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The Secretary, An Bord Pleanála, 64 Marlborough Street, Dublin D01 V902

> 17<sup>th</sup> October 2024 JN LW 23101

Dear Sir/Madam,

RE: APPEAL AGAINST DECISION OF SOUTH DUBLIN COUNTY COUNCIL TO REFUSE PERMISSION FOR THE CONSTRUCTION OF A DATA CENTRE AND ALL ASSOCIATED WORKS AT A SITE LOCATED WITHIN THE TOWNLANDS OF BALLYBANE AND KILBRIDE, CLONDALKIN, DUBLIN 22

# ABP REFERENCE NO. ABP-317446-23

#### Introduction

On behalf of the applicant, Vantage Data Centres DUB11 Limited ("Vantage"), we, John Spain Associates, 39 Fitzwilliam Place, Dublin 2, hereby submit a response to a request under section 132 of the Planning and Development Act 2000, as amended, to make further submissions in relation to the above-referenced appeal.

The section 132 request from An Bord Pleanála was dated the 23<sup>rd</sup> of September 2024. This response is submitted to the Board in advance of the deadline provided in the Board's correspondence (5:30pm on the 21<sup>st</sup> of October 2024).

A copy of the Board's correspondence is enclosed as **Appendix 1** to this document for ease of reference.

**Appendix 2** comprises a copy of the executed connection agreement<sup>1</sup> with EirGrid for the site, which pertains to the proposed data centre building, along with the rest of the applicant's campus. Evidence of the payment of the Connection Agreement Fee is also provided within Appendix 2<sup>2</sup>.

**Appendix 3** comprises correspondence from EirGrid confirming the existence of the executed connection agreement for the DUB1 campus, which the currently proposed phase of data centre development (DUB13) forms part of.

**Appendix 4** comprises a cover letter from Nephin Energy, and a copy of a Letter of Intent between the applicant and Nephin Renewable Gas Limited (a developer of renewable biomethane production facilities).

**Appendix 5** to this response comprises a climate impact assessment report prepared by AWN Consulting. This has been included to take account of the updated information

<sup>&</sup>lt;sup>1</sup> The connection agreement is redacted in part in line with EirGrid requirements.

<sup>&</sup>lt;sup>2</sup> Commercially sensitive information is also redacted in this document.

submitted in relation to Power Purchase Agreements (PPAs) submitted in response to Item 2 of the section 132 request. The Institute of Environmental Management and Assessment (IEMA) guidance note on "Assessing Greenhouse Gas Emissions and Evaluating their Significance" (IEMA, 2022) sets out that PPAs are an appropriate project-specific "Substitution" mitigation measure alongside measures such as adopting renewable technologies and reducing the carbon intensity of energy used. The accompanying report presents an updated assessment of climate impact, taking account of the applicant's commitment to engaging in a PPA for additional renewable energy generation.

The AWN report also details the consistency of the proposed development (and the proposed mitigation) with the policies listed under section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended), including the current Climate Action Plan 2024. It would be appropriate for the Board to refer to this in any decision on the application.

The following sections of this document provide a direct response to the two Items raised in the Board's section 132 request.

# Item 1 – Connection Agreement

Item 1 of the section 132 request reads as follows:

"You are requested to provide confirmation from Eirgrid that you have a fixed connection agreement with Eirgrid to connect the data centre the subject of this appeal (DUB13) to the grid."

## Response

Appendix 2 to this response document comprises a copy of the executed connection agreement with EirGrid, to connect the applicant's data centre campus (including the proposed DUB13 data centre) to the national grid. Evidence of the payment of the Connection Agreement Fee is also provided within Appendix 2

The DUB1 campus includes the already approved data centres (known as DUB11 and 12), the permitted multi fuel generation plant, and the currently proposed phase of data centre development (known as DUB13). The energy solution (i.e. the substation / grid connection, on site multi fuel generation plant to provide for flexibility, avoid grid strain, and support the grid, and the EirGrid connection agreement are common to the overall campus, including DUB13).

