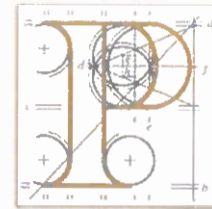


Our Case Number: ABP-317446-23

Planning Authority Reference Number: SD22A/0420



An
Bord
Pleanála

South Dublin County Council
Planning Department
County Hall
Tallaght
Dublin 24

Date: 18 November 2024

Re: Demolition of structures, construction of a data centre and all associated works. Environmental Impact Assessment Report (EIAR) submitted with application.
Site within the townlands of Ballybane & Kilbride, Clondalkin, Dublin 22

Dear Sir / Madam,

I have been asked by An Bord Pleanála to refer to the above mentioned appeal.

The Board is of the opinion that, in the particular circumstances of this appeal, it is appropriate in the interests of justice to request you to make submissions or observations in relation to the enclosed submission dated 17th October, 2024 received from John Spain Associates on behalf of the applicant Vantage Data Centres DUB11 Limited.

In accordance with section 131 of the Planning and Development Act, 2000, (as amended), you are requested to make any submissions or observations that you may have in relation to this enclosure **on or before 16th December, 2024**. The Board cannot consider comments that are outside the scope of the matter in question. Your submission in response to this notice must be received by the Board not later than **5:30pm on the date specified above**.

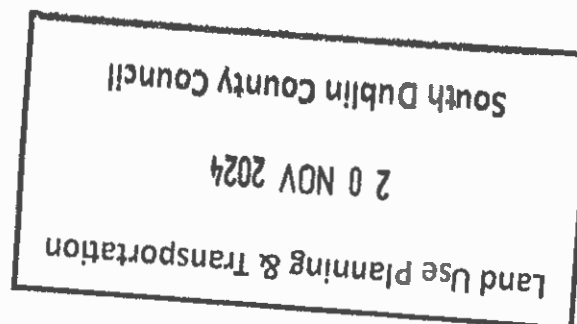
If no submission or observation is received before the end of the specified period, the Board will proceed to determine the appeal without further notice to you, in accordance with section 133 of the 2000 Act.

Please quote the above appeal reference number in any further correspondence.

Yours faithfully,


Karen Byrne
Executive Officer
Direct Line: 01-8737264

BP70 Registered Post



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

AN BORD PLEANÁLA
LDG- _____
ABP- _____
17 OCT 2024
Fee: € _____ Type: _____
Time: 1528 By: Hand

17th 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 23rd 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 21st 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 agreement¹ 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 2².

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

¹ The connection agreement is redacted in part in line with EirGrid requirements.

² 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 1st 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 capacity³ 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.

³ 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 new 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 but for 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 MFGP 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 23rd 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

Version 2.00 (July 2013)



TRANSMISSION CONNECTION AGREEMENT

EirGrid plc.

and

Vantage Data Centers DUB11 Limited

For Connection of a Demand Facility with a Maximum Import Capacity (MIC) of
█ MVA

at Profile Park, Kilcarbery, Co. Dublin

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THIS AGREEMENT is made the 01-Jul-22 | 11:30 AM BST

BETWEEN:

- (1) **EirGrid plc**, a statutory corporation registered at The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4 (hereinafter called the "**Company**"); and
- (2) Vantage Data Centers DUB11 Limited, 1-2 Victoria Buildings, Haddington Road Dublin 4. With a company registration number of 683471 (hereinafter called the "**Customer**")

and each of the parties hereto being a "Party" and the term "Parties" shall be construed accordingly.

WHEREAS:

- (A) The Customer has applied to the Company for connection of the Facility to the Transmission System and use of the Transmission System to transport electricity to and/or from the Facility through the Transmission System.
- (B) The Company has agreed to the connection of the Facility to the Transmission System at the Connection Point and to the Customer using the Transmission System to transport electricity to and/or from the Facility through the Transmission System.
- (C) The Parties make this Transmission Connection Agreement hereinafter referred to as the "Connection Agreement" to record the terms and conditions upon which (amongst other matters) the Parties will carry out their respective Connection Works, the Customer will pay the Charges and Security to the Company and Energisation will be achieved.
- (D) The Parties agree that the terms set out in the General Conditions as amended by the Company and approved by the CER from time to time are incorporated into this Connection Agreement and the interpretation rules set out in the General Conditions and shall be the rules of construction of this Connection Agreement.

IT IS HEREBY AGREED as follows:

1 DEFINITIONS AND INTERPRETATIONS

- 1.1 The Parties agree that the latest version of the General Conditions of Connection [and Use of System] as amended from time to time are incorporated into this Connection Agreement hereinafter referred to as the "General Conditions".
- 1.2 The Parties agree that the Offer Letter is incorporated into this Connection Agreement.
- 1.3 In the event of inconsistency between the provisions of this Connection Agreement and industry codes or inconsistencies within the Connection Agreement itself the following order of precedence shall prevail:
 - a) The Grid Code;
 - b) The Offer Letter;
 - c) This Connection Agreement including the General Conditions but excluding the Offer Letter,
 - d) The Trading and Settlement Code and the Metering Code.
- 1.4 In this Connection Agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions unless expressly provided to the contrary elsewhere, as appropriate, and for the avoidance of doubt shall be interpreted in accordance with Clause 2 of the General Conditions.

2 CONDITIONS PRECEDENT

2.1 Offer Letter

Any Conditions Precedent expressly provided for in the Offer Letter shall be a Condition Precedent to this Connection Agreement.

2.2 Conditions Precedent to Acceptance

This Connection Agreement is conditional upon the following being fulfilled in a form satisfactory to the Company on or before the date of execution of the Connection Agreement:-

- 2.2.1 any Charges, or other monies, payable by the Customer on execution of the Connection Agreement have been paid; and
- 2.2.2 the Security requirements required to be provided by the Customer on execution of the Connection Agreement, more particularly set out in the Offer Letter, have been provided.

The Parties acknowledge that these Conditions Precedent have been inserted for the benefit of the Company.

2.3 Conditions Precedent to Carrying out the Works

Notwithstanding anything in the Connection Agreement to the contrary, and without limiting any other obligations of the Customer, the provisions of the Connection

Agreement which refer to the carrying out of the Works are (unless the Customer and the Company otherwise agree) in all respects conditional on and subject to the Company being satisfied that:-

- 2.3.1 the Consents Issue Date has occurred;
- 2.3.2 the Customer has fulfilled its obligations under Clause 7 of the Connection Agreement in a form satisfactory to the Company; and
- 2.3.3 the Customer has complied with any other obligations which are required to be satisfied prior to the carrying out of the Works, as set out in the Offer Letter.

The Parties agree that the Condition Precedent detailed in Clause 2.3.1 above is waived insofar as is necessary to enable the Customer to exercise its rights under Clause 20.9 of the General Conditions.

The Parties acknowledge that this Condition Precedent has been inserted for the benefit of the Company.

2.4 Conditions Precedent to Connection

Notwithstanding anything in the Connection Agreement to the contrary and without limiting any other obligations of the Customer the Customer shall not have the right under the Connection Agreement to proceed with the Connection of the Facility until the Company is satisfied that the Customer has:-

- 2.4.1 paid any outstanding Charges or other monies due to the Company;
- 2.4.2 fulfilled its obligations under Clause 7 of the Connection Agreement in a form satisfactory to the Company;
- 2.4.3 fulfilled its obligations under Clause 8 of the Connection Agreement in a form satisfactory to the Company;
- 2.4.4 a current and enforceable agreement in place with a licensed supplier for the supply of electricity to the Facility; and
- 2.4.5 complied with any other obligations which are required to be satisfied prior to Connection, as set out in the Offer Letter.

The Parties acknowledge that these Conditions Precedent have been inserted for the benefit of the Company.

2.5 Conditions Precedent to the implementation of the Commissioning Instructions

Notwithstanding anything in the Connection Agreement to the contrary, and without limiting any other obligations of the Customer, the Customer shall not have the right under the Connection Agreement to require the Commissioning Instructions to be implemented until the Company is satisfied (acting reasonably) that:

- 2.5.1 the Connection Works have been completed;
- 2.5.2 the Customer has complied with any obligations which are required to be satisfied prior to implementation of the Commissioning Instructions as set out in the Offer Letter;
- 2.5.3 the Customer has complied with its obligations under the Grid Code which must be met prior to implementation of the Commissioning Instructions; and

- 2.5.4 the conditions specified in respect of implementation of Commissioning Instructions as set out in Schedule 10 of the Connection Agreement have been met.

The Parties acknowledge that these Conditions Precedent have been inserted for the benefit of the Company.

2.6 Confirmation

When the Conditions Precedent specified in this Clause 2 have been either met or waived (by the Party for whose benefit they have been inserted), the Party for whose benefit they have been inserted shall immediately notify the other Party in writing that they have been so satisfied.

3 TERM AND TERMINATION

The term and termination provisions as set out in the General Conditions in respect of Connection Agreements shall apply to this Connection Agreement in addition to the provisions of this Clause 3.

3.1 Term

The Term shall be as set out in Clause 20.1 of the General Conditions.

3.2 Termination

If:

- 3.2.1 the confirmation under Clause 2.6 has not been notified by the CID Longstop Date; or
- 3.2.2 the confirmation under Clause 2.6 has not been notified by the Scheduled Operational Date Longstop Date;

then the Connection Agreement will be terminated by written notice to the Customer by the Company unless both Parties agree to do otherwise.

The Company shall not issue a termination notice pursuant to this Clause 3.2 if CID or the Operational Date has not been achieved as a result of an obligation or obligations of the Company not having been performed unless exceptional circumstances exist including, without limitation, significant technical reasons.

In the event that the Connection Agreement is terminated in accordance with the terms of this Clause, then the Customer shall immediately pay to the Company the amounts calculated in accordance with the General Conditions. Without prejudice to the foregoing provision, the Party terminating the Connection Agreement shall have no liability to the other Party arising from such termination.

4 AGREEMENT TO CONNECT AND USE

4.1 Agreement to Connect and Use

The Company agrees to:

- (a) the Facility being connected to the Transmission System at the Connection Point; and

- (b) the Company's Connection Equipment and the Customer's Equipment remaining Energised; and
- (c) the Customer transporting electricity to and/or from the Facility through the Transmission System

from the Connection Date for the duration of the Term on the terms and conditions set out in this Connection Agreement subject to transmission constraints from time to time.

4.2 Capacity limit

- 4.2.1 The Customer shall not take electricity through the Connection Point exceeding the Maximum Import Capacity or transmit electricity through the Connection Point exceeding the Maximum Export Capacity without the consent of the Company.
- 4.2.2 If the Maximum Import Capacity or the Maximum Export Capacity is exceeded without consent, the Company may give notice to the Customer setting out details and requesting the Customer to remedy the situation within twenty (20) Business Days of receipt of the notice, failing which the Company reserves the right to De-Energise and shall not re-Energise until such time as the Customer satisfies the Company that the Maximum Import Capacity or the Maximum Export Capacity (as applicable) will not be exceeded when the connection is renewed or arrangements have been made for an alteration or modification of the Connection Agreement.

4.3 Company's Obligation to Maintain and Operate the Transmission System

The Company shall maintain and operate the Transmission System in accordance with the Grid Code and otherwise to a standard equal to Prudent Electricity Utility Practice.

4.4 Customer's Obligation to Maintain and Operate the Customer's Equipment and Premises

The Customer shall maintain and operate the Customer's Equipment and Premises in accordance with the Grid Code and otherwise to a standard equal to Prudent Electricity Utility Practice.

4.5 Continuity of Connection

- 4.5.1 No liability for loss of continuity
The Company shall, subject to the requirements of Prudent Electricity Utility Practice, maintain a continuous connection of electrical energy and if by reason of any cause whatsoever the Company shall fail to do so the Company shall restore the connection with all reasonable speed but the Company shall not be under any liability whatsoever for loss or damage arising from such failure to maintain a continuous connection.
- 4.5.2 Failure of continuity
If there is a failure in the continuity of connection, the Company shall endeavour as soon as practicable to notify the Customer of the reason for the breakdown and of the estimated time for restoration of the connection

and shall endeavour to keep the Customer informed about the progress of the work of restoring the connection but the Company shall not be liable if due to circumstances beyond its reasonable control it is unable to do so.

4.6 Power Quality

If requested by the Customer the Company will work together with the Customer through the power quality liaison group and will provide information on power quality matters to the Customer from time to time. The Company and the Customer shall each treat any and all information and data disclosed to it in connection with this power quality liaison group as confidential.

5 AGREEMENT TO PAY CHARGES AND COSTS

5.1 Agreement to pay Charges and additional costs

The Customer agrees to pay the Charges and additional costs arising in accordance with the terms and subject to the conditions set out in this Clause 5 and more specifically in the Offer Letter and the General Conditions thereto.

5.2 Charges related to Use of System

The applicability of Use of System Charges shall be in accordance with the General Conditions and shall be as set out in the Offer Letter.

5.3 Charges and costs in accordance with CER Policy

The Customer acknowledges that the Company has quoted Charges and costs in respect of the Connection Works in accordance with its policies as have, to the extent required, been approved by the CER and based on the Assumptions set out in the Offer Letter.

5.4 Variation in Consents Costs

Any costs and/or expenses reasonably incurred by the Company and not provided for in the Connection Charge:

- 5.4.1 in obtaining and endeavouring to obtain the Company's Consents;
- 5.4.2 in meeting any conditions attached to Consents obtained for the Company or for the Customer;
- 5.4.3 changes in the Connection Charge arising from a failure to achieve the Consents Issue Date by the Scheduled Consents Issue Date; or
- 5.4.4 a change otherwise arising under the Offer Letter.

shall (for the avoidance of doubt) be to the account of the Customer (in addition to the Connection Charge) who shall, on receipt of the Company's invoice in respect of such costs and/or expenses, pay to the Company the amount of the invoice in accordance with the payment provisions contained in the General Conditions (and, for the avoidance of doubt, regardless of whether the Connection Works are or can be completed and/or whether Energisation has occurred or can occur). The Company (acting in accordance with Prudent Electricity Utility Practice) shall incur only such costs and/or expenses as are reasonably necessary in the circumstances.

5.5 Reduction in MEC

At any given time prior the commencement of the construction of the Connection Works, the Customer has the right to reduce the MEC applicable to this Connection Agreement by issuing a written notice to that effect to the Company and subject to paying the Company an amount of [REDACTED] per each MW of reduced MEC.

For the avoidance of doubt, a reduction in MEC may also be requested after the commencement of construction of the Connection Works. This will lead to a draw down of the MEC Bond in accordance with the process outlined in Clause 24.3 of the Connection Agreement General Conditions as appropriate.

6 OFFER LETTER

6.1 Offer Letter

The Customer agrees that the Offer Letter forms part of this Connection Agreement.

6.2 Influencing Connections prior to Acceptance

If at any time prior to the acceptance of the Offer Letter by the Customer, one or more Influencing Connections occur or there is a failure in the Assumptions, the Company shall, as soon as reasonably practicable prior to the acceptance of the Offer Letter by the Customer:-

- 6.2.1 inform the Customer in writing that there are Influencing Connections or that a failure in the Assumptions has occurred; and
- 6.2.2 issue an amended Offer Letter as soon as reasonably practicable, taking into account any changes that have arisen; or
- 6.2.3 make the amended Offer Letter conditional upon the Influencing Connections and the revised Assumptions.

6.3 Influencing Connections post Acceptance

6.3.1 The Company and the Customer will proceed as soon as reasonably practicable with their respective construction works programmes and respective applications for Consents following execution of the Connection Agreement. The Parties agree that amended Offer Letters may, from time to time, need to be developed and issued by the Company to deal with any changes which may arise from a failure of the Assumptions or arising from the Charges (including Pass Through Charges) and Security or a policy change by the CER. These changes may result in additional charges which will be payable by the Customer and may require changes to programmes in accordance with the terms of this Connection Agreement.

6.3.2 Where one or more Influencing Connections occurs, or there is a failure in the Assumptions, the Company shall be entitled to have a period of two (2) Business Days following the day on which the Influencing Connection occurs or the failure of the Assumption occurs in which to issue notification of the occurrence to the Customer. Any acceptance of an Offer Letter submitted to the Company during this two (2) Business Days period shall be invalid and the provisions of Clause 6.2 shall apply.

6.4 Failure arising under the Offer Letter

If at any time the Company reasonably determines that:

- 6.4.1 any Assumption has not been, or is unlikely to be, met (for whatever reason);
- 6.4.2 any Consent required is not obtainable;
- 6.4.3 changes in the Connection Charge have arisen from a failure to achieve Consents by the Scheduled Consents Issue Date; or
- 6.4.4 a change has otherwise arisen under the Offer Letter;

then without prejudice to the rights under Clause 5.4 of the Connection Agreement:-

- 6.4.5 the Parties shall meet within ten (10) Business Days to discuss alternative options available and the costs and expenses thereof; and
- 6.4.6 save where the provisions of Clause 5.4 of the Connection Agreement apply, the Company shall (having given consideration to the discussions referred to in Clause 6.4.5) prepare and submit to the Customer a revised Offer Letter containing an alternative proposal which is not, in the opinion of the Company (acting reasonably), likely to have adverse long term technical implications, whereby the Company will incur difficulties in operating the Transmission System and in performing its function in relation thereto, such revised Offer Letter to include the Company's assessment of revised:
 - 6.4.6.1 Charges;
 - 6.4.6.2 Security;
 - 6.4.6.3 Connection Works Completion Period; and
 - 6.4.6.4 Commissioning Tests Completion Period;which would apply to the alternative proposal.

- 6.4.7 Except as provided for under Clause 6.4.8, if the Customer notifies the Company within ten (10) Business Days of receiving the Company's proposal that it is agreeable to the proposal, then the Offer Letter shall be deemed to be replaced with the revised Offer Letter, the details in Schedule 2 shall (to the extent necessary) be deemed to be amended in accordance with that revised Offer Letter and the provisions of this Clause 6 shall apply *mutatis mutandis* to such alternative proposal. If the Customer notifies the Company within ten (10) Business Days of receiving the Company's proposal, that it is dissatisfied with the proposal then the Parties shall meet and endeavour to resolve the matter within a further ten (10) Business Days of the Customer notification of dissatisfaction so that a further Offer Letter may be revised and issued. Where the Company and the Customer fail to agree a proposal within the said period, the Company acting reasonably, shall issue a revised Offer Letter, being in its opinion the best available alternative proposal for the Customer, taking due account of the circumstances encountered. The Customer shall have a further ten (10) Business Days from receipt of the proposal to accept this final proposal. This time period may be extended by mutual agreement of the Company and the Customer. Where the Customer does not notify the Company in writing that it is satisfied to accept the final proposal without qualification

within the allotted period, the Offer Letter shall be deemed to have lapsed, and the Company reserves the right to drawdown the MEC Bond and/or MIC Bond as applicable and to terminate the Connection Agreement. In the event of a dispute as to whether the Company has acted reasonably in preparing alternative proposals the matter shall be determined by the Independent Engineer in accordance with the Dispute Resolution Procedure of the General Conditions.

- 6.4.8 Where the failure of an Operational Consent has occurred, if the Customer notifies the Company within ten (10) Business Days of receiving the Company's proposal that it is agreeable to the proposal, then the Offer Letter shall be deemed to be replaced with the revised Offer Letter, the details in Schedule 2 shall (to the extent necessary) be deemed to be amended in accordance with that revised Offer Letter and the provisions of this Clause 6 shall apply *mutatis mutandis* to such alternative proposal. If the Customer notifies the Company within ten (10) Business Days of receiving the Company's proposal, that it is dissatisfied with the proposal then the Parties shall meet and endeavour to resolve the matter within a further ten (10) Business Days of the Customer notification of dissatisfaction so that a further Offer Letter may be revised and issued. Where the Company and the Customer fail to agree a proposal within the said period, the Company acting reasonably, shall issue a revised Offer Letter, being in its opinion the best available alternative proposal for the Customer, taking due account of the circumstances encountered. The Customer shall have a further ten (10) Business Days from receipt of the proposal to accept this final proposal without qualification. This time period may be extended by mutual agreement of the Company and the Customer. Where the Customer does not notify the Company in writing that it is satisfied to accept the final proposal within the allotted period, then the Company shall be entitled to drawdown under the MEC Bond and/or MIC Bond as applicable and the Connection Agreement shall terminate. In the event of a dispute as to whether the Company has acted reasonably in preparing alternative proposals, the matter shall be determined by the Independent Engineer in accordance with the Dispute Resolution Procedure of the General Conditions.
- 6.4.9 The Customer shall be entitled to notify the Company if, in its opinion, any of the circumstances set out in Clauses 6.4.1 to 6.4.4 inclusive has or is likely to occur. The Company shall be obliged to consider any such notification in making a determination for the purposes of this Clause 6.4.

7 INSURANCES

The Customer shall provide insurance coverage in accordance with the General Conditions and Schedule 6.

8 SECURITY

The Customer shall provide Security in accordance with the Offer Letter and the General Conditions in a form set out in Schedules 7A, 7B, and 7C where applicable.

9 PROTECTION AND METERING

9.1 Protection Relays

The Customer shall at its cost and expense provide and install in accordance with the Construction Programme and this Clause 9, and maintain throughout the Term, the protection relays detailed in this Clause 9.

9.2 Signals

The Company shall at the Customer's marshalling rack and in accordance with the Construction Programme provide the Customer with any signals from the Company's Equipment which the Customer reasonably requires for control and protection purposes and for the operation of the protection relays specified in this Clause 9.

9.3 Settings

In accordance with the Construction Programme, the Customer and the Company shall:-

- 9.3.1 each exchange back-up setting times to facilitate the co-ordination of the interface between the Company's control and protection equipment and the Facility's control and protection equipment; and
- 9.3.2 co-operate fully to implement any trip signals for their respective control and protection equipment in accordance with Prudent Electricity Utility Practice.

As part of the Customer's Commissioning Tests and, in any event, prior to implementation of the Commissioning Instructions, the Customer shall notify to the Company the settings which the Customer (in accordance with the Grid Code and Prudent Electricity Utility Practice) proposes to apply to the Customer's control and protection equipment. The Company shall within fifteen (15) Business days of receiving the Customer's notification:-

- 9.3.3 notify the Customer that it approves the settings proposed by the Customer; or
- 9.3.4 if the Company determines that the settings proposed by the Customer are not in accordance with the Grid Code and Prudent Electricity Utility Practice, then following discussion with the Customer, notify to the Customer alternative settings (which are in accordance with the Grid Code and Prudent Electricity Utility Practice).

The settings approved by the Company under Clause 9.3.3 or notified by the Company under Clause 9.3.4 shall be deemed to be incorporated in Schedule 2 of the Connection Agreement as the settings for the Customer's protection equipment (and the parties agree to insert details of the settings into the Connection Agreement as a supplementary appendix to Schedule 2). The Customer shall ensure that the Customer's control and protection equipment complies with and continues to comply with the settings for the Customer's control and protection equipment as set out in Schedule 2 of the Connection Agreement.

9.4 Amendments to Settings

If, at any time, after the settings for the Customer's control and protection equipment have been determined under Clause 9, the Customer wishes to alter those settings then

the Customer may (or if the settings cease to be in accordance with the Grid Code and Prudent Electricity Utility Practice, the Customer shall forthwith) notify to the Company the new settings which the Customer (in accordance with the Grid Code and Prudent Electricity Utility Practice) proposes to apply to the Customer's control and protection equipment. The Company shall within fifteen (15) Business days of receiving the Customer's notification:-

- 9.4.1 notify the Customer that it approves the settings proposed by the Customer; or
- 9.4.2 if the Company determines that the settings proposed by the Customer are not in accordance with the Grid Code and Prudent Electricity Utility Practice, then following discussion with the Customer, notify to the Customer alternative settings (which are in accordance with the Grid Code and Prudent Electricity Utility Practice).

The settings thus approved by the Company under Clause 9.4.1 or notified by the Company under Clause 9.4.2 shall be deemed to be incorporated in Schedule 2 of the Connection Agreement as the settings for the Customer's control and protection equipment in place of the existing settings and the parties agree to insert details of the settings into the Connection Agreement as an appendix to Schedule 2 in place of the existing supplementary appendix to Schedule 2.

9.5 Auto-reclosing Facilities

The Customer hereby acknowledges that the Company may use switchgear with high speed, slow speed and manual (remote or local) auto-reclosing facilities, and that the Facility should be designed so as not to suffer damage through the operation of such facilities. The Customer agrees that the Company shall bear no liability for any damage caused by the operation of such facilities.

9.6 Metering

The Company shall provide and maintain the Metering, power supplies, protection relays, signalling, and other equipment installed by the Company (in accordance with any relevant provisions of the Grid Code and the Metering Code). The costs incurred by the Company in doing so are reflected in the Connection Charge and On-Going Service Charge. In the event that the Company is compelled by any legal requirement to replace any such equipment with equipment of a different specification in order to conform with the relevant legislation, the Company's costs of so doing shall be met by the Customer who shall on receipt of the Company's invoice in respect of such costs pay to the Company the amount of the invoice in accordance with the payment provisions of the Connection Agreement.

9.7 Operational Instrumentation

The Company shall as part of the Company's Connection Works, provide, install, calibrate and commission in accordance with the Construction Programme (and in accordance with any relevant provisions of the Grid Code) and maintain throughout the Term, Operational Instrumentation in the Communications and Control Room which interfaces with the Company's Supervisory, Control and Data Acquisition (SCADA) system.

9.8 Use of Metering

The Metering will be used to provide such readings from the Customer's Equipment and the Company's Equipment as are required by the Company.

9.9 Customer's Obligations

The Customer shall as part of the Customer's Connection Works, at its expense, provide and install in accordance with the Construction Programme (and in accordance with any relevant provisions of the Grid Code):-

9.9.1 Communications and Other Equipment

Communications and such other equipment as is required by the Company for the purposes of the Transmission Station, shall be advised to the Customer in accordance with the Construction Programme and/or the Grid Code, as appropriate. For information purposes only, and without limitation, such equipment may include dial-up telephone line connections between the Communications and Control Room and the public telephone network for voice communication and data collection from Metering as set out in the Grid Code;

9.9.2 Power Supplies

Power supplies, for the operation of the Commercial Metering, the Operational Instrumentation, lighting and heating, the switchgear, control and protection equipment, unless otherwise determined by the Company, shall be in accordance with the Grid Code.

9.9.3 Protection Relays

Control and protection equipment for the Customer's Equipment, associated instrument transformers and cabling and power supplies. Such equipment, transformers, cabling and power supplies shall be maintained by the Customer throughout the Term to the reasonable satisfaction of the Company in accordance with the Grid Code and the Customer shall provide to the Company such evidence as to the completion of such maintenance as is required by the Company (acting reasonably).

10 INTERFERENCE WITH EQUIPMENT

The Customer shall not, and shall ensure that its agents, employees and invitees do not, interfere in any way with the Plant and/or Apparatus (including, without limitation, Metering) owned by the TAO, or the Company, and operated by the Company without the consent of the Company except in accordance with the Operating Instructions.

The Company shall not, and shall ensure that its agents, employees and invitees do not, interfere in any way with the Customer's Plant and/or Apparatus (including, without limitation, Metering) without the consent of the Customer, except in accordance with the Operating Instructions

11 RIGHTS OVER LAND AND ACCESS CONDITIONS

11.1 Easements etc.

Except where specifically provided for elsewhere under the Connection Agreement, the Customer shall, at the cost and expense of the Customer, grant to the Company all Consents that the Customer is empowered to give as are required by the Company for the installation, operation, maintenance, inspection and removal of the Company's Equipment situated, or to be situated, on or in any land or buildings owned or controlled by the Customer. Any such Consent, shall be granted on such terms and conditions as are reasonably acceptable to the Company having regard to the terms and conditions on which similar Consents have previously been granted to the Company.

11.2 Transmission Station Services

The Customer shall, to the extent that building services (including, without limitation, power supplies, water supplies, telephone and sewerage disposal) for the Transmission Station are connected to services on the Customer's Premises:-

- 11.2.1 procure that the building services are throughout the Term and at the cost and expense of the Customer supplied to the Transmission Station; and
- 11.2.2 maintain (throughout the Term) to the reasonable satisfaction of the Company and at the cost and expense of the Customer the building services on the Customer's Premises to which such Transmission Station building services are connected. The Customer shall provide to the Company such evidence as to the maintenance of such building services as is from time to time required by the Company (acting reasonably).

11.3 Company Access

The Customer shall permit the Company's employees and/or agents and/or subcontractors and/or invitees at times to be agreed between the Parties both during the Term and after the termination of the Connection Agreement to enter those parts of the Customer's Premises as shall be reasonably agreed between the Parties to enable the Company to carry out preliminary site investigation works, the Connection Works, modification works, inspections, operating, testing, repairing, renewing, maintaining, isolating, protecting or removing the Company's Equipment, materials or temporary works or any part thereof, Disconnecting or De-Energising, monitoring compliance with the terms of the Connection Agreement or to enable the Company to fulfil its obligations under the terms of the Connection Agreement. The Company shall use all reasonable endeavours to co-operate with the Customer and its Contractors prior to and when present on the Customer's Premises.

Notwithstanding the foregoing provisions of this Clause 11.3, the Company's employees and/or agents and/or subcontractors and/or invitees shall be entitled to enter the Customer's Premises at any time both during the Term and after the termination of the Connection Agreement for any purpose in connection with the operation of the Transmission System provided that the Company shall, when present on the Customer's Premises, use all reasonable endeavours to co-operate with the Customer and its Contractors.

This Clause 11.3 shall survive termination of the Connection Agreement.

11.4 Conditions of Access

All rights of access for the Company under the Connection Agreement shall include the right for the Company to bring on to the Customer's Premises such vehicles, plant, machinery and construction materials as shall be reasonably necessary to carry out the functions in respect of which the right of access is granted. Any individual to whom access is given under the Connection Agreement shall comply with all reasonable directions given by the Customer and its appropriately authorised employees and agents as to general safety and site security requirements, prior to and when present on the Customer's Premises. All such rights shall be exercisable free of charge or payment of any kind.

11.5 Customer Access

The Customer shall not have rights of access to the Company's Premises or Company's Equipment at any time other than as may have been previously agreed in writing by the Company for the purpose of carrying out by the Customer of the Customer's obligations under the Connection Agreement.

11.6 Customer to grant Consents

The Customer shall grant to the Company (at the cost and expense of the Customer) all Consents it is empowered to give in respect of any land owned or controlled by the Customer which the Company requires and notifies to the Customer. Any such Consent shall be granted on such terms and conditions as are reasonably acceptable to the Company, including a condition that the Company shall not be required to move or alter the Company's Connection Equipment to facilitate further developments by the Customer.

12 INTERFACE UNDERTAKING

The Company in accordance with the terms of clause 6 of the Infrastructure Agreement is required to ensure that the Customer gives and maintains an Interface Undertaking to the Company in the form and in accordance with the terms of Schedule 11 of this Agreement. This Interface Undertaking shall be given in favour of the Company and enforceable as a contract by the Company against the Customer for the purpose of ensuring that the legitimate interest of the TAO is protected.

The Company is required to ensure that the Customer gives and maintains an Interface Undertaking to the Company in the form and in accordance with the terms of Schedule 13 of this Agreement. This Interface Undertaking shall be given in favour of the Company and enforceable as a contract by the Company against the Customer for the purpose of ensuring that the legitimate interest of the DSO is protected.

IN WITNESS WHEREOF the Company and the Customer have caused this Connection Agreement to be executed on date above first herein written.

Signed for and on behalf of:-

DocuSigned by:
Siobhan O'Shea
90C93E0C3454430

EIRGRID PLC.

Print Company Signatory Name in Block Capitals:

Siobhan O'Shea

DocuSigned by:
Nick Haslehurst
3A84E0B8203E467

Vantage Data Centres DUB11 Limited.

Print Customer Signatory Name in Block Capitals:

Nick Haslehurst

SCHEDULE 1

Offer Letter

[REDACTED]

Adam Cunningham
Vantage Data Centres DUB11
1-2 Victoria Buildings
Haddington Road
Dublin 4

5th April 2022

Our ref. [REDACTED]

OFFER LETTER

**For Connection of a Facility with a Maximum Import Capacity (MIC) of [REDACTED]
at Profile Park, Kilcarbery, Co. Dublin**

Dear Adam,

EirGrid plc (the "**Company**") acknowledges receipt of Vantage Data Centers DUB11 Limited's (the "**Customer**") application (the "**Application**") to modify its existing connection agreement with the Company for a [REDACTED] demand facility which was executed on the 1st April 2021 (the "**Original Connection Agreement**"). The Company understands that the Customer has requested a modification to increase the rating of its grid connected transformer to 100 MVA which the Company understands the Customer is proposing to build at Profile Park, Kilcarbery, County Dublin and which will be known as Kilcarbery (hereinafter referred to as the "**Facility**").

For the avoidance of doubt, both the Company and the Customer (the "**Parties**") agree, that the Original Connection Agreement shall be amended and restated in the form set out in this offer letter (the "**Offer Letter**") together with the unsigned transmission connection agreement between the Company and the Customer (the "**Connection Agreement**"), which together form the Company's offer to the Customer for connection of the Facility to the Transmission System (this "**Offer**"). This Offer supersedes and takes precedence over all previous written contractual arrangements between the Parties, including the Original Connection Agreement.



The Customer acknowledges that, in accordance with the Network Codes¹, the Company is required to update relevant clauses in contract and general terms and conditions relating to grid connection of new and existing facilities. Any amendments to the general terms and conditions of grid connection made by the Company are subject to the approval of the CRU and, once approved, shall thereafter be binding on the Customer and the Company.

The Customer further acknowledges that the Company is required to update the elements of the Grid Code which are impacted by the Network Codes. The Customer may be required to comply directly with the requirements of the Network Codes, to the extent applicable in the circumstances.

