An Bord Pleanála

Inspector's Report ABP-313583-22.

Development	Demolish dwellinghouses and construct 2 no. data hall buildings.
Location	Lands adjacent to Huntstown Power Station, North Road, Finglas.
Planning Authority	Fingal County Council.
Planning Authority Reg. Ref.	F0021A/0151.
Applicant	Huntstown Power Company Limited.
Type of Application	Permission.
Planning Authority Decision	Grant Permission.
Type of Appeal	Third Party
Appellants	1. An Taisce 2. John Conway and Louth Environmental Group.
Observers	1. Roisin Shortall TD 2. Fingal One Future 3. Proinsias Mac Fhlannchadha
Dates of Site Inspection:	04 February 2022 and 06 March 2023.
Inspector	Mairead Kenny.

Contents

1.0 Overview

1.1. The subject development of a data centre is before the Board on foot of 2 no. third party appeals of the decision of the planning authority to grant permission.

1.2. There is a concurrent application under ABP-311528-21 for the development of an 220kV substation and associated electrical infrastructure. The proposed substation will be known as Mooretown Substation.

1.3. The data centre will be served by Mooretown Substation.

1.4. The two reports and the application documentation contain some degree of overlap and it would be appropriate that the cases be simultaneously considered.

1.5. Other live appeals relevant to data centres in the Dublin region are before the Board under ABP-314884, and ABP-314461. Another live appeal under ABP-314474 relates to lands in Ennis, Co. Clare.

2.0 Site Location and Description

2.1. The site relates to lands adjacent to Huntstown Power Station at North Road, Finglas in Dublin 11 close to the M50 / N2 interchange. The site access from the national road network is by way of a one-way exit from the N2. Egress from the general area is by way of North Road and the junction with the N2 further north. North Road (R135) is effectively a cul de sac as it terminates at a location to the south where the M50 cuts across it. As such the traffic on North Road is almost exclusively generated by the land uses in the immediate vicinity of the site.

2.2. The proposed data centre site comprises 5 no. fields which are bounded by hedgerows and part of another field. The is stated to be 13.3 ha and its eastern site frontage adjoins North Road and at this location also are 2 no. residential properties, which are to be demolished as part of the proposed development. At the opposite side of North Road are a few small scale commercial and service uses including a garden centre, car repair facility and a veterinary clinic. To the north of the site is the dog rescue and rehoming charity operated by Dogs Trust. To the west is Huntstown power plant. To the south of the site is a vehicular access road which leads to the power plant, to Huntstown quarry and an anaerobic digestion plant. In the wider area land uses include warehouse parks. Proposed development in the area includes

infrastructure related to the Greater Dublin Drainage scheme namely a biosolids storage facility to the north of the Dog's Trust and a major orbital sewer which would be located close to the M50 and close to the large substation at road interchange.

2.3. Huntstown Power Station to the west is in the ownership of the applicant as outlined in blue on the application maps. It has operated since 2002. The output originally permitted was 600 MW but subsequently this was increased and permission has also been granted at the site for development of a battery energy storage system. The Huntstown bioenergy plant which operates under EPA licence is an anaerobic digestion (AD) facility from which electricity is exported to the grid and which has the capacity of up to 99,000 tons per annum of organic waste. This is a 4.8 MW facility.

2.4. In terms of landscape character the area is dominated by the agricultural landscape of the proposed data centre site and in the background the motorway and the major industrial uses. The data centre site is devoid of large trees or watercourses and is traversed by overhead power lines. The proposed substation site has a brownfield character at its western side and is immediately adjacent the power plant which is perhaps the most significant landscape feature in the area. The remainder of the substation site comprises lands which are traversed by a significant land drain which runs north – south and also includes lands which contain electrical infrastructure. Wayleaves relevant to overhead power lines traverse the proposed data centre site. At the time of my second site inspection works were ongoing in relation to the undergrounding of overhead powerlines across the overall site.

2.5. Notwithstanding the dominance of the heavy industrial uses and major roads in the area there are also a number of small scale residential and commercial uses. The commercial uses include the Dogs Trust facility to the north of the proposed data centre site with frontage to North Road and the small services including a garden centre to the east of North Road opposite the data centre site. Residential dwellinghouses are located to the north of the Dog's Trust and to the east of the data centre site and at the southern side of North Road.

2.6. The main channel for conveying water from the overall site and a 30 ha catchment runs south to north through the substation site. The existing ditch originates adjacent the southern substation site boundary and flows in a northerly direction where it forms Huntstown Stream which drains to the Ward River.

3.0 Application Details

3.1. Proposed Development

3.2. A 10-year permission is sought for development comprising:

- demolition of 2 no. dwellinghouses and ancillary structures
- construction of 2 no. data hall buildings (A and B) containing various rooms and facilities as described in the public notices with photovoltaic panels and screened plant areas at roof levels
- external plant and 58 no. emergency generators in a generator yard east and west of buildings A and B
- buildings A and B are of gross floor area of 37,647 m² each and 28m to roof parapet level / 32 m including roof plant roof vents and flues
- provision of a temporary substation, water treatment building, water storage tanks, sprinkler tanks, pump houses
- associated site development works, services, drainage upgrade, attenuation basins, landscaping, boundary treatment and security
- new vehicular entrance from North Road and secondary access to the south-west of site from existing private road
- internal access roads, security gates, pedestrian/cyclist routes, lighting and bin stores
- bicycle stores serving 48 bicycles and 208 car parking spaces
- undergrounding of existing overhead lines traversing the site under planning reg. ref. FW 21A/0144
- 220 KV substation to the west of site to be subject of SID application under section 182A
- application accompanied by EIAR.

3.3. The application submission is accompanied by letters of consent and maps relating to lands in the ownership of third parties.

3.4. It is stated that the application does not relate to a development which comprises or is for the purposes of an activity requiring an IPPC licence. It is stated that the Major Accident Regulations do not apply to the proposed development.

3.5. The significant documentation submitted with the original application includes:

- Planning Application Report - Brock McClure, August 2021.
- Architectural drawings including CGIs and Design Statement – Henry J Lyons.
- Landscape drawings and report - Kevin Fitzpatrick Landscape Architecture.
- Engineering drawings and Engineering Services Report, Outline Construction Management Plan and Flood Risk Assessment – CSEA.
- Energy statement and lighting drawings – Ethos Engineering.
- COMAH Land-use Planning Report - AWN.
- Arborists Report – Rik Pannett.
- Aeronautical Report - ASAP.
- Glint and Glare Assessment – Macroworks.
- AA Screening Report – The Moore Group / AWN.
- Environmental Impact Assessment Report.

The Planning Application Report describes :

- the applicant's role in the energy sector
- site suitability and zoning
- energy offsetting through CPPA
- sustainability of water and heat
- socio economic benefits.

