through the design and future proofing of the Power Plant so that it has capacity to accept biogas and hydrogen when it becomes available. The Power Plant therefore complies with the current EirGrid policy requirements, while also providing for net additional renewable generation on site in the future. This approach ensures that the grid will not be negatively impacted by the Proposed Development.

This policy was further confirmed by the CRU and their Direction CRU21/124 that was issued on the 23rd November 2021 (and post-dates the DCCOPP and Edgeconnex Grid Connection Agreement) that set out the future regulation of the electrical connection of data centres in Ireland.

The Direction by the CRU acknowledged the value of allowing the data centre market to continue to develop and grow in Ireland, while also recognising the role that they need to play in the stabilisation of Ireland's electrical grid. The CRU Direction requires EirGrid to apply the following assessment criteria on a case-by-case basis, in determining whether a connection offer should be made to an applicant data centre in this location:

The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by EirGrid in times of system constraint. This includes both with, and without, the use of dispatchable on-site generation and/or storage, which meets appropriate availability and other technical requirements as may be specified by EirGrid.

The Government Statement recognised that data centre operators, such as the First Party, in accordance with the above cited policies, have an opportunity to play a pivotal, and positive role in the development and stabilisation of Ireland's electrical grid infrastructure while also allowing the development of the Irish data centre hosting market, and its role within Ireland's Enterprise Strategy to continue.

The Government Statement recognises this in conjunction with the CRU Direction and states:

"...allows the data centre industry to continue to connect to the electricity grid, subject to certain conditions. New data centre connections are required to have on-site generation (and/or battery storage) that is sufficient to meet their own demand and, to assist in full decarbonisation of the power system, this generation should also be capable of running on renewably sourced fuels (such as renewable gas or hydrogen) when supplies become more readily available."

We respectfully submit that the processing of the Edgeconnex Grid Connection Agreement, reflects EirGrid's assessment that a connection offer can be made to the applicant who are the First Party in this instance, as their proposed connection will be consistent with the needs and constraints of the electricity system and National Grid, as set down by their own policy and that of the CRU. The connection is currently due to be operational in 2024/5 and will be phased.

ii. Lack of a fixed connection agreement to connect to the grid

We respectfully refer the Board to the legal opinion by Mason Hayes & Curran LLP on the role of EirGrid, rather than SDCC, in determining sufficient grid capacity, the Government policy on grid connections, and the meaning of a flexible arrangements. We refer the Board to the fact that the reason for refusal cited by the Planning Authority raised the question of whether the First Party had a grid connection agreement in place to serve the Proposed Development. Notwithstanding that it is EirGrid's role to determine grid capacity, the First Party has the benefit of contracted capacity through the Edgeconnex Grid Connection Agreement.

This aspect of the refusal cited "the lack of a fixed connection agreement to connect to the grid" as a ground for rejecting the Planning Application. In considering this matter, rather than seeking a Clarification of the Additional Information, the Planning Authority reached a conclusion that the Edgeconnex Grid Connection Agreement that was used for both previous planning applications under Planning Ref. SD19A/0042 and SD21A/0042, was not sufficient to demonstrate connection to the electricity grid for the purposes of the current application.

We respectfully submit that *EDE7 Objective 2* does not require a fixed connection agreement to be in place. Rather it notes that the Applicant must demonstrate sufficient capacity in the electricity network. In this regard, we would note that EirGrid makes this determination and the Proposed Development is in accordance with EirGrid and the Government's policy for the use of the grid by data centres.

Explanation of the wider connection offer process

We respectfully submit that the decision of the Planning Authority indicates a complete misunderstanding of EirGrid's current data centre policy as set out in the DCCOPP, the CRU Direction and the First Party's own connection agreement. It also, in our considered opinion, outstretches the role of the Planning Authority above and beyond its remit.

Notwithstanding the planning authority's approach in this regard, the First Party complies with national policy on energy provision for data centres. As part of this, the First Party's Facility Campus already has a connection

agreement that will be facilitated by a connection from the transmission lines and substation that are subject of the concurrent SID application. This was the situation previously when the Permitted Development was granted on the site, and remains the position.