If there is an inconsistency between any of the provisions of the Network Codes and the provisions of the Grid Code, the provisions of the Network Codes shall prevail. Thereafter, if there is any conflict or ambiguity between the terms of the documents listed below, a term contained in a document higher in the list shall have priority over one contained in a document lower in the list.

- (a) The Grid Code;
- (b) The Offer Letter;
- (c) The Connection Agreement including the General Conditions but excluding the Offer Letter;
- (d) The Metering Code;
- (e) The Capacity Market Code; and
- (f) The Trading and Settlement Code.

Unless the context otherwise requires, defined terms used in the Connection Agreement shall have the same meaning when used in this Offer Letter and reference should be made to the Connection Agreement for the definition of such terms.

¹ "Network Codes" means (i) any network codes established under Article 6 of the Electricity Market Regulation, and (ii) guidelines adopted under Article 18 of the Electricity Market Regulation, as may be amended, varied, supplemented or replaced from time to time;

"Electricity Market Regulation" means Regulation (EC) 714/2009 of the European Parliament and of the Council of 13 July 2009 on condition for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No. 1228/2003, as same may be amended, varied, supplemented, recast or replaced from time to time

Amendments may need to be developed from time to time to deal with (a) changes required by applicable laws or regulations or (b) any additional costs and/or expenses which may arise under this Offer Letter or (c) as provided for under the Connection Agreement. The Company also reserves the right to change the method of Connection outlined in the Offer Letter for any reason without increasing the Charges to the Customer arising from such change.

To accept this Offer, the Customer must comply with the Conditions Precedent to offer acceptance (outlined below) no later than three (3) calendar months from the date of the Offer letter i.e. before close of business on 5th July 2022 (the "**Acceptance Date**"). After the Acceptance Date, this Offer cannot be accepted by the Customer without approved extension by the Company.

The Conditions Precedent to offer acceptance are as follows:

1. The Company has received two (2) original copies of the Connection Agreement signed by an authorised signatory of the Customer (see cover letter to the Offer Letter for further details);
2. The Customer has signed the Interface Undertaking with the Transmission Asset Owner which is set out in Schedule 11 of the Connection Agreement;
3. The Customer has signed the Interface Undertaking with the DSO which is set out in Schedule 13 of the Connection Agreement;
4. The Customer has made a payment of €1 to the Company which has been received by the Company;

(hereinafter referred to as the "**Conditions Precedent**").

For the avoidance of doubt, the date that the Original Connection Agreement was executed, 1st April 2021, is the Transmission Connection Agreement Effective Date..

[Redacted]



Based on the information provided by the Customer to the Company in the Application, and on which the Company has relied upon in preparing this Offer Letter, the method of Connection, the Charges and Security for Connection of the Facility to the Transmission System, the Key Parameters and the Assumptions upon which this Offer Letter is based are either set out or referred to below. Any inaccuracies or misinformation or omission of information provided or not provided to the Company by the Customer, its agents or consultants are to the account of the Customer and the Company shall not be liable for any delays or increased costs and/or expenses arising therefrom.

Please note that the Company is not obliged to accept the information provided by the Customer in its Application and reserves the right to require changes in accordance with the Connection Agreement and in particular the Grid Code.

1.0 - The Method of Connection

[Redacted]

1.1 [Redacted]

1.1.1 [Redacted]
[Redacted]

[Redacted]



[Redacted]

1.1.2

[Redacted]

[Redacted]

1.1.3

[Redacted]

[Redacted]



[Redacted]

1.1.4

[Redacted]

1.1.5

[Redacted]

1.1.6

[Redacted]

(Hereinafter known as the [Redacted])

1.1.7

[Redacted]

(Hereinafter known as the '[Redacted]
[Redacted] respectively);

[Redacted]



[Redacted]
[Redacted]
[Redacted]

1.1.8 [Redacted]
[Redacted]
[Redacted]

(Hereinafter known as the [Redacted]
[Redacted])

1.1.9 [Redacted]
[Redacted]
[Redacted]
[Redacted]

1.2 [Redacted]
[Redacted]

1.3 [Redacted]

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[Redacted]
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
















































[Redacted]

[Redacted]

[Redacted]

For the avoidance of doubt the Connection Charge is not considered to be final until the completion of the settlement of any Pass Through Charges

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[REDACTED] [REDACTED] [REDACTED] [REDACTED]	[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] [REDACTED]

[REDACTED]
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[REDACTED]
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[REDACTED]
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[REDACTED]
[REDACTED]

Connection Charge.

[Redacted]



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[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] the estimate for certain Pass Through Charges is provided in this Part II.

2.3 Consents: The Connection Charge includes the cost and expenses that the Company estimates, acting reasonably and taking due account of the social, economic and business environment in which it operates, is involved in making one non-contentious Consent application for each Consent, as identified in Appendix 2, that the Company, acting in accordance with Prudent Electricity Utility Practice, deems necessary in relation to the Company's Connection Works.

It does not provide for the costs and expenses which may arise if such a Consent application is contentious. The additional costs and expenses which may arise in such circumstances include costs and expenses associated with, but not limited to:

- preparing an Environmental Impact Statement if required;
- complying with any decision(s) (including any conditions attached to such decision(s)) made by relevant Competent Authority(s) in their consideration of the application for the Consent in question;

[Redacted]



- written submissions or attendance and provision of data for oral hearings or other meetings with a Competent Authority where Consent applications are contested and costs and expenses arising therefrom or from the decision(s) themselves (including any conditions attached to such decision(s));
- planning, environmental or other conditions which are associated with the Company seeking and/or obtaining Consents;
- any re-design or re-application for Consents to which above points then apply; and
- the costs of seeking, obtaining and paying for wayleaves, easements or other interests in land, including over the Customer's own Site.

Any other additional costs and/or expenses involved in obtaining Consents, howsoever arising are to the account of the Customer.

2.4 circuitRoute: [Redacted]

[Redacted]



[Redacted]

2.6 Interacting Applications: It is in the nature of a national electricity system that a number of applications will be in progress simultaneously which may be in some way competing with or will affect in some way other applications. If an offer is accepted then work that the Company may be undertaking for another applicant or an issued connection offer which has not yet been accepted by the applicant may no longer be valid or appropriate. The Company will advise all affected interacting applicants of an acceptance of a connection offer which affects or invalidates a connection offer made but as yet unaccepted or a connection application being processed as soon as reasonably practicable after the offer acceptance by the first party. The Company can only base connection offers on the committed connections. A connection offer must allow for the rights of third parties to proceed to a committed connection, which may occur in advance of the connection offer being accepted by the original connection applicant if they delay in their acceptance for whatever reason. The first interacting or conflicting applicant to accept an offer will be the one to be given priority.

At present, there are no Interacting Applications associated with this Offer.

[Redacted]



2.7 Grid Code Tests & Commissioning/Testing of the Facility-NCC Signals: The Company allows up to seven (7) man-days for Grid Code Tests and up to three (3) man-days for the Commissioning of the Facility and the Testing of the signals communications interface between the Facility, the Company's Remote Terminal Unit and the Company's National Control Centre (the "Signal Testing"). Except for those circumstances which result from an act or omission by the Company, the Customer shall be responsible for all costs and/or expenses for any additional man-days required for Grid Code Tests or Signal Testing over and above those allotted and the Connection Charge shall be adjusted accordingly.

2.8 Influencing Connections: The offer made to the Customer by the Company may be one of a number of offers that have been issued to applicants for connections to the Transmission System. The Charges, method of Connection, and Connection Dates and periods specified in this Offer Letter may be based on a number of Influencing Connections. If any of the Influencing Connections do not proceed in accordance with the timeframes as set out in their contracts, then the method of Connection, the timing of the Connection and/or Charges may be amended to reflect the changed circumstances and the provisions of Clause 6 of the Connection Agreement will apply. The Company shall not be liable to the Customer nor any third party for losses or costs of any kind arising from or in connection with an Influencing Connection occurring, including but not limited to: a delay in issuing a revised Offer Letter; a delay in proceeding with any Connection Works in the Connection Agreement; any changes to the connection method; and/or any resulting changes to the Charges which the Company, acting reasonably, deems necessary. For the purposes of this offer the term "Influencing Connections" should be interpreted as meaning any offer letter for a connection issued by the Company or ESB Networks Limited (the Distribution System Operator (DSO)) that potentially influences the terms and conditions set out in the Offer Letter. The Influencing Connections for the Facility are:

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

For the avoidance of doubt any increased Charges resulting from any of the Influencing Connections not proceeding will be processed in accordance with CRU approved policy, which includes the current CRU Direction, the Decision Paper on the Implementation of Group Processing – Move to Construction Phase reference CER 15/098A and 15/098B, and any subsequent CRU approved policy update in this regard (the “**Subgroup Progression Direction**”). For the avoidance of doubt the Influencing Connections are considered to be a “**Subgroup**” as set out in the Subgroup Progression Direction. The Influencing Connections may be updated by the Company from time to time.

2.9 **Civils:** N/A

2.10 **Provision of Additional Land:** In consideration of the payment of €1 by the Company to the Customer (receipt of which is hereby acknowledged by the Customer), the Customer acknowledges and agrees that subject to satisfaction of the Pre-Conditions (as defined below) by the Consents Issue Date, the Company may exercise an option (the “**Option**”) requiring the Customer to transfer to the Company additional land which is adjacent to where the Site-Related Connection Equipment is installed (the “**Additional Land**”) within 25 Business Days of the date on which the last of the Pre-Conditions is satisfied (the “**Option Period**”). Exercise of the Option is conditional on satisfaction of the following:

- (i) the Parties, having used all reasonable endeavours, agreeing on the amount to be paid by the Company for the Additional Land by the Planning Application Lodgement Date (the “**Agreed Price**”); and
- (ii) the Company being satisfied with the planning consent issued in respect of the plans and particulars agreed by the Company for the Site Related Connection Equipment and the Facility does not preclude the future use by the Company of the Additional Land,

(the “**Pre-Conditions**”).

[Redacted]



For the avoidance of doubt, the Company may only exercise the Option when both Pre-Conditions have been satisfied, and during the Option Period. If the Pre-Conditions fail to be satisfied by the Consents Issue Date, or the Company elects not to exercise the Option during the Option Period, the Option shall cease to have effect immediately after the Consents Issue Date or on the expiry of the Option Period (whichever is applicable), and the Customer shall not have any claim against the Company in respect of the Additional Land.

If the Company is satisfied to exercise the Option, it shall serve an Option notice on the Customer in accordance with clause 16.1 of the General Conditions. Once the Option has been exercised, the Customer agrees to transfer to the TAO the Additional Land in accordance with Schedule 12 of the Connection Agreement at the Agreed Price.

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

Part III: Other Charges

2.11 Decommissioning and Reinstatement Charges: [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]



Part IV: Other Security

[Redacted]

3.0 - Assumptions

Any change in the assumptions could lead to a change in (1) the Charges, (2) the cost of Consents, (3) the timing of the Connection and/or (4) the method of Connection. The effects of such changes may be to the account of the Customer.

The assumptions upon which this Offer Letter is based are as follows:

- 3.1. **Connection Agreement:** The terms and conditions of the Connection Agreement;
- 3.2. **Method of Connection:** The method of Connection is as detailed in Section 1.0 above;
- 3.3. **Term:** It is assumed that the Term of the Connection Agreement is as set out in Section 5.0 below;

- 3.4. **Route Lengths:** This Offer is based on a [REDACTED] m. The [REDACTED] is based on desktop studies and a more detailed route selection process will be carried out by the Customer in consultation with the Company following execution of the Connection Agreement;
- 3.5. **Line or Cable Route and Ground Conditions:** Reasonable line or cable routes and ground conditions and no unreasonable restrictions placed on the Company for working hours or other restrictions by third parties. For the avoidance of doubt, reasonable ground conditions should be interpreted as meaning ground conditions that do not require explosives or specialised equipment for their removal, stabilisation or draining and do not involve the re-routing of other services;
- 3.6. **Influencing Connections:** The Influencing Connections accept their respective Connection offers and proceed with the design, construction, completion and Commissioning of their projects in accordance with the terms of their respective Connection Agreements;
- 3.7. **Alterations to the Transmission System:** No alterations to the Transmission System will be necessary for this Connection, other than those detailed in this Offer Letter;
- 3.8. **Company's Connection Works:** The installation by the Company of all transmission Plant will be in accordance with the Company's standard transmission designs;
- 3.9. **Delivery Dates:** The delivery dates of all items of plant and materials will be within current standard industry delivery periods;
- 3.10. **Weather Conditions:** No adverse environmental and/or weather conditions will be encountered during the Construction Programme;
- 3.11. **Changes in Construction, Access and Commissioning Dates and Periods:** The dates and periods in Appendix 1 below remain as set out;

[Redacted]



3.12. **Customer Costs:** The Customer bears all the costs for the work performed by the Customer;

3.13. **Connection Works Planning Permission:** The Customer obtains all necessary consents for the Kilcarbery 110 kV Station Compound;

3.14. **Connection Point / Interface Point:**

- **Connection Point:** The Connection Point is the first set of high voltage ("HV") air insulated bushings at the Customer's HV transformer. Connection point by means of HV cable boxes on the Customer's power transformers or via cable boxes on the Customer's HV switchgear shall not be permitted. The Customer shall be responsible for making the connection from the Connection Point onto the Customer's transformer bushings. For the avoidance of doubt, the [Redacted]

[Redacted]

[Redacted] The Facility may not import or export power onto or from the Transmission System through another facility's connection point.

- **Low Voltage (LV) Interface Point:** A low-voltage ("LV") interface cabinet for small wiring circuits will be supplied and fitted by the Customer in [Redacted]

[Redacted]

- **Customer Compound:** All of the Customer's connection equipment, such as control room, power transformer and associated transformer MV bay and LV interface and protection shall be located within the Customer's compound. No part of the MV/LV interface arrangements (associated with the transmission substation) are to extend beyond the Customer's [Redacted] compound



3.15. Operational Boundary: The Company will be responsible for the operation of all plant on the Company's side of the Connection Point up to and including all [REDACTED]
[REDACTED] The Company will be responsible for the status of the [REDACTED]

In the event that the Company requires control of any additional plant in the Customer compound (up to the HV bushings on the Customer's transformer(s)) then this will be agreed by the Company and the Customer in advance of Energisation of the Facility;

3.16. Construction Outage Requirements: The transmission outage season runs from the end of March to the end of October. Please note that outages in excess of one weekday or one full weekend will not be given outside of the transmission outage season. Also the Customer should also be aware that there may be existing parties connected or contracted to connect, or may be connected at a future date, at [REDACTED] which may influence the outage availability for the connection of the Facility. It is assumed all required outages can be incorporated into the Company's Outages Schedule;

3.17. Contestability:

Dedicated Assets for the Facility	Contestable Assets
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Dedicated Assets for the Facility	Non-Contestable Assets
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

- 3.18. **Company's Connection Works:** As detailed in Appendix 2;
- 3.19. **Customer's Connection Works:** As detailed in Appendix 3;
- 3.20. **Location of the Facility:** It is assumed that the Facility is located at coordinates [REDACTED]
- 3.21. **Customer [REDACTED] Transformers:** It is assumed the Customer [REDACTED] [REDACTED] from the relevant transformer bays and are connected to the transformer bays using underground cable ;
- 3.22. **Access and space requirements:** It is assumed that the Customer will provide adequate access from the nearest paved County Council road to the [REDACTED]
- 3.23. **Land rights:** It is assumed that the [REDACTED] and appropriate access rights and wayleaves and easements (if applicable) shall be transferred from the Customer to the Transmission Asset Owner in accordance with Schedule 10 and Schedule 12 of the Connection Agreement;

- 3.24. **Construction Safety:** It is assumed that the Customer's Connection Works will be undertaken in accordance with ESB Safety Standards and any other appropriate health, safety and environmental standards as deemed applicable by a Competent Authority;
- 3.25. **Basis of Connection Offer:** The Offer Letter is based on the Application and subsequent clarifications deemed complete on the [REDACTED] as set out in Schedule 8 of the Connection Agreement;
- 3.26. **Deep Reinforcement Works:** [REDACTED]
- 3.27. **Dynamic modelling clause:** [REDACTED]
- 3.28. **Optimisation of Deep Reinforcement Works:** Please note that following the completion of the processing of applications by the Company and ESB Networks, the Company shall seek to optimise the Deep Reinforcement Works. As a result of this optimisation study, the Deep Reinforcement Works listed in section 1.3 of this Offer Letter may be amended;
- 3.29. **Single Electricity Market Operator (SEMO):** [REDACTED]
- 3.30. **Metering Point:** [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] The Relevant Meter Operator is defined as the entity obliged under the Trading and Settlement Code or obliged under licence, issued by the Commission, to operate and provide for the installation, testing, calibration and data collection of a defined set of metering points;
- 3.31. **Power Output Control Mechanism:** [REDACTED]



- 3.32. **Space Requirements:** It is assumed that there is sufficient space available in Transmission Stations to carry out the Site Related Connection Equipment works and space is available to expand earth grids where required;
- 3.33. **Installed Plant:** [REDACTED]
- 3.34. **Maintenance Outages:** The Facility may be subject to annual disconnection for periods while maintenance is carried out on elements of the Transmission System that form part of the Site-Related Connection Equipment or Allocated Equipment;
- 3.35. **Assumed Data:** The Application has been processed using assumed data as identified by the Company. The assumed data and Application on which this Offer Letter is based is set out in Schedule 8 of the Connection Agreement.

A full application form including all the technical data currently requested must be submitted by the Customer at least one calendar year prior to first Energisation (the "Submitted Data"). This Offer Letter is subject to the results of the completed analysis using this data. If a modification agreement based on the outcome of studies carried out using the Submitted Data is required, it must be accepted prior to first Energisation, otherwise first Energisation may be delayed. All risks associated with any changes required due to the results of analysis carried out using the submitted data and any associated financial implications are the Customer's responsibility. The Facility cannot connect to the Transmission System until any issues identified by the analysis of the Submitted Data, including payment of the appropriate Charges, have been resolved;

- 3.36. **Cable Use and Harmonics:** The use of underground cabling can have impacts on the Transmission System, for example amplification of background harmonic distortion, that would require specific works to resolve. If additional works, for example filter banks, are required by the TSO, this may increase the scope and cost of assets for a particular connection. Notwithstanding the other clauses in this Connection Agreement whereby the connection method may be amended the Customer should be aware that if there is a material change to the underground cabling assumptions that there could be a material change to the connection method, leadtimes and Charges for the Facility;
- 3.37. **Power Quality:** Further detailed power quality studies need to be carried out prior to the Energisation of the Facility, as in addition to harmonics driven Network reinforcements, a limit on the harmonic distortions caused by the Customer's Facility may be required in which case the Customer would have to comply with said limits. Harmonics limits may be provided to the Customer by the Company at least eighteen (18) months prior to the expected Energisation of the Facility or a date closer to Energisation as agreed between the Customer and the Company;
- 3.38. **Reactive Power Capability (Demand Customer):** [REDACTED]
[REDACTED]
[REDACTED]
- 3.39. **Fault Ride Through:** The Customer should not produce load fluctuations of greater than [REDACTED] over short periods of time during system faults or switching transients that do not disconnect the Customer from the Transmission System;
- 3.40. **Special Protection Schemes:** [REDACTED]
- 3.41. **Shieldwire Requirements:** [REDACTED]
- 3.42. **Naming:** The circuit names referenced in this Offer Letter are assumed to be correct as of the date of issue of the Offer Letter. The names referenced are subject to change from time to time as new stations and circuits are connected to the Transmission System;

[Redacted]



3.43. Underground cables: Prior to the Customer commencing any works on the Facility's internal network, the proposed layout of the internal network including all routes must be submitted to the Company by the Customer. The Company shall confirm whether the Facility's internal network has the potential to conflict with the existing or planned Transmission System. In the event that there is a conflict the cost of resolving it shall be to the Customer's account;

3.44. Station Layout: [Redacted]
[Redacted]
[Redacted]

3.45. Clearances: The Customer should consult with the Company if any of the Facility's equipment will be close to the centreline of any existing or planned transmission circuits. Technical guidance on clearances is available on the Company's website including drawings illustrating the required clearances. If there are any transmission angle masts on the Site of the Facility, the Customer should also consult with the Company to agree upon space provision for stringing areas/maintenance around the angle mast;

3.46. Blackstart and Blue Alert Stations: The Company reserves the right to switch out blue alert stations, and any associated customers connected to these stations, for the purpose of the Company's power system restoration testing. The assignment of transmission stations as blue alert stations may change from time to time. [Redacted]

3.47. [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

[Redacted]



[Redacted]

3.48. Tower Footing Resistance Measures: Tower footing resistance reduction measures and/or potential control measures may be required to be put in place as required to satisfy EirGrid's protection requirements and the latest version of National Normative Aspects I.S. EN 50341-3;

3.49. Transformer Earthing: [Redacted]

3.50. Standalone Earthing Design: [Redacted]

3.51. Outage Requirments: [Redacted]

3.52. Re-use of existing cable / Cable Type: [Redacted]

[Redacted]



3.53. [Redacted]
[Redacted]
[Redacted]
[Redacted]

3.54. Maximum Import Capacity: [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

[Redacted]
[Redacted]
[Redacted]
[Redacted]

[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

3.55. Constrained Network: [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]



4.0 - Connection Works Ownership

For the avoidance of doubt, the Company will, on behalf of the Transmission Asset Owner, ensure that the Customer transfers the ownership of the following components of the Connection Works to the Transmission Asset Owner in accordance with Schedule 10 and Schedule 12 of the Connection Agreement:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

It is a requirement that the transfer of ownership is finalised in accordance with the timelines as set out in Schedule 12 of the Connection Agreement.

5.0 - Term

The Term of the Connection Agreement is as set out in the General Conditions.

6.0 - Use of System Charges

Use of System Charges are invoiced monthly and the Connection Agreement binds the Customer to pay for Use of System Charges as applicable to the Customer based on their eligibility under the definition of 'User' in the Connection Agreement. [REDACTED]

[REDACTED] Please refer to the Company's published Statement of Charges for more information.



7.0 – Terms for Suspension of Works

- 7.1** Where the Customer requests suspension of the Project (i.e. to go “On Hold”), or where the Customer has not made the Second Stage Payment or any subsequent Stage Payment under clause 2.0 of this Offer Letter by the applicable Due Date, or if any other obligation of the Customer has not been performed by the applicable date for performance under this Connection Agreement, then without prejudice to any other rights it may have under the Connection Agreement, the Company may, at its discretion, suspend the planning, commencement and carrying out of the Company Connection Works. Where the Company suspends its obligations under this clause 7.1, it shall notify the Customer in writing that the Project is suspended (also referred to as being ‘on hold’).
- 7.2** For the purposes of clause 7.1, the Customer will be deemed to have requested suspension of the Project in circumstances where:
- (i) The Customer requests in writing to go On Hold; or
 - (ii) Following a written query from the Company as to whether the Customer wishes to progress the Project at a particular time, the Customer advises in writing that they wish to suspend progress on the Project; or
 - (iii) The Customer fails to respond to a written query from the Company under (ii) above within the timeframe specified by the Company for a response by the Customer.



- 7.3 During a period of suspension under clause 7.1, the Company shall be under no obligation to take any steps with regard to the planning, commencement or carrying out of Company Connection Works, and solely where the Company's Connection Works are dedicated to a single Customer who does not share any connection assets and/or connection costs with any other customer of the Company ("**Dedicated Works**") the Customer shall be under no obligation to make a further Stage Payment until the Customer requests to lift the suspension under clause 7.4. Notwithstanding the foregoing, in circumstances where some or all of the connection assets, works and/or connection costs associated with the Company's Connection Works under this Agreement are or become shared with, or common to, any other customer's connection ("**Shared Works**"), then the suspension of the Customer's Project shall not in any way delay, limit or impede on the Company's entitlement to invoice the Customer for payment of the relevant Stage Payment and subject to, payment of such Stage Payment, to proceed with the Shared Works. For the avoidance of doubt the Company shall determine whether the Customer Works are or have the potential to become Shared Works.
- 7.4 A suspension under clause 7.1 shall be lifted by the Company only following the request of the Customer, and where applicable:
- 7.4.1** the payment by the Customer of the next applicable Stage Payment (which shall be calculated by reference to the revised Connection Charge under clause 0 and invoiced by the Company); and/or
 - 7.4.2** the provision by the Customer of evidence to the satisfaction of the Company that any relevant outstanding obligation of the Customer has been performed.
- 7.5 A period of suspension under 7.1 shall not have the effect of altering any longstop date which is binding on the Customer under this Agreement. For the avoidance of doubt, to the extent that any indicative timelines for the performance of Company Connection Works have been communicated to the Customer, such timelines are likely to change as a result of any period of suspension.



- 7.6 Following any period of suspension under clause 7.1, the Customer's Connection Charge shall be re-calculated on the basis of the Company's standard Charges applicable as of the date of invoice of the next applicable Stage Payment following the period of suspension (the "Revised Connection Charge"), and for the purposes of clause 2 of this Offer Letter, all Stage Payments due following the period of suspension shall be calculated by reference to the Revised Connection Charge.
- 7.7 Where any Stage Payment was outstanding as at the date of commencement of the suspension, then following the request of the Customer to lift the suspension, the Company shall issue a revised invoice for the outstanding Stage Payment which shall be calculated by reference to the Revised Connection Charge under clause 0, and which shall supersede and replace the original invoice for the relevant Stage Payment.
- 7.8 Following satisfaction of the conditions of clause 7.4, the Company shall notify the Customer in writing of the date on which the suspension is lifted.

8.0 - Miscellaneous

- 8.1 **Value Added Tax:** Value Added Tax or any replacement or other sales taxes in force in Ireland at the appropriate rate will be payable by the Customer on all Charges.
- 8.2 Any costs and expenses arising under this Offer Letter are governed by the terms of the Connection Agreement and will become payable by the Customer on receipt of the Company's invoice for the same.
- 8.3 Any extension of the Term of the Connection Agreement will require a re-evaluation of the Charges to cover additional costs and expenses arising therefrom including potential refurbishment and additional maintenance costs and the re-evaluated Charges will be payable as notified by the Company.



8.4 In issuing any amended Offer Letter, the Company will advise the Customer of any shortfall in amounts already paid by the Customer, arising from any increased overall cost of the Charges and the associated Security requirements. The Customer's obligation to pay on the basis of a Modification to the Offer Letter includes an obligation to top-up the Charges and/or the Security then extant within fourteen (14) Business Days of receipt of a Modification to the Offer Letter.

We look forward to hearing from you.

Yours sincerely,

DocuSigned by:
Siobhan O'Shea
90C8350C345428

Siobhán O'Shea
Head of Customer and Connections
EirGrid plc

Appendix 1

Construction, Access and Commissioning Dates and Periods

Scheduled Planning Application Lodgement Period:	[REDACTED]
Initial Construction Notification Period:	[REDACTED]
Scheduled Consents Issue Date	[REDACTED]
Construction Program Finalisation Period:	[REDACTED]
Connection Works Completion Period:	[REDACTED]
Commissioning Tests Completion Period:	[REDACTED]
Scheduled Operational Date	[REDACTED]

Contract Longstop Dates

Consents Issue Date Longstop Date	[REDACTED]
Scheduled Operational Date Longstop Date	[REDACTED]

For the avoidance of doubt the Scheduled Operational Date Longstop Date above takes precedence over the Definition for the Scheduled Operational Date Longstop Date as set out in the General Conditions.

[Redacted]



Appendix 2

Company's Connection Works

For the Connection Works the Company will perform the following:

Site-Related Connection Equipment

No.	SRCE	Item Description
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]
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●	[Redacted]	[Redacted]
●	[Redacted]	[Redacted]

[REDACTED]



		[REDACTED]
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•	[REDACTED]	[REDACTED]
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•	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]



Appendix 3

Customer's Connection Works

For the Connection Works the Customer will perform the following in accordance with the Company's requirements:

No.	SRCE	Item Description
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
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●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]
●	[REDACTED]	[REDACTED]

[Redacted]



[Redacted]	[Redacted]	[Redacted]
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■	[Redacted]	[Redacted]
■	[Redacted]	[Redacted]
■	[Redacted]	[Redacted]
■	[Redacted]	[Redacted]

All the above are to be provided in accordance with the Company's requirements as provided for under the Connection Agreement.

SCHEDULE 2
Site Specific Details

- | | | |
|---|--|---|
| 1 | Location: | Profile Park, Kilcarbery, Co. Dublin |
| 2 | Facility Name: | Kilcarbery |
| 3 | Facility Type: | [REDACTED] |
| 4 | Maximum Export Capacity: | [REDACTED] |
| 5 | Maximum Import Capacity: | [REDACTED] |
| 6 | [REDACTED] | [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] |
| 7 | [REDACTED] | [REDACTED] |
| 8 | Independent Engineer: | Both parties agree to meet to discuss the appointment of the Independent Engineer within thirty (30) days of execution of the Connection Agreement. |
| 9 | Provisional Settings for Customer's protection equipment: | to be advised in writing by the Company to the Customer as soon as reasonably practicable. |

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

SCHEDULE 3

Key Parameters

1. Site Location: Profile Park, Kilcarbery, Co. Dublin
2. Plant Details: [REDACTED]

SCHEDULE 4

This schedule is left intentionally blank

SCHEDULE 5

Addresses

COMPANY:

Address: EirGrid plc.
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Republic of Ireland

For the attention of: Financial Controller
EirGrid plc.

Facsimile Number: + 353 1 661 5375

CUSTOMER:

Address: Vantage Data Centres DUB11
1-2 Victoria Buildings
Haddington Road
Dublin 4

For the attention of: [REDACTED]

SCHEDULE 6

Insurance

The insurances below must be in place prior to the commencement of construction of the Connection Works.

Employer's Liability

Cover:	Legal liability of the insured for bodily injury, death, illness or disease to any employee of the insured.
Limit of Indemnity:	Minimum of €13,000,000 any one accident or series of accidents arising out of a single occurrence/unlimited any one period of insurance.
Insured:	The Customer.
Jurisdiction:	To include Republic of Ireland.

Note: Policy to include specific indemnity to the Company and ESB (as the TAO).

Public/Product Liability

Cover:	Legal liability of the insured for damage to property of third parties or bodily injury, death or disease to third parties arising out of the construction, ownership, operation and maintenance of the Facility.
Limit of Indemnity:	Minimum of €6,500,000 any one occurrence unlimited in any period of insurance for the public liability exposures and capped at any one occurrence level and in the aggregate per insurance period for product liability.
Insured:	The Customer.
Jurisdiction:	To include Republic of Ireland.

Note: Policy to include specific indemnity to the Company and ESB (as the TAO).

SCHEDULE 7A

Connection Charge Bond to be provided by a Bank or Financial Institution

To: EirGrid plc. [Date]
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Republic of Ireland

Dear Sirs

Connection Charge Bond Issued pursuant to the Connection Agreement in the amount of €[]

Under the Connection Agreement for a Facility at [] between EirGrid plc. (the "Beneficiary") which includes its legal successors and any person to whom the Beneficiary assigns or transfers all its rights and obligations under the Connection Agreement and [] (the "Applicant"), which expression includes its legal successors and any person to whom the Applicant assigns or transfers all its rights and obligations under the Connection Agreement) it was agreed that the Applicant will procure the issue of a Connection Charge Bond in favour of the Beneficiary in the form of this document.

[] with its registered place of business at [] (the "Issuer") issues this Connection Charge Bond, number [], and irrevocably and unconditionally agrees as follows:

1. In this Connection Charge Bond (and every Demand), unless the context otherwise requires:

"Authorised Signatory"

means an officer of the Beneficiary having authority to execute a Demand and whose name and specimen signature have been notified to the Issuer by the Beneficiary before service of the Demand;

"Demand"

means a written notice of demand served by the Beneficiary on the Issuer in the form set out in the Appendix to this Connection Charge Bond;

"Expiry Date"

means the later of the date falling six (6) months after the Operational Date or the date that is twelve (12) months after the Scheduled Operational Date Longstop Date;

"UCP Rules"

means the ICC Uniform Customs and Practices for Documentary Credits, 2007 Revisions (UCP 600) and all subsequent revisions thereof unless otherwise stated. Reference to any article is reference to such article in the UCP Rules or, where relevant, the equivalent article in any subsequent revisions of the UCP Rules.

"Specified Amount"

means in relation to any Demand the sum specified in that Demand.

Unless expressly defined in this Connection Charge Bond, words and phrases defined in the Connection Agreement shall have the same meaning in this Connection Charge Bond (and every Demand).

This Connection Charge Bond is subject to the UCP Rules except where otherwise stated.

2. The Issuer irrevocably and unconditionally undertakes that it will, on service of a Demand in paper form at the address specified below at clause 7 (or such other address as may be agreed between the Beneficiary and the Issuer) before the Expiry Date, and within three (3) Business Days of service of such Demand, pay to the Beneficiary the Specified Amount, unless in so doing the aggregate limit set out in paragraph 3 of this Connection Charge Bond would be exceeded, in which case the Issuer shall pay to the Beneficiary so much of the Specified Amount as may be paid without exceeding such limit.
3. The Beneficiary may make one or more Demands under this Connection Charge Bond provided that the aggregate amount of all Demands and the aggregate liability of the Issuer under this Connection Charge Bond shall not exceed €[] .
4. Any payment under this Connection Charge Bond shall be made without set-off or counterclaim and free from any deduction or withholding in euro in immediately available, fully transferable, cleared funds by transfer to the following account in the Beneficiary's name;

Account Name: [REDACTED]
Account Number: [REDACTED]
Bank Name: [REDACTED]
Bank Address: [REDACTED]
Sort Code: [REDACTED]
Swift Code: [REDACTED]
IBAN: [REDACTED]

or in such other manner or to such other account at an Irish financial institution as the Beneficiary may from time to time notify to the Issuer in writing.

Where any such deduction or withholding is required by law to be made (whether by the Applicant, Issuer or otherwise) the Issuer shall pay in the same manner and at the same time such additional amounts as will result in receipts by the Beneficiary of the amount it would have received had no such reduction or withholding been required.