3.6. **Further Information Request**

3.7. The request by planning authority for further information and the applicant's response include:

- The planning authority requested an addendum EIAR incorporating the data centre and substation combined – the applicant states that the submitted Addendum describes the characteristics, impacts and mitigation measures for the 'Overall Development' and also takes account of legal / other charges and revisions proposed in response to the further information.
- Potential conflict with proposed Greater Dublin Drainage northern pipeline corridor – the response including revised drawings were considered by Irish Water to be acceptable subject to condition.
- Transportation items related to the sightline drawing, width of internal roads, details of entrance arrangements, reservation of lands for footpaths and cycle track for later development, need for a right turning lane at the site entrance, justification for the level of parking and legal consent – the response was stated to be agreed with the Transportation Department.
- Design and alternatives were questioned in the further information request – in response revised plans for the data centre building to include revisions to the eastern elevation and a better aesthetic and / or screening to the flues.
- Request for updated AA screening report, appraisal of potential impacts on air quality and a review of in combination effects – NIS was submitted.
- Due to site being within noise zone C the applicant was requested to submit proposals for noise insulation within the administrative and welfare areas – response outlines measures incorporated to prevent noise intrusion.
- The planning authority requested a feasibility study for excess heat generated from the data centre being used in the nearby AD facility - the submitted response concluded that there is already excess heat energy.
- The planning authority noted the applicant's reference to the end user but that the end user does not appear to have been confirmed in the application documentation – in response the applicant stated that the proposed development is not speculative but has been designed as part of a multidisciplinary process in conjunction with the end user, a global technology company – the applicant also noted receipt of a Transmission Connection Agreement and described the strategic nature of the site as it minimises the

need for grid network improvements and provides the most energy efficient location for the consumer that minimises electrical losses that occur when transferring electricity longer distances and will avoid the requirement to build new on-site gas power generation which might be required at another site.

- In response to a query relating to the zoning the applicant noted that the zoning heavy industry is not defined in the development plan and that the visual impact is consistent with industrial development.

4.0 Planning Authority Decision

4.1. Decision

The planning authority decided to grant permission subject to conditions including:

- Use shall be as indicated on the submitted plans as a data hall and the offices shall remain ancillary to the data hall use permitted.
- Prior to the commencement of development details of the Corporate Purchase Power Agreement shall be finalised. The CPPA shall demonstrate that the energy consumed by the development on site is offset with new renewable energy generation. The new renewable energy projects shall not be supported by government, consumer, or public subsidies, shall be located in Ireland, shall be provided by the applicant's group (Huntstown Power Company Limited) and shall relate to energy that is not being generated at the date of this permission.
- Transportation requirements including road safety audits and a mobility management plan.
- Landscaping, tree protection and provision of public art or architectural feature.
- Special contribution in respect of the upgrading junction of R135/North Road with the northbound slip road from the N2 in the amount of €39,372.30.
- Financial contribution under the Development Contribution Scheme in the amount of €6,510,742.

4.2. **Planning Authority Reports**

4.2.1. Planning Reports

4.2.2. Original report (15 October 2021):

- The applicant's justification and site zoning are noted – the colocation is stated to be in accordance with current Eirgrid connection policy for data centres and allows the proposal to access the electrical power needed – the co-location would minimise electrical losses that occur when transferring electricity longer distances and will avoid the need to build on-site gas power generation. The power plants and the proposed development will be connected to the grid using the same electrical infrastructure.
- There is support at national and regional policy level for the promotion of Ireland as a destination for ICT infrastructure
- The location away from public transport corridors is suitable, due to the employment. There is merit in this as a location for a data centre.
- Due to its mass, scale and size there will be impacts on visual amenity. Revisions to the elevation onto the R135 and further screening are warranted.
- The submitted Energy Statement and the use of renewable technologies including heat pumps and photovoltaic panels on the roof are noted.
- Further information is needed relating to use of waste heat.
- The applicant states that the facility end user will be obliged to enter into arrangements which are capable of underpinning new renewable energy generation to offset the energy consumed by the proposed development.
- Justification for the proposed 200 parking spaces is required.
- Details of roads and related issues are required. Road Safety Audits should be undertaken at the relevant stages of the development. Mobility management plan should be finalised within one year. Junction analysis is acceptable. Detailed Construction Management Plan will be agreed.
- Final CEMP can be agreed.
- Conflict with the GDD needs to be assessed.

- EIA requirement arises as the threshold for urban development is exceeded.
- The EIAR is deficient in the addressing of the impacts / consideration of the whole project including the substation and the potential significant effects.
- More detailed assessment of alternatives including design and of the land use zoning are required.
- An AA Screening report notes the indirect hydrological connection to Malahide Estuary but discounts any impacts due to the very weak and indirect ecological pathway. It is considered that the potential impacts associated with surface water are adequately addressed. However the potential operational impacts including related to air quality have not been addressed.

4.2.3. Final report (14 April 2022):

- The issue relating to the GDD has been resolved.
- The transportation issues raised in item 2 of FI have been resolved. A condition is required relating to the footpath / cycle path along public roads. The parking level has been justified and is considered acceptable given the staff and visitor parking, shift patterns and the location of the site outside the M50. A special contribution relating to the upgrade of the junction of the R135 northbound off ramp is required.
- Revisions to the design of the eastern elevations and the flues have been made and are acceptable.
- Revisions to the AA Screening report involving a full appraisal of potential air impacts and in combination effects to take into account the grid connection proposals was requested. The response identifies the potential for significant effects on two European sites and a NIS has been submitted. The accompanying technical report adequately addresses air quality.
- The requirement for noise insulation within this noise zone was subject of the noise assessment by the applicant. The adopted design goals and noise mitigation measures will prevent noise intrusion. The response is acceptable.
- Sufficient space has been reserved on site to accommodate pipework and other infrastructure to supply district heating in the future.

- Regarding the EIAR the response takes into account the two projects referred to as the ‘Overall Development’. It is considered that the addendum provided describes the characteristics and impacts of the overall development and sets out mitigation measures required. It also includes a notable update of legislation and guidance in relation to air quality and climate, which has changed since the submission of the original application.
- The applicant outlines alternatives and states that the design evolved following pre-consultation and a multidisciplinary team and accommodating the diversion of overhead power lines and the proposed substation.
- The applicant submits that while the datacentre uses are not defined in the development plan the zoning ‘heavy industry’ does not specify a definition either. The applicant submits that the visual impact of the proposed data centre would be considered consistent with that of industrial developments.
- The EIAR is considered to provide an adequate description of baseline conditions and has had regard to the reports and submissions received.
- The assessment of the impacts is outlined in pages 37 to 43 (of the planner’s final report) and the main significant effects of the proposed development on the environment are outlined.
- Regarding the impact on the amenities of the area the contractor will liaise with the operators of the Dogs Trust facility to manage construction phase impacts. Mitigation measures are set out in the EIAR, the addendum and associated documents. Final versions of these documents should be agreed prior to commencement of work. The documents should include mapped descriptions of measures where applicable including noise screens and hours of construction work should be specified by conditions incorporated into the documents.
- A 10-year permission is sought and this is acceptable.
- Submissions have referred to the acceptability of permitting further data centres in Ireland and in the county having regard to the number of such facilities, the energy use and implications for climate change. Planning policy

at national and regional level supports the promotion of Ireland as a destination for ICT infrastructure including the NPF and the EMRSES.