Who provides connection agreements?

It is without doubt the role of EirGrid to provide connection agreements to data centre operators in Ireland. Under current EirGrid policy Flexible Demand Offers are the only offers being provided to data centre operators in constrained network areas such as the subject site.

The importance of the flexibility in demand both for the enterprise economy that forms a corner stone of government policy but also facilitating the transition to decarbonisation is recognised in the recent government document in that it states:

"Securing flexibility in demand from a data centre is more straightforward than getting the same flexibility from a similarly sized block of demand made up of a diverse set of small businesses, public facilities, and domestic users. As renewables grow in importance, a more flexible pattern of data centre demand can reduce the need for fossil-fuel generated electricity and help with decarbonisation."

Progress to this stage of the connection agreement has been facilitated by the granting of two valid planning permissions on the First Party's site that forms Phase 1 and 2 of the development of their Facility Campus, as well as the grant of permission for the substation.

As the primary fuel of the Power Plant is gas, this plays a part in decarbonising the grid – as acknowledged in the Climate Action Plan adopted by government. The Power Plant will provide stable power to the grid in order to facilitate the greater resilience of the grid and to enable the penetration of additional intermittent renewables in the short term. This in turn will contribute to helping Ireland meet its required 2GW of flexible gas fired generation as identified in the 2021 Climate Action Plan and endorsed in the 2023 Climate Action Plan, which is a key enabler for the continued increase in renewable penetration on the grid.

We respectfully submit that this fourth objective of Policy EDE7, Objective 2 has been interpreted in a manner that is beyond the remit of SDCC. Current national policy is to facilitate new data centre development by ensuring that on-site dispatchable energy of the same or equivalent is available on the same site, as well as other considerations as set out within this appeal that influence the acceptability of new data centre development, that the First Party meets in full, including the Government Statement.

We respectfully request the Board to conclude that the First Party is in compliance with the need to demonstrate that there is sufficient capacity in the network. Any demand not met by the flexible connection agreement, will be met by the onsite Power Plant.

The adjacent UBC Properties and nearby VDC campuses within Grange Castle and Profile Park, have similar arrangements. The Planning Authority were therefore incorrect to cite the lack of a fixed connection as a reasonable reason for refusal in this instance. We therefore request the Board to overturn this aspect of the Decision and grant permission in this instance.

iii. Lack of significant on-site renewable energy to power the proposed development We understand that this refusal ground relates to the following requirement under Policy EDE7 Objective 2:

"Maximise onsite renewable energy generation to ensure as far as possible 100% powered by renewable energy, where on site demand cannot be met in this way provide evidence of engagement with power purchase agreements (PPA) in Ireland;"

There are two elements to the above requirement, first the applicant must maximise onsite renewable energy generation to ensure as far as possible it is 100% powered by renewable energy. Where an applicant cannot do this, it can satisfy the requirement by providing evidence of engagement with PPA in Ireland. The First Party submits that it can meet the second element of this requirement (in relation to providing evidence of engagement with PPAs in Ireland) and in this regard refers the Board to point 4 below and the KPMG letter within Appendix D where the First Party demonstrates that it has satisfied this requirement.

On review of the specific wording of EDE7 Objective 2, it is clear that the objective seems to promote on site renewable generation as far as possible, however, in circumstances where this is not possible, evidence of engagement in PPAs will be sought as an alternative. The Planning Authority's Chief Executive's Report also made it clear that evidence of engagement with PPA's was relevant on the basis that the primary energy source would not be on-site renewable energy.

As set out previously in this appeal document, in the context of the Government Statement, while the subject site does not provide for an opportunity to power the Proposed Development via on site solar or wind generation, it is noted that the Facility Campus (which the current development will form part, and the third and final phase of) entails the permitted Power Plant which is designed to accommodate operation on renewable fuel sources.

The Proposed Development and the wider Facility Campus do provide for on-site generation which is designed to accommodate renewable fuel sources, however notwithstanding this, this appeal document also sets out robust evidence of engagement with renewable PPAs in Ireland in respect of the Proposed Development.