5. The obligations of the Issuer under this Connection Charge Bond shall cease on the Expiry Date, except:

5.1 in respect of any Demand received by the Issuer prior to the Expiry Date in relation to which the Issuer shall be obliged (subject to the terms of this Connection Charge Bond) to pay to the Beneficiary the Specified Amount; and

5.2 as provided in paragraph 11 of this Connection Charge Bond;

and the provisions of this paragraph shall survive expiration of this Connection Charge Bond accordingly.

6. The liability of the Issuer shall not in any way be affected by:

6.1 any time, indulgence or relief being given to or by the Beneficiary or the Applicant;

6.2 any amendment or extension of or supplement to the Connection Agreement;

6.3 any invalidity in, or irregularity or unenforceability of the obligations of any person under the Connection Agreement; or

6.4 anything done or omitted which but for this provision might constitute a legal or equitable discharge or release of, or defence for, the Issuer.

7. Any notices or notification (including any Demand and the requirement for supporting documents and a supporting statement under Article 15 paragraphs (a) and (b) of the of the ICC Uniform Rules for Demand Guarantees, International Chamber of Commerce Publication No. 758 ("URDG Rules") is hereby excluded) given under this Connection Charge Bond shall be in writing and shall be served by sending the same by post or leaving the same at:

If to the Issuer: []

Attention: The Company Secretary

If to the Beneficiary: EirGrid plc.
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Ireland

Attention: The Company Secretary

The Beneficiary and the Issuer may change its nominated address to another address in the Republic of Ireland by prior written notice to the other party. Any written notices shall be effective upon the earlier of:

- 7.1 actual receipt; or
- 7.2 two (2) days after mailing or despatch.
8. This Connection Charge Bond may be amended only by an instrument in writing signed on behalf of the Beneficiary and the Issuer.
9. This Connection Charge Bond shall be governed by and construed in accordance with the laws of Ireland. The competent Courts shall be the Courts of Ireland.
10. The Beneficiary, after receiving written consent of the Issuer and the Applicant (such consent not to be unreasonably withheld), may transfer and assign all its rights and obligations under the Connection Charge Bond and Article 38 and 39 of the UCP Rules is hereby expressly excluded to the extent that it precludes such an assignment.
11. If this Connection Charge Bond expires during any interruption of business of a kind referred to in Article 26 of the UCP Rules, then the Issuer shall remain liable to make payment under this Connection Charge Bond in respect of any Demand served no later than fifteen (15) Business Days after the Issuer has notified the Beneficiary that its business has ceased to be so interrupted. The Issuer undertakes that it shall, within two (2) Business Days of the cessation of any interruption of business referred to in Article 36 of the UCP Rules (during which this Connection Charge Bond expires) notify the Beneficiary of that cessation. Article 36 of the UCP Rules is hereby amended.
12. All charges and fees arising under the Connection Charge Bond are for the account of the Applicant.

Yours faithfully

[]

Appendix to Schedule 7A - Form Of Demand

FORM OF DEMAND

To: [The Issuer]

[Date]

The Connection Charge Bond number [] dated [] (the "Connection Charge Bond")

We refer to the Connection Charge Bond dated [] and issued by you in our favour. In accordance with paragraph 2 of the Connection Charge Bond, we hereby make demand in the sum of EUR [€] and request that you pay the same immediately to [specified account].

For EirGrid plc.

Dated this [] of [] 20[]

[Authorised signatory]

SCHEDULE 7B

THIS SCHEDULE IS NOT RELEVANT'

MEC Bond to be provided by a Bank or Financial Institution

To: EirGrid plc. [Date]
The Oval
160 Shelbourne Road,
Ballsbridge
Dublin 4
Republic of Ireland

Dear Sirs

MEC Bond Issued pursuant to the Connection Agreement in the amount of €[]

Under the Connection Agreement for a Facility at [] between the EirGrid plc. (the "Beneficiary") which includes its legal successors and any person to whom the Beneficiary assigns or transfers all its rights and obligations under the Connection Agreement and [] (the "Applicant"), which expression includes its legal successors and any person to whom the Applicant assigns or transfers all its rights and obligations under the Connection Agreement it was agreed that the Applicant will procure the issue of a MEC Bond in favour of the Beneficiary in the form of this document.

[] with its registered place of business at [] (the "Issuer") issues this MEC Bond, number [], and irrevocably and unconditionally agrees as follows:

1. In this MEC Bond (and every Demand), unless the context otherwise requires:

"Authorised Signatory"

means an officer of the Beneficiary having authority to execute a Demand and whose name and specimen signature have been notified to the Issuer by the Beneficiary before service of the Demand;

"Demand"

means a written notice of demand served by the Beneficiary on the Issuer in the form set out in the Appendix to this MEC Bond;

"Expiry Date"

means the later of the date falling six (6) months after the Operational Date or the date that is twelve (12) months after the Scheduled Operational Date Longstop Date;

OR

means the date falling one (1) month after the Operational Certificate has issued and Capacity Tests A and B have been achieved as applicable;

"UCP Rules"

means the ICC Uniform Customs and Practices for Documentary Credits, 2007 Revisions (UCP 600) and all subsequent revisions thereof unless otherwise stated. Reference to any article is reference to such article in the UCP Rules or, where relevant, the equivalent article in any subsequent revisions of the UCP Rules.

"Specified Amount"

means in relation to any Demand the sum specified in that Demand.

Unless expressly defined in this MEC Bond, words and phrases defined in the Connection Agreement shall have the same meaning in this MEC Bond (and every Demand).

This MEC Bond is subject to the UCP Rules except where otherwise stated.

2. The Issuer irrevocably and unconditionally undertakes that it will, on service of a Demand in paper form at the address specified below in clause 7 (or such other address as agreed between the Beneficiary and the Issuer) before the Expiry Date, and within three (3) Business Days of service of the Demand pay to the Beneficiary the Specified Amount, unless in so doing the aggregate limit set out in paragraph 3 of this MEC Bond would be exceeded, in which case the Issuer shall pay to the Beneficiary so much of the Specified Amount as may be paid without exceeding such limit.
3. The Beneficiary may make one or more Demands under this MEC Bond provided that the aggregate amount of all Demands and the aggregate liability of the Issuer under this MEC Bond shall not exceed €[redacted].
4. Any payment under this MEC Bond shall be made without set-off or counterclaim and free from any deduction or withholding in euro in immediately available, fully transferable, cleared funds by transfer to the following account in the Beneficiary's name;

Account Name: [redacted]
Account Number: [redacted]
Bank Name: [redacted]
Bank Address: [redacted]
Sort Code: [redacted]
Swift Code: [redacted]
IBAN: [redacted]

or in such other manner or to such other account at an Irish financial institution as the Beneficiary may from time to time notify to the Issuer in writing.

Where any such deduction or withholding or is required by law to be made (whether by the Applicant, Issuer or otherwise) the Issuer shall pay in the same manner and at the same time such additional amounts as will result in receipt by the Beneficiary of the amount it would have received had no such deduction or withholding been required.

5. The obligations of the Issuer under this MEC Bond shall cease on the Expiry Date, except:

5.1 in respect of any Demand received by the Issuer prior to the Expiry Date in relation to which the Issuer shall be obliged (subject to the terms of this MEC Bond) to pay to the Beneficiary the Specified Amount; and

5.2 as provided in paragraph 11 of this MEC Bond;

and the provisions of this paragraph 5 shall survive expiration of this MEC Bond accordingly.

6. The liability of the Issuer shall not in any way be affected by:

6.1 any time, indulgence or relief being given to or by the Beneficiary or the Applicant;

6.2 any amendment or extension of or supplement to the Connection Agreement;

6.3 any invalidity in, or irregularity or unenforceability of the obligations of any person under the Connection Agreement; or

6.4 anything done or omitted which but for this provision might constitute a legal or equitable discharge or release of, or defence for, the Issuer.

7. Any notices or notification (including any Demand and the requirement for supporting documents and a supporting statement under Article 15 (a) and (b) of the ICC Uniform Rules for Demand Guarantees, International Chamber of Commerce Publication No. 758 ("URDG Rules")) given under this MEC Bond shall be in writing and shall be served by sending the same by post or leaving the same at:

If to the Issuer: []

Attention: The Company Secretary

If to the Beneficiary: EirGrid plc.
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Ireland

Attention: The Company Secretary

The Beneficiary and the Issuer may change its nominated address to another address in the Republic of Ireland by prior written notice to the other party. Any written notices shall be effective upon the earlier of:

- 7.1 actual receipt; or
 - 7.2 two (2) days after mailing or despatch.
8. This MEC Bond may be amended only by an instrument in writing signed on behalf of the Beneficiary or the Issuer.
 9. The governing law for the purposes of this MEC Bond shall be the laws of Ireland. The competent Courts shall be the Courts of Ireland.
 10. The Beneficiary, after receiving written consent of the Issuer and the Applicant (such consent not to be unreasonably withheld), may transfer and assign all its rights and obligations under the MEC Bond and Article 38 and 39 of the UCP Rules is hereby expressly excluded to the extent that it precludes such an assignment.
 11. If this MEC Bond expires during any interruption of business of a kind referred to in Article 26 of the UCP Rules, then the Issuer shall remain liable to make payment under this MEC Bond in respect of any Demand served no later than fifteen (15) Business Days after the Issuer has notified the Beneficiary that its business has ceased to be so interrupted. The Issuer undertakes that it shall, within two (2) Business Days of the cessation of any interruption of business referred to in Article 36 of the UCP Rules (during which this MEC Bond expires) notify the Beneficiary of that cessation. Article 36 of the UCP Rules is hereby amended.
 12. All charges and fees under this MEC Bond shall be for the account of the Applicant.

Yours faithfully

[]

Appendix to Schedule 7B – Form of Demand

To: [The Issuer]

[Date]

The MEC Bond number [] dated [] (the “MEC Bond”)

We refer to the MEC Bond dated [] and issued by you in our favour. In accordance with paragraph 2 of the MEC Bond, we hereby make demand in the sum of EUR [€] and request that you pay the same immediately to [specified account].

For EirGrid plc.

Dated this [] of [] 20[]

[Authorised signatory]

SCHEDULE 7C

'THIS SCHEDULE IS NOT RELEVANT'

MIC Bond to be provided by a Bank or Financial Institution

To: EirGrid [Date]
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Republic of Ireland

Dear Sirs

MIC Bond Issued pursuant to the Connection Agreement in the amount of €[]

Under the Connection Agreement for a Facility at [] between EirGrid plc. (the "Beneficiary") which includes its legal successors and any person to whom the Beneficiary assigns or transfers all its rights and obligations under the Connection Agreement and [] (the "Applicant"), which expression includes its legal successors and any person to whom the Applicant assigns or transfers all its rights and obligations under the Connection Agreement) it was agreed that the Applicant will procure the issue of a MIC Bond in favour of the Beneficiary in the form of this document.

[] with its registered place of business at [] (the "Issuer") issues this MIC Bond, number [], and irrevocably and unconditionally agrees as follows:

1. In this MIC Bond (and every Demand), unless the context otherwise requires:

"Authorised Signatory"

means an officer of the Beneficiary having authority to execute a Demand and whose name and specimen signature have been notified to the Issuer by the Beneficiary before service of the Demand;

"Demand"

means a written notice of demand served by the Beneficiary on the Issuer in the form set out in the Appendix to this MIC Bond;

"Expiry Date"

means the date falling two (2) years after the Operational Date;

"UCP Rules"

means the ICC Uniform Customs and Practices for Documentary Credits, 2007 Revisions (UCP 600) and all subsequent revisions thereof unless otherwise stated. Reference to any article is reference to such article in the UCP Rules or, where relevant, the equivalent article in any subsequent revisions of the UCP Rules.

"Specified Amount"

means in relation to any Demand the sum specified in that Demand.

Unless expressly defined in this MIC Bond, words and phrases defined in the Connection Agreement shall have the same meaning in this MIC Bond (and every Demand).

This MIC Bond is subject to the UCP Rules except where otherwise stated.

2. The Issuer irrevocably and unconditionally undertakes that it will, on service of a Demand in paper form at the address specified below at clause 7 (or such other address as may be agreed between the Beneficiary and the Issuer) before the Expiry Date, and within three (3) Business Days of service of the Demand pay to the Beneficiary the Specified Amount, unless in so doing the aggregate limit set out in paragraph 3 of this MIC Bond would be exceeded, in which case the Issuer shall pay to the Beneficiary so much of the Specified Amount as may be paid without exceeding such limit.
3. The Beneficiary may make one or more Demands under this MIC Bond provided that the aggregate amount of all Demands and the aggregate liability of the Issuer under this MIC Bond shall not exceed €[REDACTED].
4. Any payment under this MIC Bond shall be made without set-off or counterclaim and free from any deduction or withholding in euro in immediately available, fully transferable, cleared funds by transfer to the following account in the Beneficiary's name:

Account Name: [REDACTED]
Account Number: [REDACTED]
Bank Name: [REDACTED]
Bank Address: [REDACTED]
Sort Code: [REDACTED]
Swift Code: [REDACTED]
IBAN: [REDACTED]

or in such other manner or to such other account at an Irish financial institution as the Beneficiary may from time to time notify to the Issuer in writing.

Where any such deduction or withholding is required by law to be made (whether by the Applicant, Issuer or otherwise) the Issuer shall pay in the same manner and at the same time such additional amounts as will result in receipts by the Beneficiary of the amount it would have received had no such reduction or withholding been required.

5. The obligations of the Issuer under this MIC Bond shall cease on the Expiry Date, except:

5.1 in respect of any Demand received by the Issuer prior to the Expiry Date in relation to which the Issuer shall be obliged (subject to the terms of this MIC Bond) to pay to the Beneficiary the Specified Amount; and

5.2 as provided in paragraph 11 of this MIC Bond;

and the provisions of this paragraph 5 shall survive expiration of this MIC Bond accordingly.

6. The liability of the Issuer shall not in any way be affected by:

6.1 any time, indulgence or relief being given to or by the Beneficiary or the Applicant;

6.2 any amendment or extension of or supplement to the Connection Agreement;

6.3 any invalidity in, or irregularity or unenforceability of the obligations of any person under the Connection Agreement; or

6.4 anything done or omitted which but for this provision might constitute a legal or equitable discharge or release of, or defence for, the Issuer.

7. Any notices or notification (including any Demand and the requirement for supporting documents and the supporting statement under Article 15 (a) and (b) of the ICC Uniform Rules for Demand Guarantees, International Chamber of Commerce Publication No. 758 ("URDG Rules") is hereby excluded) given under this MIC Bond shall be in writing and shall be served by sending the same by post or leaving the same at:

If to the Issuer: [REDACTED]

Attention: The Company Secretary

If to the Beneficiary: EirGrid plc.
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4
Ireland

Attention: The Company Secretary

The Beneficiary and the Issuer may change its nominated address to another address in the Republic of Ireland by prior written notice to the other party. Any written notices shall be effective upon the earlier of:

7.1 actual receipt; or

- 7.2 two (2) days after mailing or despatch.
8. This MIC Bond may be amended only by an instrument in writing signed on behalf of both parties.
9. This MIC Bond shall be governed by and construed in accordance with the laws of Ireland. The competent Courts shall be the Courts of Ireland.
10. The Beneficiary, after receiving written consent of the Issuer and the Applicant (such consent not to be unreasonably withheld) may transfer and assign all its rights and obligations under the MIC Bond and Article 38 and 39 of the UCP Rules is hereby expressly excluded to the extent that it precludes such an assignment.
11. If this MIC Bond expires during any interruption of business of a kind referred to in Article 26 of the UCP Rules, then the Issuer shall remain liable to make payment under this MIC Bond in respect of any Demand served no later than fifteen (15) Business Days after the Issuer has notified the Beneficiary that its business has ceased to be so interrupted. The Issuer undertakes that it shall, within two (2) Business Days of the cessation of any interruption of business referred to in Article 36 of the UCP Rules (during which this MIC Bond expires) notify the Beneficiary of that cessation. Article 36 of the UCP Rules is hereby amended.
12. All charges and fees under this MIC Bond shall be for the account of the Applicant.

Yours faithfully
[]

Appendix to Schedule 7C – Form of Demand

To: [The Issuer]

[Date]

The MIC Bond number [] dated [] (the “MIC Bond”)

We refer to the MIC Bond dated [] and issued by you in our favour. In accordance with paragraph 2 of the MIC Bond, we hereby make demand in the sum of EUR [€] and request that you pay the same immediately to [specified account].

For EirGrid plc.

Dated this [] of [] 20[]

[Authorised signatory]

Version 2.00 (July 2013)

SCHEDULE 8
Customer Application Form



**Demand Customer
Connection**
Connection Application Form to the
Transmission System

January 2017



Introduction

This application form (version 1.2) outlines the information EirGrid requires to progress an application for connection to the Transmission System. EirGrid recommends that the applicant refers to the customers section of the website www.eirgridgroup.com for further information on the application process. The website has links to other relevant documents such as the Grid Code. It should be noted that it is the applicant's responsibility to comply with the technical, design and operational standards detailed in the Grid Code.

Please note for the purpose of this application form TSO should be interpreted as: the holder of the license to operate Ireland's Transmission System (EirGrid).

Please note that this application form deals with HV connections only (≥ 110 kV) and that if an MV (≤ 110 kV) supply is required the applicant should first contact ESB Networks:
Tel: +353 850 372 757, www.esb.ie

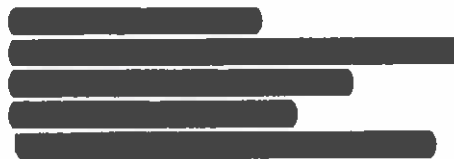
EirGrid reserves the right to request additional data if necessary and the applicant should provide such information promptly during and post the offer process.

It is EirGrid's responsibility to determine the transmission connection method. If the applicant has a specific request this will be considered and examined in the process. The selected method will be based on the overall least cost technically acceptable solution unless the Applicant requests otherwise or EirGrid requires an alternative method for system reasons.

Definitions of terms used in this form can be found in the Glossary of the Grid Code.

Please note that payment of application fees can only be made via electronic fund transfer into the following account. Cheques are not accepted.

Bank Details:
Barclays Bank Ireland Plc
2 Park Place,
Hatch Street
Dublin 2
D02 NP94



When the application form is completed please send the form to the below address, or email to opmo@eirgrid.com

EirGrid Plc.
Customer Relations
The Oval,
160 Shelbourne Road,
Ballsbridge,
Dublin 4,
D04 FW28
Ireland.

If any queries arise please do not hesitate to contact our Customer Relations Team at:

Tel: ++353 1 237 0472
Email: info@eirgrid.com

[REDACTED]

Details of Applicant

1. Full name of the applicant.
Vantage Data Centers DUB11 Limited

2. Address of the applicant or in the case of a corporate body, the registered address (including Eircode) and company registration number.

1-2 Victoria Buildings, Haddington Rd, Dublin 4, Dublin

Company Registration no. (If applicable)

683471

3. Telephone Number

[REDACTED]

4. Contact Person(s)

[REDACTED]

5. Email Address

6. a) Please confirm the Contact Address for all written correspondence (if different from above)

[REDACTED]

b) Please confirm the Customer Name, Address and Contact Details to be used on invoices for billing purposes

7. Please nominate a preferred name for this facility.
[REDACTED] provided in connection agreement CP1188

[REDACTED]

EirGrid will take this preferred name into consideration when determining the facility's station name but reserves the right to change it in order to avoid any potential for confusion with other projects or stations.
Please refer to Appendix A for EirGrid's policy on User Site/Station Naming.

8. Please specify the address of this facility.
Profile Park, Kilcarberry, Co. Dublin

9. [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

If no, please confirm when you expect to achieve it. If the date of application is dependent on the connection offer date, please confirm the expected number of months to achieve planning permission for the facility.

[REDACTED]

10. It should be noted that it is the applicant's responsibility to comply with the technical design and operational standards detailed in the Grid Code.

Noted

11. Has the Applicant signed a confidentiality agreement with EirGrid?
If no, two copies have to be submitted with application form.
Confidentiality agreement templates can be found on our website, www.eirgridgroup.com.

[REDACTED] [REDACTED]

12. Has the Applicant previously had a pre-feasibility study regarding this facility completed by EirGrid?

If yes, please specify name and the date of issue of the pre-feasibility study(s).

[REDACTED] [REDACTED]

Study 1: _____ (D/M/Y)

Study 2: _____ (D/M/Y)

Customer Type

13. Please state which of the following demand types applies to this application. Then fill in the relevant sections/questions which apply to that type as specified below:

A. New transmission customer, fill in questions 18– 44.

B. Existing transmission customer with transformer changes, fill in questions 15 – 44.

C. Existing transmission customer (no transformer changes), fill in questions 15 – 26 and 35 - 44.

14. State if the applicant currently has a connection at the distribution level.

If yes, please continue with question 15.

If no, proceed to question 18.

Technical Information

15. What is your existing connection point? (Please specify substation/location)
Kilcarberry 110 kV station

16. What is your current Maximum Import Capacity (MIC)?

MIC (MVA)

[REDACTED]

EirGrid will allow up to 3 steps/ramps in the ramping schedule. Please note any change to the requested ramping schedule during the offer process may cause delays to the offer processing time and therefore the initial ramping schedule submitted should be the customer's best available information.

21. Target Connection Date (this date will be used for connection assessment).
(D/M/Y)

[REDACTED]

22. State the number of connecting circuits to the Transmission System (e.g. one, two etc.), the applicant requires for technical and/or security reasons.

[REDACTED]

Please also state any specific connection method requests e.g. the use of underground cabling or connection to a specific station etc.

[REDACTED]

Please note that while underground cabling may be quicker to build than overhead line however it is more expensive and in certain areas of the country the use of underground cabling can have impacts on the Transmission System, for example amplification of background harmonic distortion, that would require additional equipment to be installed to mitigate their impact.

Where the possibility of harmonic amplification exists more detailed studies are required during the process leading to the issuance of a Connection Offer which may not be possible to complete within the standard 90 business day timeframe. Please also note that customers pay for 50% of the least cost connection method. Customer requested connection methods above and beyond the least cost connection method are fully chargeable to customers.

Further information on this aspect of charging policy is available at:
<http://www.eirgridgroup.com/customer-and-industry/general-customer-information/connections-and-contracts/>

23. Confirm whether you wish the connection offer to issue on a contested or a non-contested basis and broadly outline the works the customer wishes to contest. Further information on contestability is available at:
<http://www.eirgridgroup.com/site-files/library/EirGrid/Contestability-and-Connection-Assets.pdf>

[REDACTED]

[REDACTED]

Type of Demand

The purpose of this section is to provide EirGrid with a broad knowledge of the type of demand the customer will connect.

24. Please provide a graph of the facility's Load Factor over 1 year.
Name of Attachment:

[REDACTED]

25. Please indicate if there are any items of plant which can contribute significant levels of harmonic distortion i.e. Large variable speed drives, large inverters etc. If yes please provide a general outline.

[REDACTED] [REDACTED]

Name of Attachment:

26. Please indicate if your facility has any equipment that is designed to fluctuate by more than 5 MVA within a short period of time at the point of connection to the Transmission System.

[REDACTED]

If Yes, EirGrid may require further clarifications. However, these will not affect the completeness of your application.

Grid Connected Transformer Data

There are many types of transformers. This application form specifies Two Winding Transformers. All impedances should be stated in % on transformer rated MVA base.

Please note that the connection voltage is determined by EirGrid in accordance with normal standards, as detailed in the Grid Code, taking into account the particulars of each development. If the connection voltage differs from that specified in the Application, EirGrid will request new data corresponding to the new voltage level. An appropriate connection voltage will initially be examined as part of the application check.

Please note the Grid Connected Transformer specified must be compliant with section WFPS1.6.5 of the Grid Code.

If the full details are not available at the time of application EirGrid can assume values based on the expected transformer size in MVA provided by the applicant and EirGrid would make assumptions. Please note any issues with the assumptions would be at the applicants risk and the applicant will have to provide the information requested in this section and a full manufactures test report for the installed transformer prior to energisation.

Two Winding Transformers

	Transformer 1	Transformer2
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]		
30. Transformer positive sequence reactance ($X_1\%$)		
31. Transformer zero sequence resistance ($R_0\%$)		
32. Transformer zero sequence reactance ($X_0\%$)		
33. Transformer vector group		

34. Please provide details of tap changer.
Nature of tap changer (off load/on load/off circuit)

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
------------	------------	------------	------------	------------	------------	------------	------------

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
------------	------------	------------	------------	------------	------------	------------	------------

For Three Winding Transformers, please complete Appendix B.

Additional Reactive Power Devices

35. Does the site include reactive devices or power factor correction devices on the MV side of the grid connected transformer?

██████████
██████████
██████████
If yes, please complete questions 36-38; otherwise skip to question 39.

36. Number of inductive devices.

██████████

Indicate for each device the inductive MVar capability.
If the device has more than one stage please indicate the number of stages and the MVar capability switched in each stage.

MVar ██████████ in steps

MVar ██████████ in steps

37. Number of capacitive devices.

██████████

██████████ for each device the capacitive MVar capability. If the device has more than one stage please indicate the number of stages and the MVar capability switched in each stage.

MVar ██████████ in steps

MVar ██████████ in steps

38. Is it intended to utilise shunt compensation as harmonic filters?

Yes No

On-site Generators

39. Does the site include generators?

██████████ ██████████

40. Will the generator export power to the transmission system?

██████████ ██████████

It should be noted here that generators expecting to export onto the transmission system will also be required to submit an application in accordance with the document 'Process for Connection' available on www.eirgrid.com. Depending on the nature of the generation it will be processed under the Group Processing or Non-Group Processing Approach.

Further information is available at <http://www.cer.ie/docs/000767/cer09099.pdf>

41. Will any of these generators be paralleled to the system?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

If yes, please refer to and complete the relevant generation form available at <http://www.eirgridgroup.com/site-files/library/EirGrid/Generation-Facilities-Application-Form.pdf>

Maps and Diagrams

42. Please provide a 1:50,000 "Discovery Series" Ordnance Survey map, with the location address of the facility clearly marked. The electrical connection point must be clearly marked with an "X".

Name of OS map attachment:

Grid co-ordinates of the electrical connection point of your site (In appendix C an example is shown of how to correctly specify the grid co-ordinates):

Easting

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

Northing

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

43. Please provide a site plan in an appropriate scale. This site plan should indicate:

- the proposed location of the connection point,
- generators,
- transformers and
- site buildings.

Note that the connection point is normally at the HV bushings of the grid connected transformer. Space for the transmission compound will have to be clearly marked on the site plan. The exact size of the compound will depend on the connection method defined in the connection offer. Site plan is to be submitted in soft copy. Site plan is to be submitted in soft copy.

Name of site plan attachment:

[REDACTED]

44. Please provide an **electrical Single Line Diagram (SLD)** of the proposed facility detailing all significant items of plant and their values.

- Generator transformer(s),
- power factor correction devices,
- location of alternative connection for on-site generation (if applicable) and
- grid connected transformer(s).

Name of the SLD attachment, should be submitted in soft copy.

[REDACTED]

Appendixes

Appendix A: EirGrid's policy on Station Naming,

- Station name must be unique and pronounceable for all stations,
- station name must be geographically accurate and descriptive,
- station name should be as local as possible to provide for future proofing for other stations that may locate in the same area,
- station names should be identified in the following order:
 - town land it is situated in,
 - nearby town land,
 - adjacent landmark, i.e. a mountain,
- station names should not be named after a company, any individual supplier or manufacturer as this is liable to change,
- station name must not start with the letter X as this is reserved for ETSO.

Note: Station name above applies to both the transmission station name and the users site name.

EirGrid will also assign a unique 3 character code to each generation unit which are used by various software for modelling purposes and dispatch purposes. This 3 character code is based on the user site name and the number of generators at that site.

Appendix B:

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]			
[REDACTED]			

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]			
[REDACTED]			

Clearly specify the MVA base (in space provided between brackets) which the measured impedances below are related to:

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
[REDACTED]			
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[Redacted]

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[Redacted]			
[Redacted]			
[Redacted]			
[Redacted]			

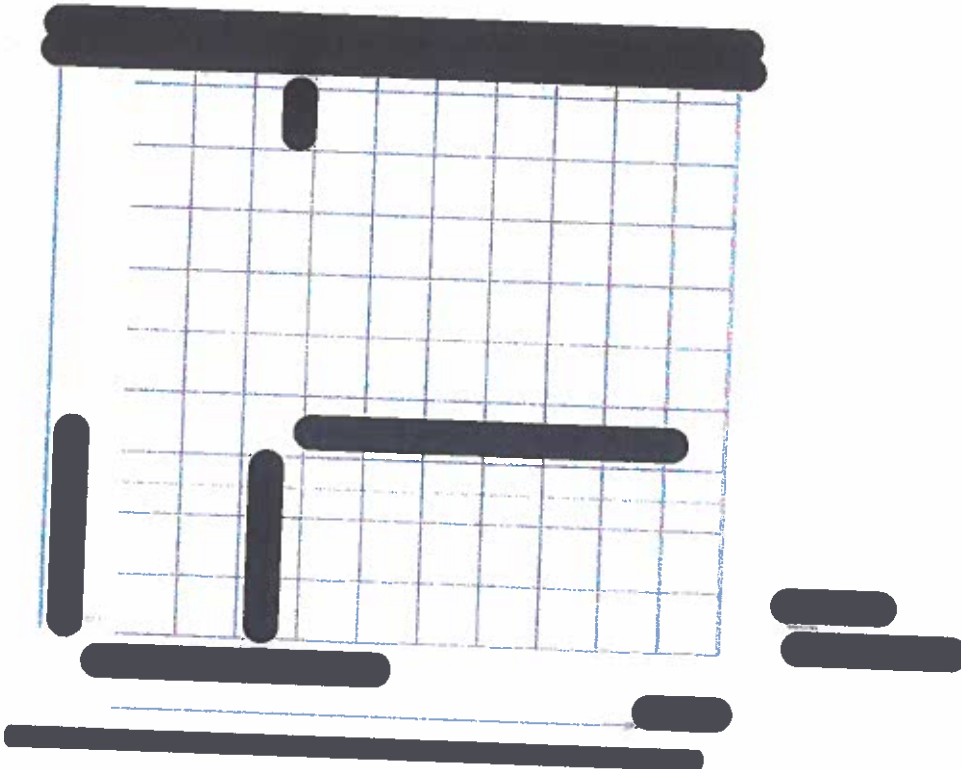
**Appendix C:
Grid co-ordinates**

How to define the grid co-ordinates from "Discovery Series" ordinance survey map.

Easting and Northing co-ordinates should be stated to six places.

Easting co-ordinates are the numbers on the horizontal axis.

Northing co-ordinates are the numbers on the vertical axis.



[Redacted]

**Appendix D:
Checklist**

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

SCHEDULE 9

This schedule is left intentionally blank

SCHEDULE 10
Construction, Commissioning and Connection



SCHEDULE 10

**CONSTRUCTION, COMMISSIONING AND
CONNECTION**

Contestable

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This schedule shall apply where Customers have elected that the Company shall not execute the Contestable Components.

For the avoidance of doubt the Parties acknowledge and agree that:-

- *the Company shall undertake the Company's Connection Works and where appropriate the Deep Reinforcement Works as defined in the definitions section of the General Conditions to the Connection Agreement and as more particularly set out in the Offer Letter; and*
- *the Customer shall undertake the Customer's Connection Works as defined in the definitions section of the General Conditions to the Connection Agreement and as more particularly set out in the Offer Letter.*

1 SITE SURVEY, CONDITIONS AND RESPONSIBILITY

1.1 Site Survey and Investigation

[Not Used].

1.2 Site Conditions

The Customer acknowledges that it selected the Site at which the Facility and the Connection Works for the shallow connection are to be constructed and accordingly the Customer accepts full responsibility for the conditions of the Site and of any land required for the Company's Site-Related Connection Equipment (including but not limited to any toxic contamination) and agrees that the existence of any such condition which adversely affects the performance by:

- 1.2.1 the Customer of its obligations under the Connection Agreement shall not excuse any delay by the Customer in meeting its obligations under the Connection Agreement or give rise to any other right for the Customer under the Connection Agreement;
- 1.2.2 the Company of its obligations under the Connection Agreement shall excuse any delay by the Company in meeting its obligations under the Connection Agreement, and in the event that any such condition causes the Company to incur increased costs (as determined by the Company, acting reasonably) in meeting its obligations under the Connection Agreement in relation to the Company's Connection Works then the Connection Charge shall be increased by the amount of those increased costs (so determined).

1.3 Site Responsibility Schedule

- 1.3.1 As soon as reasonably practicable a Site Responsibility Schedule shall be prepared by the Company (reflecting the details agreed between the Company and the Customer) in respect of the Site pursuant to the Connection Agreement and signed by both Parties by way of confirmation of its accuracy, detailing the division of responsibilities at the interface site in respect of ownership, control, operation, maintenance and safety. The

- Customer shall provide to the Company upon request all such information as is required by the Company to enable it to prepare the Site Responsibility Schedule prior to the commencement of Works.
- 1.3.2 An ownership diagram shall be included in the Site Responsibility Schedule incorporating numbering, nomenclature and labelling. Apparatus to be shown and the preferred graphical symbols to be used shall be in accordance with the Company's standard practice.
 - 1.3.3 A copy of the Site Responsibility Schedule and the ownership diagram shall be retained by the Company and by the Customer.
 - 1.3.4 The Customer shall notify the Company of any changes at or relating to the Site which may affect the Site Responsibility Schedule or ownership diagram and the Company shall carry out any necessary updating and the principles set out in Paragraph 1.3.1 shall apply to such updating.
 - 1.3.5 The Site Responsibility Schedule shall detail the demarcation of the responsibility for safety of persons carrying out work or testing at the Site on circuits which cross the Site at any point.
 - 1.3.6 Safety procedures for all personnel working on or in close proximity of Transmission System Plant and Apparatus are governed by the ESB Safety Rules.