- The 2018 Government Strategy on the role of Data Centres highlights how they raise Ireland's visibility internationally. It also recognises the challenges to future planning and operating a sustainable power system. It is stated that the increased renewable electricity requirement linked to energy intensive investments will be mainly delivered by the development of the new renewable energy support scheme (RESS) which also reflect failing costs across a range of renewable technologies and an ambition to increase community and citizen participation.
- The CRU Direction to the System Operators related to Data Centre Grid Connection Processing published in November 2021 confirmed that it has not decided to impose a moratorium on connections at that date. The applicant has stated that a Transmission Connection Agreement has been received from Eirgrid. The applicant has confirmed acceptance of mechanisms to secure additional renewable energy generation to offset energy usage by the proposed development.
- Having regard to national, regional and local planning policy in respect of data centre and information technology developments, the objectives of the development plan, the Government Statement on the Role of Data Centres in Ireland's enterprise strategy, the principle of the development is acceptable. Subject to compliance with conditions the proposed development would not result in unacceptable impact on the receiving environment, amenities of the area and property and would otherwise be in accordance with the proper planning and sustainable development of the area.
- Permission is recommended subject to conditions.

4.2.4. Other Technical Reports

Water Services Department– recommends condition relating to surface water.

Transportation –

Original report - additional information is required in relation to details of roads, footpaths, turning pocket and a justification for 200 permanent car parking spaces.

Second report - the FI response is acceptable subject to conditions. The report notes that previous permitted developments along the North Road have been conditioned to provide pedestrian and cycle facilities along the boundary. A special contribution in the amount of 19.44% of the total cost of the planned upgrade of the junction of the R135 northbound off ramp from the N2 to a signalised junction is recommended based on the site area. Other requirements are set out. Relating to glint and glare it is recommended that the applicant be required to comply with any mitigation which may arise when the installation is commissioned.

Environment Section (Waste Enforcement and Regulation) – recommends conditions relating to waste streams and importation of soil and stone.

Environmental Health Air and Noise Unit – original report states that the development is acceptable subject to conditions relating to noise and air mitigation and monitoring during demolition and construction phase, that diesel generators are used only in the case of emergency and routine testing and are within specified noise limits, that noise emissions from HGVs are controlled to ensure they do not pose a nuisance, that cumulative noise emissions from the site shall not exceed background level by 10 dB(A) or more or exceed the limit specified.

Parks and Green Infrastructure – recommends conditions including with respect to timing of implementation of landscape plan, specifications of landscape and maintenance proposals to be agreed, tree retention as per submitted tree report to be implemented, engagement of arboricultural consultant engaged and a tree bond of €65,000 to be lodged.

Community Archaeologist – verbal report to planner - concurs with Department.

Brady Shipman Martin (engaged to assist in review of AA Screening and EIAR). The AA Screening is deficient in respect of potential impacts and further assessment is needed relating to operational air quality. The EIAR is considered not to satisfactorily address the entire development including the substation.

The second report addressed the FI received (items 4 and 7) and the revised AA Screening report and the addendum to the EIAR address the issues raised and provide sufficient information.

4.3. Prescribed Bodies

An Taisce

4.3.1. Objection to data centre on basis of climate and resource consumption.

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

4.3.3. Need for an assessment of in-combination effects on climate, emissions and electricity supply impacts in the Dublin area and Ireland.

4.3.4. Perpetuates reliance on fossil gas.

4.3.5. The CPPA commitments are noted. Use of this mechanism does not address the overall issue of increasing energy demand. The commitment to providing additional renewable capacity to exceed the power demand is welcome. However the specifics of the projects have not been provided and the planning process does not appear to have started. Projects should be delivered prior to or in tandem with the data centre.

4.3.6. The potential role in exacerbating the current electricity supply problem should be thoroughly assessed and a grant of permission for the subject proposal in advance of resolving grid capacity issues, energy supply problems and data centre grid connection policy issues would be premature.

Commission for Regulation of Utilities (CRU)

4.3.7. Indicates no comment.

ESB Networks

4.3.8. No reply received.

Environmental Protection Authority (EPA)

4.3.9. From the documentation it is not possible to determine if Class 2.1 of the EPA Act applies to the emergency generators. An IE licence is not required for the emergency generation provided it is not operating at greater than 50MW thermal input for more than 18 hours annually. No licence application has been received.

Irish Water

4.3.10. The site conflicts with the proposed Greater Dublin Drainage northern pipeline corridor and further information is required.

4.3.11. The second report refers to the need for a standard condition relating to connection.

Development Applications Unit of Department of Housing, Local Government and Heritage (DAU)

4.3.12. The original report recommends that conditions relating to archaeological excavation and monitoring be included. A second report refers to requirements that a condition be attached relating to the removal of vegetation.

Health and Safety Authority (HSA)

4.3.13. Does not advise against a grant of permission.

Inland Fisheries Ireland (IFI)

4.3.14. Requirement for CEMP, which should be addressed by condition. The groundwater aquifer is 1.85 m below ground level and it is therefore likely that localised dewatering will be required. Appropriate silt management infrastructure should be agreed in advance of any construction. It is desirable that tree stands, woodland and hedgerows be retained. Filling of old field boundaries must be avoided and surface water drains and ditches should be retained with adequate buffer zones to protect surface water drainage systems.

Dublin Airport Authority (DAA)

4.3.15. **R**equirements relating to operation of cranes.

Irish Aviation Authority (IAA)

4.3.16. 30-day prior notification to DAA and IAA relating to erection of cranes.

Transport Infrastructure Ireland (TII)

4.3.17. No observations to make.

Heritage Council

4.3.18. No response.

4.4. Third Party Observations

Proinsias Mac Fhlannchadha

4.4.1. In response to the further information submission it is stated:

- The Energy Statement does not outline how the proposed development will not be a net consumer of energy. There is an absence of solid proposals or existing permissions in place or specific proposals from Energia.
- The proposed development will be responsible for 0.48% of the national emission ceiling for NOx. There is no information regarding the percentage of national emission ceiling for CO_2. Does not align with CAP 2021.
- Action 20 of the CAP 2019 referring to regional balance is contravened.
- The guidance CRU/21/124 will have an immediate effect (issued 23/11/2021) and will require the applicant to re-engage with the grid operator. The applicant should be instructed to seek clarification of Eirgrid's position.
- In accordance with development plan policies renewables should make a contribution to the energy needs of the facility. There is potential for greater use of roof space and green walls and use of battery storage on site.
- Waste heat recovery to facilitate district heating should be subject to a condition as provided.

4.4.2. The original submission includes the following points:

- CRU has not been notified.
- Risk to the national grid.
- Contrary to the development plan objectives.
- The proposal with respect to renewable energy generation is vague and is unacceptable in light of the Climate Act and Fingal Climate Action Plan.
- Disproportionate concentration of data centres. Premature to consider additional planning permissions until intentions of Eirgrid are known.
- Need to supplement the significant energy demands with alternative energy supply to include renewable energy sources/storage given the scale of the development and policies of the development plan.
- EIAR does not take into account the cumulative effects of the proposed development in combination with other similar developments in the GDA.

- Power source of gas and diesel is contrary to the reduction in GHG emissions required under legislation and the Fingal CAP.
- No provision for waste heat recovery to facilitate district heat system.
- No feasibility study for use of excess heat at the adjacent bioenergy plant.

Sean Loughran

4.4.3. The submission states that the data centre must be powered entirely by on-site or new off-site renewable energy in order to reduce Ireland's emissions consistent with the Climate Action Plan and commitments under the Paris agreement.