There is no doubt that this is an enforceable and binding connection agreement; and, there is no doubt that the applicant has performed relevant obligations, including payment of the applicable monetary obligation under the agreement. These obligations are fixed, being agreed and binding.

The applicant has now received approval from An Bord Pleanála (under ABP Ref.: 312793-22) for the construction of the physical grid connection for their landholding (comprising a new 110kV gas insulated switchgear 'GIS' substation and associated 110kV cable connections to the existing grid). The applicant is currently engaged in the construction of this infrastructure, which will be completed in advance of the operation of the proposed DUB13 data centre. It is confirmed that this infrastructure will serve the DUB13 building, in addition to the two permitted data centres within the applicant's landholding. The power supplied by this connection is not specified for consumption by any specific structure, building or use on the Vantage lands.

The permitted 110kV substation equipment and transformers are designed to provide up to 100MW of power and can facilitate import of power from the grid and export of power from the permitted MFGP as discussed further below.

Pages 30 and 31 of the submitted first party appeal set out an explanation of the grid connection and the overall connection agreement process. This was supplemented by a letter prepared by Eversheds Sutherland LLP (Appendix A to the submitted first party appeal), which confirmed that the General Conditions of the executed connection agreement provide for the connection of the overall DUB1 campus (including DUB13).

Appendix B to the submitted appeal response also comprised email correspondence from EirGrid which confirmed their awareness of the existing connection agreement with the applicant, signed on the 1<sup>st</sup> of July 2022, for "a demand facility for their campus located at Vantage Data Centres DUB1, Profile Park, Kilcarbery, Co. Dublin". For the avoidance of doubt, the DUB13 building falls within the DUB1 campus referred to in that EirGrid correspondence. A copy of this previous correspondence is included as Appendix 3 to this response for ease of reference.

As set out within the submitted first party appeal, the connection agreement for the overall campus comprises both firm and non-firm (sometimes labelled flexible) capacity (i.e. allowing EirGrid, the transmission system operator to instruct the off-taker to reduce their load when constraints arise). This provides welcome flexibility, of the kind required of large energy users, not just data centres. This approach is in line with EirGrid policy on providing connection agreements for data centres and the CRU "Direction to the System Operators related to Data Centre grid connection processing" (CRU/21/124).

Flexibility of electricity demand on the part of data centres and other large energy users is also an important objective of the 2024 Climate Action Plan, which states the following at Section 12.4.1.3:

- "The overarching objective of managing electricity demand growth is to ensure, through a combination of energy efficiency and flexible electricity demand, that economic growth can be supported by low-carbon or no-carbon energy demand growth;
- Ensure that 15-20% of the electricity system demand is flexible by 2025, increasing to 20-30% by 2030, to reduce the peak demand and shift the demand to times of high renewable output;"

The flexible element of capacity provided for under the executed connection agreement aligns with EirGrid and CRU policy, and with Government Climate Policy. This flexibility allows the quantity of power drawn by the development from the national grid to be reduced in times of grid constraint, avoiding grid failure and helping to avoid the dispatching of more carbon intensive generation assets (including coal and oil generation stations).

Additionally, as set out in the submitted first party appeal, the applicant is progressing an amendment to the VDC Grid Connection Agreement, to allow for the export of electricity generated in the already permitted multi fuel generation plant (MFGP) within the campus to the national grid. The already permitted MFGP has sufficient capacity to fulfil this function for the overall campus, including DUB13, as it was designed to support the entire campus (including the currently proposed phase of development) without any requirement for increase in its capacity or change to its design.

This will further support the grid and decarbonisation efforts, by providing dispatchable peaking capacity to help address the intermittency of increased renewables on the grid.

When this export amendment is ratified, the flexible demand offer for the campus will be reclassified as a firm capacity<sup>3</sup> offer.