2 CARRYING OUT OF THE WORKS

2.1 Company's Consents

- 2.1.1 The Company shall, immediately following satisfaction of the appropriate Conditions Precedent set out in the Connection Agreement, use prudent and commercial endeavours to obtain all such Consents (not being Operational Consents) as shall be required by the Company for the purposes of the Company's Connection Works no later than the CID Longstop Date (and shall thereafter maintain the same).
- 2.1.2 Where the Facility is a Power Station subject to Firm/Non-Firm Direction or the Non-Firm Renewables Direction or the Non-Firm Peaking Plant Direction although the obtaining and timing of Consents for the Deep Reinforcement Works are not required for the Operational Date they will be required for the Scheduled Deep Operational Date.
- 2.1.3 The Company shall use prudent and commercial endeavours to obtain all such Operational Consents as shall be required by the Company for the purposes of the Company's Connection Works during the Connection Works Completion Period. Where an Operational Consent is delayed the Company shall notify the Customer accordingly, advising it of any delays and/or costs that will arise by reason of the delay in the issue of an Operational Consent, and the Connection Works Completion Period shall be extended pro rata for the delay.

2.1.4 Where the Facility is a Power Station subject to the Firm/Non-Firm Direction or the Non-Firm Renewables Direction or the Non-Firm Peaking Plant Direction the Company shall use reasonable endeavours to obtain all such Consents (including Operational Consents) as shall be required by the Company for the purposes of carrying out and completing the Deep Reinforcement Works in the event that Deep Reinforcement Works are required.

2.1.5 For the avoidance of doubt, nothing in this Paragraph 2.1 shall require the Company to obtain any Consent which the Customer is required to obtain pursuant to Paragraph 2.2.

2.2 Customer's Consents

The Company shall in accordance with Paragraph 2.4, if it has not already done so, within thirty (30) Business Days following satisfaction of the appropriate Conditions Precedent provide the Customer with the Outline Specification to include the functional specification and protection specification for the Connection to facilitate the Customer in applying for Consents for the Customer's Connection Works. The Customer shall, immediately following satisfaction of the appropriate Conditions Precedent use its prudent and commercial endeavours to obtain all such Consents as shall be required for the purposes of the Customer's Connection Works (as shall be necessary to enable the Connection Works to be completed) no later than the CID Longstop Date and as otherwise required for the purposes of the Connection Agreement (and shall thereafter maintain the same). Prior to the Customer submitting any application for Consents the Customer shall submit the application to the Company for its approval and, only after the Customer has incorporated all the Company's comments, suggestions and/or amendments into the application may the Customer formally submit the application for Consents to the relevant authorities. The Customer acknowledges and agrees that any comments, suggestions and/or amendments made by the Company to the Customer in connection with applications for Consents do not in anyway create any liability whatsoever for the Company. In making any application for Consents the Customer shall include in such applications a reference to any applications for planning permission consents which have been made by the Company and which have been notified to the Customer by the Company.

2.3 Advice and Assistance

Each Party, at its own expense, shall give advice and assistance to the other Party to the extent reasonably required by the other Party in the furtherance of their obligations under Paragraphs 2.1, 2.2 and 2.7. Each Party shall, as provided for in Paragraph 2.7, keep the other Party appraised (in reasonable detail) of its progress towards its satisfaction of its obligations under Paragraph 2.1 or 2.2 respectively. Further, each Party shall, without delay, notify the other Party on completion of their respective obligations under Paragraph 2.1 and 2.2 and the Customer shall provide to the Company such details as the Company may reasonably require of such Consents obtained by the Customer.

2.4 Connection Works Design and Programme

- 2.4.1 As soon as reasonably practicable, and in any event within twenty (20) Business Days of the date of the Connection Agreement, the Parties shall meet in good faith, to discuss and agree a programme for progressing of the Connection Works to the Connection Works Completion Date consistent with the Offer Letter and the following provisions:
- 2.4.1.1 The Company will specify its requirements and advise of required standards within a reasonable timeframe and may request site surveys from the Customer to assist this process;
 - 2.4.1.2 The Customer will specify its proposed designs consistent with the Company's requirements and in accordance with all Irish and EU Safety regulations and shall assume the duties of the Project Supervisor Design as specified under the Safety, Health and Welfare at Work Act, 1989 and all subsequent modifications and regulations arising under or in relation to same;
 - 2.4.1.3 The Company will review the Customer's designs and advise of amendments necessary to meet the Company's requirements notwithstanding any review or comment made by the Company with respect to the Customer's design, the Customer shall be responsible for any failure to comply with and/or achieve the Company's requirements and for any errors, omissions or discrepancies whatsoever and howsoever arising therein;
 - 2.4.1.4 The Customer shall comply with all the requirements of the Company.
- 2.4.2 The Customer shall assume full responsibility for the design of the Customer's Connection Works. Approval by the Company shall not relieve the Customer of any obligations under this Connection Agreement.
- 2.4.3 The Parties shall liaise during the carrying out of the Connection Works.
- 2.4.4 Each Party shall, throughout the construction programme, promptly provide the other Party with such information as that Party, acting reasonably, may require from time to time with respect to their respective Connection Works or otherwise in connection with this Connection Agreement so as to enable the Party requiring the information to meet its obligations and/or enforce its rights to supervise under this Connection Agreement.

2.5 Construction and Quality Assurance

- 2.5.1 The Customer shall construct the Customer's Connection Works in accordance with the requirements of the Company as set out in the Company's specification and in the Customer's approved design.
- 2.5.2 The Customer shall construct the Customer's Connection Works in accordance with all Irish and EU Safety regulations and shall assume the duties of the Project Supervisor Construction specified under the Safety, Health and Welfare at Work Act, 1989 and all subsequent modifications and regulations arising under or in relation to same.

- 2.5.3 In order to demonstrate that the Customer's Connection Works comply with the Company's requirements the Customer shall provide the following facilities to the Company:
- 2.5.3.1 A copy of the Customer's quality and test plan for implementation of the Customer's Connection Works;
 - 2.5.3.2 Rights to attend any factory acceptance test or site acceptance test for major plant, as selected at the option of the Company. The Customer shall provide due notification of any such selected tests as they occur throughout the project and true copies of all documentation relevant to the tests;
 - 2.5.3.3 Rights to request true copies of relevant documentation of any acceptance test (factory or site) that the Company has elected not to attend;
 - 2.5.3.4 Rights to inspect work in progress and relevant documentation;
 - 2.5.3.5 Rights to attend all pre-commissioning tests and receive copies of records of all pre-commissioning tests carried out;
 - 2.5.3.6 Rights to request the Customer to carry out additional tests in cases where the Company considers the specified tests to be inadequate or in cases where the initial test has been failed.
- 2.5.4 The Customer shall also provide the following information:
- 2.5.4.1 Copies of all as-built documentation and other information necessary to commission the Works;
 - 2.5.4.2 Copies of the Safety File (as provided for in the Safety, Health and Welfare at Work Act, 1989 and all subsequent modifications and regulations arising under or in relation to same) and any other documentation required to facilitate take over of the required elements of the Customer's Connection Works.
- 2.5.5 The Customer shall conform with all reasonable requests from the Company to make appropriate changes to aspects of the construction where, in the opinion of the Company, the said construction is not in conformance with the Company's requirements.

2.6 Variations to design and Construction Programme

The Company may, having advised the design under Paragraph 2.4 and Paragraph 2.7.4 and the agreed Construction Programme, further advise the Customer that in order to meet its obligations under the Connection Agreement it requires changes to that design and/or the Construction Programme. In this event the Parties will consult as to the changes required, and the design and the Construction Programme will be amended as determined by the Company (acting reasonably) and having regard to such consultation and in the event of a dispute as to whether the Company has so acted reasonably the matter shall be determined in accordance with the Dispute Resolution Procedure of the General Conditions. The reasonable costs and expenses arising from such variation shall be for the account of the Customer unless arising from the negligence of the Company.

2.7 Project Monitoring, Programme and Progress Reports

The Parties shall, within twenty (20) Business Days of the date of the Connection Agreement and acting in good faith, meet to discuss what further project monitoring provisions shall apply to the Connection Agreement. Subject always to the Company's overall rights to supervise the Customer's Connection Works, the Parties shall use their best endeavours to agree in writing on such further project monitoring provisions, and having so agreed shall comply with such provisions and in the event of a disagreement the matter will be determined by the Independent Engineer pursuant to Paragraph 2.12.

2.7.1 Advice and Assistance

In accordance with the terms of Paragraph 2.3 above the Parties shall continuously liaise during the carrying out of the Connection Works, Commissioning and the Project and (unless the Connection Agreement provides otherwise) provide each other with reasonable advice and assistance at any reasonable time and without charge with regard to their respective Connection Works and Commissioning and reasonable on-load Testing.

2.7.2 Meetings

Either Party may request the other Party to the Connection Agreement to engage in meetings more frequently than as provided for in Paragraph 2.7.8. The Parties agree they will engage in telephone meetings or discussions within a period of five (5) Business Days from the initial request in writing from either the Customer or the Company for such a meeting. Thereafter, unless the telephone meeting or discussion has resolved the issue of concern to the Party who initiated the contact, both Parties agree to attend at a meeting at a mutually convenient location to discuss further and work towards a resolution of the issue of concern.

2.7.3 Provision of Information

Each Party shall, throughout the Term, promptly provide the other Party with such information as that Party, acting reasonably, may require from time to time with respect to their respective Connection Works, Commissioning and the Project or otherwise in connection with the Connection Agreement so as to enable the Party requiring the information to meet its obligations under the Connection Agreement.

2.7.4 Construction Programme

Within thirty (30) Business Days following the Consents Issue Date, or such later date as arises under the Connection Agreement each Party shall provide to the other Party three (3) copies of the programme for the design, construction, commissioning and testing of that Party's Connection Works. The programme referred to in this Paragraph 2.7.4 shall be in a form agreed by the Parties (the "Construction Programme") and shall be consistent in all respects with the Connection Agreement but shall where appropriate contain less detail in relation to the Deep Reinforcement Works.

2.7.5 Progress Reports

From the date of execution of the Connection Agreement until the Connection Date, each Party shall provide to the other regular progress reports detailing the Party's progress towards constructing and providing that Party's Connection Works and meeting its obligations under the Connection Agreement at such intervals shall be mutually agreed between the Parties.

2.7.6 Contents of Reports

The reports to be provided under Paragraph 2.7.5 shall cover in reasonable detail steps taken or to be taken to obtain Consents under Paragraph 2.2, the relevant aspects of the design, construction, commissioning and Testing of that Party's Connection Works and highlighting actual or potential departures from the Construction Programme. The progress reports shall state the proposed measures to be taken by the Party concerned to overcome such departures or to resolve any grounds for potential dispute or disagreement.

2.7.7 Form of Reports

The form of the progress reports referred to in Paragraph 2.7.5, and of any other reports as may be required under Paragraph 2.7.5 shall be such as to provide a comprehensible explanation to the other Party in reasonable detail.

2.7.8 Progress Meetings

In addition to the obligation to provide the reports required under Paragraph 2.7.5 the representatives (or their alternates) of the Company and the Customer appointed in accordance with the General Conditions, together with such other representatives of the Parties who may be appropriate in the circumstances shall meet at regular intervals mutually agreed between the Parties and at least once per quarter from the date of execution of the Connection Agreement until the Connection Date to discuss progress of their respective Connection Works and compliance with the Party's respective obligations under the Connection Agreement and, in particular, any interface issues between the Parties.

2.7.9 Delays

Should it appear to one Party (the "Reviewing Party") at any time that the actual progress of the design, construction, commissioning and Testing of the other's Connection Works does not conform with the Construction Programme then the Reviewing Party shall be entitled to require the other Party to submit to the Reviewing Party a report identifying the reasons for the delay and/or to produce and submit to the Reviewing Party for its review a revised programme showing the order of procedure and periods consistent with actual progress and necessary to ensure compliance with the Construction Programme and completion of:

- 2.7.9.1 the design and construction of the other Party's Connection Works to the extent necessary to allow all the Commissioning Tests to be performed by the Scheduled Works Completion Date; and
- 2.7.9.2 the other Party's Commissioning Tests by the Scheduled Commissioning Tests Completion Date.

2.8 Customer's Technical Parameters

- 2.8.1 The Customer shall submit to the Company details of proposed changes in the technical parameters of major plant and the proposed layout of such plant and its related equipment from the details as outlined in the Application to the extent that this affects the Connection or compliance with the Grid Code as soon as it becomes aware, or ought reasonably to have become aware of them, and thereafter the Customer shall submit to the Company as soon as practicable details of any further proposed material changes thereto. Proposed material changes in the technical parameters under this Paragraph shall be within the range of no greater than five percent (5%) or no less than ten percent (10%) of the Maximum Export Capacity if applicable. The Company may request additional information if necessary to enable the Company review such technical parameters or any proposed changes to them. Where the review by the Company leads the Company to consider that the changes affect the Connection Works or do not comply with the requirements of the Grid Code, the Company may raise objections to the proposed technical parameters or any proposed changes to them with the Customer within twenty (20) Business Days of receipt or such later time as may be reasonable in the circumstances. The Company shall advise the Customer of the effect of the change for the purposes of the Connection Agreement, whether it be a variation of Charges and/or costs under Clause 5.4, an amended Offer under Clause 6.4, or otherwise.
- 2.8.2 Where the Company has notified the Customer that the change gives rise to a variation in the Charges and/or costs under Clause 5.4 or an amended offer under Clause 6.4, or other change of the terms of the Connection Agreement, the Customer shall have a period of twenty (20) Business Days from the date of receipt of such notification from the Company to advise the Company whether or not it wishes to proceed with the change. Where the Customer elects in writing to the Company to proceed with the change, the Company agrees to facilitate the Customer subject to payment by the Customer of all costs and expenses arising therefrom and adjustments to the Construction Programme for the impact of the change and the time taken in its resolution. Failure to elect shall be deemed to be a decision by the Customer not to proceed with the change.
- 2.8.3 Notwithstanding any review by the Company of any information submitted by the Customer under this Paragraph 2.8, the Customer's obligations under the Connection Agreement shall not be relieved, absolved or otherwise modified and the Company shall have no liability whatsoever in relation to its approval or otherwise of any designs or information submitted to it by the Customer.

2.9 Increased Costs

The Company shall be entitled to make adjustments to the Connection Charge so as to provide reasonable compensation to the Company for any increased or additional costs incurred by it (being costs of a nature ordinarily incurred by the Company, including employment costs) in carrying out the Company's Connection Works or the Company's Commissioning Tests caused by non-performance by the Customer of any obligations under the Connection Agreement.

2.10 Works to be in accordance with Construction Programme etc.

Both Parties shall be obliged to design, procure, construct, install, commission and test their respective Connection Works and, where appropriate, Deep Reinforcement Works in accordance with the terms of the Connection Agreement, the Construction Programme, and any design furnished under Paragraph 2.4 and 2.7.4.

2.11 Connection Works Completion Date

The Company shall, as soon as it is satisfied that the Connection Works Completion Date is reached, notify the Customer to that effect specifying the date on which such completion occurred. If the Customer disputes that the Connection Works have been so completed, or the date on which such completion occurred, the Customer may, within five (5) Business Days of receiving the Company's notification, refer the dispute to the Independent Engineer who shall determine whether the Connection Works have been so completed and/or the date on which such completion occurred, as the case requires. If the Independent Engineer determines that the Connection Works were so completed on a date other than the date specified in the Company's notification, then the date so determined by the Independent Engineer shall be the Connection Works Completion Date. If the Independent Engineer determines that the Connection Works have not been so completed then the provisions of this Paragraph 2.11 shall once again apply as if the Company had not given a notification hereunder.

2.12 Independent Engineer

The Parties agree that the Independent Engineer shall act as an expert and not as an arbitrator and shall decide those matters referred or reserved to the Independent Engineer under the Connection Agreement by reference to the Prudent Electricity Utility Practice using the Independent Engineer's skill, experience and knowledge and with regard to such other matters as the Independent Engineer in the Independent Engineer's sole discretion considers appropriate. The Parties shall supply the Independent Engineer with such documents and information as the Independent Engineer may request. When considering any matter referred or reserved to the Independent Engineer, such documents and information to be supplied within such time limit as the Independent Engineer may specify in the Independent Engineer's request (subject to any extension of time granted at the absolute discretion of the Independent Engineer). The Independent Engineer shall use the Independent Engineer's best endeavours to give the Independent Engineer's decision upon the question referred within fifteen (15) Business Days following its referral

(subject to any extension of time determined by the Independent Engineer at the absolute discretion of the Independent Engineer). The Parties shall share equally the fees and expenses of the Independent Engineer.

In the event that the Independent Engineer ceases to perform the duties as required, then the Parties shall jointly appoint such firm of engineers as they may agree for the purposes of fulfilling the role of the Independent Engineer under the Connection Agreement. The Independent Engineer will be deemed to have ceased to perform his duties if he abandons his post or fails to use best endeavours or does not render a decision on a matter referred to him within a reasonable time. Failing such agreement within five (5) Business Days of either Party serving the other with written notice to concur with the appointment of a firm of engineers, a firm of engineers of international repute shall, on application by either Party in writing to the President, for the time being of the Institution of Engineers of Ireland, be appointed by the President for the purposes of fulfilling the role of the Independent Engineer under the Connection Agreement. The President shall be requested to appoint such a firm of engineers within ten (10) Business Days of such application.

2.13 Intellectual Property Rights

In advance of the commencement of the Commissioning Tests, notwithstanding Clause 13.4 of the General Conditions, where the Contestable Components are to be transferred to TAO, all copyright and other intellectual property rights in the As-Built Records and in any other relevant information, documentation or data which may be reasonably requested by the Company shall be vested in and belong to the Company. The Customer shall not use the As-Built Records for any purpose other than in connection with the Contestable Components or grant a licence of any such intellectual property rights to any third party, without the prior written consent of the Company.

In the event the Contestable Components are retained by the Customer, the Customer shall be deemed, immediately after the Customer's pre-commissioning tests, to give the Company a non-terminable transferable non-exclusive licence to copy, use and communicate the As-Built Records, including making and using modifications of them. The licence shall:

- a) Apply in perpetuity.
- b) Entitle any person in proper possession of the relevant part of the Contestable Components to copy, use and communicate the As-Built Records for the purposes of controlling, operating and/or regulating the Network and Customer's Equipment.
- c) Entitle the Company to provide copies of as-laid maps and drawings showing the Contestable Components to third parties without the consent of the Customer.

3 CONSEQUENCES OF DELAYS

3.1 Delays

If prior to the Commissioning Tests Completion Date, an Affected Party shall be delayed in carrying out any of the Affected Party's works (including, for the

purposes of this Paragraph 3 the Affected Party's Commissioning Tests and Grid Code Tests) by reason of:

- 3.1.1 any act, default or omission on the part of the Defaulting Party or the Defaulting Party's employees, agents, contractors or sub-contractors;
- 3.1.2 in the case of the Company being the Affected Party, any Consent required under Paragraph 2.1 or in the case of the Customer being the Affected Party, any Consent required under Paragraph 2.2, ceasing to be in force, or any condition of such a Consent preventing the Affected Party from performing its obligations save where such condition is the consequence of the negligent actions or omissions of the Affected Party;
- 3.1.3 in the case of the Company, a delay of the nature referred to in Paragraph 1.2; or
- 3.1.4 an event of Force Majeure (to the extent that the Affected Party is relieved of its obligations under the General Conditions),

the Affected Party shall be entitled to have such later date or dates fixed as the Scheduled Works Completion Date and/or (as the case may be) the Scheduled Commissioning Tests Completion Date as may be fair and reasonable in the circumstances provided that the Affected Party notifies the Defaulting Party in writing of such act, default or omission, or event of Force Majeure, within five (5) Business Days of the Affected Party becoming aware of the occurrence giving rise to the delay, together with an estimate of the proposed delay which it will cause the Affected Party. Either Party may refer a dispute between the Parties over what is a fair and reasonable new date to be fixed in the circumstances to an Expert for determination in accordance with the Dispute Resolution Procedure set out in the General Conditions. Once the new date or dates are fixed (by agreement between the Parties or by determination of the Expert) the Construction Programme shall be deemed to be amended as appropriate.

3.2 Notification of Delay

If either Party shall have reason to believe that it is being delayed or will be delayed in carrying out that Party's Connection Works for any reason (whether it is one entitling it to the fixing of a new date under Paragraph 3.1 or not) it shall notify the other Party in writing within five (5) Business Days of its becoming aware of the occurrence giving rise to the delay and of the extent of the actual and/or anticipated delay.

3.3 Consequences of Delay for Parties

Each Party agrees to use all reasonable endeavours to complete the Connection Works by the Scheduled Works Completion Date.

- 3.3.1 Where the Customer has not used all reasonable endeavours to meet its obligations and such failure has resulted in the Connection Works not being completed by the Scheduled Works Completion Date and/or the Scheduled Commissioning Tests Completion Date and/or the Scheduled Transmission Station Compound Works Completion Date then the Customer shall be liable to pay to the Company the costs and/or expenses reasonably incurred by the Company arising from such delays.

- 3.3.2 Except in the circumstances detailed in Paragraph 3.1 or for reasons of Force Majeure, where it appears to the Customer at any time that the actual progress of the design, construction, Commissioning and Testing of the Company's Connection Works is not achieving a major milestone listed in the Construction Programme and provided both parties have already referred to the matter at issue to the Independent Engineer and the Company has failed to comply with the directions of the Independent Engineer the Customer shall be entitled to require the Company to submit to the Customer a report identifying the reasons for the delay and/or to produce and submit to the Customer for its review (where practicable to do so) a revised programme showing the order of procedure and periods consistent with actual progress and necessary to ensure compliance with the programme submitted under Paragraph 2.7 ("Revised Programme").
- 3.3.3 If the Company shall fail to implement the Revised Programme so that it meets any of the major milestones listed therein for a period of thirty (30) Business Days (other than for circumstances outside its reasonable control or otherwise provided for in the Connection Agreement) then the Customer's remedies against the Company for non performance of the Essential Component Works are:-
- 3.3.3.1 refer the matter to the CER and the CER may direct the Company to forthwith perform the Essential Component Works; and/or
 - 3.3.3.2 seek an order for specific performance together with a mandatory injunction in the Courts against the Company for failure to perform the Essential Component Works.

4 COMMISSIONING AND CONNECTION

4.1 Discussions on Commissioning, Grid Code and Capacity Tests

- 4.1.1 As soon as reasonably practicable, but no later than sixty (60) Business Days before the Scheduled Connection Works Completion Date, and in any event no later than the latest date for such meeting specified in the Construction Programme, the Parties shall meet to discuss, in good faith:
- 4.1.1.1 what Commissioning Tests and what Grid Code Tests are required;
 - 4.1.1.2 which Commissioning Tests are to be conducted by each Party, and which Grid Code Tests the Company reasonably requires to witness and/or requires notification as to the results;
 - 4.1.1.3 any requirements of the Parties which must be met before they can carry out their respective Commissioning Tests and, in the case of the Customer, the Grid Code Tests;
 - 4.1.1.4 whether there are any distinct parts of the Customer's Equipment which are capable of being separately Energised;
 - 4.1.1.5 which of one Party's Commissioning Tests must be conducted simultaneously with Commissioning Tests of the other Party; and
 - 4.1.1.6 the Capacity Test if applicable.

4.1.2 As soon as reasonably practicable following such meeting, and in any event within ten (10) Business Days of receiving a notice from the other Party (given after the meeting) requiring details of the Party's Commissioning Tests and, in the case of the Company's notice, the Grid Code Tests and if applicable the Capacity Test, each Party shall notify to the other Party reasonable details of the Commissioning Tests and, in the case of the Customer's notification, the Grid Code Tests and if applicable the Capacity Test it proposes to carry out.

4.1.3 The Company (acting reasonably) may, within twenty (20) Business Days of receipt of such details from the Customer, notify to the Customer further Customer's Commissioning Tests and/or Grid Code Tests and/or if applicable the Capacity Tests which the Company requires the Customer to carry out on the Customer's Equipment, and the Customer shall be obliged to perform such tests as part of the Customer's Commissioning Tests and/or Grid Code Tests and/or if applicable the Capacity Tests (as the case may be).

4.2 Notice of Requirement to Witness

Each Party shall, within thirty (30) Business Days of the other Party's notice giving details as to the Commissioning Tests and, in the case of the Customer's notice, the Grid Code Tests and if applicable the Capacity Test it proposes to carry out, notify the other Party as to:

4.2.1 which of the other Party's Commissioning Tests and, in the case of the Company's notification, the Grid Code Tests and if applicable the Capacity Test it reasonably requires to witness whereupon the other Party shall allow the representatives of the Party giving notice access to its Premises to witness (and, in the case of the Customer's Commissioning Tests, the Grid Code Tests and if applicable the Capacity Test, verify) such Commissioning Tests, Grid Code Tests and if applicable the Capacity Test; and

4.2.2 which of the other Party's Commissioning Tests and, in the case of the Company's notification, the Grid Code Tests and if applicable the Capacity Test it requires the results of whereupon the other Party shall, following completion of the test and without delay, notify reasonable details of the test results to the Party giving notice.

4.3 Notice of Further Tests

In the event that, subsequent to a notice given under Paragraph 4.1.2 a Party proposes to carry out a Commissioning Test or, in the case of the Customer, a Grid Code Test and/or if applicable the Capacity Test for which reasonable details were not given in that notice the Party shall, without delay, give to the other Party reasonable details of that Commissioning Test or, in the case of the Customer, the Grid Code Test (as the case may be) it proposes to carry out. The other Party may, within five (5) Business Days of such a notice, notify the proposing Party that it reasonably requires to witness that test or that it requires the results of the test whereupon Paragraph 4.2 shall apply in respect of that test as if it had been so included in the other Party's notice given under Paragraph 4.2.

4.4 Joint Testing

The Company shall, as soon as reasonably practicable, notify (acting reasonably and having regard to the Parties discussions under Paragraph 4.1.1.5) the Customer as to which Joint Commissioning Tests must be conducted. In addition the Company shall, (acting reasonably and without delay), once the Company is satisfied that all the Company's Commissioning Tests (other than Joint Commissioning Tests) and that all the Customer's Commissioning Tests (other than Joint Commissioning Tests) in respect of any distinct (as determined by the Company, acting reasonably and having regard to the Party's discussions under Paragraph 4.1.1.4) part of the Customer's Equipment which is capable of being separately Energised, have been properly and satisfactorily completed (or that none are required in respect of that part) notify to the Customer the date of commencement of each Joint Commissioning Test Date relevant to that part, which date shall be as soon as reasonably practicable thereafter. Each Joint Commissioning Test shall commence on the relevant Joint Commissioning Test Date.

4.5 Notice of Customer's Commissioning Tests

In setting the timing of the Customer's Commissioning Tests, the Grid Code Tests and if applicable the Capacity Test, the Customer shall comply with the requirements of the Grid Code and if applicable the Capacity Test as to testing prior to the Operational Date. Where a Customer's Commissioning Test or a Grid Code Test or if applicable the Capacity Test involves a requirement for Dispatch, the Customer shall not carry out such Commissioning Test or Grid Code Test or if applicable the Capacity Test except as Dispatched in accordance with the Grid Code. Where a Customer's Commissioning Test or a Grid Code Test and if applicable the Capacity Test does not involve a requirement for Dispatch the Customer shall, without limitation to the general obligation set out in this Paragraph 4.5, separately give the Company reasonable advance notice (being not less than fifteen (15) Business Days) of the time and date of carrying out the Customer's Commissioning Tests (other than Joint Commissioning Tests) and the Grid Code Tests. The date and time of such tests shall be re-confirmed not less than three (3) Business Days before the time of carrying out such tests. In the event that, having given such confirmation, the Customer (acting reasonably) determines that such tests must be carried out prior to the time and date previously confirmed because of exceptional circumstances outside his control, then provided the Customer gives the Company reasonable notice of the re-scheduled tests, it shall not be deemed to have failed to give the Company the notices required. In the event of failure by the Customer to give either of the notices required, the Company may notify the Customer that it requires the Customer to repeat or re-schedule any Commissioning Test or Grid Code Test or if applicable the Capacity Test not so notified, whereupon the Customer shall repeat or re-schedule such test having first (in the case of repetition) given the advance notices required by this Paragraph 4.5.

4.6 Repetition of Tests

The Customer shall also (at the Customer's expense, and having first carried out such modifications to the Customer's Equipment as are necessary for the

Customer's Commissioning Tests and/or the Grid Code Tests and/or if applicable the Capacity Tests (as the case may be) to be properly and satisfactorily completed and having given in respect of such repetitions or further tests the notice required by Paragraph 4.5 to be given to the Company) undertake such repetitions of, or further, Customer's Commissioning Tests and/or Grid Code Tests and/or if applicable the Capacity Tests (as the case may be) as are required by the Company (acting reasonably) so that the Company may satisfy itself that the Customer's Commissioning Tests and/or Grid Code Tests and/or if applicable the Capacity Test (as the case may be) have been properly and satisfactorily completed.

4.7 Notice of Company's Commissioning Tests

The Company shall give the Customer reasonable advance notice (being not less than fifteen (15) Business Days) of the time and date of carrying out the Company's Commissioning Tests (other than Joint Commissioning Tests). The time and date of the Company's Commissioning Tests will be confirmed not less than three (3) Business Days before the time of carrying out such tests. In the event that, having given such confirmation, the Company (acting reasonably) determines that such tests must be carried out prior to or after the time and date previously confirmed, then provided the Company gives the Customer reasonable notice of the re-scheduled tests, it shall not be deemed to have failed to give the Customer the notice required. In the event of failure by the Company to give such notice, the Customer may notify the Company that it requires the Company to repeat or re-schedule any Commissioning Test not so notified, whereupon the Company shall repeat or re-schedule such test having first given the advance notice required by this Paragraph 4.7.

4.8 Commencement of Commissioning Tests

Without limiting the other provisions of this Paragraph 4, to the extent that each Party has not done so already, each Party shall commence its Commissioning Tests and proceed to carry them out in accordance with the Connection Agreement, forthwith after the Connection Works Completion Date.

4.9 Declaration of Fitness

The Customer will arrange to have a Declaration of Fitness issued to the Company in respect of any distinct (as determined by the Company, acting reasonably and having regard to the Parties discussions under Paragraph 4.1.1.4) part of the Customer's Equipment which is capable of being separately Energised prior to the implementation of the Commissioning Instructions or at a time to be agreed with the Company.

4.10 Notification of Commissioning Instructions

The Company shall in respect of each part of the Customer's Equipment for which a Declaration of Fitness is to be issued under Paragraph 4.9 and in consultation with the Customer, develop and notify to the Customer the Commissioning Instructions. The Commissioning Instructions shall be completed and notified to the Customer (subject to the Customer having co-operated fully with the Company in developing and implementing the

Commissioning Instructions (which the Customer agrees to do)) not later than the date on which the Declaration of Fitness issues in respect of that part. Both Parties shall be bound to comply with the Commissioning Instructions and for the avoidance of doubt no part of the Customer's Equipment shall be Energised other than by implementation of the Commissioning Instructions.

4.11 Notification of Operating Instructions

The Company shall in consultation with the Customer, develop, and notify to the Customer the Operating Instructions. The Operating Instructions shall be completed and notified to the Customer (subject to the Customer having co-operated fully with the Company in developing the Operating Instructions (which the Customer agrees to do)) not later than the date on which the Company has issued a Declaration of Fitness in respect of every part of the Customer's Equipment and the Company's Site-Related Connection Equipment. Both Parties shall be bound to comply with the Operating Instructions, which shall come into force on the Connection Date.

4.12 Commissioning Tests Completion Date

The Company shall notify the Customer when, in its opinion, the Commissioning Tests Completion Date has been reached provided that the Commissioning Tests Completion Date shall not occur prior to the date on which the Company is satisfied that all Commissioning Tests to be carried out pursuant to this Paragraph 4 (other than Joint Commissioning Tests) have been properly and satisfactorily completed.

4.13 Implementation of Commissioning Instructions

Subject to the Clause 2.4 of the Connection Agreement, the Parties shall, as soon as reasonably practicable, following (but not before) the later of:

- (a) the date on which the Company notifies the Customer that the Company's Commissioning Tests (other than the Joint Commissioning Tests) have been properly and satisfactorily completed (which the Company shall do without delay once it is satisfied as to such completion); and
- (b) the making of a Declaration of Fitness under Paragraph 4.9; and
- (c) the notification of the Commissioning Instructions under Paragraph 4.10,

implement the Commissioning Instructions in respect of the relevant part of the Customer's Equipment (as the case may be).

4.14 Connection Date

The Company shall, as soon as reasonably practicable notify the Customer specifying the Connection Date following the date of completion on which the Commissioning Instructions have to the Company's satisfaction been properly implemented in respect of every part of the Customer's Equipment.

4.15 Capacity Testing / Maximum Export Capacity

This Paragraph 4.15 is only applicable to Customers generating electricity and exporting it to the Transmission System.

- 4.15.1 The Customer warrants that it has declared a true and correct Maximum Export Capacity as detailed in Schedule 2 of the Connection Agreement and represents to the Company that it intends to use all reasonable endeavours to complete the Facility by the Scheduled Operational Date.
- 4.15.2 The Customer understands and agrees that the Company will require the Customer to undertake the Capacity Tests in respect of the Maximum Export Capacity to verify the export capacity of the Facility. The Customer undertakes to carry out such tests as may be required by the Company to meet this requirement.
- 4.15.3 Where, however, the Customer fails the Capacity Tests as defined in the General Conditions, the Customer shall be liable to the Company to pay the Specified Amount and the Company shall be entitled to draw down the MEC Bond to this effect, in accordance with the provisions of the General Conditions.