The requirements of EDE7 Objective 2 are clearly satisfied by the Proposed Development, on the basis of which the Decision ought to be overturned.

iv. Lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland

We refer the Board to the consideration of the third objective of Policy EDE7, Objective 2 of the County Development Plan in the Chief Executive's Order (page 63 and 64). In this, the Planning Authority outline that, in their considered opinion, the use of natural gas to power the already permitted Power Plant, which will aid the security of the National Grid in the longer term, and ensure no notable impact on it in the short-term, is not renewable and therefore that the applicant should provide evidence of engagement with PPA providers to be fully in accordance with this part of this Policy under the County Development Plan.

It is worth noting the purpose of a PPA in a practical context. A PPA is an agreement between two parties, typically a power producer and a buyer, regarding the purchase and sale of electricity. The power producer, often a renewable energy company or a generator, agrees to produce a certain amount of electricity over a specified period. The buyer, who could be a corporation, a government entity, or even an individual, agrees to purchase that electricity at a predetermined price.

As PPAs are commercial agreements, they must work for both parties and may be renegotiated from time to time. For example, the power producer is generally looking to ensure a steady or secure income. While the buyer is looking to secure best value of the power they are purchasing. As a result, PPAs are generally utilised to cover a baseline energy requirement.

As a relatable example, a homeowner would look at their baseline electricity usage – i.e., items that are run in a predictable pattern such as the refrigerator, heating system, internet router, etc. – and would then look to cover that usage via a PPA. Unpredictable usage – such as boiling the kettle, charging phone, watching TV, etc. – would then be considered using "spot" price purchasing. To ensure the spot purchase is also from a renewable source, Guarantee of Origin certificates could be sought.

We refer the Board to the fact that as part of this appeal correspondence from KPMG (a broker for PPAs and the First Party's main partner in the sourcing of PPAs) is submitted, which confirms that the First Party has been engaging actively in the pursuit of a PPA in respect of the Proposed Development, and we can also confirm that they are actively pursuing a PPA for the Power Plant.

It is standard and common practice in Ireland for large energy users, such as data centre operators, such as the First Party, to utilise brokers in engaging with renewable energy providers in sourcing PPAs. The brokers have the expertise and contacts in the Irish PPA market; is a faster process for the First Party rather than having to deal with several renewable PPA providers and it enables them to get access to a number of net additional renewable projects rather than having to negotiate with each one.

This represents clear and unequivocal evidence of the First Party's engagement with Power Purchase Agreements in Ireland. We can also confirm that the First Party has directly engaged with owner operators of renewable energy infrastructure assets in Ireland on terms of PPAs.

Due to the fact that the design of the permitted Power Plant allows for the use of biogas and hydrogen in the future, the overall campus being progressed by the First Party will also provide a direct opportunity for additional renewable energy generation on site.

This therefore confirms that the Proposed Development is fully in accordance with this third objective of Policy EDE7, objective 2 of the County Development Plan.

As outlined above the wording of this objective of the County Development Plan can only reasonably be interpreted as requiring a confirmation that discussions have taken place between the First Party and PPA providers. In our view, there is no requirement under this objective beyond this. Indeed, it is an issue that could easily have been addressed by a condition of permission that would have been reasonable in terms of ensuring both compliance with this objective, and a greater certainty of the Proposed Development entering into PPA's with renewable energy providers. We can confirm that the First Party would welcome such a condition from the Board. We would suggest the following as suitable wording:

"Prior to the commencement of operation of the development hereby permitted, the developer shall submit to the Planning Authority details of a Corporate Power Purchase Agreement that the developer has entered into which demonstrates that the energy consumed by the development on site is offset with renewable energy generation."

The Government Statement identified the preference for data centre developments to be supported by renewable generation facility to be supported by PPAs, private wire or other arrangements.

As noted previously, the Facility Campus at this location includes the permitted Power Plant which is designed to accommodate power generation via renewable fuel sources, allowing for transition towards carbon neutrality. Finally, as outlined above, the First Party is actively pursuing and committed to sourcing PPAs and to powering the development using renewable energy.