Finally, as noted within the submitted first party appeal and discussed in the response to Item 2 below, the applicant would be willing to accept a condition requiring entry into a power purchase agreement (PPA) in respect of the DUB13 development, and a letter of intent is now submitted between the applicant and Nephin Renewable Gas Limited, a major developer of renewable biomethane facilities in Ireland. Entry into such a PPA would ensure that the use of gas in the generation of electricity for DUB13 (either on site via the MFGP where required, or off site for the national grid), would be substituted with additional renewable energy in the form of indigenous biomethane.

## Item 2 - Power Purchase Agreement

Item 2 of the section 132 request reads as follows:

"You are requested to provide the Board with information on how the Power Purchase Agreement in association with the on-site renewable energy provision proposal addresses 'renewables additionality', having regard to the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy, July 2022, noting that this is a preference within this Government Statement."

# Response

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (2022) states the following with regard to additionality:

"The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland. Developments should provide clear additionality in renewable energy delivery in Ireland, whether through new generation, repowering or otherwise increasing in-country renewable energy capacity – proportionate to the impact of their energy demand."

With regard to this second Item within the section 132 request, we refer to Appendix 4 to this document, comprising a cover letter from Nephin Energy, and a signed letter of intent (LOI) between the applicant and Nephin Renewable Gas Limited (NRG).

The applicant is in advanced discussions with NRG to agree a PPA for additional renewable biomethane produced in Ireland. It is impossible, and would be wholly unreasonable to expect parties, to complete any final PPA until after permission is granted.

Additionality is the term given to a PPA which directly adds renewable energy generation to the grid, which would not otherwise have been delivered.

The engagement of the applicant with an indigenous biomethane producer such as NRG would directly facilitate the delivery of additional renewable energy production.

<sup>&</sup>lt;sup>3</sup> The level of firm access available in the transmission network for a customer is that customer's Firm Access Quantity or 'FAQ'. Firm financial access means that if a customer is constrained on or off, it is eligible for compensation in the manner set out in the Trading & Settlement Code. In the case of the applicant for the current proposed development, this means that until the flexible demand offer is reclassified as a firm offer, no compensation would be payable in the event that the system operator requests the applicant to reduce the level of electricity they are importing from the grid. Once the offer is reclassified, and the MFGP can export peaking capacity to the grid, the applicant would be compensated in the event they were requested to reduce the level of electricity they import from the grid.

NRG will be developing <u>new</u> biomethane production facilities in Ireland, and the renewable energy associated with any CPPA will not be sourced from existing anaerobic digestion (AD) plants. This will lead to a genuine increase in Ireland's renewable energy capacity and any organisation procuring biomethane from NRG will be directly contributing to Ireland's renewable energy targets. The 2024 Climate Action Plan targets the production of up to 5.7 TWh of biomethane by 2030, as reiterated within the 2024 National Biomethane Strategy.

The biomethane produced by NRG will not be supported by a Government subsidy. As a result, any organisation that enters into a PPA with Nephin can demonstrate that the renewable energy being purchased would not have been produced <u>but for</u> the organisation entering into the PPA. In other words, VDC can demonstrate that they are directly responsible for increasing renewable energy capacity in Ireland beyond what would have been achieved in the absence of such a PPA. Biomethane certificates issued by Gas Networks Ireland (GNI) will reflect this point and state that the biomethane is unsubsidised.

The delivery of biomethane projects associated with such a PPA will make a meaningful contribution to economic development in rural areas through job creation. An AD plant typically provides up to 75 direct and indirect jobs in a local area. Further, an ancillary product of the anaerobic digestion process is the creation of a nutrient-rich digestate which can be spread over land and used to displace chemical fertiliser, thereby improving soil health, improving water quality, and reducing fossil fuel reliance in the agricultural sector.

These ancillary economic and environmental impacts add an extra layer of additionality as its benefits extend beyond just the addition of renewable energy to Ireland's energy mix.