4.16 Operational Certificate

The Operational Certificate indicates that the Capacity Tests as applicable have been completed and that the Facility has complied with the Grid Code Tests at commissioning. It does not indicate compliance by the Facility including the Customer's Equipment with the Grid Code on a continuous basis thereafter. The Company will issue the Operational Certificate as soon as reasonably practicable and in any event no longer than ten (10) Business Days following the Operational Date.

4.17 Effect of Operational Certificate

The Customer shall not at any time prior to the Operational Date operate the Facility so as to pass electricity on to the Transmission System through the Connection Point or take electricity from the Transmission System through the Connection Point, except as required for the implementation of the Commissioning Instructions, for the purposes of carrying out the Grid Code Tests or for the purpose of carrying out tests on the Generation Unit(s) or as otherwise agreed with the Company. Upon receipt of the Operational Certificate, the Customer may operate the Facility so as to pass electricity on to the Transmission System through the Connection Point or take electricity from the Transmission System through the Connection Point in accordance with the terms of the Connection Agreement, the Grid Code and the Trading and Settlement Code if applicable, subject to the provisions governing Shallow Connection Capacity set out in the Connection Agreement, the Grid Code and the Trading and Settlement Code.

4.18 Deep Operational Date

This Paragraph 4.18 is only applicable to Customers whose Facility is a Power Station which is subject to the Firm/Non-Firm Direction or the Non-Firm Renewables Direction or the Non-Firm Peaking Plant Direction.

When the Company is satisfied that the Deep Operational Date has been achieved, the Company will as soon as reasonably practicable and in any event no longer than ten (10) Business Days thereafter notify the Customer, specifying the time and date the Deep Operational Date was achieved.

4.19 Notification of Personnel Contact Details

The Customer is obliged to provide the Company with the relevant contact details of the personnel authorised to issue Declarations of Fitness on behalf of the Customer and the personnel authorised to undertake switching on behalf of the Customer. If there is any change to the contact details of these personnel, the Customer shall notify the Company of these changes immediately.

5 TRANSFER OF ASSETS

5.1 Transfer of Ownership

The Customer agrees to convey to the TAO for a nominal sum of €1 a freehold interest (if the Customer does not own the freehold, a leasehold interest for a period of not less than 100 years) and grant the necessary wayleave(s) and/or easement(s) to the TAO in those components of the Connection Works as identified in the Offer Letter together with any and all equipment fixed to the land in accordance with the terms of Schedule 12 of the Connection Agreement. The TAO will consider (in line with CER/09/138) a leasehold interest of less than one hundred (100) years on a case by case basis.

For the avoidance of doubt, the Company shall, on behalf of the TAO, ensure that the Customer executes such conveyance as indicated above.

5.2 Warranties to the Company

The Customer warrants to the Company that:

- 5.2.1 All assets constructed by the Customer and subsequently transferred by the Customer to the TAO under the terms of Paragraph 5.1 shall be constructed in accordance with the Connection Agreement and any defects therein shall be remedied by the Customer; and
- 5.2.2 All assets constructed by the Customer and subsequently transferred by the Customer to the TAO under the terms of Paragraph 5.1 shall be fit for the purposes for which they are intended as set out in the Connection Agreement and shall be of merchantable quality and free from defects for a period of twenty four (24) months from the Handover Agreement Effective Date; and
- 5.2.3 All electrical and mechanical works relating to the assets constructed by the Customer and subsequently transferred by the Customer to the TAO under the terms of Paragraph 5.1 shall be free from defects for a period of twelve (12) months from the Handover Agreement Effective Date; and
- 5.2.4 All civil works relating to the assets constructed by the Customer and subsequently transferred by the Customer to the TAO under the terms of Paragraph 5.1 shall be free from defects for a period of five (5) years from the Handover Agreement Effective Date; and
- 5.2.5 All assets constructed by the Customer and subsequently transferred by the Customer to the TAO under the terms of Paragraph 5.1 shall be free from

- corrosion for a period of five (5) years from the Handover Agreement Effective Date; and
- 5.2.6 The warranty periods referred to in this Paragraph 5.2 shall be extended by the same period as the respective original warranty and to commence from the date of the rectification of the default should any defect arise within the original warranty period herein provided for and such extension shall apply only to that part of the Contestable Components, Terminal Sub-Station or associated Equipment where the defect has arisen; and
- 5.2.7 The Contestable Components, Terminal Sub-Station and associated Equipment and the sites on which they are located shall be in a good state of repair and condition and shall be fit for purpose and shall be free from all environmental hazards including but not limited to contamination, groundwater pollution, flooding, subsidence, heave or landslip for a period of ten (10) years from the Handover Date; and
- 5.2.8 After Handover of the Site-Related Connection Equipment in accordance with Clause 23.2 of the Connection Agreement General Conditions the Company shall only make a claim against the Customer in relation to a breach of the warranties set out in this Paragraph 5.2 if, and to the extent that, the events giving rise to the breach result directly from negligence of the Customer and/or the Customer is entitled to claim under Manufacturer's Warranties (as defined in Paragraph 5.2.9 below); and
- 5.2.9 The Customer shall obtain manufacturer's warranties from the manufacturer in respect of the Contestable Components (including each and every component part of the Contestable Components) and all other assets constructed by the Customer which may transfer to ESB ("the Manufacturer's Warranties"). The Customer shall ensure that the Manufacturer's Warranties are and remain valid for the warranty periods set out in this Paragraph 5.2.

SCHEDULE 11

Interface Undertaking

The Customer agrees as a counterparty to the Agreement to give and maintain, on its own behalf and on behalf of their officers, employees, agents and contractors, throughout the term of the Agreement and surviving its termination, the following undertaking ("Interface Undertaking") in favour of the Company in relation to the Customer's connection to the Transmission System;

1. In this Schedule, the following expressions shall have the following meanings:
 - "Statutory Instrument" means the European Communities (Internal Market in Electricity) Regulations, 2000 (statutory instrument No. 445 of 2000) as amended by statutory instrument No. 328 of 2003 and by statutory instrument No. 60 of 2005;
 - "Infrastructure Agreement" means the agreement made on 16 March 2006 pursuant to the requirement of Regulation 18 of the Statutory Instrument that ESB and the Company are required to enter into such agreement for the purpose of enabling the transmission system operator to discharge its functions under the Statutory Instrument.
2. The Customer agrees to comply with the technical requirements for connection to the Transmission System set out in the Agreement and to install protection equipment as required by the Company to protect its facility from faults on the Transmission System.
3. The Customer agrees that ESB is permitted to take any steps it is authorised to take by the Statutory Instrument or the Infrastructure Agreement and the Customer agrees not to make any claim against the ESB in connection with such steps except to the extent that such claim would be permitted under the Agreement if the ESB were a party to that Agreement in place of the Company.
4. The Customer agrees to comply with the ESB Safety Rules and procedures and other requirements reasonably specified by the Company and or ESB to ensure the health and safety of persons coming into contact with, or working in close proximity to, assets forming part of the Transmission System and to ensure that all persons under its control or direction working on or in close proximity to the Transmission System are adequately trained in those requirements.
5. The Customer agrees to grant the ESB access to the Customer's premises and facilities on reasonable notice and subject to the Customer's own health and safety requirements for the purpose of enabling the Board to fulfil its obligations under the Infrastructure Agreement.
6. The Customer agrees to permit the Company to give the ESB information about the Customer's connection to the Transmission System reasonably required by the ESB to fulfil its obligations under the Infrastructure Agreement subject always to the Company's obligations under the Infrastructure Agreement and the Statutory Instrument.

7. Where the Customer has discovered any fault or other unusual circumstance in relation to its connection to the Transmission System, or in relation to the Transmission System more generally, the Customer will notify both the Company and representatives of the ESB (as designated by the Company) as soon as reasonably possible.
8. The Customer agrees to ensure that public liability insurance is procured and maintained by the Customer in accordance with the Agreement extends to damage suffered by the ESB and its officers, employees, agents and contractors.
9. The Customer agrees that except in the case of claims in respect of death and personal injury, and to the extent permitted by law, not to make, and to waive its rights now and for the future in respect of, any claim against the ESB or any of its directors, officers, employees, agents or contractors for any loss, damage, cost, claim, demand, suit, liability, fine, penalty or expense, whether based in contract, tort, breach of duty or on any other grounds, in connection with the Customer's connection to the Transmission System except for any such claim that, had the ESB been a party to the Agreement in place of the Company, it would have been entitled to claim against the ESB under the terms of the Agreement, and then subject to the ESB being entitled to rely on the limitations and exclusions of liability and indemnities available to a party to the Agreement in the position of the Company.
10. The Customer agrees that except in the case of claims in respect of death and personal injury and other liability that cannot, by law, be excluded or limited, and without prejudice to paragraph 9 above and paragraph 11 below or to any right of indemnity in the Agreement, not to make any claim against the ESB arising from any act or omission of the ESB or its officers, agents, employees or contractors in respect of any loss, damage, claim, liability, cost or expense in respect of:
 - a) physical damage being occasioned to the property of the Customer, its officers, employees or agents; or
 - b) the liability of the Customer to any other person for loss in respect of physical damage caused directly to the property of such other person; or
 - c) the disconnection or de-energisation of the Customer's connection in circumstances permitted under the Agreement; or
 - d) negligence or breach of statutory duty on the part of the ESB or of any of its officers, employees, agents, or contractors; or
 - e) any other matter connected with the Customer's connection to the Transmission System or with the Agreement

for an amount in respect of any one event in excess of the Connection Liability Amount and further, for an amount in respect of all events during the term of the Agreement in excess of the Connection Liability Cap.

11. The Customer agrees that except in the case of claims in respect of death or personal injury and without prejudice to paragraphs 9 and 10 above or to any rights of indemnity in the Agreement, not to make any claim against the ESB or its directors, officers, employees, contractors or agents for, and to waive its rights now and for the future in respect of, any:
- a) indirect or consequential loss, punitive, special, exemplary or incidental damages;
 - b) loss of profit, loss of use, loss of contract, loss of goodwill or loss of revenue;
 - c) loss damage, cost, demand, suit, liability, fine, penalty or expense whether incurred by the Company or any other person in respect of constraints on the transportation of electricity using the Transmission System or entry to or exit from the Transmission System howsoever arising and including whether due to the size of the Transmission System, planned or unplanned outages, faults, unavailability or arising through the operation of any code or contract;
 - d) loss resulting from the liability of the Customer to any other person howsoever and whensoever arising save as expressly provided in 10(b) above,

regardless of whether suffered by the Customer or not and regardless of whether such a claim is based on contract, warranty, tort (including negligence), breach of duty, strict liability or any other legal or equitable principle.

12. The Company in accordance with the terms of clause 6 of the Infrastructure Agreement is required to ensure that the Customer gives and maintains an Interface Undertaking to the Company in the form and in accordance with the terms of Schedule 11 of this Agreement. This Interface Undertaking shall be given in favour of the Company and enforceable as a contract by the Company against the Customer for the purpose of ensuring that the legitimate interest of ESB as a owner of the Transmission System is protected.

Version 2.00 (July 2013)

IN WITNESS WHEREOF the Company and the Customer have caused this Interface Undertaking to be executed on date above first herein written.

Signed for and on behalf of:-

DocuSigned by:
Siobhan O'Shea
90C905D0C3M5443R

EIRGRID PLC.

Print Company Signatory Name in Block Capitals:

Siobhan O'Shea

DocuSigned by:
Nick Haslehurst
3AB1FC892D3E4E7

Vantage Data Centers DUB11 Limited

Print Customer Signatory Name in Block Capitals:

Nick Haslehurst

SCHEDULE 12
Transfer of Ownership

**Checklist of requirements to transfer ownership of site and equipment and/or rights
over land to ESB as Transmission Asset Owner (TAO)**

Please note that this Schedule 12 and in particular the template deeds set out in the attached Annexes may be subject to change from time to time.

1. IMMEDIATELY AFTER PLANNING PERMISSION/APPROVAL HAS BEEN GRANTED

The Customer is required to furnish copies of full planning permission/approval documentation in respect of the site/equipment/rights over land to be transferred as soon as reasonably possible after full and final planning permission/approval has been granted (where the Customer has applied for planning permission/approval). The Customer shall use reasonable endeavours to ensure that planning permission/approval is not limited in time. In the event that planning permission/approval is limited in time, the Customer will be required to put in place a bond covering the cost of decommissioning and re-instatement. This bond is to be put in place prior to physical works/construction commencing.

2. ONE MONTH AFTER THE CONSENTS ISSUE DATE

The Customer is required to produce to the Company, for the benefit of the TAO, the following items **no later than one month after the Consents Issue Date:-**

- 2.1. Satisfactory title documentation as follows:**
- 2.1.1. Where title is registered, original, up-to-date (to within 6 months), certified copy folio(s) and filed plan(s) showing ownership of site.
 - 2.1.2. Where title is unregistered (Registry of Deeds) a certified copy of the Original Deed of Conveyance, Lease or Assignment and such prior title as would be required to establish good and marketable title in accordance with current recommendations from the Law Society Conveyancing Committee.

Freehold transfer to the TAO of ownership of the site is required **free of conditions or obligations**. Where it is not possible to transfer a freehold interest, a leasehold interest, free from any user restrictions, of at least one hundred (100) years will be accepted. Please note where leasehold interest is being given, the original lease and assignment if any and the landlord's [and head landlord's] consent to assign/alterations/ to change of user will be required.

In line with CER/09/138 the TAO will consider, on a case by case basis, a leasehold interest of less than one hundred (100) years. Additionally, and in line with CER/13/145, the TAO will consider whether certain conditions or obligations are allowable.

Where a query on the acceptability of title has been raised, the Company will endeavour to respond to the query within twenty (20) Business Days. In some cases the initial response will be that additional time is required. In such cases a timeframe for addressing the query will be advised.

The Customer is advised to notify the Company as soon as reasonably possible if it is envisaged that there may be difficulty in meeting these requirements.

2.2. All relevant maps □

Where the site is owned by an individual, the Customer is required to furnish all relevant maps, conforming to the requirements set out below, in relation to the transfer of ownership of the site and equipment and/or rights over land. The Company will facilitate the TAO in verifying the relevant maps.

Map requirements:-

- 2.2.1. the most up to date OS mapping for the area (the most up to date map for each area can be checked out online at www.osismartmaps.ie or www.osi.ie).
 - 2.2.2. the map must be produced with the new ITM coordinate system.
 - 2.2.3. the map must be produced on the largest scale map available.
 - 2.2.4. the map must be produced in CAD form (in compliance with PRA CAD requirements available on the Property Registration Authority - website www.prai.ie). In the event that the Customer cannot obtain approval from the PRA to provide the maps in CAD format, alternative forms (e.g. hard copy or pdf) will be considered.
 - 2.2.5. permission must be obtained by the Customer from OSi to include the OSi data, under licence, in CAD format for the transfer to the Company.
 - 2.2.6. where a query on the acceptability of maps has been raised, the Company will endeavour to respond to the query within twenty (20) Business Days. In some cases the initial response will be that additional time is required. In such cases a timeframe for addressing the query will be advised.
 - 2.2.7. The map must show the following:
 - a) site to be transferred outlined in red;
 - b) right of way from public road to be shown shaded yellow;
 - c) where an overhead line (easement) is required the area of the easement is to be marked hatched blue in accordance with standard industry practice [specific minimum easement widths for standard Deeds of Grant are set out in Annex 4]; and
 - d) where an underground cable (wayleave) is required the line is to be marked blue.
- 2.3. The Customer must procure from third parties the requisite rights of wayleave, easement and access (rights of way) where it is necessary for overhead lines, cable routes or access routes to traverse third party lands. Rights shall be granted, without conditions or obligations, to TAO. Without prejudice to paragraph 2.4 (below), all such rights must be acquired by way of Deed and must be in the format of the template Deeds attached at Annex 2 (Deeds A & B). Where a final route has not yet been established, draft agreements must be provided.

Where appropriate the acquired rights must be transferred to the TAO on completion of legal transfer and in the format of the template Deeds attached at Annex 3 (Deed C).

- 2.4. Where lines are contestably built, the Customer may opt to serve section 53 wayleave notices, instead of acquiring deeds by agreement with third parties, once they have obtained CER consent. In the event that the Customer opts to serve such notices, the

Customer shall transfer all rights acquired under these notices to the TAO (see template Deed D attached at Annex 4). The Customer shall also be required to furnish copies of such section 53 notices to the Company for the benefit of the TAO.

3. WITHIN SIX MONTHS OF CONSENTS ISSUE DATE AND IN ANY EVENT PRIOR TO ENERGISATION

The Customer is required to produce to the Company, for the benefit of the TAO, the following items **no later than six months after the Consents Issue Date and in any event prior to Energisation:-**

3.1. A Contract for Sale, in form agreed with TAO, duly executed by the Customer

The Contract for Sale is subject to satisfactory title being furnished. The Customer will be required to enter into the Contract for Sale with the TAO to cover:-

- 3.1.1. Sale of the site to the TAO including the equipment specified by the Company (where the Customer is to retain ownership of equipment or components located on the land to be transferred to the TAO then a schedule reserving ownership and access to the list of components should be included in the Transfer Deed).
- 3.1.2. Transfer of requisite wayleaves, easements and rights of way (and including the equipment, where applicable) to the TAO where it is necessary for overhead lines, cable routes or access routes to traverse third party property including public highways. Where a final route has not yet been established, for overhead lines, cable routes or access routes, the Contract for Sale may be executed based on draft agreements however maps must be finalised before Energisation can take place.

There will be a special condition in the Contract for Sale allowing for the contract to be rescinded in the event of any of the following: -

- a) Failure to fulfil material Connection Agreement requirements; and
- b) Where contestably built and there is no CER direction to transfer assets to the TAO.

For the avoidance of doubt where the Contract for Sale was based on draft route location the Customer will be required to provide final agreements and maps, to be agreed between the Customer and TAO prior to Energisation.

The terms of the Contract for Sale, including the special condition referred to above, shall be negotiated in good faith between the parties and, in default of agreement, may be referred for independent determination by an expert appointed by agreement or (in default of agreement) nominated by the President of the Law Society of Ireland.

4. COMPLETION OF LEGAL TRANSFER

4.1. The Customer shall complete the transfer of legal ownership to the TAO by the latest of:

- a) **four weeks** after the CER making a direction (where required) to transfer ownership as per Section 37(4) Electricity Regulation Act, 1999; or
- b) where assets are contestably built **eight weeks** post Energisation, following successful completion of Commissioning Tests.

- 4.2. The following is a non-exhaustive list of closing requirements that the Customer is required to produce to the Company, for the benefit of the TAO, on completion:-
- 4.2.1. Executed Deed of Assurance from the Customer to the TAO in respect of the site(s) and equipment, in the form of the TAO standard template (attached at Annex 5) and tax type and number details of Customer (for stamping purposes).
 - 4.2.2. Where appropriate, Transfer by Deed to the TAO of rights acquired in respect of Easements for overhead lines and Wayleaves for underground cables (in the form of the TAO standard templates attached).
 - 4.2.3. Certification in the current Law Society recommended format that the sale of the site is not affected by the Family Home Protection Act or S. 72 burdens (if relevant).
 - 4.2.4. Confirmation that the property is free from encumbrances (except as otherwise agreed), charges, sub-lettings and all legal mortgages and procure confirmation of consent from all chargees (if any) for wayleaves and easements.
 - 4.2.5. Give Solicitor's undertaking to give reasonable assistance with Property Registration Authority queries raised in connection with the TAO's obligation to register its title.
 - 4.2.6. Confirmation that this property is not subject to any lease or licence in favour of a third party.
 - 4.2.7. Confirmation that there are no deaths or voluntary dispositions on the title within the past twelve years.
 - 4.2.8. Detailed description of equipment on the land (specified by the Company) to be transferred to the TAO.
 - 4.2.9. Where the vendor is a company, a copy Certificate of Incorporation and Memorandum & Articles of Association.
 - 4.2.10. Where leasehold title is given, the original lease and assignment if any and the landlord's [and head landlord's] consent to assign / to alterations / change of user will be required.
 - 4.2.11. Certificate(s) of Compliance with planning permission/approval (where contestably built).
 - 4.2.12. Customer's VAT details where VAT is deemed chargeable.

Annex 1 Minimum Easement and Wayleave Widths

1. Minimum Easement Widths – Overhead Lines

Forestry

MV and 38kV Lines – 20m corridor (10m either side of the line)

110kV Lines – 61m corridor (30.5m either side of the line)

220kV Lines – 68m corridor (34m either side of the line)

400kV Lines – 74m corridor (37m either side of the line)

Within these corridors trees are allowed grow to a maximum height of 3m (as per the ESB/IFA Agreement). However, a 4m maintenance access corridor directly under the line must be left clear at all times to allow ESB access. Any trees which grow above 3m are to be cut or lopped by the landowner at his expense or, if not, by ESB and the cutting costs recovered from the landowner.

Building

Generally building easements are only purchased under 110kV lines and upwards.

The widths can vary but the following minimum widths usually apply:

110kV Lines – 46m corridor (23m either side of the line)

220kV and 400kV Lines – 60m corridor (30m either side of the line)

2. Minimum Wayleave Widths – Underground Cables

10kV/20kV – 2m corridor (1m either side of the cable)

38kV – 4m corridor (2m either side of the cable)

110kV Single Circuit 4m (centred on the trefoil group)

110kV Double Circuit 5m (centred between trefoil groups which are at 500mm centres)

220kV Single Circuit 4m (centred on centre phase)

220kV Double Circuit (this situation doesn't normally arise as these circuits would normally require 4m separation)

Where two circuits are required with 4m separation the wayleave width will be 8m total. This allows for 4m separation between circuits and an additional 2m either side of the circuit to allow for future jointing, maintenance etc. Where three circuits are required the wayleave will be 12m and so on.

Annex 2

Deed A

Acquisition of Overhead Easement by agreement between the Customer and landowner

[Easement for Contestable Line – Overhead Line]

LAND REGISTRY

COUNTY

FOLIO

DEED dated made the day of 20

BETWEEN

- (1) _____ [of / a company incorporated in the State under register number having its registered office at] in the County of (hereinafter called “the Grantor” which expression shall where the context so admits or requires include [his/her/its] [executors administrators heirs and assigns / successors and assigns]) of the First Part;
- (2) _____ [of / a company incorporated in the State under register number having its registered office at] in the County of (hereinafter called “the Grantee” which expression shall where the context so admits or requires include [his/her/its] [executors administrators heirs and assigns / successors and assigns]) of the Second Part; and
- (3) the ELECTRICITY SUPPLY BOARD a Statutory Corporation having its principal office at Lower Fitzwilliam Street in the City of Dublin (hereinafter called “the Board” which expression shall where the context so admits or requires include its successors and assigns) of the Third Part.

RECITALS:-

- A. The Grantor [is/are] the registered owner of the lands comprised in Folio of the Register of Freeholders of the County of (hereinafter called “the Lands”).
- B. In the Electricity (Supply) Act, 1927 as amended (hereinafter called “the Act of 1927”) and in these presents the expression “electric line” wherever it occurs shall be construed and have effect and be deemed always to have had effect as meaning a wire or wires, conductor, or other means used for the purpose of conveying, transmitting, or distributing electricity and as including any transforming or other apparatus connected with any such wire or wires, conductor, or other means, and as including also any easing, coating, covering, tube, pipe, or insulator surrounding any such wire or wires, conductor, or other means or any such apparatus, and as including also any post, pole, stay, erection, or structure supporting any one or more of the things hereinbefore mentioned.
- C. Under and by virtue of Section 53 of the Act of 1927 the Board and any authorised undertaker is entitled to place any electric line above or below ground across any land not being a street, road, railway, or tramway and to attach to any wall, house, or other building any bracket or other fixture required for the carrying or support of an electric line or any electrical apparatus.
- D. The Grantee [intends to place / has placed] a kV electric line (hereinafter called “the Line”) on the Lands as shown with a line on the map annexed hereto.
- E. The Grantee is the holder of an authorisation within the meaning of Section 49 of the

Electricity Regulation Act, 1999 and is entitled under the aforesaid Section 49 to apply for consent of the Commission for Energy Regulation to exercise the powers of the Board under the aforesaid Section 53 of the Act of 1927.

- F. [To avoid the necessity of exercising the Section 53 procedure the Grantor, in consideration of the payment by the Grantee to the Grantor of the sum of euro (€), has agreed with the Grantee to grant the wayleave hereinafter described to Grantee [to the intent that such wayleave shall correspond with the powers exercisable by the Grantee or the Board under the aforesaid Section 53 and may be freely assigned and transferred (including without limitation to the Board) [along with ownership of the Line]].
- G. The Grantor, the Grantee and the Board have entered into these presents to the intent that the same shall be in full and final settlement of any and all claims (including for the avoidance of doubt any compensation claim under the aforesaid Section 53 of the Act of 1927) that the Grantor may have against the Grantee or the Board or either of them arising out of or in connection with the erection of the line.

NOW THIS DEED WITNESSES as follows:-

1. In pursuance of the said Agreement and in consideration of the sum of euro (€) now paid by the Grantee to the Grantor (the receipt of which the Grantor hereby acknowledges) the Grantor the registered owner of the Lands as beneficial owner HEREBY GRANTS to the Grantee [its successors and assigns / his/her executors administrators heirs and assigns] all that and those the rights liberties and licence specified in the First Schedule hereto in over and upon the Lands to hold the same unto the Grantee in fee simple [and the Grantor hereby acknowledges that the said rights liberties and licence shall enure for the benefit of the Grantee [its successors and assigns / his/her executors administrators heirs and assigns] and may be freely assigned (including without limitation to the Board) [along with ownership of the Line].

2. *[Insert one of the following two Covenant clauses, as applicable:-]*

[For a standard overhead line not affected by a forestry plantation, insert the following:]

2. The Grantor hereby covenants with the Grantee, to the intent that such covenant shall bind and run with the Lands and any part thereof, not to permit any tree, shrub or hedge grow and not to erect any building structure or erection or to place any concrete or similar surface or foundation or to carry out any excavation or development under, or on, or within a distance of metres on either side of the straight line joining the centres of the bases of any two consecutive posts pillars or other erections nor within a distance of metres on either side of the centre of any installation placed on the lands in exercise of the right granted as aforesaid nor under or on any part of the lands hatched in blue on the map annexed hereto and the Grantor hereby acknowledges that the benefit of this covenant may be freely assigned by the Grantee (including without limitation to the Board) [along with ownership of the Line] and the Grantor further acknowledges that the restriction aforesaid on [his/her/its] rights in respect of the Lands is a necessary incident of and is essential to the exercise of the rights granted pursuant to paragraph 1 above.

[OR]

[when dealing with an overhead line going through a forestry plantation, insert the following:]

- 2 The Grantor hereby consents with the Grantee, to the intent that such covenant shall bind and run with the Lands and any part thereof:-

2.1 *[If the line is a 10kV, 20kV or 38kV line, use the following clause 2.1:]*

2.1 Not to permit any tree, shrub or hedge to grow within a distance of two metres on either side of the straight line joining the centres of the bases any two consecutive posts pillars or other erections nor within a distance of two metres on either side of the centre of any installation placed on the lands in exercise of the right granted as aforesaid.

[or]

2.1 *[If the line is a 110kV, 220kV or 400kV line, use the following clause 2.1:]*

2.1 Not to permit any tree, shrub or hedge to grow within a distance of four metres to one side of the supporting line structures placed on the lands in exercise of the right granted as aforesaid.

2.2 Subject as above not to permit any tree, shrub or hedge to grow more than three metres in height or to obstruct the Grantee's right of entry on the lands within a distance of metres on either side of the straight line joining the centres of the bases of any tow consecutive posts pillars or other erections nor within a distance of metres on either side of the centre of any installation placed on the lands in exercise of the right granted as aforesaid nor under or on any part of the lands hatched in blue on the map annexed hereto.

2.3 In the event of any tree, shrub or hedge growing in breach of the foregoing covenant the Grantor at the request of the Grantee shall cut or lop the tree shrub or hedge at the Grantor's own expense.

2.4 In default of the Grantor cutting or lopping a tree shrub or hedge when requested to do by the Grantee or in the event of an emergency the Grantee shall be entitled to cut or lop the tree shrub or hedge growing in breach of the foregoing covenant and to recover the costs of so doing from the Grantor.

2.5 The Grantor hereby acknowledges that the benefit of this covenant may be freely assigned by the Grantee (including without limitations to the Board) [along with ownership of the Line] and the Grantor further acknowledges that the restriction aforesaid on [his/her/its] rights in respect of the Lands is a necessary incident of and is essential to the exercise of the rights granted pursuant to paragraph 1 above.

3 The Grantor hereby agrees that the payment of the sum referred to in paragraph 1 above is in full and final settlement of all claims against the Grantee and the Board and either of them (including without limitation any compensation claim under Section 53 of the Act of 1927) in respect of the placing of the Line and all associated posts pillars pylons steel masts wooden structures and other equipment and installations and other things.

IT IS HEREBY CERTIFIED that section 29 (conveyance on sale combined with building agreement for dwelling house/apartment) of the Stamp Duties Consolidation Act, 1999, does not apply to this instrument.

IT IS HEREBY FURTHER CERTIFIED that the consideration (other than rent) for the sale/lease is wholly attributable to property which is not residential property and that the transaction effected by this instrument does not form part of a larger transaction or of a series of transactions in respect of which the amount or value, or the aggregate amount or value, of the consideration (other than rent) which is attributable to property which is not residential property exceeds €10,000 / €20,000 / €30,000 / €40,000 / €70,000 / €80,000.

FIRST SCHEDULE

RIGHTS AND PRIVILEGES HEREBY GRANTED BY THE GRANTOR TO THE GRANTEE

- (a) Full and free right liberty and licence for the Grantee its servants agents contractors and workmen to place erect and lay and forever to retain the Line [together with all associated posts pillars pylons steel masts wooden structures and other equipment and installations to carry wires cables or other things necessary for the transmission of electricity in over or under the strip of Land more particularly described in the Second Schedule.
- (b) Full and free right liberty and licence for the Grantee its servants agents contractors and workmen to enter upon the Lands at all times with or without vehicles and all necessary equipment plant and apparatus for the purpose of inspecting repairing renewing replacing and maintaining the Line and including any wires cables and other things now or to be so erected or installed to enter upon the said portion of the Lands hatched in blue on the said map in pursuance of the rights granted by these presents doing thereby as little damage as possible and making compensation for any damage thereby caused but not being responsible for any temporary inconvenience caused by any such work.
- (c) Full and free right liberty and licence for the Grantee its servants agents contractors and workmen to enter upon the Lands at all times with or without vehicles and all necessary equipment plant and apparatus to open the ground within that portion of the Lands described in paragraph (a) of this First Schedule for such purposes as may be required and reinstating the same to the reasonable satisfaction of the Grantor.

SECOND SCHEDULE

STRIP OF THE LANDS IN RESPECT OF WHICH RIGHTS OF THE GRANTOR ARE RESTRICTED

All that and those part of the Lands as shown on the map annexed hereto and thereon hatched in blue

SIGNED AND DELIVERED

by the said **GRANTOR**

in the presence of:-

SIGNED AND DELIVERED

by the said **GRANTEE**

in the presence of:-

PRESENT when the Common Seal of the **ELECTRICITY SUPPLY BOARD** was affixed hereto:-

Deed B

Acquisition of underground cable wayleave by agreement between the Customer and landowner

[Wayleave for Contestable Line – Subterranean Cables]

LAND REGISTRY

COUNTY

FOLIO

DEED dated the day of 20

BETWEEN

- (1) _____ [of / a company incorporated in the State under register number having its registered office at] in the County of (hereinafter called "the Grantor" which expression shall where the context so admits or requires include [his/her/its] [executors administrators heirs and assigns / successors and assigns]) of the First Part;
- (2) _____ [of / a company incorporated in the State under register number having its registered office at] in the County of (hereinafter called "the Grantee" which expression shall where the context so admits or requires include [his/her/its] [executors administrators heirs and assigns / successors and assigns]) of the Second Part; and
- (3) the ELECTRICITY SUPPLY BOARD a Statutory Corporation having its principal office at Lower Fitzwilliam Street in the City of Dublin (hereinafter called "the Board" which expression shall where the context so admits or requires include its successors and assigns) of the Third Part.

RECITALS:-

- A. The Grantor [is/are] the registered owner of the lands comprised in Folio of the Register of Freeholders of the County of (hereinafter called "the Lands").
- B. In the Electricity (Supply) Act, 1927 as amended (hereinafter called "the Act of 1927") and in these presents the expression "electric line" wherever it occurs shall be construed and have effect and be deemed always to have had effect as meaning a wire or wires, conductor, or other means used for the purpose of conveying, transmitting, or distributing electricity and as including any transforming or other apparatus connected with any such wire or wires, conductor, or other means, and as including also any easing, coating, covering, tube, pipe, or insulator surrounding any such wire or wires, conductor, or other means or any such apparatus, and as including also any post, pole, stay, erection, or structure supporting any one or more of the things hereinbefore mentioned.
- C. Under and by virtue of Section 53 of the Act of 1927 the Board and any authorised undertaker is entitled to place any electric line above or below ground across any land not being a street, road, railway, or tramway and to attach to any wall, house, or other building any bracket or other fixture required for the carrying or support of an electric line or any electrical apparatus.
- D. The Grantee [intends to place / has placed] a kV electric line (hereinafter called "the Line") on the Lands as shown with a line on the map annexed hereto.
- E. The Grantee is the holder of an authorisation within the meaning of Section 49 of the Electricity Regulation Act, 1999 and is entitled under the aforesaid Section 49 to apply for consent of the Commission for Energy Regulation to exercise the powers

of the Board under the aforesaid Section 53 of the Act of 1927.

- F. To avoid the necessity of exercising the Section 53 procedure the Grantor, in consideration of the payment by the Grantee to the Grantor of the sum of euro (€), has agreed with the Grantee to grant the wayleave hereinafter described to Grantee [to the intent that such wayleave shall correspond with the powers exercisable by the Grantee or the Board under the aforesaid Section 53 and may be freely assigned and transferred (including without limitation to the Board) [along with ownership of the Line].
- G. The Grantor, the Grantee and the Board have entered into these presents to the intent that the same shall be in full and final settlement of any and all claims (including for the avoidance of doubt any compensation claim under the aforesaid Section 53 of the Act of 1927) that the Grantor may have against the Grantee or the Board or either of them arising out of or in connection with the erection of the line.