With regard to private wire arrangements, the necessary legislation does not currently exist to facilitate such an arrangement (albeit the First Party would welcome the option to avail of such an arrangement in the future, if legislation were to permit it).

The Government Statement outlines that PPAs have a key role to play in decarbonising the electricity sector and ensuring demand growth from large energy users, such as data centres, reduces the cost of reaching renewable energy targets. It recognises that data centre operators purchasing PPAs that add additional renewables, and use our electricity grid efficiently, can play a positive role in Ireland's renewable energy transformation. The First Party is committed to facilitating this transition by entering into PPAs with renewable energy providers fully in accordance with government policy and the policy of the County Development Plan. We respectfully submit that the reasonableness of the first reason for refusal as it relates to PPAs must be questioned by the Board given the wording of this objective. The objective indicates intent only (given the need for permission to have been granted for a development), as it would not be feasible to enter into / finalise a binding commercial agreement like a Corporate PPA in the absence of certainty provided by a grant of permission and is not a reasonable ground for refusal. As outlined in this appeal, it is a matter that could have been addressed by a condition of permission.

We respectfully submit that the First Party is committed to reducing carbon emissions and procuring carbonfree energy whenever possible, which is a requirement of the First Party under their signatory of the Climate Neutral Data Centre Pact. They have provided evidence of engagement with renewable energy PPA suppliers in Ireland, and in addition are willing to be conditioned that any grant of permission requires them to provide further evidence of this fact prior to the occupation of the development (see wording of suggested condition above). We can confirm that the First Party are committed to procuring electricity from 100% renewable sources.

The First Party fully commits to continuing their positive engagement in procuring PPAs in Ireland to support the ongoing development of renewable energy capacity. The First Party is also investigating how the previously permitted Power Plant and the capacity for it to run on green gas or hydrogen can encourage the investment in their supply in Ireland.

We respectfully submit that this appeal indicates undeniably that the First Party has provided evidence of engagement with PPA's in Ireland fully in accordance with the third objective of Policy EDE7 Objective 2 of

the County Development Plan and the Government Statement. We therefore request the Board to overturn this aspect of the Decision and grant permission in this instance.

v. the reliance of on a predominately gas-powered plant to provide energy to the development It is unclear what application criteria this refusal ground relates to. Having an on-site generation plant that is predominately powered by natural gas is not, of itself, a ground for refusal. This would be contrary to the requirement relating to on-site energy generation under Policy EDE7 Objective 2. As explained further above, under this requirement, where an applicant cannot maximise its on-site generation by 100% renewable energy, it can still satisfy the requirement of this policy, if it provides evidence that it has been engaging with renewable PPAs in Ireland. In this regard, the First Party has provided evidence of engagement with PPA's and refers the Board to its responses to points ii and iv above for further detail, and Appendix D.

On this basis, the First Party submits that it has satisfied the requirement relating to on-site generation under Policy EDE7 Objective 2 (as per its responses to points ii and iv above) and that this refusal ground should not have been considered by the Planning Authority. Policy Objective EDE7 Objective 2 does not restrict the use of onsite gas as an energy source where 100% onsite renewable energy is not viable.

Furthermore, as set out previously, the Proposed Development is covered by the existing Connection Agreement. The First Party intends to procure renewable energy under the Edgeconnex Grid Connection Agreement and will not solely rely on the on-site generation plant (i.e. the Power Plant) to provide energy to the Proposed Development (as this refusal ground eludes to).

In addition, the Permitted Development encompasses the Power Plant, which is scaled to cover the Proposed Development also (the Power Plant should not be reconsidered under the current application). The principle, use, scale, and capacity of the Power Plant is established in planning terms, and is not open for reconsideration as part of the current application or appeal.

As noted in the appeal document, the Power Plant will reinforce the national grid, once the EirGrid connection is realised. In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy. This directly aligns with the CRU Direction to system operators and can support the increased penetration of intermittent renewable energy on the grid in line with the 2021 and 2023 Climate Action Plans.