John Conway and Louth Environmental Group

4.4.4. The main points of the submission are:

- Failure to notify CRU.
- Inadequacies and lacunae in AA screening report and NIS. There is not sufficient information for the Board to complete AA Screening and AA.
- No information on proposals to connect the power plant to the grid and the source of gas proposed. Failure to mention the Climate Action and Low Carbon Development (Amendment) Act 2021 in the Planning Report.
- Water usage will be significant. The proposed development will divert this increasingly valuable resource away from the local area.
- Information should be sought on the level and specific source of energy usage and on measures to ensure that the project will not create any increase in electricity generation causing greenhouse gas emissions.
- Comments relating to EIA and the significance of data centres in Ireland.

Fingal One Future

4.4.5. The main points of the submission include:

- There is a discrepancy in terms of the information provided in terms of energy usage. Due to its scale there will be undue demand on power supply.
- The addition of a new large-scale data centre will add to the existing water supply pressure. There is a lack of clarity relating to the water consumption.

The projections for future population growth in Dublin also need to be considered.

- The proposed development does not align with the development plan including strategic policy to minimise the impact on climate change.
- It is crucial that any new data centre be shown to be powered by renewable energy onsite or as a parallel development of new off-site renewable energy. Any new data centre should have infrastructure to supply district heating.
- A moratorium on new data centres is appropriate until they can be run entirely on renewables.
- There is a requirement for a policy to set a cap on the level of data centre energy demand on the grid, that new data centres be powered by either on-site renewable power or off-site renewables with dedicated grid connection.
- There is a need to comply with best practice on public participation.
- A pause on new data centre connections has been recommended by a number of institutions in order to reduce fossil fuel use.

Dogs Trust

4.4.6. Comments on the further information response include:

- The proposed development would impact this sensitive facility by reason of noise and traffic and exacerbate existing traffic noise from the R135.
- The development contribution should be directed towards traffic calming.
- The proposed development is generally welcomed and the efforts made to ensure minimal impact on our facility during construction(including the noise monitoring and acoustic screening) is appreciated. We request conditions relating to the maintenance of the acoustic screening until all works are complete and secondly that part of the development contribution be used for traffic calming measures along the R135 to ensure compliance with the 50kph speed limit and thereby minimise distress and improve road safety.

The comments in the original submission include:

- We disagree with the conclusion in the EIAR that noise mitigation measures along the R135 are not required.

Geraldine Cooper and Family

4.4.7. Comments on the further information response include:

- The proposed development would be seriously injurious to the visual amenity of the landscape due to its scale, height and proximity to the road and houses.
- The proposed development would seriously injure the residential amenity of the nearby dwellinghouses as a result of visual intrusion and overshadowing.
- The proposed development is premature pending the substation permission.
- Rather than submit a separate addendum as requested by the planning authority entire chapters of the EIAR document were amended.
- The applicant's comments that the proximity to the power station make this standalone development (in zoning terms) suitable are noted. It could equally be argued that a location where district heating could be facilitated is suitable. In the absence of a distinct land use category in the zoning matrix, it is difficult to show compatibility with the zoning objectives. The arguments used in favour of the location of this site may be flawed and misleading.
- A ten-year permission would lead to local blight. 5 years is appropriate.
- Justification for the demolition of the two houses is inadequate.

The original submission references includes the following comments:

- The family has been in place at this location for more than 350 years.
- The proposed development will destroy the evening skyline and diminish natural light to my home.
- The AD facility has resulted in an emergency alert and noxious smells.
- The community liaison officers have failed to convince me that the proposed development will have no effects on my home our daily life.
- The five-year construction programme and the connection to the substation will cause immense disturbance, noise and possible damage.

- Water pressure is under strain since the construction of the AD facility.
- The cooling fans will create a lot of noise and disturbance and would be clearly audible from my home leading to health concerns.

Kevin Hughes, Coldwinters

4.4.8. Comments made are in line with those submitted on behalf of Geraldine Cooper and Family in response to the additional information received.

Gregory Hughes

4.4.9. Comments made include:

- Need to upgrade the local drainage network and ensure flooding is avoided.
- Comments are also made relating to the local road network and the proposed entrance. For safety access should be by way of the existing Roadstone entrance and exit only by way of the proposed new entrance.
- The proposed arrangement is hazardous due to proximity to our garden centre.
- More speed limits are required.

Gabrielle Hughes

4.4.10. The main points may be summarised as follows:

- The submission relates to the impact on Beech Vista House by reason of the height of the proposed development which will be only 100 to 150 m from our property, and noise from emergency generators will dominate the landscape to the south and devalue the house.
- The proposed development will remove the evening sun and cast very long shadows on my property.
- Entrance arrangements are unclear.
- There will be a major increase in pollution emissions from the power station and a requirement for an extremely large amount of electricity for operation.

Ronan Fallon

The main points may be summarised as follows:

- The submission is on behalf of a group aiming to end fossil fuel exploration and development of new fossil fuel infrastructure in Ireland.
- The data centre must be entirely powered by on-site or new off-site renewable energy in order to reduce emissions consistent with the Climate Action Plan.
- Fossil fuels will be used to power the data centre and as a backup energy.
- The applicant may be unable to fulfil offsetting commitments. Until renewable energy generation is achieved there will be reliance on fossil fuels to meet the additional demand on the grid, putting in jeopardy the national goal of 70% renewable electricity by 2030.
- The applicant should be required to provide for its own renewable energy on or off site to power the data centres from first use.
- It is essential that data centres are powered directly by on-site renewables such as rooftop solar farms or genuinely new off-site renewables.
- Where technically possible heat should be used for district heating systems.
- Water usage will be significant and will impact the local community.

Roisin Shortall TD

4.4.11. The main points may be summarised as follows:

- The grid cannot sustain more data centres as evident from comments of CRU.
- Despite the huge climate cost associated with the sector permissions continue to be granted. Ireland now has an estimated one third of global data.
- A moratorium on data centres is urgently needed to consider their impact on climate action targets and energy security.
- Poses a serious risk to the local electrical and water infrastructure.

5.0 Planning History

Overall site

5.1.1. FW21A/0144 refers to a grant of permission for installation of electrical infrastructure between Huntstown power plant and a nearby substation to facilitate retirement of

overhead power lines and to facilitate site clearance for the future development of the data centre and substation subject of separate planning applications. . This project has commenced.

ABP-313564 relates to an invalid appeal relevant to proposed data centre.

5.1.2. This is a concurrent applicant under ABP-311528 for a substation to facilitate the proposed development.

5.1.3. **Huntstown and other nearby sites**

FW13A/0089 refers to a grant of permission for a **renewable bioenergy plant** to generate up to 3.4 MW of electricity from 90,000 tons of non-hazardous biodegradable waste per annum using anaerobic digestion technology on a 2.3 ha site. Two related applications provided for the substitution of the permitted wastewater treatment plant (FW 18A/0082) and for an increase in the annual volume of waste allowing 99,900 tons to be imported to the permitted bioenergy plant (FW 18A/0159).

FW19A/0015 refers to a grant of permission for development of a **battery energy storage system** within Huntstown Power Station.