NOW THIS DEED WITNESSES as follows:-

- 4 In pursuance of the said Agreement and in consideration of the sum of euro (€) now paid by the Grantee to the Grantor (the receipt of which the Grantor hereby acknowledges) the Grantor the registered owner of the Lands as beneficial owner HEREBY GRANTS to the Grantee [its successors and assigns / his/her executors administrators heirs and assigns] all that and those the rights liberties and licence specified in the First Schedule hereto in over and upon the Lands to hold the same unto the Grantee in fee simple [and the Grantor hereby acknowledges that the said rights liberties and licence shall enure for the benefit of the Grantee [its successors and assigns / his/her executors administrators heirs and assigns] and may be freely assigned (including without limitation to the Board) [along with ownership of the Line].
- 5 The Grantor hereby covenants with the Grantee, to the intent that such covenant shall bind and run with the Lands and any part thereof, not to erect any building structure or erection or to place any concrete or similar surface or foundation or to carry out any excavation or development under or on that portion of the Lands more particularly described in the Second Schedule hereto and the Grantor hereby acknowledges that the benefit of this covenant may be freely assigned by the Grantee (including without limitation to the Board) [along with ownership of the Line] and the Grantor further acknowledges that the restriction aforesaid on [his/her/its] rights in respect of the Lands is a necessary incident of and is essential to the exercise of the rights granted pursuant to paragraph 1 above.
- 6 The Grantor hereby assents to the registration of the rights hereby created as burdens on the said Folio of the Register County
- 7 The Grantor hereby agrees that the payment of the sum referred to in paragraph 1 above is in full and final settlement of all claims against the Grantee and the Board and either of them (including without limitation any compensation claim under Section 53 of the Act of 1927) in respect of the placing of the Line and all associated posts pillars pylons steel masts wooden structures and other equipment and installations and other things.

IT IS HEREBY CERTIFIED that section 29 (conveyance on sale combined with building agreement for dwellinghouse/apartment) of the Stamp Duties Consolidation Act, 1999 does not apply to this instrument as it does not effect a sale or lease of land.

IT IS HEREBY FURTHER CERTIFIED that the consideration (other than rent) for the sale/lease is wholly attributable to property which is not residential property and that the

transaction effected by this instrument does not form part of a larger transaction or of a series of transactions in respect of which the amount or value, or the aggregate amount or value, of the consideration (other than rent) which is attributable to property which is not residential property exceeds €10,000 / €20,000 / €30,000 / €40,000 / €70,000 / €80,000.

FIRST SCHEDULE

RIGHTS AND PRIVILEGES HEREBY GRANTED BY THE GRANTOR TO THE GRANTEE

1. The right of laying cables, and forever keeping same laid and maintained, below the surface of that part of the Lands comprising a strip metre(s) wide as more particularly described in the Second Schedule hereto.

2. Full right and liberty for the Grantee its agents and/or contractors, including the Customer, with or without plant and apparatus to enter upon the said Lands and open the ground, for the purpose of
 - 2.1 laying such cables, connections and fittings for carrying same through and under the Lands, and
 - 2.2 from time to time as may be necessary and without notice in the case of emergency, for the purpose of inspecting, repairing, maintaining, relaying and renewing the said cables, connections and fittings and so forth,and reinstating the same to the reasonable satisfaction of the Grantor and not being responsible for any temporary inconvenience caused by any such work.

SECOND SCHEDULE

STRIP OF THE LANDS IN RESPECT OF WHICH RIGHTS OF THE GRANTOR ARE RESTRICTED

All that and those the Lands comprising a strip metre(s) wide shown on the map hereto annexed and thereon marked "A - B" and coloured in blue

SIGNED AND DELIVERED
by the said **GRANTOR**
in the presence of:-

SIGNED AND DELIVERED
by the said **GRANTEE**
in the presence of:-


Version 2.00 (July 2013)

PRESENT when the Common Seal of
the ELECTRICITY SUPPLY BOARD
was affixed hereto:-

Annex 3

Deed C

**[Deed of Transfer from the Customer to ESB of Contestable Line with Easement /
Wayleave created by Deed of Grant A or B]**

LAND REGISTRY

COUNTY

FOLIO

DEED dated the day of 20

BETWEEN

- (1) _____ [of / a company incorporated in the State under register number having its registered office at] in the County of (hereinafter called "the Assignor" which expression shall where the context so admits or requires include his/her/its executors administrators heirs and assigns / successors and assigns) of the First Part; and
- (2) the ELECTRICITY SUPPLY BOARD a Statutory Corporation having its principal office at Lower Fitzwilliam Street in the City of Dublin (hereinafter called "the Board" which expression shall where the context so admits or requires include its successors and assigns) of the Second Part.

RECITALS:-

- A. In the Electricity (Supply) Act, 1927 as amended (hereinafter called "the Act of 1927") and in these presents the expression "electric line" wherever it occurs shall be construed and have effect and be deemed always to have had effect as meaning a wire or wires, conductor, or other means used for the purpose of conveying, transmitting, or distributing electricity and as including any transforming or other apparatus connected with any such wire or wires, conductor, or other means, and as including also any easing, coating, covering, tube, pipe, or insulator surrounding any such wire or wires, conductor, or other means or any such apparatus, and as including also any post, pole, stay, erection, or structure supporting any one or more of the things hereinbefore mentioned.
- B. Under and by virtue of Section 53 of the Act of 1927 the Board and any authorised undertaker is entitled to place any electric line above or below ground across any land not being a street, road, railway, or tramway and to attach to any wall, house, or other building any bracket or other fixture required for the carrying or support of an electric line or any electrical apparatus.
- C. The Assignor is the holder of an authorisation within the meaning of Section 49 of the Electricity Regulation Act, 1999 and is entitled to apply for the consent of the Commission for Energy Regulation to exercise the powers of the Board under the aforesaid Section 53 of the Act of 1927
- D. To avoid the necessity of exercising the Section 53 procedure a deed of grant dated was entered into between (hereinafter called "the Owner") of the first part, the Assignor of the second part and the Board of the third part, the Owner, the registered owner of the Lands, for the valuable consideration therein recited and granted unto the Assignor full and free right liberty and licence for the Assignor to place and retain an electric line in under or over the portion of the Lands therein specified and for the purpose of inspecting repairing renewing replacing and

maintaining the same to enter upon the Lands doing thereby as little damage as possible and to open the ground within the portion of the Lands aforesaid (hereinafter called "the Wayleave"), to the intent that the Wayleave should correspond with the powers exercisable by the Assignor under the aforesaid Section 53 of the Act of 1927 and further to the intent that the Wayleave should be freely assignable by the Assignor (including without limitation to the Board).

- E. The Assignor has placed an electric line over the lands comprised in Folio _____ of the Register of Freeholders of the County of _____ (hereinafter called "the Lands").
- F. By the deed of grant dated [date] aforesaid, the Owner as registered owner of the Lands covenanted (hereinafter called "the Covenant") to keep with the strip of land described in the Second Schedule hereto and thereto free from growth, erections or development and said Covenant is more particularly described in the aforesaid deed of grant. It was agreed that the Covenant should bind and run with the Lands and any part thereof, to the intent and the Owner thereby acknowledging that the benefit of the Covenant should be freely assignable by the Assignor (including without limitation to the Board) and the Owner further acknowledging that the Covenant was and is a necessary incidents of and was and is essential to the exercise of the rights comprised in the Wayleave.
- G. The Assignor placed an electric line on over or under the Lands as shown with a line on the map annexed hereto [together with associated posts pillars pylons steel masts wooden structures and other equipment and installations to carry wires cables or other things necessary for the transmission of electricity] (hereinafter called "the Line").
- H. The Wayleave and the Covenant were registered as [a burden / burdens] on the said Folio _____ of the Register of Freeholders of the County of _____ and the Assignor is the registered owner of the said burden[s].
- I. The Assignor has agreed with the Board for and the Commission has authorised the transfer and assignment by the Assignor to the Board of the Line together with the Wayleave and the benefit of the Covenant on the terms hereinafter appearing.

NOW THIS DEED WITNESSES as follows:-

In pursuance of the said Agreement and in consideration of the sum of _____ euro (€ _____) now paid by the Board to the Assignor (the receipt of which the Assignor hereby acknowledges) the Assignor, as beneficial owner, HEREBY TRANSFERS to the Board the Line and further as registered owner and as beneficial owner TRANSFERS ASSIGNS GRANTS AND CONVEYS unto the Board its successors and assigns all its full right title interest privilege and licence of whatever kind in over and in respect of the Lands and including the Wayleave together with the benefit of the Covenant.

IT IS HEREBY CERTIFIED that section 29 (conveyance on sale combined with building agreement for dwelling house/apartment) of the Stamp Duties Consolidation Act, 1999, does not apply to this instrument as it does not effect a sale or lease of land.

IT IS HEREBY FURTHER CERTIFIED that the consideration (other than rent) for the sale/lease is wholly attributable to property which is not residential property and that the transaction effected by this instrument does not form part of a larger transaction or of a series of transactions in respect of which the amount or value, or the aggregate amount or value, of the consideration (other than rent) which is attributable to property which is not residential property exceeds €10,000 / €20,000 / €30,000 / €40,000 / €70,000 / €80,000.

FIRST SCHEDULE

RIGHTS AND PRIVILEGES HEREBY GRANTED BY THE GRANTOR TO THE GRANTEE

[As per schedule attached to Deed A for overhead easement or Deed b for underground cable

SECOND SCHEDULE

STRIP OF THE LANDS IN RESPECT OF WHICH RIGHTS OF THE GRANTOR ARE RESTRICTED

As per second schedule of Deed A or B as appropriate.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and affixed their seals the day and year first herein written.

SIGNED AND DELIVERED

by the said **ASSIGNOR**
in the presence of:-

PRESENT when the Common Seal of
the **ELECTRICITY SUPPLY BOARD**
was affixed hereto:-

Annex 4

Deed D

**[Deed of Transfer from the Customer to ESB of Contestable Line and Wayleave
acquired by section 53 Notice]**

LAND REGISTRY

COUNTY

FOLIO

DEED dated made the day of 20

BETWEEN

- (1) _____ [of / a company incorporated in the State under register number _____ having its registered office at] _____ in the County of _____ (hereinafter called "the Assignor" which expression shall where the context so admits or requires include his/her/its executors administrators heirs and assigns / successors and assigns) of the First Part; and
- (2) the ELECTRICITY SUPPLY BOARD a Statutory Corporation having its principal office at Lower Fitzwilliam Street in the City of Dublin (hereinafter called "the Board" which expression shall where the context so admits or requires include its successors and assigns) of the Second Part.

RECTALS:-

- A. In the Electricity (Supply) Act, 1927 as amended (hereinafter called "the Act of 1927") and in these presents the expression "electric line" wherever it occurs shall be construed and have effect and be deemed always to have had effect as meaning a wire or wires, conductor, or other means used for the purpose of conveying, transmitting, or distributing electricity and as including any transforming or other apparatus connected with any such wire or wires, conductor, or other means, and as including also any easing, coating, covering, tube, pipe, or insulator surrounding any such wire or wires, conductor, or other means or any such apparatus, and as including also any post, pole, stay, erection, or structure supporting any one or more of the things hereinbefore mentioned.
- B. Under and by virtue of Section 53 of the Act of 1927 the Board and any authorised undertaker is entitled to place any electric line above or below ground across any land not being a street, road, railway, or tramway and to attach to any wall, house, or other building any bracket or other fixture required for the carrying or support of an electric line or any electrical apparatus.
- C. The Assignor is the holder of an authorisation within the meaning of Section 49 of the Electricity Regulation Act, 1999 and by virtue of the consent of the Commission for Energy Regulation (hereinafter called "the Commission") given under the aforesaid Section 49 the Assignor became authorised to exercise the powers of the Board under the aforesaid Section 53 of the Act of 1927.
- D. The Assignor was authorised to place an electric line over the lands comprised in Folio _____ of the Register of Freeholders of the County of _____ (hereinafter called "the Lands").
- E. In the exercise by the Assignor of the powers conferred upon it under the aforesaid Section 53, by notice dated _____ the Assignor became entitled to place an electric line on, over or under the Lands and to enter upon the Lands for the purposes

contemplated by the aforesaid Section 53 and thereby acquired rights in respect of the Lands which are referred to hereinafter as "the Wayleave".

- F. In the exercise of the powers aforesaid and pursuant to the Wayleave the Assignor placed an electric line on over or under the Lands as shown with a line on the map annexed hereto [together with associated posts pillars pylons steel masts wooden structures and other equipment and installations to carry wires cables or other things necessary for the transmission of electricity more particularly described in the Schedule hereto] (hereinafter called "the Line").
- G. [The Wayleave was registered as [a burden / burdens] on the said Folio of the Register of Freeholders of the County of and the Assignor is the registered owner of the said burden[s].]
- H. The Assignor has agreed with the Board for and the Commission has authorised the transfer and assignment by the Assignor to the Board of the Line together with the Wayleave on the terms hereinafter appearing.

NOW THIS DEED WITNESSES as follows:-

In pursuance of the said Agreement and in consideration of the sum of euro (€) now paid by the Board to the Assignor (the receipt of which the Assignor hereby acknowledges) the Assignor, as beneficial owner, HEREBY TRANSFERS to the Board the Line and further as registered owner and as beneficial owner TRANSFERS ASSIGNS GRANTS AND CONVEYS unto the Board its successors and assigns all its full right title interest privilege and licence of whatever kind in over and in respect of the Lands and including the Wayleave.

IT IS HEREBY CERTIFIED that section 29 (conveyance on sale combined with building agreement for dwelling house/apartment) of the Stamp Duties Consolidation Act, 1999, does not apply to this instrument as it does not effect a sale or lease of land.

IT IS HEREBY FURTHER CERTIFIED that the consideration (other than rent) for the sale/lease is wholly attributable to property which is not residential property and that the transaction effected by this instrument does not form part of a larger transaction or of a series of transactions in respect of which the amount or value, or the aggregate amount or value, of the consideration (other than rent) which is attributable to property which is not residential property exceeds €10,000 / €20,000 / €30,000 / €40,000 / €70,000 / €80,000.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and affixed their seals the day and year first herein written.

SIGNED AND DELIVERED

by the said ASSIGNOR
in the presence of:-

PRESENT when the Common Seal of
the ELECTRICITY SUPPLY BOARD
was affixed hereto:-

ANNEX 5

STANDARD TEMPLATE DEED

LAND REGISTRY

COUNTY

FOLIO (PART)

TRANSFER dated the day of 20

_____ of [a Limited Liability Company having its registered office at _____ in the County of _____ (hereinafter called "the Vendor") the registered owner in consideration of the sum of (€ _____) (the receipt of which is hereby acknowledged), as beneficial owner, hereby **TRANSFERS** the property described in the First Schedule hereto (hereinafter called "the Scheduled Property") being part of the property described in Folio _____ of the Register County _____ **TOGETHER WITH** the easements rights and privileges specified in the Second Schedule hereto to the **ELECTRICITY SUPPLY BOARD** (hereinafter called "the Purchaser") in fee simple.

THE VENDOR HEREBY ASSENTS to the registration of the easements rights and privileges specified in the Second Schedule hereto as burdens on the property described in Folio _____, County _____.

The address of the Purchaser in the State for the service of notices and its description are:-

27, Lower Fitzwilliam Street, City of Dublin, Statutory Corporation.

IT IS HEREBY CERTIFIED that section 29 (conveyance on sale combined with building agreement for dwellinghouse/apartment) of the Stamp Duties Consolidation Act, 1999, does not apply to this instrument.

IT IS HEREBY FURTHER CERTIFIED that the consideration (other than rent) for the sale is wholly attributable to property which is not residential property and that the transaction effected by this instrument does not form part of a larger transaction or of a series of transactions in respect of which the amount or value, or the aggregate amount or value, of the consideration (other than rent) which is attributable to property which is not residential property exceeds €10,000.

FIRST SCHEDULE

ALL THAT AND THOSE part of the lands of _____, Barony of _____, in the County of _____ containing _____ square metres or thereabouts metric measure being part of the property comprised in Folio _____ of the Register County _____, as more particularly delineated in red on the map annexed hereto.

SECOND SCHEDULE

Full right and liberty for the Purchaser, its successors and assigns, the owners of the property hereby transferred, and its and their servants, agents, invitees and licensees:

1. At all times and for all purposes on foot or with vehicles to go pass and repass over and along a passageway [coloured yellow on the map attached hereto **OR** of ten feet minimum width from the Scheduled Property to the public roadway (delete as appropriate)].
2. To have all the necessary facilities to lay, relay, maintain and keep in repair and to have access to the underground cables, ducts and overhead lines now or at any time from the date hereof leading to and from the Scheduled Property making good any damage caused.

[If no right of way required delete above and insert only the following in the Second Schedule:

Full right and liberty for the Purchaser, its successors and assigns, the owners of the property hereby transferred, and its and their servants, agents, invitees and licensees to have all the necessary facilities to lay, relay, maintain and keep in repair and to have access to the underground cables, ducts and overhead lines now or at any time from the date hereof leading to and from the Scheduled Property making good any damage caused.]

IN WITNESS WHEREOF the parties hereto have hereunto executed these presents the day and year first herein written.

SIGNED AND DELIVERED

by the **VENDOR**

in the presence of :-


Version 2.00 (July 2013)

or
PRESENT when the Common Seal of
the VENDOR
was affixed hereto:-

PRESENT when the Common Seal of
the PURCHASER
was affixed hereto:-

Dated the _____ day of _____ 20____

TO

ELECTRICITY SUPPLY BOARD

TRANSFER

Solicitor,
Electricity Supply Board,
Lower Fitzwilliam Street,
DUBLIN 2.

Reference: _____

SCHEDULE 13

Interface Undertaking

The Customer agrees as a counterparty to the Agreement to give and maintain, on its own behalf and on behalf of their officers, employees, agents and contractors, throughout the term of the Agreement and surviving its termination, the following undertaking ("Interface Undertaking") in favour of the Company in relation to the Customer's connection to the Transmission System;

1. The Customer agrees to comply with the technical requirements for connection to the Transmission System set out in the Connection Agreement and to install protection equipment as required by the Company to protect its facility from faults on the Distribution System.
2. The Customer agrees that DSO is permitted to take any steps it is authorised to take under law, including, without limitation, by its' licence or the Distribution Code and the Customer agrees not to make any claims against DSO in connection with such steps.
3. The Customer agrees to permit the Company to give DSO information about the Customer's connection to the Transmission System reasonably required by DSO to fulfill its obligations under its licence and the Distribution Code.
4. In the event that the Customer is unable to notify the Company, the Customer hereby consents to the Company notifying DSO promptly of any fault or other unusual circumstance that it discovers in relation to the Distribution System in connection with the Company's connection.
5. The Customer shall ensure that the public liability insurance procured and maintained by it in accordance with its Connection Agreement with the Company extends to damage suffered by DSO and its officers, employees, agents and contractors.
6. The Customer agrees that except in the case of claims in respect of death and personal injury, and to the extent permitted by law, not to make, and to waive its rights now and for the future in respect of, any claim against the DSO or any of its directors, officers, employees, agents, distribution connected customers or contractors for any loss, damage, cost, claim, demand, suit, liability, fine, penalty or expense, whether based in contract, tort, breach of duty or on any other grounds, in connection with the Customer's connection to the Transmission System or the DSO's operation of the Distribution System except for any such claim that it is entitled to make against the DSO as set out in paragraph 7 below and subject always to paragraph 8 below.
7. The Customer agrees that, except in the case of claims in respect of death and personal injury and other liability that cannot, by law, be excluded or limited, and without prejudice to paragraph 6 above and paragraph 8 below or to any right of indemnity in the Connection Agreement, not to make any claim against DSO arising from any act or omission of DSO or its officers, agents, employees, distribution connected customers or contractors in respect of any loss, damage, claim, liability, cost or expense in respect of:

- a) physical damage being occasioned to the property of the Customer, its officers, employees or agents; or
- b) the liability of the Customer to any other person for loss in respect of physical damage cause directly to the property of such other person; or
- c) the disconnection or de-energisation of the Customer's connection in circumstances permitted under the Connection Agreement; or
- d) negligence or breach of statutory duty on the part of or of any of its officers, employees, agents, or contractors; or
- e) any other matter connected with the Customer's connection to the Transmission System and/or related to the operation by the DSO of the Distribution System or with the Connection Agreement

for an amount in respect of any one event in excess of the Connection Liability Amount and further, for an amount in respect of all events during the term of the Connection Agreement in excess of the Connection Liability Cap.

8. The Customer agrees that, except in the case of claims in respect of death or personal injury and without prejudice to paragraphs 6 and 7 above to any rights of indemnity in the Agreement, not to make any claim against DSO or its directors, officers, employees, contractors, distribution connected customers or agents for, and to waive its rights now and for the future in respect of, any:

- a) indirect or consequential loss, punitive, special, exemplary or incidental damages;
- b) loss of profit, loss of use, loss of contract, loss of goodwill or loss of revenue;
- c) loss resulting from liability of the Customer to any other person howsoever and whensoever arising save as expressly provided in 7(b) above,

regardless of whether suffered by the Customer or not and regardless of whether such a claim is based on contract, warranty, tort (including negligence), breach of duty, strict liability or any other legal or equitable principle.

IN WITNESS WHEREOF the Company and the Customer have caused this Interface Undertaking to be executed on date above first herein written.

Signed for and on behalf of EirGrid plc:-

DocuSigned by:
Siobhan O'Shea
90C9350C345442B...

EIRGRID PLC

Print Company Signatory Name in Block Capitals: Siobhan O'Shea

DocuSigned by:
Nick Haslehurst
3A84EC882D3E487...

Vantage Data Centers DUB11 Limited

Print Customer Signatory Name in Block Capitals: Nick Haslehurst

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

Our Case Number: ABP-317446-23

Planning Authority Reference Number: SD22A/0420

Your Reference: Vantage Data Centers DUB11 Limited



An
Bord
Pleanála

John Spain Associates
39 Fitzwilliam Place
Dublin 2
D02 ND61



Date: 23 September 2024

Re: Demolition of structures, construction of a data centre and all associated works. Environmental Impact Assessment Report (EIAR) submitted with application.
Site within the townlands of Ballybane & Kilbride, Clondalkin, Dublin 22

Dear Sir / Madam,

I have been asked by An Bord Pleanála to refer to the above-mentioned appeal.

The Board has examined the appeal and is of the opinion that certain information is necessary for the purpose of enabling it to determine the appeal.

In accordance with section 132 of the Planning and Development Act, 2000, (as amended), you are required to submit, on or before **21st October, 2024**, the following information:

1. **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 (DUB 13) to the grid.**
2. **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.**

If the information required is not received before the end of the specified period, the Board will dismiss or otherwise determine the appeal without further notice to you in accordance with section 133 of the 2000 Act, (as amended). Your submission in response to this notice must be received by the Board not later than **5.30 p.m. on the date specified above.**

Tel	Tel	(01) 858 8100
Glaó Áitiúil	LoCall	1800 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

Please quote the above appeal reference number in any further correspondence.

Yours faithfully,

Karen Byrne
Karen Byrne
Executive Officer
Direct Line: 01-8737264

BP71 Registered Post

Tel
Glao Áitiúil
Facs
Láithreán Gréasáin
Ríomhphost

Tel (01) 856 8100
LoCall 1800 275 175
Fax (01) 872 2684
Website www.pleanala.ie
Email bord@pleanala.ie

64 Sráid Macilbhríde
Baile Átha Cliath 1
D01 V902

64 Marlborough Street
Dublin 1
D01 V902

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

Confirmation of Connection Agreement Payment

From: Majumdar, Shoubhik <shoubhik.majumdar@eirgrid.com>
 Sent: Monday, July 8, 2024 11:03 AM
 To: Nicholas Synnott <nicholas.synnott@eirgrid.com>
 Cc: Megan Byrne <megan.byrne@eirgrid.com>; Murphy, Kilian <kilian.murphy@eirgrid.com>; Emmanuel Ogunyemi <emmanuel.ogunyemi@eirgrid.com>;
 Hinder-Thomas <hinder.thomas@eirgrid.com>; Tibirna, Rodica <rodica.tibirna@eirgrid.com>
 Subject: RE: Klicarbery Sub-station VOC DUB2 Campus

Some people who received this message don't often get email from <shoubhik.majumdar@eirgrid.com>. This may not be a mistake.

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 [redacted] received today, 08/07/24 from Vantage Data Centers DUB11 Ltd paying invoice SINV005391.

Best regards,

Shoubhik Majumdar | Contract Manager
 EirGrid

M: +353 (0)27 441 8851



We're working hard to get EirGrid Group. For sending this message at a time that suits you, please feel comfortable knowing that I don't expect you to read, respond

Reference	Transaction Date	Transaction Type	Value Date	Debits
Outgoing ACH Payment CUSTREF: SINV005391-02072; BANK REF: 15KD07BNSRWV; BIO: CHASIE4LXXX IE95CHAS93090379809587 Vantage Data Centers DUB11 Limited 1-2 VICTORIA BUILDINGS HADDINGTON R OAD DUBLIN IE, D04 NIW8 PAYB BARCIE2DXXX BARCLAYS BANK IRELAND P ONE MOLESWORTH STREET BENEFICIARY: eirgrid PLC The Oval, Dublin D04 FV25 IE SCT OUT REF: 15KD07BNSRWV; eirgrid PLC REM/SINV005391; PAY METHOD: G796/BARCDEF FI	8 JUL	TRF	8 JUL	[redacted]

APPENDIX 3 – CORRESPONDENCE FROM EIRGRID

CP1188 Kildarbery

Murphy, Kilian <Kilian.Murphy@Eirgrid.com>
 Tue 8/20/2023 7:08 AM

to Almas Sabitov (C) <almas.sabitov@vantage-dc.com>
 cc Adam Cunningham <acunningham@vantage-dc.com>

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.

Almas,

We, EirGrid Plc are aware of the following:

1. 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, Kildarbery, 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, Kildarbery, 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 87 671 4993
 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 Dóthra, Baile Átha Cliath 4, D04 FW28

Registered Office
 The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, D04 FW28.
 Registered in Ireland No. 338522 V.A.T. No. IE 6358522H
 TELEPHONE + 353 (0)1 677 1700
 EMAIL Info@eirgrid.com

**APPENDIX 4 – COPY OF COVER LETTER FROM NEPHIN ENERGY AND SIGNED
LETTER OF INTENT WITH NEPHIN RENEWABLE GAS LIMITED**



Nephin Energy Limited
126 Pembroke Road
Ballsbridge, D04 EP27
Ireland

01 October 2024

Vantage Data Centres Ireland Limited
1-2 Victoria Buildings
Haddington Road
Dublin 4
Ireland

Subject: Letter of Intent to purchase biomethane from Nephin Renewable Gas Limited

Dear Mr. Barry King,

We are pleased to enclose with this letter a signed Letter of Intent reflecting Vantage Data Centres' intention to purchase biomethane from Nephin Renewable Gas Limited.

We understand that Vantage Data Centres DUB11 Limited has a pending application for permission for the construction of the DUB13 datacentre at Clondalkin in Dublin and that the matter is under appeal to An Bord Pleanála (ABP-317446-23). We consent to the production of this letter to An Bord Pleanála, in support of the request for a grant of planning permission.

I trust the above is in order, but should you have any queries, please do not hesitate to contact my colleague Nicholas Lincoln at nlincoln@nephinenergy.com.

Yours sincerely,

A handwritten signature in black ink that reads "Tom O'Brien".

Tom O'Brien
Group Chief Executive

Subject to Contract / Contract Denied

LETTER OF INTENT

THIS LETTER OF INTENT is dated 2024 between:

(1) **Nephtin Renewable Gas Limited** (company registration number 737460) a company incorporated in the Republic of Ireland having its registered office at 3 Dublin Landings, North Wall Quay, Dublin 1, Ireland, D01 C4E0 ("**Seller**"); and

(2) **Vantage Data Centers Ireland Limited** (company registration number 683470) a company incorporated in Ireland having its registered office at 1-2 Victoria Buildings, Haddington Road, Dublin 4, DUBLIN, Ireland, ("**Offtaker**").

(each a "**Party**" and together the "**Parties**")

1 INTRODUCTION

- 1.1 Seller is a biomethane development company established in the Republic of Ireland with the ambition of becoming a market leader in the Irish biomethane sector.
- 1.2 Offtaker is a company established in Ireland and is a leading global Data Centre provider.
- 1.3 Seller and Offtaker wish to enter into commercial discussions with a view to entering into a binding agreement described in Clauses 3 and 4 below.
- 1.4 This Letter of Intent (LOI) is intended to form the basis for commercial discussions between the parties. Except in respect of clause 5 (Confidentiality) and clause 6 (Law and Jurisdiction), no part of it is intended to be legally binding, neither does it represent an offer by Offtaker to enter into a contract.

2 LEGALLY BINDING PROVISIONS

- 2.1 If the Parties were to agree on formal contractual arrangements for the sale and purchase of biomethane, a supply contract may be entered into Contract as soon as reasonably practical and by no later than 1 June 2025.
- 2.2 By notice in writing, either Party may terminate this LOI contract if business plans change.

3 CONTRACT

- 3.1 Under the terms of the intended contract, the Seller will supply and sell biomethane and the related Renewable Gas Proof of Origin (RGPO), and the Offtaker would purchase, and accept transfer of title and delivery of the same on, and subject to, the terms and conditions set out in the contract. Seller and Offtaker, having regard to evolving regulatory and market frameworks for biomethane

gas sale, purchase and certification, will cooperate to formulate, discuss and agree the optimal contract structuring.

4 PRINCIPAL TERMS & CONDITIONS OF THE CONTRACT

4.1 Sale & Purchase of Biomethane

During the delivery period, Seller will supply, sell and deliver to the Offtaker at the agreed delivery point, and Offtaker would agree to offtake and purchase at the delivery point, the quantity of biomethane produced by the Seller up to the indicative annual contract quantity (ACQ).

4.2 Delivery Period

The delivery period under the Contract is intended be up to seven years from commercial operation of the Seller's production facility, which is expected to be in Quarter 4 of calendar year 2025.

4.3 Delivery Point

The Delivery Point and method of biomethane delivery, and the duration of the delivery method such as:

- i. Direct grid injection and pipeline transport of supply by the Seller to the Offtaker; or
- ii. Seller trucks supply to an injection point for pipeline supply to the Offtaker; or
- iii. Seller trucks supply directly to the Offtaker;

is to be agreed between both Parties.

4.4 Annual Contract Quantity (ACQ) for biomethane and associated Renewable Gas Proof of Origin (RGPO)

Pursuant to the contract envisaged in clause 2.1 above, the Seller agrees to deliver an indicative ACQ of up to 500GWhs of biomethane produced by the Seller per annum. The associated RGPOs will be delivered to the Offtaker in accordance with Clause 4.6.

4.5 Contract Price

The indicative Contract Price is expected to range from €0.175 per KWh (excluding VAT) indexed to inflation (subject to further negotiations).

The Contract Price reflects the unsubsidised wholesale price of the biomethane molecule and associated RGPO. Additional charges include (but may not be limited to):

- (a) Gas Networks Ireland Transmission Tariffs for the operation of the transmission network;
- (b) Gas Networks Ireland Distribution Tariffs for the operation of the distribution network;
- (c) GNI Shrinkage and Balancing charges (if applicable); and
- (d) Supplier charges.

The Contract Price will be indexed annually using the Consumer Price Index¹ as published by the Central Statistics Office.

4.6 Renewable Gas Proof of Origin (RGPO)

Seller will transfer to Offtaker relevant RGPOs issued in respect of, and corresponding to, the biomethane actually delivered by Seller. The RGPO price (excluding administrative costs) will be included in the Contract Price specified above. The parties are to do all things necessary to ensure that the RGPOs are registered and transferred from Seller to Offtaker.

4.7 Law & Jurisdiction

This LOI and any future Contract (including its formation and performance) will be governed by, and construed in accordance with, the laws of the Republic of Ireland. Any disputes arising under or in connection with this LOI or any future Contract will be subject to the jurisdiction of the courts of the Republic of Ireland.

5 CONFIDENTIALITY & ANNOUNCEMENTS

5.1 The existence and contents of this LOI and all documents and information made available by one Party to the other Party with respect to this LOI, is strictly confidential and shall not be disclosed to any third party (other than a Party's affiliates' employees, contractors, directors or officers and professional advisors), nor shall any public announcement relating to this LOI be made by either Party, except for such information (i) as may become generally available to the public without breach of this clause 5.1, (ii) as may be required in response to any summons, subpoena, or otherwise as may be required in connection with any litigation or to comply with any applicable law, order, regulation, ruling, accounting disclosure rule or standard, rule of a stock exchange on which its stock (or those of an affiliate to it) are listed or traded or any governmental authority or other authority with relevant powers, (iii) as may be obtained from a non-confidential source that disclosed such information in a manner that did not violate its obligations to the non-disclosing Party in making such disclosure, (iv) as may be furnished to the disclosing Party's affiliates, auditors, attorneys, advisers, rating agencies or counsel which are required to keep the information that is disclosed in confidence, or (v) as may be disclosed to potential lenders or other providers of funds in connection with any form of financing of its business. The disclosing Party shall notify the other Party about any such announcement as soon as possible and (where practicable) consult with the other Party and take into account the other Party's reasonable requirements as to the timing and contents of the announcement and how it is to be made. This provision replaces and supersedes any confidentiality or non-disclosure agreement made between the Parties before the date hereof relating to the subject-matter contained in this LOI.