It should also be noted that the Power Plant is designed to allow for the use of renewable biogas, and hydrogen to provide electricity. The First Party is committed to increasing its use of these renewable energy resources when they become more available at scale in the Irish market. As set out above, the First Party is also committed to engagement with renewable PPAs in Ireland and the securing of renewable energy to power the Proposed Development.

Having regard to the foregoing responses to each of the individual points raised within the first reason for refusal, it is submitted that the Decision should be overturned, and that the Board should proceed to grant permission for the Proposed Development, which complies fully with EDE7 Objective 2 of the County Development Plan.

REASON FOR REFUSAL NO. 2

The second reason for refusal was as follows:

 The proposed development does not comply with GI1 Objective 4, GI2 Objective 2, GI2 Objective 4, NCBH11 Objective 3 and GI5 Objective 4 the South Dublin County Development Plan 2022-2028 in relation to the retention and protection of existing green infrastructure and provision of green infrastructure.

We refer the Board to the fact that Policies GI1 Objective 4; GI2 Objective 2; GI2 Objective 4, NCBH11 Objective 3; and GI5 Objective 4 all informed the overall approach to the Proposed Development, and as amended as part of the AI response.

We refer the Board to our response to each of the cited objectives as a single response as follows. However, prior to outlining our response to each, it is useful for the clarity of the Board to set out each policy and objective,

use of the transmission or distribution system, subject to terms and conditions specified in accordance with directions given to the Board by the Commission under this section from time to time."

- 1.12 However, the TSO is not required to offer terms, and indeed by virtue of its obligations under Regulation 8(1)(a) SI No 445/2000 - European Communities (Internal Market in Electricity) Regulations 2000 (the "2000 Regulations") should not offer terms, if it is not in the public interest to do so, as set out in Section 34(4) of the 1999 Act, which provides:
 - *(4) The Board shall not be required under subsection (1) to enter into an agreement where —
 - (e) It has demonstrated to the satisfaction of the Commission that it is not in the public interest to provide additional capacity to meet the requirements to be imposed by that agreement..."
- 1.13 The Commission as defined under the 1999 Act is the Commission for Regulation of Utilities (the "CRU"). It is the CRU that is statutorily responsible for security of electricity supply in accordance with Regulation 28 SI No 60/2005 - European Communities (Internal Market in Electricity) Regulations 2005.
- 1.14 On 29 September 2021, the CRU published a 'Security of Supply Programme of Work', which was a programme to increase generation capacity to provide additional stability and resilience to the Irish energy system in the short to medium term. This referenced and was followed in November 2021 by the 'CRU Direction to the System Operators related to Data Centre grid connection (CRU/21/124)', directing them to implement a set of assessment criteria by which the system operators will process data centre grid connection applications. This was not a moratorium on data centre connections.
- 1.15 Also in November 2021, the Government released a 'Policy Statement on Security of Supply'd in which it approved that:

"the connection of large energy users to the electricity gnd should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid."

1.16 In this context, it is recognised by the Applicant that grid capacity is constrained in terms of the connection of data centre projects that are not yet contracted, as set out in 'Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy -July 2022', 5 which provides:

"In the short- and medium-term, new demand growth from large energy users, such as data centres, will have to be moderated to protect security of supply and ensure consistency with the carbon budget programme.

Electricity Grid Capacity and Energy System Transformation

EirGrid predicts that if all contracted capacity were connected, data centres would make up between 25% and 33% of Ireland's electricity demand by 2030. These

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³ https://www.cru.ie/publications/27388/

⁴ https://www.gov.ie/en/publication/a4757-policy-statement-on-security-of-electricity-supply/

⁵ https://www.gov.ie/ga/foilsiuchan/5e/281-government-statement-on-the-rote-of-data-centres-in-irelands-enterprisestategy/

forecasts are based on data centre projects already contracted to connect to the electricity system, which are all located in the Greater Dublin region. New data centre projects, not yet contracted to the electricity system, would only further increase electricity demand. EirGrid is aware of up to 1GW of these prospective data centre projects. This would present additional challenges for grid capacity and the emissions targets set for the electricity sector in the Climate Action Plan. 6