FW 20A/0063 relates to a 2.85 ha site to the south of the site of the proposed development which is zoned HI. Permission was refused for a 5000 m² **research and development building** to specialise in developing pilot scale circular economy solutions for a range of discarded resources. The overall site is to be developed as a circular economy hub/business Park. The reasons for refusal related to possible need for EIA, consent to use surface water sewer and undertake other works.

FW 20A/0211 relates to a grant of permission for development of **industrial / warehouse / logistics** uses at the site to the north-east of the Dog's Trust and at the opposite side of the R135. The works included a dedicated footpath and cycle way along the eastern side of the R135.

FW 13A/0143 refers to works at the 2.63 ha site to the north of the proposed development site, which is occupied by **Dogs Trust** and where the permitted development provided for new lighting, landscaping and other works related to the exercise runs.

5.1.4. ABP-301908 relates to an application for a major infrastructure project known as the **Greater Dublin Drainage scheme**. Part of the pipeline corridor route adjoins the site of the proposed data centre. At lands to the north of the existing Dog's Trust facility is the site of a permitted Regional Biosolids Storage Facility which was subject of the same application. The application has been subject to judicial review and was remitted to the Board (under ABP-312131) and at the time of writing it remains under consideration.

6.0 Legislative and Policy Context – Key Provisions

6.1. European Policy and Legislation

6.1.1. **Regulation (EU) 2021/1119** establishing the framework for achieving climate neutrality came into force in July 2021. Known as the **European Climate Law** it sets a legally binding target of net zero greenhouse gas emissions by 2050 and obliges member states to meet those targets. It is noted as providing a framework for achieving progress in pursuit of goals under the Paris Agreement. It includes measures to track progress and for five-year reviews. It includes the reduction by at least 55% of net emissions of GHGs by 2030 and will involve engagement in the preparation of sectoral roadmaps and rapid penetration of renewable energy.

6.1.2. The **Fit for 55** package is a set of proposals to revise and update EU legislation and put in place initiatives which are in line with the agreed climate goals. This will include boosting the share of renewable energy by 2030 and will involve a revision of the **Renewable Energy Directive** resulting in an increased target of 40% of all energy being used in the EU to come from renewable sources by 2030 (an increase from the current target of 32% by 2030).

6.1.3. **European Green Deal** was a key communication of the Commission in December 2019 which set out a new strategy for growth which decoupled economic growth from resource use and aimed to transform the Union into a fair , prosperous and resource efficient and competitive economy with no net emissions of greenhouse gases in 2050. Further provisions included the need for a just transition.

6.2. The Climate Action and Low Carbon Development (Amendment) Act 2021 – the Climate Act

6.2.1. This requires the government to pursue and achieve the transition to a climate resilient and climate neutral economy by the end of 2050. It establishes an interim target of 51% reduction in GHG emissions by 2030 (relative to 2018).

6.2.2. The act provides a framework for plans and strategies to reach these targets through annual climate action plans, five-year strategies and carbon budgets, sectoral emission ceilings and a National adaptation framework. All local authorities are required to prepare climate action plans to be updated every five years and to be considered when making development plans under the PDA 2000.

6.3. Eirgrid's All Island Generation Capacity Statement 2021-2030

6.3.1. This was published in 2021 and referenced the significance of large energy users such as data centres as a key driver for electricity demand for the next number of years. The forecast scenario is that 27% of the total demand will come from data centres and large energy users by 2030. Except in the low demand scenario the figures presented indicate a deficit on a national level by as early as 2026.

6.3.2. It is noted that 1700 MVA appropriately is contracted to data centres and other large energy users that are already connected to the transmission or distribution system. The average load currently drawn by these customers is appropriately 30% of the overall Maximum Import Capacity. Demand from this sector is expected to rise as these customers build out to their full potential and a significant proportion of this extra load is contracted to materialise in the Dublin region. The forecast scenario is that 27% of the total demand will come from data centres and large energy users by 2030. It is evident from the report that the calculated figure is subject to a large range of assumptions and variables including for example the demand relative to the update of EVs. The significance of the large energy users proportional to the overall demand is presented.

6.4. CRU Direction to the System Operators related to Data Centre grid connection

6.4.1. This was published in November 2021 on foot of concerns identified by Eirgrid in May 2021. CRU and others have identified data centres as disproportionately contributing to the predicted rapid demand growth for electricity. In no particular order the assessment criteria relate to the location of the data centre in a constrained or unconstrained region, the ability to bring onsite dispatchable generation and/or storage equivalent to or great than their demand and the ability to provide flexibility by reducing consumption when asked to do so.

6.4.2. **National Energy Security Framework** was published in April 2022. It sets out the government's response to Ireland's energy security needs in the context of the Ukraine war and identifies a number of potential measures under the planning system that could support the timely delivery of renewables. This will include future national policy on renewables which will be given effect through implementation in the planning system including the plan making process at regional and local level.

6.5. Climate Action Plan 2023

6.5.1. Published in December 2022 this outlines the actions required to 2035 and beyond. It implements the carbon budgets and sectoral emission ceilings and sets a roadmap for halving our emissions by 2030 and reaching net zero by no later than 2050.

6.5.2. To meet the challenges posed by the climate crisis and achieve further emissions reductions a major step up is required and the management of electricity demand is one of three key measures. Improved electricity demand management will require more flexible demand, improved infrastructure and supportive policies. Limiting peak demand when renewable resources are unavailable will be vital. In the short- and medium-term new demand growth from large energy users, such as data centres will have to be moderated to protect security of supply and ensure consistency with the carbon budget program. The Government Statement on the role of data centres in enterprise strategy is mentioned in this context.

6.5.3. The key measures to manage electricity demand flexibility and growth will be contained in a forthcoming CRU Demand Size Strategy. Large energy users will be expected to make a higher proportional contribution to the targets relating to

flexibility. A review will be carried out of gas and electricity connection policies for new large energy users.

6.5.4. A suite of market incentives will be developed to match electricity demand with renewable energy generation including the development of policies that support extra-large energy users to achieve carbon free demand so that electricity carbonisation, demand efficiency and flexibility, and enterprise growth can go hand-in-hand. This is to include connection agreements hybrid connections, non-firm connections where appropriate, on-site dispatchable generation, on-site storage, emissions reporting and renewable PPAs in particular within the scope of this work. In line with the roadmap on CPPAs relevant agencies will work with large energy users through enhanced reporting and matching of demand with usage of lower carbon energy sources. ESB Networks will deliver a suite of actions to enable and incentivise demand-side flexibility to meet the requirements of the strategy to be developed by CRU.

6.5.5. Large energy users will need to play a critical role in the decarbonisation acceleration through delivering high levels of flexibility across time and geographical locations, and matching energy consumption with renewable energy generation on an hourly basis. More granular certification processes will be required including “time stamped’ guarantees of origin, so that energy intensive users can demonstrate that they are using zero emissions electricity during the same hour and geographical location to match all of their consumption on a 24 hours a day, seven days a week basis.

6.5.6. The annexes accompanying the CAP are not available on the website as on 22 February 2023. It is stated that they will be published in early 2023.