5.2 Clause 5 shall survive the termination or expiry of this LOI for a period of 12 months.

6 LAW & JURISDICTION

6.1 This LOI shall in all respects (including its formation and performance) be governed by, and construed in accordance with, the laws of Ireland. Any disputes arising under or in connection with this LOI will be subject to the jurisdiction of the courts of the Republic of Ireland.

¹ the Consumer Price Index (CPI), as published by the Central Statistics Office (or its successor) – <https://www.cso.ie/en/statistics/prices/consumerpriceindex>

IN WITNESS WHEREOF the Parties have executed this Letter of Intent on the respective dates specified below with effect from the date specified on the first page of this LOI.

Signed for and on behalf of **Seller**

Signature: 

Print name: Tom O'Brien

Position: Director

Date: 01.10.24

Email address: tobrien@nephinenergy.com

Signed for and on behalf of **Offtaker**

Signature: 

Print name: 
3A84ECB82D3E467

Position: _____

Date: _____

Email address: _____

**APPENDIX 5 – CLIMATE IMPACT ASSESSMENT REPORT PREPARED BY AWN
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CLIMATE IMPACT ASSESSMENT FOR VANTAGE DUB13 DATA CENTRE

Report Prepared For

Vantage Data Centers DUB11 Ltd

Report Prepared By

Dr. Edward Porter

Our Reference

EP247501.0168AR01

Date of Issue

14th October 2024



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Signature		
Name	Dr Edward Porter	Ciara Nolan
Title	Director AWN	Senior Consultant
Date	14 th October 2024	14 th October 2024

1.0 CLIMATE IMPACT ASSESSMENT OF VANTAGE DATA CENTERS DUB13 FACILITY

Executive Summary

- 1.1 This report outlines the significance of greenhouse gas (GHG) emissions from the Vantage Data Centers DUB13 Facility in the context of Ireland's climate targets and in the context of the latest Climate Action Plan. It is noted that the Climate Action Plan (CAP24) was published in December 2023 and was approved by the government on the 21 May 2024.
- 1.2 An assessment has been carried out which has assessed the proposed development against the overall 2030 Carbon Budget, and more specifically, the Emission Ceiling for the Electricity Sector as set out under CAP24.
- 1.3 This report takes account of the updated information 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. This 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.
- 1.4 The 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.
- 1.5 In relation to the facility the average GHG emissions when using electricity from the national grid, in the absence of mitigation, based on the facility being in operation in 2026, are equivalent to:
- 0.08% of the national 2030 target,
 - 0.83% of the Emission Ceiling for the Electricity Sector.
- 1.6 The average GHG emissions when using electricity from the onsite Multi-Fuel Generation Plant (MFGP), in the absence of mitigation, based on the facility being in operation in 2026, are equivalent to:
- 0.21% of the national 2030 target,
 - 2.05% of the Emission Ceiling for the Electricity Sector.

Table 1 below sets out emissions associated with the proposed development on a year-on-year basis relative to the overall Carbon Budget and the Emission Ceilings for the Electricity Sector.

Facility	Year	Carbon Intensity (g CO ₂ /kWh)	Proposed Development CO ₂ (tonnes)	Overall Carbon Budget (CO ₂ Tonnes)	% of Development of Overall Carbon Budget	Electricity Emission Ceiling (CAP 23 and CAP 24) (CO ₂ Tonnes)	% of Development against Electricity Emission Ceiling (CAP23/CAP24)
Vantage DUB13 Facility – Electricity From The Grid	2026	0.191	43529	40,000,000	0.11%	4,000,000	1.09%
	2027	0.168	38349	40,000,000	0.10%	4,000,000	0.96%
	2028	0.145	33218	40,000,000	0.08%	4,000,000	0.83%
	2029	0.123	28454	40,000,000	0.07%	4,000,000	0.71%
	2030	0.100	23323	40,000,000	0.06%	4,000,000	0.58%
Vantage DUB13 Facility – Electricity From Onsite MFGP	2026	0.200	111,207	Average 40,000,000	0.08%	Average 4,000,000	0.83%
	2027	0.196	108,940	40,000,000	0.28%	4,000,000	2.78%
	2028	0.192	106,673	40,000,000	0.27%	4,000,000	2.72%
	2029	0.188	104,405	40,000,000	0.27%	4,000,000	2.67%
	2030	0.184	102,138	40,000,000	0.26%	4,000,000	2.61%
				Average	0.27%	Average	2.55%
							2.67%

- Based on a 100% IT load utilisation (worst-case for data centres) and an MFGP efficiency of 40.65%.
- The overall Carbon Budget, based on a five-year total (i.e. from 2026-2030) is 200,000,000 tonnes of CO₂.
- The Sectoral Emission Ceiling for the electricity sector, based on a five-year total (i.e. from 2026-2030) is 20,000,000 tonnes of CO₂. There is flexibility from year to year in that it could reduce each year in a linear fashion or each year could have the same total etc. Given that is not possible to predict year to year ceilings, for the purposes of the assessment, the overall sectoral emission ceilings for the electricity sector for the years 2026-2030 has been divided evenly for each year (i.e. 4,000,000 tonnes of CO₂ annually).

Table 1 CO₂ Emissions On A Year On Year Basis Relative To The Overall Carbon Budget And The Emission Ceilings For The Electricity Sector

- 1.7 The Applicant has entered into a Letter of Intent (LOI) with Nephin Renewable Gas Limited to provide Corporate Power Purchase Agreements ('CPPAs') for new renewable energy once permission is received. The Applicant can confirm that the LOI has been signed by both parties, These LOIs are capable of underpinning new renewable energy generation calculated to offset the energy consumed by the proposed development from the electricity grid and onsite gas generation. These arrangements, once planning is granted, will provide for:
- Corporate Power Purchase Agreements between the Applicant and Nephin Renewable Gas Limited.
 - The establishment of new renewable energy generation projects by the Applicant's group, that will not be supported by government or consumer subsidies – these new renewable energy projects will be:
 - Located throughout Ireland;
 - Parallel development to the energy demand of the proposed development; and
 - In total, should see the collective annual generation match the data centre's annual electricity use.
- 1.8 Through these obligations, for every unit of energy consumed by the data centre, a unit of new renewable energy generation would be despatched to the wider electricity system to off-set it. This delivers the objective of operating the proposed development on an annual net energy zero basis that would support Ireland's overall climate targets.
- 1.9 Having regard to:
- the emission associated with proposed development relative to the Carbon Budget and the Emission Ceiling for the Electricity Sector; and
 - the level of renewable additionality that will be provided under agreements between the applicant and Nephin Renewable Gas Limited,
- it has been assessed that the proposed development would result in a minor adverse impact (based on IEMA Methodology).

Introduction

- 1.10 The energy generated by the national grid and associated GHG emissions to power the proposed development will fall within the scope of the EU Emissions Trading System (ETS) either indirectly as a result of electricity from the national grid or directly from onsite gas generation and onsite backup HVO generators (used infrequently when power from the grid is not available) and thus will require a Greenhouse Gas Permit in order to operate.
- 1.11 The proposed facility building will be powered from the onsite MFGP with support from the national grid where required. The applicant will accept a condition requiring engaging in a CPPA, providing for additionality of renewable energy delivery to match the energy demand of the proposed facility development. This assessment has been undertaken on the assumption of the use of power from the grid is used to power the facility and secondly assuming natural gas is used to power the onsite MFGP, thus ensuring that a worst-case assessment has been undertaken.
- 1.12 Recent changes to national legislation have also be addressed in this assessment in the context of GHG emissions associated with the development. The 2024 Climate Action Plan (CAP) (Government of Ireland, 2023) provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050. This is identified as the national climate objective in section 3 of the Climate Action and Low Carbon Development Act 2015 (as amended by the Climate Action and Low Carbon Development (Amendment) Act 2021) as follows:
- "3. (1) The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy..."*
- 1.13 CAP24 outlines the current status across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and outlines the various broadscale measures required for each sector to achieve ambitious decarbonisation targets. CAP24 also detailed the required governance arrangements for implementation including carbon-proofing of policies and establishment of Sectoral Emission Ceilings and carbon budgets.

CAP24 has outlined the path towards the electricity target by 2030 of a 75% reduction in GHG emissions compared to 2018. The core measures set out in the CAP24 are outlined below in Table 2:

SECTOR	CAP 24
Renewable Electricity Share	Increasing the share of renewable electricity to 80%.
Onshore Wind	Indicative Onshore Wind Capacity of up to 9GW,
Offshore Wind	Indicative Offshore Wind Capacity of at least 5GW,
New Flexible Gas Plant	New Flexible Gas Plant of at least 2 GW,
Solar	Indicative Solar PV Capacity of 8GW.

Table 2 CAP24 Core Sectoral Targets

EU Legislation

- 1.14 In order to meet the commitments under the Paris Agreement, the European Union (EU) enacted 'Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030, contributing to climate action to meet

commitments under the Paris Agreement and amending Regulation (EU) No. 525/2013' (the Effort Sharing Regulation).

- 1.15 GHG emissions from electricity generation used to power data storage facilities in Ireland, either from the national grid or from onsite generation (where the thermal input is greater than 20MW), are included in the ETS. Thus, they are not included in the Effort Sharing Regulation which covers all non-ETS emissions and thus any necessary increase in electricity generation due to data storage facility demand will have no impact on Ireland's obligation to meet the EU Effort Sharing Regulation¹.
- 1.16 These Regulations aim to deliver, collectively by the EU in the most cost-effective manner possible, reductions in GHG emissions from the Emission Trading System (ETS) and non-ETS sectors amounting to 43% and 30%, respectively, by 2030 compared to 2005. The ETS is an EU-wide scheme which regulates the GHG emissions of larger industrial emitters including electricity generation, cement manufacturing and heavy industry. The non-ETS sector includes all domestic GHG emitters which do not fall under the ETS and thus includes GHG emissions from transport, residential and commercial buildings and agriculture. Ireland's obligation under the Regulations is a 30% reduction in non-ETS GHG emissions by 2030 relative to its 2005 levels.
- 1.17 The EU, in May 2023, published Directive (EU) 2023/959 Amending Directive 2003/87/EC Establishing A System For Greenhouse Gas Emission Allowance Trading Within The Union And Decision (EU) 2015/1814 Concerning The Establishment And Operation Of A Market Stability Reserve For The Union Greenhouse Gas Emission Trading System. As part of this Directive, the cap on emissions has been tightened again to reduce emissions covered by the EU ETS by 62% by 2030 compared to 2005.
- 1.18 As outlined in European Commission publication "*Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment*" (EC, 2013) the assessment of the impact of the project on climate should be context specific. Within the context of global or EU-wide emissions, the GHG emissions associated with the project are small. The approach that has been adopted at EU level is the EU Climate and Energy Package. In this regard, this publication (EC, 2013) has stated that:
- "The EU Emissions Trading System, the backbone of the EU mitigation effort, which sets a cap on emissions from the most polluting sectors including over 11,000 factories, power plants and other installations, including airlines. By 2020, the cap should result in a 21% reduction relative to 2005 levels. The EU ETS covers about 40% of all EU emissions."* (EC, 2013).
- 1.19 The ETS is a "cap and trade" system where an EU-wide limit, or cap, is set for participating installations. Thus, the geographical location of a given development within the EU is not relevant as there is only one EU-wide target which is applicable to the ETS and thus the cumulative direct and indirect climate assessment of relevance in this context is the GHG emissions associated with the EU under the ETS. When viewed in this context, on an EU-wide basis, where the ETS market in 2023 was approximately 1,064 million tonnes CO_{2eq}, the impact of the emissions from the proposed development, from electricity generation from the national grid, will be less than 0.006% of the total EU-wide ETS market.
- 1.20 As shown in Figure 1, the ETS has had mostly a year-on-year reduction trend (with the exception of 2020 due to COVID) since 2007. As outlined in the EU publication "*The EU Emissions Trading System in 2020: trends and projections*" (EU, 2020), the European Union's energy system is decarbonising rapidly. The report states:

¹ Available at: https://ec.europa.eu/clima/policies/effort_en

"Total ETS emissions from stationary installations declined by 9.1% between 2018 and 2019, the largest drop in a decade, driven by a strong decrease in coal use for power production" (EU, 2020)

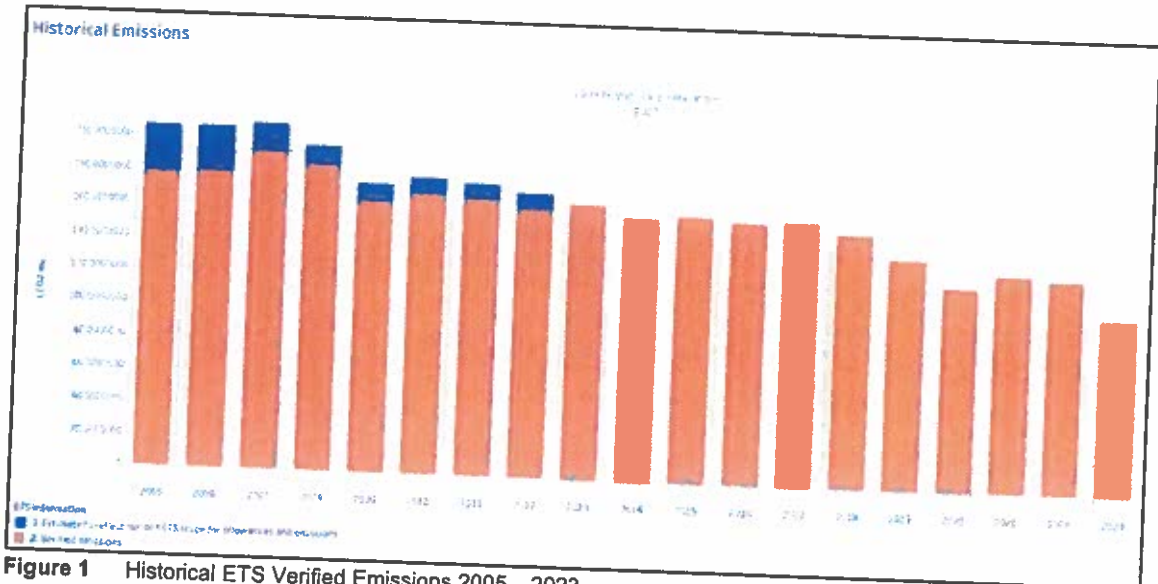


Figure 1 Historical ETS Verified Emissions 2005 – 2023

- 1.21 The European Topic Centre on Climate report entitled "Trends and projections in the EU ETS in 2020" (ETC, 2020) in reference to additional electricity capacity states:

"In the revised ETS Directive 2018/310, Article 10(c) now requires that "where an investment leads to additional electricity generation capacity, the operator concerned shall also demonstrate that a corresponding amount of electricity-generation capacity with higher emission intensity has been decommissioned by it or another associated operator by the start of operation of the additional capacity". This clause aims at ensuring that overall electricity generation capacity becomes less carbon intensive over time."

- 1.22 The report (ETC, 2020) further indicates that the reduction in GHG emissions is predicted to continue up to at least 2030 due to current policies in place. As shown in Figure 2, both the energy industries and "other industries" are predicted to decrease significantly by 2030.

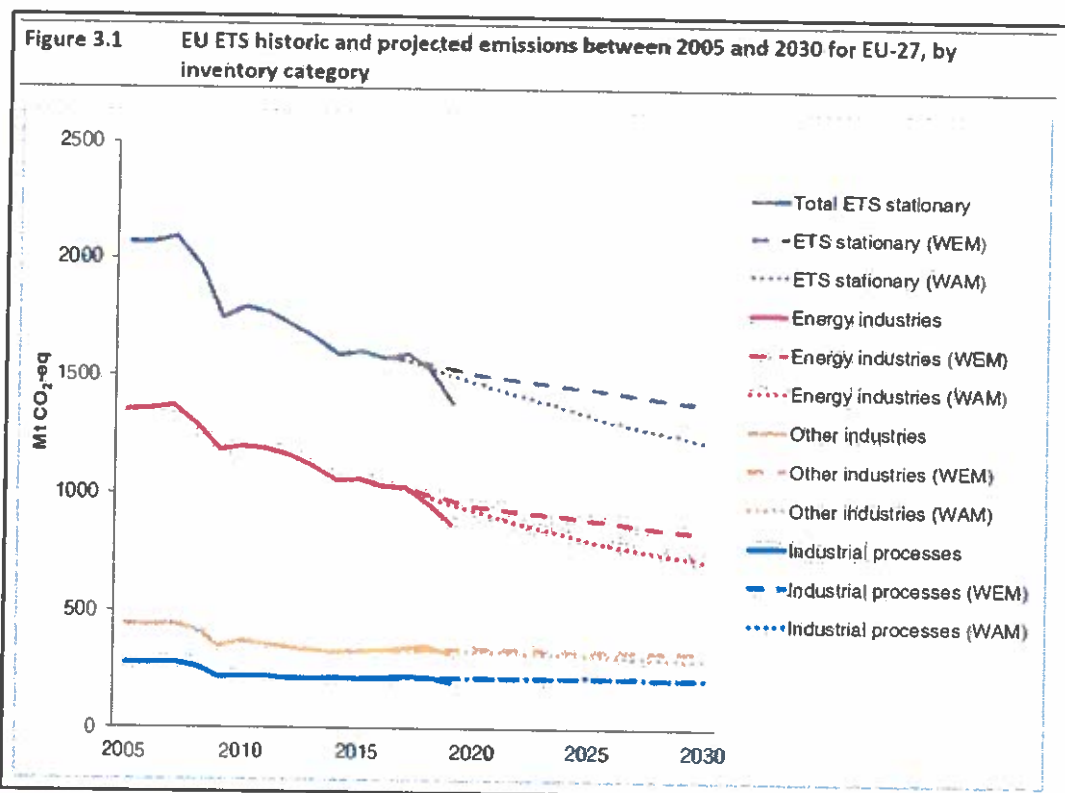


Figure 2 Historical ETS Verified Emissions & Project Emissions 2005 – 2030 (WEM = with existing measures, WAM = with additional measures)

- 1.23 The European Climate Law² was published in 2021 as part of the EU's "Fit for 55" legislative package where the EU has committed to a domestic reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2030, the Effort Sharing Regulation has also been strengthened with increased ambition by the year 2030. The regulation³ for Ireland increases the GHG emission reduction target from 30% to 42% relative to 2005 levels. Thus, it is likely that the actual emissions reduction by 2030 will be greater than the projections outlined in Figure 2.

National Legislation

- 1.24 The Climate Action and Low Carbon Development Act 2015 (as amended) outlines a series of specific actions including:
- To make a strategy to be known as the 'National Long Term Climate Strategy' not less than once in every five-year period with the first to be published for the period 2021 to 2035 and with each subsequent Strategy covering the next three five-year carbon budgets and also include a longer-term perspective of at least 30 years;
 - To adopt a system of carbon budgets which will be determined as part of a grouping of three five-year periods calculated on an economy-wide basis, starting with the periods 2021 to 2025, 2026 to 2030, and 2031 to 2035;
 - To introduce a requirement for Government to adopt "sectoral emission ceilings" for each relevant sector within the limits of each carbon budget;

² Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')

³ Regulation (EU) 2023/857 of the European Parliament and of the Council of 19 April 2023 amending Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement, and Regulation (EU) 2018/1999

- To request all local authorities to prepare climate action plans for the purpose of contributing to the national climate objective. These plans should contain mitigation and adaptation measures that the local authority intends to adopt;
 - Increasing the power of the Advisory Council to recommend the appropriate climate budget and policies;
 - Requiring the Minister to set out a roadmap of actions to include sector specific actions that are required to comply with the carbon budget and sectoral emissions ceiling for the period to which the plan relates; and
 - Reporting progress with the CAP on an annual basis with progress including policies, mitigation measures and adaptation measures that have been adopted.
- 1.25 The Long-term Strategy on Greenhouse Gas Emissions Reduction 2024, published in August 2024, outlines a range of policies and strategies to address GHG emissions. In relation to electricity the Government commits to the full decarbonisation of the electricity system by 2050 by means of a range of measures including flexibility, grid expansion and increase in renewable power capacity.
- 1.26 The first carbon budget programme was published in November 2021 and comprises three successive 5-year carbon budgets. In relation to carbon budgets, the Climate Action and Low Carbon Development Act 2015 (as amended) states 'A carbon budget, consistent with furthering the achievement of the national climate objective, shall be proposed by the Climate Change Advisory Council, finalised by the Minister and approved by the Government for the period of 5 years commencing on the 1 January 2021 and ending on 31 December 2025 and for each subsequent period of 5 years (in this Act referred to as a 'budget period')'. The carbon budget is to be produced for 3 sequential budget periods with the third carbon in draft format. The carbon budget can be revised where new obligations are imposed under the law of the European Union or international agreements or where there are significant developments in scientific knowledge in relation to climate change. The total emissions allowed under each budget is set out below in Table 3, as well as the average annual reduction for each 5-year period.

Period	Mt CO ₂ eq	Emission Reduction Target
2021-2025	295 Mt CO ₂ eq	Reduction in emissions of 4.8% per annum for the first budget period.
2026-2030	200 Mt CO ₂ eq	Reduction in emissions of 8.3% per annum for the second budget period.
2031-2035	151 Mt CO ₂ eq	Reduction in emissions of 3.5% per annum for the third provisional budget.

Table 3 5-Year Carbon Budgets 2021-2025, 2026-2030 and 2031-2025

- 1.27 The Sectoral Emission Ceilings were published in July 2022 for each Sector as shown in Table 4. It should be noted that 5.25 MtCO₂eq of annual emissions reductions are currently unallocated on an economy-wide basis for the second carbon budget period (2026-2030). These will be allocated following a mid-term review and identification of additional abatement measures. The electricity sector emitted approximately 10.5 MtCO₂eq in 2018 and has a carbon budget of 40 MtCO₂eq between 2021-2025, 20 MtCO₂eq between 2025-2040 and a ceiling of 3 MtCO₂eq in 2030.
- 1.28 The CAP24, published in December 2023 and approved by the government on the 21 May 2024, reiterates the Sectoral Emission Ceilings and outlines the current status across key sectors including electricity, transport, built environment, industry and agriculture and outlines the various broadscale measures required for each sector to achieve the decarbonisation targets. CAP24 also details the required governance

arrangements for implementation including carbon-proofing of policies, establishment of carbon budgets, a strengthened Advisory Council and greater accountability to the Oireachtas.

Sector	Baseline (MtCO _{2e})	Carbon (MtCO _{2e})	Budgets	2030 Emissions (MtCO _{2e})	Indicative Emissions % Reduction in Final Year of 2025- 2030 Period (Compared to 2018)
	2018	2021- 2025	2026-2030		
Electricity	10	40	20	3	75
Transport	12	54	37	6	50
Built Environment Residential	7	29	23	4	40
Built Environment Commercial	2	7	5	1	45
Industry	7	30	24	4	35
Agriculture	23	106	96	17.25	25
Other (F-gases, waste, petroleum refining)	2	9	8	1	50
Land Use, Land-use Change and Forestry (LULUCF)	5	Reflecting the continued volatility for LULUCF baseline emissions to 2030 and beyond, CAP24 puts in place ambitious activity targets for the sector reflecting an EU-type approach.			
Total	68				
Unallocated Savings	-	-	26	-5.25	-
Legally Binding Carbon Budgets and 2030 Emission Reduction Targets	-	295	200	-	51

Table 4 Sectoral Emission Ceiling 2030

- 1.29 In relation to the scenario where the Proposed Development is powered by electricity from the national grid, the national fuel mix will decrease in carbon intensity as the grid reaches the 80% in renewables predicted for 2030 (see Figure 3 below). Therefore, the powering of the facility from the national grid will allow for a reduction in the GHG emissions associated with the proposed development over time. It has also been assumed that the facility utilisation will be 100% which is worst-case as 80% load is the assumption in the DECC report entitled "Summary of Analysis to Support Preparation of the Sectoral Emissions Ceilings" (DECC, 2022) which has an average load factor of 80% for data centres as shown in Figure 5.
- 1.30 In relation to the scenario where the Proposed Development is powered by the onsite MFGP using natural gas, natural gas will decrease in carbon intensity as outlined in the report "Pathway to a Net Zero Carbon Network by 2045" (GNI, 2024) with a prediction of 6.5 TWh biomethane, 1.3 TWh hydrogen and overall demand falling from 56.8 TWh in 2028 to 46 TWh in 2032. Therefore, the powering of the facility using natural gas will allow for a reduction in the GHG emissions associated with the proposed development over time.

'Net Zero' Energy System Emissions Reduction Profile

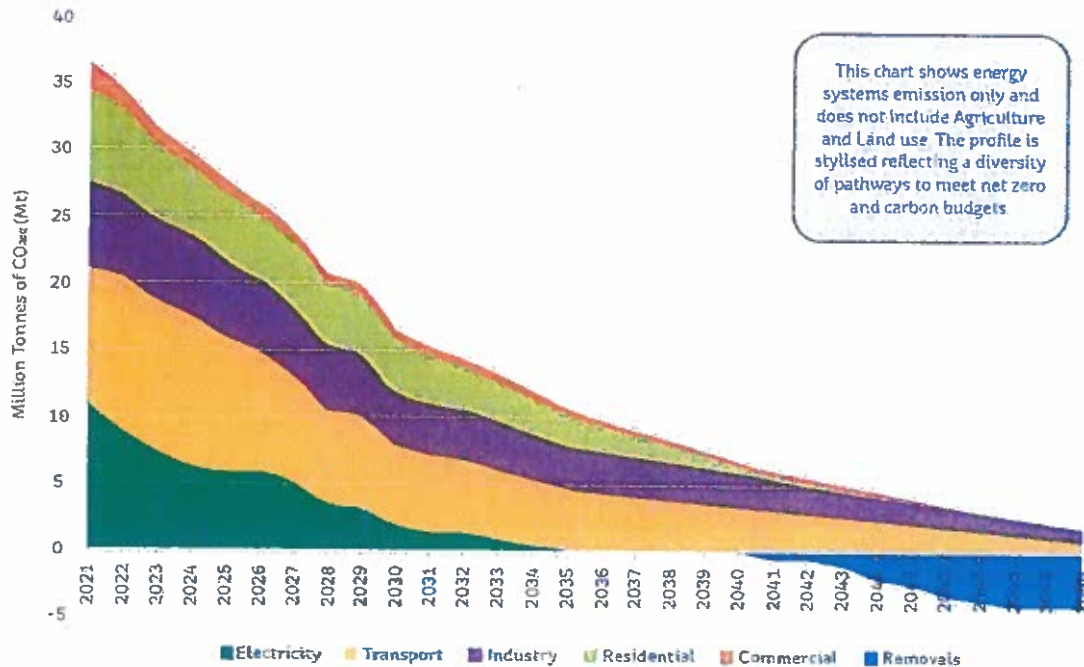


Figure 3 Net Zero Energy System Emissions Reduction Profile (UCC / MaREI) (ESB Networks, 2023)

- 1.31 The proposed development will have a maximum operational energy demand of 26 MWelect (for assessment purposes). The proposed development will ramp up its energy consumption over a period of several years. The development is therefore not capable of consuming its maximum energy capabilities until the proposed development becomes fully operational.
- 1.32 For the purposes of this assessment, the commencement of operations year of 2026 has been assigned. Table 5 below sets out the total GWh (operating at maximum annual energy consumption) and the fuel usage.

Facility	Anticipated operational year	Maximum annual energy consumption (for assessment purposes) (absolute worst case)	Estimate annual energy consumption GWh – (reasonable worst case)	Fuel
Vantage DUB13 Facility – Electricity From National Grid	2026	26 MWelect	228 GWh	Electricity
Vantage DUB13 Facility – Electricity From Onsite MFGP (Natural Gas)	2026	26 MWelect (64 MWthermal)	231 GWh	Natural Gas

Table 5 Proposed Development (Electricity From National Grid & Natural Gas) – Vantage Data Centers

- 1.33 In accordance with the methodology outlined above, the emission calculations reflect the actual GHG emissions associated with electricity / natural gas in the relevant year

of operation and has taken into account the estimated annual energy consumption per Table 5.

- 1.34 Thus, for Year 2026, the GHG emissions from electricity and natural gas will be based on the expected GHG emission rate in 2026. The expected values for each year from 2025 to 2030 is shown below in Table 6.
- 1.35 The GHG emission factor of electricity is based on current reported levels (Year 2023) with the assumption that the GHG emission factor will decrease in a linear fashion to reach 100 gCO₂/kWh by 2030 in line with government policy as shown in Table 6 below. The GHG emission factor of natural gas is based on current reported levels (Year 2023) with the assumption that the GHG emission factor will decrease in a linear fashion as the use of biomethane increases to account for 12% of overall gas demand by 2030 in line with the report "Pathway to a Net Zero Carbon Network by 2045" (GNI, 2024) as shown in Table 6 below.

Year	Electricity ^{Note 1} (g CO ₂ / kWh)	Natural Gas / Biomethane ^{Note 2} (g CO ₂ / kWh)
2025	214	200
2026	191	196
2027	168	192
2028	145	188
2029	123	184
2030	100	180

Note 1 Based on a carbon intensity of 259 g CO₂ / kWh in 2023 and assuming linear interpolation to 100 g CO₂ / kWh by 2030.

Note 2 Based on a carbon intensity of 204 g CO₂ / kWh in 2024 and assuming linear interpolation to 180 g CO₂ / kWh by 2030.

Table 6 Carbon Intensity of Electricity And Natural Gas From 2025 - 2030

- 1.36 A number of conservative approaches in this reasonable worst-case assessment are as follows:
- It was assumed that the data centre will operate at 100% utilisation on an annual average as a worst-case whereas a 60% - 80% load factor is likely to occur in reality.
 - It is assumed that net zero electricity would not be achieved until 2050, whereas recent data from the ESB and UCC/MaREI suggests that this is likely to be achieved by 2040 at the latest as outlined in "Networks For Net Zero – Delivering the Electricity Network for Ireland's Clean Electric Future" (ESB Networks, 2023).
 - UCC / MaREI have also separately published the report "Our Climate Neutral Future – Zero by 50" (UCC / MaREI, 2021) which details how the energy system can achieve net zero by 2050 by using technologies, concepts and interventions will already exist today. As shown in Figure 4, the report predicts that the energy system will be dominated by renewable energy in 2050.
 - Although the pathway may vary somewhat depending on future policy decisions, it is likely that net zero electricity (shown in green in Figure 3) will be achieved by 2040.

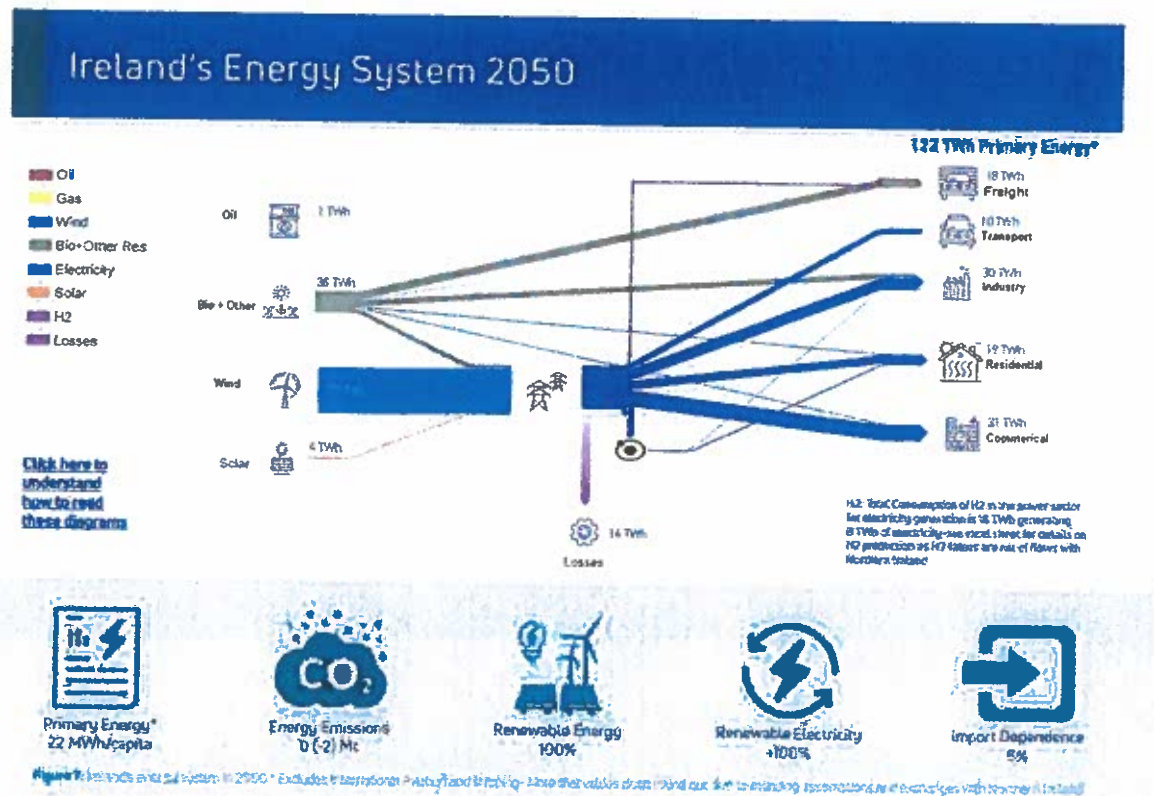


Figure 4 Ireland's Energy System 2050 (UCC / MaREI, 2021)

- 1.37 Specific to the Electricity Sector, CAP24 sets out that "Delivery and integration of onshore and offshore wind and solar PV is the best-performing mitigation measure to deliver emissions abatement at scale and at speed. Already under the first Climate Action Plan in 2019, reaching 70% renewables by 2030 provided the core of emissions reduction in the sector. Increasing renewables to 80% of demand under Climate Action Plan 2021 and beyond this to the CAP23 capacity targets of 22 GW of wind and solar achieves a further 16% emissions reductions over the first two carbon budgets. No other supply side measure comes close to the emissions abatement achieved by the early and rapid deployment of unprecedented wind and solar capacity".
- 1.38 The DECC publication "Summary of Analysis to Support Preparation of the Sectoral Emissions Ceilings" (DECC, 2022) outlines the assumptions which have been used to derive the Sectoral Emission Ceilings. The "proposed scenario" (Figure 5) adopted by DECC takes into account the EirGrid Generation Capacity Statement for 2020-2029 which set out a median overall demand in 2029 of 1,250MVA for Data Centre and Large Industrial User Demand by 2029⁴.
- 1.39 With a growth rate of 65% - 70% in electricity demand by 2030 inherent in the DECC analysis, the assessment undertaken for the Sectoral Emission Ceilings has concluded that the 2030 target of 3 Mtonnes of CO₂e_q is attainable as shown in Figure 6 below.