- 1.17 While the Applicant recognises that the TSO has identified such constraints, it is important to note that the Applicant is contracted to connect to and use the electricity system and does not fall to be considered as a 'prospective data centre project' in this respect. The Connection Agreement was entered into in advance of the above policy measures. However, the Connection Offer was received and the Connection Agreement entered into following introduction of DCCOPP and the identification of the greater Dublin area as a constrained
- 1.18 The Government statement on the role of data centres goes on to consider the extensive energy management efficiencies of data centres, as are demonstrable in the proposed development:

"In addition, many of these data centres require significantly large loads at a specific site. The average size of a data centre connection request to EirGrid is for a capacity of 80 MW. This has ramifications not only for the resilience of transmission network in those regions, but also to power system adequacy at a national level.

Extensive planning is required when commissioning the infrastructure to provide for data centres' energy needs. Data centres are typically large facilities with extensive energy management capability. As such, they may have the potential to provide local flexibility services, assisting the secure and efficient operation of the local electricity system. 'Flexibility services' means that a site can alter its electricity demand or generation, either by controlling its internal processes (e.g. heating and cooling demand), or using on-site storage or generation.

Some data centres have scope to flexibly reduce their electricity demand at times when the local or national power system is under pressure, either by shifting demand to other sites, or through the use of on-site storage or power back up facilities. <u>Data centres can support the operation of the local system in partnership with the transmission or distribution system operator.</u> "I

- 1.19 In this respect, there appears to be a clear lack of understanding by the planning authority as to the requirement for a 'fixed' Connection Agreement to demonstrate capacity.
- 1.20 The application of flexible demand arrangements provides the TSO with measures to effectively manage stability in the capacity of an area and was introduced on this basis, with mechanisms to 'turn down' a customer should any issues with capacity be identified.
- 1.21 This clearly falls within EirGrid's function as TSO "to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system".⁸

e at pages 9 - 10

⁷ at pages 15 - 16

Regulation B(1)(a) S.I. No. 445/2000 - European Communities (Internal Market in Electricity) Regulations, 2000

1.22 DCCOPP introduced flexible demand arrangements to ensure effective management of capacity in constrained areas. Section 4.1 of DCCOPP provides:

*Flexible demand is the portion of a data centre's electrical load that must be reduced on instruction from EirGrid via the National Control Centre (NCC). Where capacity availability in a particular area is constrained, EirGrid will reserve the right to apply flexible demand arrangements and this will be reflected as a requirement for connection offers for new data centres in that area.

- 1.23 Further, these flexible demand arrangements are subject to review following annual capacity auctions and where new on-site dispatchable generation is made available to EirGrid.
- 1.24 Such contracted capacity is considered by the TSO and the CRU when preparing their capacity forecast statement⁹ and identifying the transmission system requirements and demands in planning grid development, among other matters.
- 1.25 The Generation Capacity Statement 2022 2031 (the "GCS") provides:

"As part of the demand forecast process EirGrid examines the status of data centres and new large energy users using a range of factors. This process creates three credible low, median and high forecast scenarios.

There is very strong growth in this sector out to 2024, with continued growth towards the end of the decade.

This growth is from contracted projects only. As per the directive from the Commission for the Regulation of Utilities in November 2021, data centre projects that do not currently have connection agreements will be assessed on new criteria. Offers of new connections will be contingent upon the ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) with a capacity equivalent to or greater than their demand. This does not constitute a moratorium for data centres but according to CRU's direction¹⁹. 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.'

1.26 The GCS concludes:

"This changing demand and generation supply landscape for the island will require coordinated management of both the volume and type of new capacity, alongside new ways of managing increasing demand to ensure security of supply."