6.6. **Sectoral Emissions Ceilings 2022**

6.6.1. Published in the context of CAP21 it is stated that the upper ends of emissions reduction ranges in CAP 2021 would be consistent with a 51% reduction in emissions by 2030 compared to 2018 levels on the basis of full implementation of more measures and further measures which require further evaluation. The sectoral emissions ceilings as approved on 28 July 2022 by Government as set out in table 1 of the document sets challenging targets. With respect to electricity in the final year

of the carbon budget period 2026 – 2030 the target is for a 75% reduction compared to 2018. In absolute figures the sectoral emission ceilings is 3 Mt_{COeq} in 2030 from the electricity sector.

6.7. Climate Action Plan 2021

6.7.1. Published in the context of the European Green Deal the plan sets out the context of climate change, including the evidence for and consequences and the 'limited window for real action to reduce emissions'. The plan is a roadmap for taking decisive action to secure the reduction of emissions as set out in national policy and legislation. It notes that considerable investment will be required to reduce our greenhouse gas emissions by 51% by 2030 and that this must influence both public and private capital investment.

6.7.2. With respect to the electricity sector in particular the increase in the proportion of renewable electricity to up to 80% by 2030 is described as one of the most important measures in the plan. In the context of this statement it is highlighted that the government will review its strategy on data centres to ensure that the sector aligns with sectoral emission ceilings and supports renewable energy targets which provide for a reduction in emissions by 2030 in the order of 62% – 81%. With respect to data centres it is stated that the forecast growth in this sector clearly represents a challenge to Ireland's emission targets. It is also stated that the impact of data centre growth on security of supply will be considered.

6.7.3. Action 20 is to develop and coordinate regional and local strategic partnerships in the Midlands region to address the specific challenges posed by the transition to a low-carbon economy.

6.7.4. Action 99 is to review the policy context for large energy users including data centres ensuring alignment of enterprise policy and wider regulatory environment with electricity emissions targets and security of supply.

6.7.5. A commitment to the publication of a roadmap for CPPA is made.

6.7.6. In Chapter 12 it is stated that enterprise policy related to high demand sectors such as data centres will be aligned and consistent with the renewable energy and carbon abatement targets in the electricity sector. The target is for a reduction in Ireland's enterprise emissions by approximately 40% between 2018 and 2023.

6.8. National Planning Framework - Project Ireland 2040.

6.8.1. National Strategic Outcome 8 relates to transition to a low carbon and climate resilient society.

6.8.2. National Policy Objective 54 is to reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and GHG emissions reductions.

6.8.3. National Policy Objective 55 is to promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

6.9. National Development Plan 2018 – 2027.

6.9.1. The National Development Plan identifies the transition to a low carbon and resilient society as a national strategic outcome. Amongst the measures included are some which will decarbonise energy generation, enhance energy efficiency, increase energy security and facilitate the more variable electricity generation on the grid. It supports the development of a strong and resilient economy which is supported by enterprise, innovation and skills. The acceleration of digital technologies and their integration into all sectors of the economy and society is envisaged and supported. There are multiple references to the role of ICT and related infrastructure including with respect to modernisation of education, health, security and other services. A shared government datacentre is to be developed.

6.9.2. With respect to data centres in general it is noted that the electricity demand from large energy users including data centres is forecast to grow up to 20% of total power demand in 2030.

6.10. Government Statement on the Role of Data Centres

6.10.1. Published in July 2022 this notes that Government seeks to enable the twin transitions of digitalisation and decarbonisation, which are complementary. A key theme is that data centres are core infrastructure. The Statement indicates that there is limited capacity available for further data centre development in the short-term pending upgrades to the electricity infrastructure and the connection of more

renewables. The Statement sets out principles for decision making. It is discussed in further detail in the assessment section of this report.

6.11. Harnessing Digital – the Digital Ireland Framework

6.11.1. Published in February 2022 this sets out support for the digital sector and includes a few specific comments relating to data centres. Data centres are noted to be now a very significant feature of Ireland's electricity demand, and also, more than ever are core infrastructure enabler of a technology rich, innovative economy which makes Ireland location of choice for a broad range of sectors and value-added activities. This however represents a challenge to achieving Ireland's renewable energy and carbon emissions targets in the electricity sector. Appropriate grid connection policy and other measures can facilitate increasingly efficient flexible and low carbon infrastructure. In this context the Government Statement on the Role of Data Centres in Enterprise Strategy will be revised.

6.12. Renewable Electricity Corporate Power Purchase Agreements Roadmap

6.12.1. Published in March 2022 this notes that the forecast growth of data centres is a challenge to Ireland's emission's targets because of the electricity demand. The review of the Statement on the Role of Data Centres is to ensure that future growth happens in alignment with sectoral emissions ceilings and renewable energy targets.

6.12.2. The overall policy objective should be to harness additional private sector investment in renewable energy technologies while minimising the cost of electricity to consumers and supporting GHG reductions across all sectors.

6.12.3. Priorities to ensure that CPPAs align with wider policy, targets and measures include ensuring that the CPPA is not related to projects that would have existed anyway, that the total full costs including network reinforcement, congestion and balancing are borne, which requires temporal and spatial matching of contracted renewable electricity generation and corporate demand, that there is hour by hour grid emissions transparency that future demand is close to where the renewable generation is deployed and where existing or future electricity grid is available and close to renewable energy generation.

6.13. Regional Spatial and Economic Strategy for Eastern and Midland Regional Assembly (RSES) 2019-2031

6.13.1. This includes strategies that support the creation of quality jobs, provides for sustainable growth and competitiveness of the Dublin Metropolitan Area and supports accelerated action on climate. Dublin is perceived as the national economic engine and is supported by a network of regional growth centres and key towns. The transition to a low carbon climate resilient and environmentally sustainable region is supported.

6.13.2. Regarding data centres in particular it is stated that local authorities shall support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.

6.13.3. RPO 10.20 relates to energy infrastructure including facilitating new transmission infrastructure projects.

6.13.4. RPO 10.22 relates to supporting the reinforcement and strengthening of the electricity transmission and distribution network.

6.14. The Planning System and Flood Risk Management, 2009

6.14.1. These Guidelines seeks to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

6.15. Fingal Development Plan 2017-2023

6.15.1. Fingal County Council's website (as on 28 February 2023) envisages adoption of the Fingal Development Plan 2023 -2029 in February. It will take effect 6 weeks later.

6.15.2. Under the current **Fingal County Development Plan 2017-2023** the site is zoned HI the objective of which is to 'provide for heavy industry'. 293 hectares is the total amount zoned HI and this is mainly in the vicinity of Huntstown quarry.

6.15.3. The zoning matrix does not list data centres. Uses which are neither 'Permitted in Principle' nor 'Not Permitted' will be assessed in terms of their contribution towards

the achievement of the zoning objective and vision and their compliance and consistency with the policies and objectives of the development plan.

6.15.4. Heavy industry is not defined in the definitions section. The stated vision for HI lands is to facilitate opportunities for industrial uses, activities and processes which may give rise to land use conflicts if located within other zonings. Such uses, activities and processes would be likely to produce adverse impacts, for example by way of noise, dust or visual impacts. HI areas provide suitable and accessible locations specifically for heavy industry and shall be reserved solely for such uses.