⁴ <https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf>

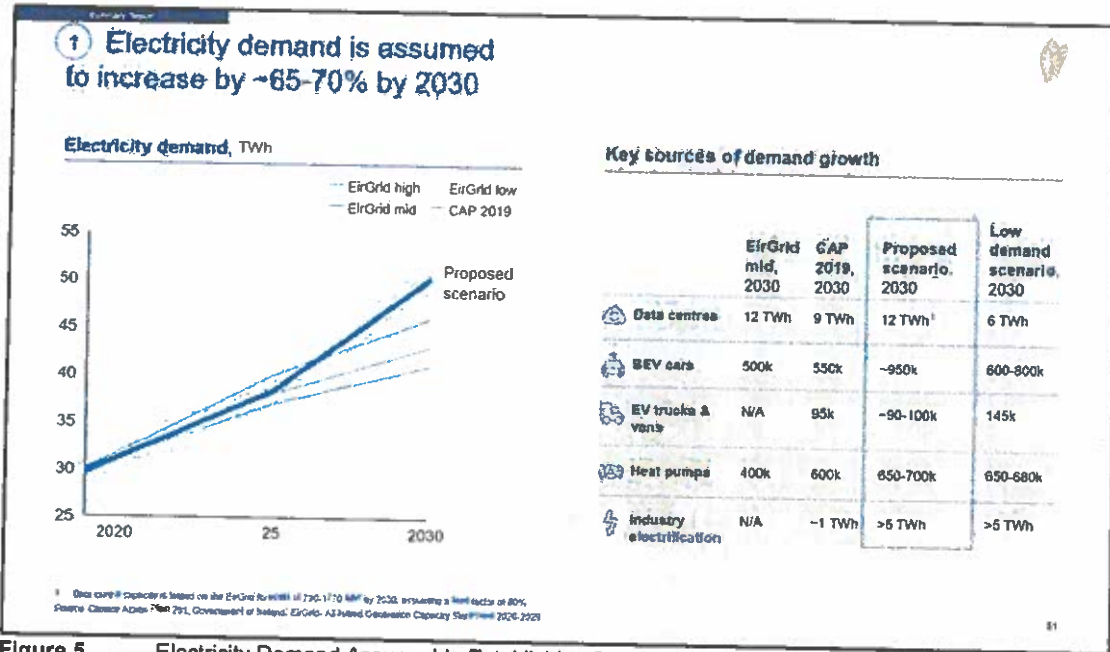


Figure 5 Electricity Demand Assumed In Establishing Sectoral Emission Ceilings (DECC, 2022)

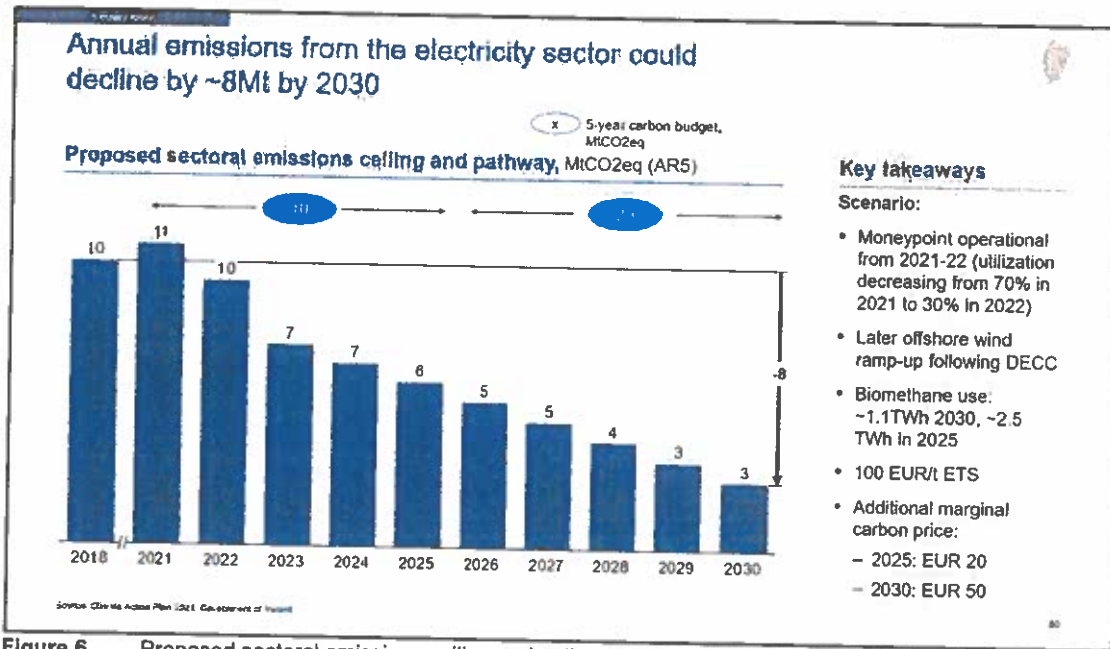


Figure 6 Proposed sectoral emissions ceiling and pathway 2018 to 2030 (DECC, 2022)

1.40 In relation to natural gas, the recent publications Ireland's National Biomethane Strategy (DECC, May 2024) and Biomethane Energy Report (Gas Networks Ireland, Sept 2023) have highlighted the potential for biomethane to replace a significant fraction of natural gas used in the network. A target of 5.7 TWh per annum by 2030 had initially been set in the 2023 GNI report which is 10% of national gas demand. An updated report by GNI published in 26 June 2024 entitled "Pathway to a Net Zero Carbon Network by 2045" (GNI, 2024) has refined these figures with a prediction of 6.5 TWh biomethane, 1.3 TWh hydrogen and overall demand falling from 56.8 TWh in 2028 to 46 TWh in 2032 and by 2036 the prediction is for 10 TWh biomethane, 6 TWh hydrogen and overall demand falling to 40.4 TWh. The report also predicts, by 2045, that the breakdown will be of 14 TWh biomethane, 30.1 TWh hydrogen and overall

demand of 44.1 TWh (with zero natural gas). Thus, Gas Networks Ireland has predicted that by 2050 the gas supply will have an overall net zero impact on climate.

- 1.41 The EPA has recently reported that the 2023 energy industries GHG emissions have decreased from 10.08 Mtonnes in 2022 to 7.8 Mtonnes in 2023⁵ which is a record 21.6% reduction. Comparing the 2023 reported data to the projected data undertaken for the Sectoral Emission Ceiling in Figure 6 indicates that the actual emissions are slightly higher to the target value in 2023. In order to comply with the 2021-2025 target annual reductions of 10.3% are required in 2024 and 2025.
- 1.42 As shown in Table 7, in relation to the development (which is assumed to be fully in operation in 2026) the GHG emissions, based on electricity from the national grid, are equivalent to 0.08% of the overall 2026-2030 carbon budget; 0.83% of the electricity sectoral ceiling 2026 - 2030 and 0.005% of the ETS 2030 Stationary Installations Cap based on the average emissions over 2026 - 2030. Also shown in Table 7, GHG emissions, based on electricity from the onsite MFGP using natural gas, are equivalent to 0.27% of the overall 2026-2030 carbon budget; 2.67% of the electricity sectoral ceiling 2026 - 2030 and 0.015% of the ETS 2030 Stationary Installations Cap based on the average emissions over 2026 - 2030.
- 1.43 It has been assumed that the facility utilisation will be 100% which is worst-case compared to the assumption in the DECC report (DECC, 2022) which has an average load factor of 80% for data centres as shown in Figure 5.

Scenario	Total CO _{2e} Emissions	% Of 2026-30 Carbon Budget	% Of 2026-2030 Electricity Sectoral Ceiling	% Of EU ETS 2030 Cap
Vantage DUB13 – Year 2026 – 2030 (228 GWh) ¹ - Electricity	166,873	0.08%	0.83%	0.005%
Vantage DUB13 – Year 2026 – 2030 (228 GWh) ¹ – Natural Gas	533,363	0.27%	2.67%	0.015%

Note 1 26MW is equivalent to 228 GWh based on 100% IT load utilisation
 Table 7 GHG Emissions Associated With The Development

Uncertainty In Relation To The Proposed Development

- 1.44 It has been assumed that the facility utilisation will be 100% which is worst-case. The proposed development will have uncertainty associated with it which will impact on the calculated GHG emissions. The factors which will be important include:
- Year of opening,
 - Phasing of operations,
 - Operational load,
 - Changes to the electricity grid.
- 1.45 The factors outlined above have been reviewed below to determine their underlying uncertainty into the future. As a general principle, a reasonable worst-case

⁵ <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Provisional-GHG-Report-Jul24-v6.pdf>

assessment has also been applied in the EIAR as shown by the following approaches below:

- Year of opening: This has been assumed to be 2026 (first full year of operation) as a conservative assumption. There is no possibility of an earlier operational date but a later date is possible. GHG emissions will be higher when an earlier operational date is assumed as later dates will have a high percentage of renewables in the national grid. Hence, an opening year of 2026 is conservative.
- Phasing of operations: The assessment assumed 100% operation of the entire Proposed Development in Year 2026. In reality, there will be a ramp-up period with 100% operation not occurring some period of time later.
- The assessment assumed a continuous 100% operational load for the data centre development, however annual average load is likely to be closer to 80% (as outlined in the recent Department of Environment, Climate and Communications [DECC] publication "Summary of Analysis to Support Preparation of the Sectoral Emissions Ceilings" (DECC, 2022). Thus, the assumption of 100% operations will overestimate GHG emissions in the early years of the project particularly for Years 2026 and 2027. Secondly, the assumption of 100% operational load will likely overestimate GHG emissions by approximately 20% every year.
- It is acknowledged that due to delays in decision making and logistical delays that the opening year may move beyond Year 2026. However, by assuming Year 2026 as the opening year it will be a conservative assumption. Each year the percentage of renewables in the national grid is likely to increase in line with government policy. As a results, the GHG emissions associated with the use of electricity from the national grid are likely to decrease on a year-by-year basis.
- As the Sectoral Emission Ceilings and Carbon Budgets have targets set for 2030, the assessment has predicted future GHG emissions for this year. Information on future GHG emissions, beyond 2030, from electricity will be naturally uncertain as it will depend on many factors including the percentage of renewables in the grid, the fossil fuel mix (gas, oil, coal) and the average wind speed. Thus, the assessment approach and the use of the 2030 target is conservative to allow for this uncertainty.
- a GHG emission rate of 100 gCO₂/kWh has been conservatively assumed for the national grid in 2030 which is higher than the SEAI⁶ predicted 92.9 gCO₂/kWh for 2030.

Assessment Of Significance

- 1.46 The Institute of Environmental Management and Assessment (IEMA) guidance note on "Assessing Greenhouse Gas Emissions and Evaluating their Significance" (IEMA, 2022) states that "*the crux of significance regarding impact on climate is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050*".
- 1.47 The assessment aims to quantify the difference in GHG emissions between the proposed project and the baseline scenario (the alternative project/solution in place of the proposed project). This is based on calculating the difference in whole life net GHG

⁶ Private communication from SEAI- dated 12th October 2023

emissions between the two options. During the assessment IEMA recommend use of a reasonable worst-case scenario rather than an absolute worst-case scenario.

- 1.48 The 2022 Guidance (IEMA, 2022) document identifies three principles:
1. When evaluating significance, all new GHG emissions contribute to a negative environmental impact; however, some projects will replace existing development or baseline activity that has a higher GHG profile. The significance of a project's emissions should therefore be based on its net impact over its lifetime, which may be positive, negative or negligible;
 2. Where GHG emissions cannot be avoided, the goal of the EIA process should be to reduce the project's residual emissions at all stages; and
 3. Where GHG emissions remain significant, but cannot be further reduced, approaches to compensate the project's remaining emissions should be considered.

Principle 1

- 1.49 The project will replace activities which have a higher GHG profile. Data storage facilities represent a significantly more efficient means of data storage when compared to a distributed model of enterprise data storage by individuals and companies (or 'enterprise sites').
- 1.50 Data centres are more energy efficient than enterprise sites due to comprehensive efficiency central to the design of the proposed development. In a June 2020 report, the International Energy Agency noted: *"Hyperscale data centres are very efficient large-scale cloud data centres that run at high capacity, owing in part to virtualisation software that enables data centre operators to deliver greater work output with fewer servers. The shift away from small, inefficient data centres towards much larger cloud and hyperscale data centres is evident in the shrinking share of data centre infrastructure in total energy demand..."*⁷.
- 1.51 A study published in 2020 by Science⁸ Magazine, found that while cloud computing productivity has grown globally by 550% between 2010 and 2018, energy consumption rose in tandem during the same period by just 6%, demonstrating the energy efficiency improvements of the industry, most notably by hyperscale data centres.
- 1.52 A report from IEA entitled "Data Centres & Data Transmission Networks (IEA, 2021) found that while global internet traffic surged by more than 40% in 2020, this strong growth in demand for data centre services continues to be mostly offset by ongoing efficiency improvements for data centre infrastructure as shown in Figure 7.

⁷ [IEA Data Centres and Data Transmission Networks](#) – June 2020

⁸ Masanet, Eric; Shehabi, Arman, Lei; Nuo, Smith, Sarah; Koomey, Jonathan; "Recalibrating global data center energy-use estimates", Sciencemag.org, February 28, 2020, Vol. 367, Issue 6481; ("Expressed as energy use per compute instance, the energy intensity of global datacenters has decreased by 20% annually since 2010....").

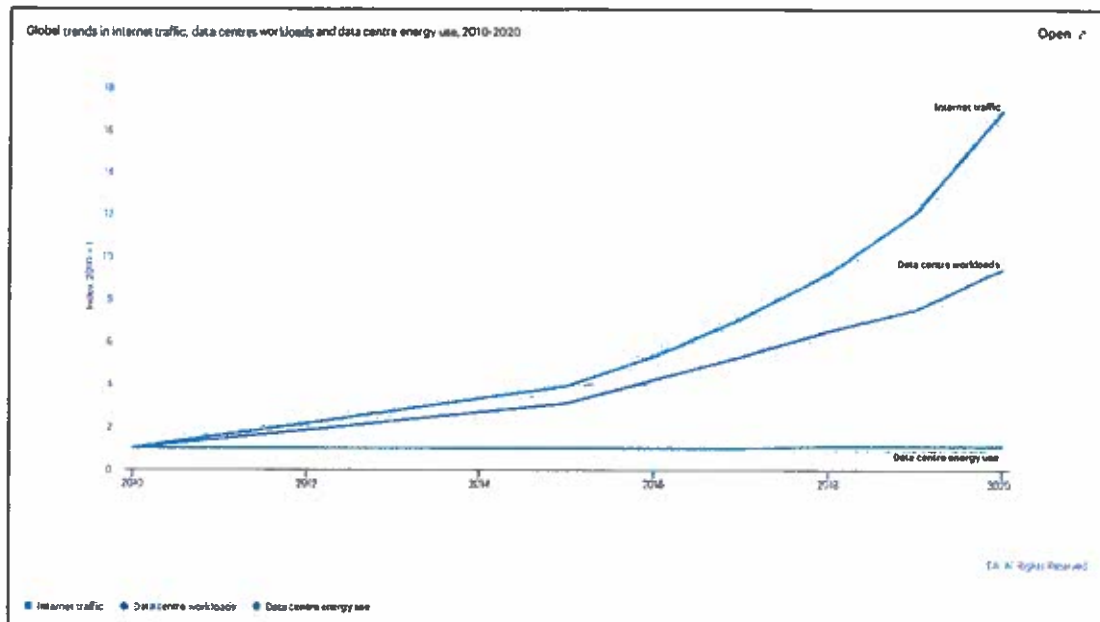


Figure 7 Global Trends In Internet Traffic, Data Centres Workloads & Data Centre Energy Use, 2010 – 2020 (IEA, 2021)

Principle 2

1.53 A range of mitigation measures, during both the construction and operational phases, will be employed which is in line with “best practice” as outlined in IEMA (IEMA, 2022) including:

- The installation of solar panels – Roof Mounted Solar PV are proposed for the Administration block,
- Internal and external lighting will be provided by high-efficiency, low energy LED luminaires,
- High Efficiency HVAC System – mechanical HVAC system will minimise energy associated with space conditioning,
- Cooling System – chilled water would be produced by premium efficiency air-cooled chillers,
- Direct Drive EC Fans – all air supply and extract systems serving the data module rooms will be provided with high efficiency direct drive fans giving a 10-20% power saving over centrifugal fans,
- It has been calculated that the heat captured from the data centre will be between 25°C and 30°C. The Applicant is supportive of the development of a waste heat recovery and district heating scheme and have reserved space on site to accommodate the associated plant should a design be feasible. The design and construction of the Data Centre buildings to accommodate waste heat supply is contingent on the existence or the parallel development of a waste heat receptor system,
- The backup generators units are specified to run on Hydrotreated Vegetable Oil (HVO),
- Construction machinery will run on Hydrotreated Vegetable Oil (HVO), and
- Climate Neutral Data Centre Pact signatory. Vantage and the end-customers has been a certified member of the Climate Neutral Data Centre Pact.

Principle 3

- 1.54 The applicant will implement measures in line with “best practice” as outlined in IEMA guidance (IEMA, 2022).
- 1.55 The Applicant has entered into a Letter of Intent (LOI) with Nephin Renewable Gas Limited to provide Corporate Power Purchase Agreements (‘CPPAs’) for new renewable energy. The Applicant can confirm that the LOI has been signed by both parties. These LOIs are capable of underpinning new renewable energy generation calculated to offset the energy consumed by the proposed development from the electricity grid and onsite gas generation. These arrangements provide for:
- Corporate Power Purchase Agreements between the applicant’s group and Nephin Renewable Gas Limited.
 - The establishment of new renewable energy generation projects by the applicant’s group, that will not be supported by government or consumer subsidies – these new renewable energy projects will be:
 - Located throughout Ireland;
 - Parallel development to the energy demand of the proposed development; and
 - In total, should see the collective annual generation match the data’ centre’ annual electricity use.
- 1.56 Through these obligations, for every unit of energy consumed by the data centre, a unit of new renewable energy generation would be despatched to the wider electricity system to off-set it. This delivers the objective of operating the proposed development on an annual net energy zero basis that would support Ireland’s overall climate targets. Any associated additional renewable energy supply would also increase energy security through indigenous energy sources.

Criteria for Determining the Significant of Effects

- 1.57 The criteria for determining the significance of effects are a two-stage process that involves defining the magnitude of the impacts and the sensitivity of the receptors. In relation to climate, there is no project specific assessment criteria, but the project should be assessed against the recommended IEMA (IEMA, 2022) significance determination. This takes account of any embedded or committed mitigation measures that form part of the design which should be considered:
- **Major or moderate adverse impact (significant):** A project that follows a ‘business-as-usual’ or ‘do minimum’ approach and is not compatible with the net zero trajectory by 2050 or sectoral based transition to net zero targets, results in a significant adverse effect.
 - **Minor adverse impact (not significant):** A project that is compatible with the budgeted, science based 1.5°C trajectory (in terms of rate of emissions reduction) and which complies with up-to-date policy and ‘good practice’ reduction measures to achieve that has a minor adverse effect that is not significant. A ‘minor adverse’ or ‘negligible’ non-significant effect conclusion does not necessarily refer to the magnitude of GHG emissions being carbon neutral (i.e. zero on balance) but refers to the likelihood of avoiding severe climate change and achieving net zero by 2050.
 - **Negligible Impact (not significant):** A project that achieves emissions mitigation that goes substantially beyond the reduction trajectory, or substantially beyond existing and emerging policy compatible with that trajectory, and has minimal

residual emissions, is assessed as having a negligible effect that is not significant.

- **Beneficial Impact (significant):** A project that causes GHG emissions to be avoided or removed from the atmosphere has a beneficial effect that is significant. Only projects that actively reverse (rather than only reduce) the risk of severe climate change can be judged as having a beneficial effect.

Assessment

- 1.58 Using the methodology outlined in the IEMA Guidance (IEMA, 2022) the significance can be assessed by a comparison between the GHG emissions of the project with the thresholds in Table 4 and Table 5 above. The significance of the development is outlined in Table 8 below based on this comparison with the overall carbon budget and the emission ceilings for the electricity sector. As shown below, based on the IEMA Guidance (IEMA, 2022) methodology, the impact of the project is **minor adverse** for both electricity from the national grid and using natural gas to power the onsite MFGP.
- 1.59 Also included in Table 8 is the significance of the assessment when compared to emission under the Emission Trading System which has set a cap for 2030 based on the approach set out in IEMA guidance (IEMA, 2022). Again, as shown in Table 8, based on the IEMA methodology, the impact of the project is **minor adverse**.

Facility	% Of Carbon Budget 2026 - 2030	Significance (Based On Thresholds in Table 4 & 5)	% Of EU ETS Cap	Significance (Based on IEMA Methodology)
Vantage – Year 2026 – 2030 (228 GWh) – Electricity From National Grid	0.08%	Minor Adverse	0.005%	Minor Adverse
Vantage – Year 2026 – 2030 (228 GWh) – MFGP Using Natural Gas	0.27%	Minor Adverse	0.015%	Minor Adverse

Table 8 GHG Emissions Associated With The Development

- 1.60 Table 9 shows the significance of the project when compared to the overall Carbon Budget and the Emission Ceilings for the Electricity Sector based on the approach set out in IEMA guidance (IEMA, 2022). The assessment is presented both prior to and post mitigation. As shown in Table 9, the impact of the project prior to mitigation would be deemed to be a moderate, significant, adverse impact for both the electricity from the grid and from the onsite MFGP. Although the project prior to mitigation is better than the “do-nothing” scenario of enterprise computers, the impact would still be significant in the absence of appropriate mitigation.
- 1.61 Also presented in Table 9 is the impact post mitigation. As outlined above the project will use “best practice” adaptive design measures (solar panels, rainwater harvesting, facilitating district heating, commitment to the Climate Neutral Data Centre Pact, etc.) and by using long term power purchase agreements. With the implementation of these measures the impact of the proposed project, in line with the IEMA methodology (IEMA, 2022), is reduced to a minor adverse, non-significant impact both the electricity from the grid and from the onsite MFGP.

Facility	% Of Electricity Emission 2030 Ceiling	Significance (Prior to mitigation)	Significance (After mitigation)
Vantage DUB13 – Year 2026 – 2030 (228 GWh) – Electricity From National Grid	0.83%	Moderate Adverse	Minor Adverse
Vantage DUB13 – Year 2026 – 2030 (228 GWh) – MFGP Using Natural Gas	2.67%	Moderate Adverse	Minor Adverse

Table 9 GHG Emissions Associated With The Development

- 1.62 In relation to the facility (2026 - 2030) the average GHG emissions, in the absence of mitigation, based on electricity from the national grid are equivalent to:
- 0.08% of the national 2030 target,
 - 0.83% of the Emission Ceiling for the Electricity Sector.
- 1.63 In relation to the facility (2026 - 2030) the average GHG emissions, in the absence of mitigation, based on electricity from the onsite MFGP using natural gas are equivalent to:
- 0.27% of the national 2030 target,
 - 2.67% of the Emission Ceiling for the Electricity Sector.
- 1.64 The Institute of Environmental Management and Assessment (IEMA) guidance document – Pathways to Net Zero - Using the IEMA GHG Management Hierarchy (Nov 2020) revised the IEMA GHG Management Hierarchy as shown in Figure 8 below to include CPPAs under the category of "substitution" within the Hierarchy:

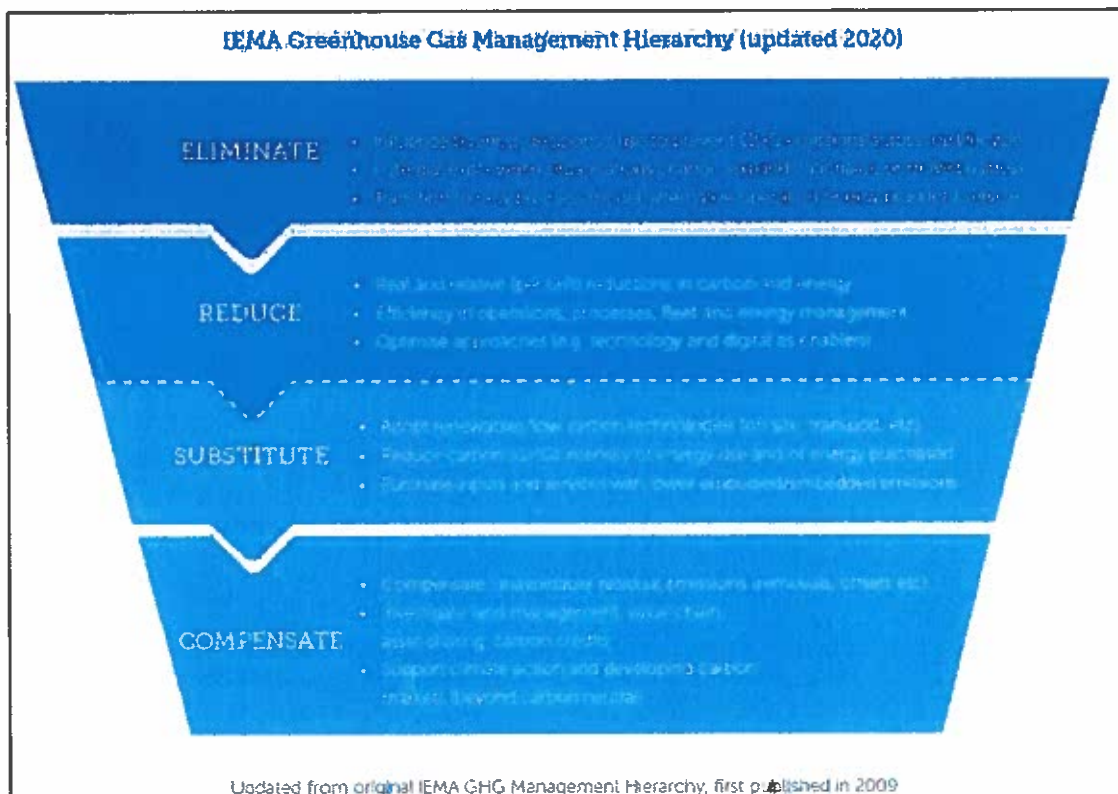


Figure 8 IEMA Greenhouse Gas Management Hierarchy (IEMA, 2020)

- 1.65 In relation to the use of CPPAs, the IEMA 2020 guidance states, on Page 5, the following:

“Purchased green electricity tariffs (also green gas) are increasingly being considered within net-zero approaches. In earlier versions of the Hierarchy these tariffs only appeared within COMPENSATE. This is still the case for market-based approaches that use certificates where additionality or quality thresholds are poor, or hard to substantiate. The hierarchy does now allow for higher quality energy tariff purchases within the SUBSTITUTE line, reflecting developing practice and some improved purchasing arrangements (e.g. higher quality procurement or quasi-investments via power purchase agreements).”

- 1.66 Thus, CPPAs are now recommended by IEMA (IEMA, 2020) as an appropriate project-specific “Substitution” mitigation measure alongside measures such as adopting renewable technologies and reducing the carbon intensity of energy used.

- 1.67 For further clarity on the position of IEMA regarding CPPAs and mitigation, the *IEMA Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Edition* (IEMA, Feb 2022) has recently stated, on Page 9, that:

“GHG mitigation is best achieved by taking a planned and focused approach following the IEMA GHG management hierarchy principles.”

- 1.68 Consideration of the alternative should also be made, with the rising demand for data storage there is a requirement for this service. Section 01.52 noted that the use of large-scale data storage facilities, such as the proposed development, represent a significantly more efficient means of data storage when compared to a distributed model of local data storage. Therefore, the alternative to large scale data storage centres will have a likely more significant impact than the proposed development.

- 1.69 IEMA states that a minor adverse impact is a project that is compatible with the budgeted, science based 1.5°C trajectory – as shown in Figure 5 the energy demand projections include for an increase in data centres and this has been “budgeted” into future projections which align with the 1.5°C trajectory. The project also must comply with up-to-date policy and ‘good practice’ reduction measures to achieve that target has a minor adverse effect. With a reduction in residual emissions through best practice and the implementation of a series of adaptive design measures, the net impact of the Proposed Development is not significant. Given that the use of electricity to power the facility will achieve net zero by 2050 and the commitment to meet all interim fossil fuel derived GHG emissions associated with the proposed development by the purchase of Corporate Power Purchase Agreements (CPPAs) the predicted impact to climate is deemed to be **indirect, long-term, negative and minor adverse**. Thus, the impact of the Proposed Development, in line with the IEMA methodology (IEMA, 2022), is a **minor adverse, non-significant** impact.

- 1.70 The CAP24 states that *“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”*. As previously detailed, the Applicant will enter into CPPAs for new renewable energy that will, subject to receipt of a grant of planning, match the amount of energy consumed by the data centre from the electricity grid or the multi-fuel generation plant. By entering these CPPAs the proposed development will align with this CAP24 overarching objective of “low-carbon or no-carbon energy demand growth”. The CPPAs will provide the support needed to build out the element of the excess capacity needed and further contribute to Ireland meeting its energy policy targets.

Compliance With Section 15 of the Climate Action & Low Carbon Development Act (Amended) 2021

- 1.71 Section 15 of the Climate Action & Low Carbon Development Act (Amended) 2021 states that:
1. "A relevant body shall, in so far as practicable, perform its functions in a manner consistent with:
 - a) the most recent approved climate action plan,
 - b) the most recent approved national long-term climate action strategy,
 - c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
 - d) the furtherance of the national climate objective, and
 - e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State."
- 1.72 The Proposed Development is aligned with the above mentioned plans, strategies and objectives as outlined below. In relation to 15.1(a), under Section 13.3.2.9, the 2024 CAP states:
- "The EU ETS is a cornerstone of the EU's policy to combat climate change and it is a key tool for reducing greenhouse gas emissions cost-effectively. The EU ETS operates on a "cap and trade" principle. The cap is an absolute limit on the level of emissions across the EU ETS marketplace, and all participants must either reduce their emissions in line with their emission allowance, or purchase permits from another market participant that has excess emission allowances to trade. The EU ETS is an important mechanism to drive emissions reductions in Ireland. Revisions for the EU ETS proposed under the EU Fit for 55 package were formally approved in April 2023 and include significant changes that aim at strengthening the decarbonisation incentive in industry. EU ETS emissions are set to reduce by 62% (previously 43%) compared to 2005, further tightening the cap on all participants. In addition, while industrial emitters currently receive a proportion of free allocation of emissions permits, the updated EU ETS will see free allocation for many industries phased out from 2026, adding further upward pressure to the carbon price" (2024 CAP, page 189),*
- 1.73 Thus, the indirect electricity emissions and the direct emissions from the MFGP and backup generators will both require greenhouse gas permits under the ETS in order to operate and thus the GHG emissions associated with the Proposed Development will be in line with Section 13.3.2.9 of the 2024 CAP which stresses the importance of the EU ETS in reducing industry GHG emissions.
- 1.74 In relation to 15.1(b), the Long-term Climate Action Strategy was published on the April 2023 and updated in June 2024. In relation to electricity, the Government commits to the full decarbonisation of the electricity system by 2050. In relation to the EU ETS, the Long-term Climate Action Strategy states that "A strong price signal, as part of a reformed EU ETS, including progressively more restrictive rules on how many allowances will be available within the EU ETS, is expected to drive decarbonisation over the coming decade by increasing the cost to firms in the EU ETS of doing nothing to reduce their emissions"(DOECC, 2023).
- 1.75 In relation to data centres, the Long-term Climate Action Strategy states that "Energy demand, including data centres, will be expected to operate within sectoral emission ceilings and further signals will be required to locate demand where existing or future electricity grid is available and close to renewable energy generation. Research and

development in energy storage and flexibility (such as a science challenge to industry) will be required to put Ireland on a pathway to net zero-carbon data centres" (DOECC, 2023).

- 1.76 The Proposed Development is in line with this strategy as the electricity associated with the project, due to the commitments in the 2024 CAP, will reduce in line with national policy and in line with EU policy as outlined in the EU Climate Law (EU, 2021) which has outlined a legally binding target to obtain net zero GHG emissions by 2050.
- 1.77 In relation to 15.1(c) national and sectoral adaptation plans and 15.1(e) "adapting to the effects of climate change on the state", a detailed flood risk assessment has been completed for the Proposed Development and adequate attenuation and drainage have been designed to account for increased rainfall in future years. Thus, the granting of permission for the Proposed Development will not be inconsistent with the national and sectoral adaptation plans.
- 1.78 In relation to 15.1(d) the national climate objective, the 2024 CAP has stated that:
"The Climate Action and Low Carbon Development (Amendment) Act 2021, requires Ireland to achieve a 51% reduction in GHG emissions by 2030 (relative to 2018 levels), and net-zero emissions by no later than 2050"
- 1.79 Thus, the Proposed Development aligns with the national climate objective as the Proposed Development will be within the EU ETS which is the cornerstone of the EU's objective to reduce GHG emissions by at least 55% by 2030 (compared to 1990) and to achieve climate neutrality by 2050. As outlined in the EU Climate Law (EU, 2021) under the Item (13): *"The EU ETS is a cornerstone of the Union's climate policy and constitutes its key tool for reducing greenhouse gas emissions in a cost-effective way."*