- 1.27 The approach taken by the planning authority in the instant appeal was misguided and outside its statutory remit on the following basis:
 - The proposed development is linked to a Facility which has a Connection Agreement and is therefore contracted capacity on the National Grid; and
 - The Connection Agreement is subject to terms which provide the TSO, EirGrid, with effective flexible demand management controls in the management of capacity on the National Grid; and

https://www.eirgridgroup.com/newsroom/elrarids-generation-capac/

¹⁰ https://www.cru.le/vp-content/uploads/2021/11/CRU21124-EirGrid-Direction-1.pdf

- 1.28 The planning authority acted outside its remit in considering 'existing grid capacity issues' without recognising that capacity has been contracted and so allocated to the Applicant.
- 1.29 The CE Report quotes the Applicant's response to the planning authority's request for further information as follows:

"the applicant has received and executed a grid connection agreement with Eirgrid to connect their permitted substation (known as Kishogue) into the national grid. This offer was made by Eirgrid on the 21st of August 2020 in the full knowledge of the constraints within the Greater Dublin area. Given this was made following both the 'Data Centre Connection Offer Process and Policy' Document published in July 2019 by Eirgrid and the National Climate Action Plan 2019; it is only reasonable to conclude that the locational requirements and other criteria in place at the time, were considered to have been met. The nature of this offer is that it will facilitate the gas plants permitted under the previous permission, as granted under SDCC Planning Ref. SD21A/0042 to supply and reinforce the national grid in c. Q1, 2024. The applicant also has a gas connection agreement from Gas Networks Ireland (GNI) to supply the permitted Power Plant."

- 1.30 The planning authority has erred in determining that the Connection Agreement, which is subject to flexibility mechanisms employed by the TSO to effectively manage capacity on the grid, demonstrates that sufficient capacity is not available in the electricity network. This is contrary to the purpose of the Connection Agreement which is subject to flexible demand arrangements.
- 1.31 Further, in its interpretation of this part of EDE7 Objective 2, the planning authority appears to place a burden on the Applicant that is entirely arbitrary and unattainable if demonstration of contracted capacity by way of a Connection Agreement to the transmission system is not an acceptable form of evidence for electricity capacity.
- 1.32 Indeed, as noted in the CE Report, it was accepted by the planning authority that:

"it appears that the proposed development was generally taken into account when designing and assessing the power plants (short-medium term power supply) and the GIS Substation (permanent power supply).

Notwithstanding this there are a range of significant technical and environmental factors that would also need to be considered in relation to demonstrating sufficient capacity within the electricity network. In order for the Planning Authority to consider that there is 'sufficient capacity in the network' in line with EDE7, a fixed EirGrid connection should be demonstrated. As the applicant has failed to demonstrate this and has also failed to demonstrate compliance with the third criterion of Objective 2 of EDE7, it is considered that planning permission should be refused".11

- 1.33 It is not clear what "significant technical and environmental factors" the planning authority refers to or how these could be demonstrated by way of a 'fixed' Connection Agreement.
- 1.34 It is a fact that the Applicant has a Connection Agreement for the connection of the Facility to the transmission system.¹² The flexible demand arrangements that apply to this Connection Agreement provide the TSO, the party responsible for the operation of a 'safe, secure and reliable' electricity grid, with effective controls for managing capacity in the area.

¹¹ at page 65

¹² granted under SDCC planning reference SD21A/0042

The Applicant has the necessary contracted capacity and the requisite access to secondary, back-up power should such flexibility be required or called upon by the TSO.

1.35 Furthermore, it appears that the requirement in EDE7 Objective 2 to demonstrate "sufficient cepecity within the relevant water and wastewater and electricity network to accommodate the use proposed" is not to be applied in isolation as has occurred here. Rather the policy requirements are to be read together with the Applicant setting out that if the energy demand may not be met in full by the electricity network, or on site renewable energy, then evidence of engagement with PPAs must be provided