6.15.5. ED28 relates to ensuring that the economic potential of the ICT sector is secured.

6.15.6. For data centres a car parking standard of 1 space per 100m^2 maximum (reduced by 50% in certain locations) and bicycle parking standard of 1 space per 200m^2 .

6.15.7. Transitional zonal areas are described in section 11.4.

6.15.8. The site is within noise zone relevant to lands impacted by Dublin Airport.

6.15.9. The security of supply of energy and matters relevant to climate change are addressed in section 7.3. Objectives relate to supporting initiatives for limiting emissions of GHGs, efficiency of building and encouragement of development proposals that are low carbon and include energy saving measures and maximise energy efficiency through siting, layout and design.

6.15.10. Objective EN22 is to facilitate energy infrastructure at suitable locations, so as to provide for the further physical and economic development of Fingal.

6.15.11. The security of supply of drinking water is referenced and it is stated to be an ultimate constraint to development. Various objectives relate to facilitating and supporting additional water sources, protecting reserves and water conservation.

6.16. Fingal Climate Change Action Plan 2019-2024

6.16.1. This sets out actions in the area of Energy and Buildings and other areas to achieve targets for the county in the area of energy efficiency, GHG reduction, reducing the effects of events and citizen engagement. The plan is underpinned by and references national and other policy and highlights the need for action including in the making of planning decisions to secure adopted targets. However, the primary target of the specific actions listed relates to assets under the control of the local

authority. So, for example the water conservation objective include measures relevant to public buildings including public housing.

6.17. Natural Heritage Designations

The Royal Canal pNHA is over 3km to the south.

Santry Demesne pNHA is over 4km to the east.

Liffey Valley pNHA is 6km to the south-west.

European sites are identified in the Appropriate Assessment Section of this report.

7.0 The Appeal

7.1. Grounds of Appeal

An Taisce

7.1.1. The main points of the appeal are:

- The statutory obligations under the Climate Act relating to decarbonisation of Ireland's energy system are noted.
- The proposed development will consume very significant amounts of power requiring 150 MW or 1,310GWh of electricity annually. The applicant calculated the proposed development is likely to generate 450,000 tons of CO_2 eq annually which is approximately 0.82% of Ireland's total annual emissions based on 2019 the EPA data.
- The submitted analysis is insufficient to justify the proposal against the obligations under the Climate Act. Individual developments are required to demonstrate alignment with statutory sectoral emissions reduction plans, the broader carbon budgets, the 51% emissions reduction obligation for 2030 and 2050 climate neutral obligation.
- It has not been demonstrated how the proposal is to be compatible with the trajectories required to achieve a 51% emissions reduction by 2030 and net zero by 2050, both of which will necessarily involve progressively tightening

carbon budgets and sectoral emission ceilings. This is of particular importance given the ongoing proliferation of data centres.

- The required participation in the EU Emissions Trading Scheme and the purchase of associated emissions permits relates to mitigation obligations under the EU climate law. This does not negate, prevent or act in place of the obligations under the national carbon budgets and sectoral emission ceilings in accordance with the Climate Act.
- Subject to the compatibility with the proposed Climate Act being demonstrated it is considered that condition 3 requires strengthening. In order for the condition to fulfil its stated purpose of ensuring that energy consumption is offset with the new renewable energy generation the following additional points should be added to the condition and incorporated in the agreement:

  the amount of electricity generated by the new renewable energy projects shall be equal to or greater than the electricity requirements of the datacentre

  the new renewable energy projects shall be fully operational prior to commencement of the operation of the datacentre.

John Conway and Louth Environmental Group

7.1.2. The main points of the appeal are:

- The planning authority failed to notify the CRU.
- Non-compliance with the EIA Directive or Habitats Directive; there is insufficient information in detail including in relation to how the proposed development would operate via linkage/connection to the national grid.
- The proposed development shall be subject to complete EIA.
- There is not sufficient information for the Board to carry out a complete AA screening and AA.
- Inadequate information has been provided in the NIS to screen out the impact of the proposed development on birds.

- The AA Screening in the NIS does not provide sufficient reasoned findings. There is not an identified clear methodology and no analysis is offered in respect of the protected sites which were screened out.
- No regard and/or inadequate regard has been given to cumulative effects in combination with other developments in the vicinity of the protected sites.
- There is no information on the proposals to connect to the national grid and the source of gas is not referenced in section 4.2.3 of the planning report.
- The peak water usage of 1 million litres per day will divert resources away from the locality. The water supply situation is likely to get worse with climate change. Examples are given of other data centres located in the Dublin region and their water usage, typically in the region of 300,000 litres per day.
- Ireland is one of the EU's worst carbon emission of offenders and faces fines.
- The data centre sector is responsible for 1.8% of electricity -related carbon emissions in 2020. This is expected to increase to 2.2% by 2025.
- An Taisce's recommendation regarding information on the level of energy use and it source and related matters is noted.
- The development would be in breach of the Climate Action Plan 2021.
- Enclosed submission to the planning authority and other information.

7.2. Applicant Response

7.2.1. The first party response includes the following points:

- The proposed development complies with the zoning and is an exemplar of how required ICT infrastructure can be delivered without prejudicing decarbonisation objectives.
- Section 5.1 addresses the matter of obligations in meeting the requirements of the Climate Act and condition 3 relating to the CPPA.
- The development will be regulated under the ETS, includes offsetting renewables and will not prejudice the targets in the Climate Act and CAP.

- Energia has a portfolio of consented renewable energy projects. If constructed these will deliver 350 MW of new renewable energy capacity. The portfolio of consented products has not yet commenced construction and will not be supported by government incentives such as the RESS.
- The stipulation that all of the offsetting renewables be in operation in advance discounts the ramp of energy consumption, which will take 7 years.
- It is considered not practical to stipulate the timing and delivery of these renewable projects by way of a planning condition.
- The offsetting renewable developments are limited by the duration of their permissions and will be constructed within the duration associated with the proposed data centre.
- All details pertaining to connections to the national grid were made by way of the concurrent SI application and were cumulatively assessed.
- All assessments relating to water consumption have been carried out in conjunction with agreements from the competent authority Irish Water.
- In terms of the grid capacity and renewable energy generation in the area it is noted that the facility is adjacent to Huntstown Power Station and Huntstown bioenergy plant and in close proximity to the consented solar farms in South Meath and North Dublin and therefore in accordance with the CAP 2021.
- The alleged 'insufficient information' is not substantiated and there is no description or detail provided to allow the applicant to respond to this point.
- The applicant has not outlined the specific shortfalls that result in the EIAR being incomplete. The application was externally reviewed on behalf of the planning authority by external consultants which confirms the level of assessment that was given to the subject application.
- We wholly disagree that there are inadequacies or lacunae in the AA Screening and the NIS.
- A full assessment of cumulative impacts has been made and the relevant applications and outcomes listed in Table 3.7 of the EIAR Addendum and Table 2 of the NIS submitted at further information stage and these have been

taken into account for the assessment of cumulative impacts with the Overall Development. The applications lodged since the EIAR and addendum have been refused or are pending a final decision (see list on bottom page 25).