Given biomethane production capacity is currently very low in Ireland, any medium to large PPA will materially increase the production capacity of this technology, thereby contributing to Ireland's baseload renewable energy production and contributing to Ireland's energy security.

NRG's biomethane directly addresses additionality concerns by ensuring that its production adds new renewable energy capacity, uses unsubsidised production and contributes to broader economic and environmental goals. We believe that these measures collectively ensure that any additionality concerns by the Board with respect to this PPA are clearly addressed.

The final PPA to be engaged in by the applicant is a commercial contract, which would only be concluded following the grant of planning permission for the development which the PPA relates to (in this case DUB13). As set out in the submitted first party appeal, the applicant would accept a condition to require engagement in such a PPA.

However, even in the absence of a specific condition applied by the Board, the commitment of the applicant to engage in a PPA in respect of the proposed development has been included as mitigation in the accompanying report prepared by AWN Consulting (Appendix 5 to this document), making this a binding commitment.

With regard to the reference in Item 2 of the section 132 Request to the "on-site renewable energy provision proposal", it is firstly noted that the MFGP within the campus is already permitted, and the proposed DUB13 development does not entail any change to the MGFP or increase in its capacity.

Secondly, as set out within the submitted first party appeal, the MFGP is designed to facilitate generation from renewable fuel sources (i.e. HVO, biomethane, and renewable hydrogen in future). The campus also accommodates a permitted battery energy storage system, further enhancing the flexible and sustainable nature of the energy strategy for the campus.

Finally, the entry of the applicant into a PPA for renewable biomethane would mitigate climate impact from the operation of the MFGP via 'substitution' with additional renewable energy generated in Ireland. The accompanying AWN report assesses in detail the benefit of such a PPA as a mitigation measure, in line with the IEMA 2022 guidance.

The effectiveness of this proposed mitigation measure is assessed in detail within the AWN Climate Impact Assessment Report (Appendix 5), and it would be appropriate for the Board to have regard to the climate assessment when determining the current appeal.

#### Conclusion

This response comprehensively addresses the two points raised by the Board in their section 132 request issued on the 23<sup>rd</sup> of September 2024.

With regard to the first point, it is confirmed that an executed connection agreement with EirGrid exists for the overall campus, including the proposed DUB13 development, and that the form of this agreement is in line with applicable connection policies and national climate policy. The engagement of the applicant in an amendment to that connection agreement to provide for electricity export from site will further support the stability and resilience of the grid, and efforts to increase renewables on the grid.

With regard to the second point, the applicant is committed to engaging in a PPA which will demonstrate strongly the additionality of renewable energy associated with such an agreement. This is clearly evidenced by the steps taken to advance such an agreement with NRG, a developer of new renewable biomethane developments in Ireland.

Having regard to the first party appeal submitted to the Board and the additional information now submitted, we respectfully request that the Board proceed to determine the appeal and grant permission for the proposed development. Following the implementation of the proposed mitigation measures, the predicted impact of the proposed development on climate is a minor adverse, non-significant impact, in line with the 2022 IEMA Guidance.

Yours faithfully,

**John Spain Associates** 

Jan Spin Ason

APPENDIX 1 – COPY OF THE SECTION 132 REQUEST ISSUED BY AN BORD PLEANÁLA

APPENDIX 2 - COPY OF EXECUTED CONNECTION AGREEMENT CONFIRMATION OF CONNECTION AGREEMENT PAYMENT TO EIRGRID	AND

# **Confirmation of Connection Agreement Payment**

From: Majumdar, Shoubhik < Shoubhik. Majumdar@Eirgrid.com>

Sent: Monday, July 8, 2024 11:03 AM

To: Nicholas Synnott <nick.synott@vantage-dc.com>

Cc: Megan Byrne <megan.byrne@vantage-dc.com>; Murphy, Kilian <Kilian.Murphy@Eirgrid.com>; Emmanuel Ogunyemi <emmanuel.ogunyemi@vantage-dc.com>; I