2 Conclusion

- 2.1 In reaching its Decision, the planning authority has had regard to grid capacity including under section 34(2)(a)(i) of the PDA and the provisions of the Development Plan (in particular EDE7 Objective 2). However, the planning authority's interpretation and application of this Objective goes beyond its statutory remit, which is limited to the consideration of proper planning and sustainable development.
- 2.2 As demonstrated above, it is clearly not within the remit of the planning authority to determine capacity allocation or connection to the electricity grid, or indeed the operation and management of contracted grid capacity. This falls squarely within the remit of the TSO and the DSO.
- 2.3 The planning authority's Decision is fatally flawed in determining that the DSO and TSO's recognition of the greater Dublin area as a constrained means that there is insufficient capacity for the proposed development.
- 2.4 The Applicant has a Connection Agreement to provide the Facility with grid capacity and therefore, notwithstanding that the consideration of grid capacity is beyond the remit of the planning authority, there was no factual basis for the planning authority to determine that there is insufficient grid capacity to service the Facility.
- 2.5 Moreover, there is no reasonable basis for the planning authority to base its Decision on concerns that the Facility will place too much demand on the grid in circumstances where the TSO is empowered under the Connection Agreement to avail of flexible demand arrangements.
- 2.6 In all the circumstances and in consideration of all the above, the planning authority has erred in fact and in law in making the Decision and the Decision ought to be overturned by the Board

MASON HAYES & CURRAN LLP

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MHC-32223640-1

APPENDIX B - EirGrid Connection Agreement letter



www.eirgrld.com The Oval, 160 Shelbourne Road Ballsbridge, Dublin D04 FW28, Ireland Telephone +353 1 677 1700 Email info@eirgrid.com



Our Ref: D48-8M-CL

Re: Connection Offer for a facility with a Maximum Import Capacity ("MIC")

at Grangecastle Business Park Extension, Dublin 22

Please find enclosed EirGrid's (the "Company") connection offer (the "Offer") with reference D48 issued to (the "Customer") to connect to the Transmission System (the "Application") which the Customer is proposing to build at Grangecastle Business Park Extension, Dublin 22 and which it is proposed will be known as Kishoge (the "Facility").

The Offer is issued by the Company to the Customer on the basis of the following application request received from the Customer:

- Connection demand demand facility to the Transmission System which is to be located at Grangecastle Business Park Extension, Dublin 22 and is to be known as Kishoge;
- A connection method consisting of a Loop-in of two underground circuits into an existing circuit; and
- (

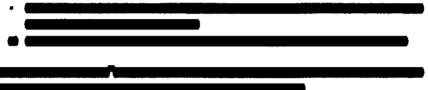
The Offer consists of a Connection Agreement to be entered into by the Company and the Customer (the "Connection Agreement"). Furthermore, any defined terms used in the Offer, shall have the same meaning when used in this Offer as in the Connection Agreement and reference should be made to the Connection Agreement for the definition of such terms.



DIRECTORS: John O'Connor Cheirman • Dr Theresa Donaldson Depery Cheir • Mark Foley Chief Executive
Shane Brennan, Tom Coughlan, Lynne Crowther, Michael Hand, Eileen Maher, Liam O'Halloran, John Trethowan • Michael Behan Company Secretary
Registered Address: EirGrid Pic, The Ovol, 160 Shalbourne Road, Ballsbridge, Dublin DO4 FW28, Ireland • Company Registrallan No. 338521



- The Company has received the Connection Agreement signed by an authorised signatory of the Customer using Docusign;
- The Customer has signed the Interface Undertaking with the Transmission Asset Owner which is set out in Schedule 11 of the Connection Agreement;
- The Customer has signed the Interface Undertaking with the DSO which is set out in Schedule 13 of the Connection Agreement;



Please note that the Customer is required to sign the execution page of the Connection Agreement. The Company requires that the signatory be an authorised signatory of the Customer. As evidence of the signatory's authority, the Company requires the Customer to provide the following:

- (i) a certified copy of the current Articles of Association of the Customer's company demonstrating that the signatory has the necessary authority to enter into contracts for and on behalf of the Customer; [and]
- (ii) a certified copy of the relevant board minute or written resolution demonstrating that the signatory has the necessary authority to enter into the Connection Agreement for and on behalf of the Customer.

In some circumstances the document listed at (i) may in itself be sufficient to demonstrate the signatory's authority to the Company, but generally documents (i) and (ii) will be required. Please note that the signatory must execute the Connection Agreement in the presence of a witness who must also sign attesting the signatory's signature.

Should you have any queries in relation to this matter or if I can be of further assistance, please do not hesitate to contact me at a second or by email at a second or by em

Yours Sincerely,

EirGrid plc.