Hinder-Thomas <a href="mailto:hinderthomas@vantage-dc.com">hinder-Thomas <a href="mailto:hinderthomas@vantage-dc.com">hinder-Thomas <a href="mailto:hinderthomas@vantage-dc.com">hinder-Thomas <a href="mailto:hinderthomas@vantage-dc.com">hinderthomas@vantage-dc.com</a>; Tibirna, Rodica <a href="mailto:hinderthomas@vantage-dc.com">hinderthomas@vantage-dc.com</a>;

Subject: RE: Kilcarbery Sub-station VDC DUB1 Campus

Some people who received this message don't often get email from shoubhilk majumdar@eirgrid.com. Learn why this is important

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Nicholas,

Payment of eceived today, 08/07/24 from Vantage Data Centers DUB11 Ltd paying Invoice SINV005391.

Best regards,

Shoubhik Majumdar | Contract Manager EirGrid

M: + 353 (0)87 441 8851

EirGrid.com



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Reference	Transaction Date	Transaction Type	Value Date	Debits
Outging ACH Payment CUSTREF: SINV005391-02072; BANK REF: 15KD07BNSRWV; B/O: CHASIE4LXXX IE95CHAS93090379609587 Vantage Data Centers DUB11 Limited 1-2 VICTORIA BUILDINGS HADDINGTON R OAD DUBLIN IE,D04 N1W6 PAYB BARCIE2DXXX BARCLAYS BANK IRELAND P ONE MOLESWORTH STREET BENEFICIARY eirgrid PLC The Oval, Dublin D04 FW28 IE SCT OUT REF:15KD07BNSRWV; eirgrid PLC/REMI/SINV005391; PAY METHOD: G/796/BARCDEFF/	8 JUL	TRF	8 JUL	

APPENDIX 3 – CORRESPONDENCE FROM EIRGRID							

### CP1188 Kilcarbery

## Murphy, Kilian <Kilian.Murphy@Eirgrid.com>

Tue 6/20/2023 7:08 AM

To:Almas Sabitov [C] <almas.sabitov@vantage-dc.com> Cc:Adam Cunningham <acunningham@vantage-dc.com>

CAUTION. This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Alams.

We, EirGrid Plc are aware of the following;

- Transmission Connection Agreement between EirGrid Plc and with Vantage Data Centers DUB11 Limited signed on the 1st July 2022, for connection of a demand facility for their campus located at Vantage Data Centers DUB1, Profile Park, Kilcarbery, Co. Dublin
- 2. That there is modification to the Transmission Connection Agreement mentioned in point 1 above in progress with Vantage Data Centers DUB11 Limited for a generation/export facility for their campus located at Vantage Data Centers DUB1, Profile Park, Kilcarbery, Co. Dublin. The modification to the Transmission Connection Agreement is currently at Stage 2 of the application process awaiting offer letter to be issued from EirGrid Plc to Vantage Data Centers DUB11 Limited

Kind Regards,

Kilian Murphy | Senior Engineer | Chief Infrastructure Office

M: + 353 87 673 4992

E: kilian.murphy@eirgrid.com

#### EirGrid.com



We're working flexibly at EirGrid Group. I'm sending this message at a time that suits me. Please feel comfortable knowing that I don't expect you to read, respond to or action it outside of regular working hours.

EirGrid plc - Transmission System Operator, Ireland.

The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, D04 FW28.

Oibritheoir Eangach Leictreachais na hÉireann.

160 Bóthar Shíol Bhroin, Droichead na Dothra, Baile Átha Cliath 4, D04 FW28.

# Registered Office

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ļ	ABP-317446-23
APPENDIX 4 – COPY OF COVER LETTER FROM NEPHIN ENERGY AND LETTER OF INTENT WITH NEPHIN RENEWABLE GAS LIMITED	SIGNED

APPENDIX 5 – CLIMATE IMPACT ASSESSMENT REPORT PREPARED BY AWN CONSULTING	