- No gas connection is proposed as part of the application.
- The cover letter submitted at further information and Chapter 9 of the EIAR / Addendum in section 5.1 of this appeal response describe the proposed development in the context of the Climate Act. The co-location of power generation and electricity consumption on the same site is beneficial as it minimises the need for national grid network improvements including new high-voltage wires and provides the most energy efficient location for the electricity consumer as it minimises electrical losses. This colocation approach avoids the requirement to build new on-site gas power generation thus avoiding the potential introduction of new additional fossil fuel generation's and associated greenhouse gas emissions.
- Regarding water supply the estimated domestic water supply demand is up to 0.85 litres per second. The process water supply demand has been estimated to have a peak demand of 56 litres per second for approximately 24 hours per annum. This figure may be exceeded if re-entrainment of warm air occurs on the site.
- On-site storage is proposed as part of the development sufficient to provide for evaporative cooling in the worst-case summer 48-hour period. This will be sourced primarily from the mains supply with a small supplement by way of rainwater harvesting. Process water supply from the proposed development has been estimated as 4,842.4 m^3 per annum.
- An alternative water-cooled design technology was considered. The evaporative cooling design selected has due regard to the potential impacts on water consumption.
- In relation to the concurrent substation development the potable water and fire supply will be provided from the data centre private connection. The pre-connection enquiry to Irish Water addressed the water demand for the concurrent data centre which allowed for sufficient capacity.

- Regarding the comments that Ireland is one of the EU's worst carbon emission offenders this is a generic statement but notwithstanding the above we refer to section 5.1 for more information relating to carbon emissions. Similarly we respond to the comments relating to the electricity -related carbon emissions from data centres in the country.
- Regarding the recommendation of An Taisce that information be sought on the level of energy use required to serve the proposed development, the specific sourcing for the proposed energy use and the measures proposed to ensure that the project will not create any increase in electricity generating causing greenhouse gas emissions we refer again to section 5.1 and 5.2 of this response.
- It has been confirmed by Eirgrid through the transmission connection agreement received by the applicant that there is sufficient power available from the existing area network to facilitate the proposed development. As the national authority Eirgrid has to ensure that the connection will not impact or reduce the capacity within the local network to support the neighbouring area.
- The new data centre connection policy implemented by Eirgrid results in a moratorium preventing new data centres that have not yet signed a connection agreement being connected to the grid for the foreseeable future. As such the projected electricity demand growth from data centres in Ireland in the period to 2013 would be substantially lower than the estimated 30% figure. The proposed development is likely to be one of only a few data centres to be built in the Republic of Ireland over the coming years. We refer to section 5.1 of this response.
- Enclosures include an updated bat survey report dated June 2022 and amphibian survey was updated in June 2022.The report also makes recommendations relating to biodiversity overall. Planning Authority Response

The planning authority's response dated 13 June 2022 states

- The development was deemed to be in accordance with national, regional and local policy and subject to conditions to be in accordance with the proper planning and sustainable development of the area.

- The planning authority has no objection to the recommended amendment to condition 3. The intention is that the Corporate Purchase Power Agreement would require that the energy generated (*sic*) by the proposed development would be offset with new renewable energy generation.
- In the event that the decision of the planning authority is upheld it is requested that condition 10c, no. 22 and no. 23 are included.

7.3. Observations

Proinsias Mac Fhlannchadha

The main points of the observation are

- The Further Information Response Report and the Energy Statement are vague at best. They do not outline a path as to how the proposed development will not be a net consumer of energy in the absence of solid proposals or existing planning permissions in place. The statements are unacceptable and risk dealing with repercussions later, which is unacceptable in light of the Climate Act 2021 and the Fingal Climate Action Plan.
- There is an absence of proposals from the parent company with respect to the offsetting. It is difficult to see how this development can promote national climate action goals.
- The proposed development will be responsible for 0.48% of the national emission ceiling for NO_X and the EIAR does not give a percentage of the national emission ceiling for CO_2.
- The long-awaited guidance of CRU will, I assume, require the applicant to re-engage with the grid operator. The applicant should be instructed to re-engage to seek clarification in light of the new guidance.
- It is disappointing that there is no intention to supplement the significant energy demands of the data centre with alternative energy supply to include renewable energy sources and is contrary to the development plan objectives EN 01, EN 06, EN 12 and EN 13.

- Cumulative effects are not taken into account in the EIAR as relevant to other similar developments in the GDA.

Fingal One Future

The main points of the observation are:

- Data centres do not qualify as heavy industry and contravene the zoning.
- The visual impact requires further consideration.
- It is contradictory that permission has been granted but yet there is a requirement for an appraisal of the air quality impact and noise insulation.
- The comments of the EPA relating to the possible requirement for an IE licence are noted. There is no reference to this licence in the decision.
- The application should be overturned until a full national plan is in place to guarantee security of supply and show the ability of the grid to fulfil demand.
- Further comments are made relating to the use of electricity and water.
- Condition 10 of the decision should be strengthened.
- The subject proposal has not demonstrated compliance with the legal obligations in the Climate Act 2021 and should be refused on that basis.

Roisin Shortall

The main points of the observation are:

- Electricity grid cannot sustain further data centres. Eirgrid has ceased discussions with data centre promoters following the decision of CRU to restrict data centres access to the grid, decisions which were taken to safeguard our energy security and to which the Board should have regard.
- The climate cost of data centres and the CAP need to be considered.
- The local water infrastructure cannot support this level of usage – residents have had to reduce their consumption already in dry periods.
- Strongly urge that permission be refused.

7.4. **Further comments**

7.4.1. The PA indicates no further comments.

7.4.2. The further comments provided by Fingal One Future reiterate comments relating to lack of consultation, climate targets, objection to offsetting and indicates support for the recommended condition of fantastic in relation to the CPPA and notes the scale of the facility.

7.4.3. The further comments of Roisin Shortall TD reiterate the previous concerns relating to energy security, water infrastructure and climate targets and states that the efforts to provide net zero data centres should be clearly agreed during the planning stage and in place on or before operation commences.

7.4.4. The further comments of John Conway and Louth Environmental Group reiterate concern relating to the scale of the facility and the emissions and electricity supplies security, notes the revised government statement on the role of data centres and the updated biodiversity surveys. With respect to the latter it is stated to be unclear if ordinary members of the public have had the opportunity to make submissions on these documents.

7.4.5. The further comments of Proinsias Mac Fhlannchadha notes that the emissions from the data centre would account for 10% of the required amount which is to be reduced, to the government statement, the significance of the sector and the lack of information relating to the connection agreement. The failure to consider the impact of other data centres in the context of the ETS is referenced and it is reiterated that the CR you guidance will require re-engagement, that the on-site renewables are inadequate and other matters.

7.4.6. An Taisce notes the setting of sectoral emission ceilings, the imminent climate action plan and states that it is practical that the subject development cannot start or increase operational energy usage prior to the level of energy demand being met at the relevant phase.

8.0 **Assessment**

8.1. I consider that the planning issues can be assessed under the following headings:

- Principle and National Policy

- Fingal County Development Plan
- Water
- Roads and traffic
- Design and Layout
- Residential amenity
- Cultural heritage
- Other issues.

8.2. Principle and National Policy

Overview

8.2.1. For the purposes of assessing this appeal I note the fast-changing nature of the legislative and policy context at EU and national levels. This section of this report considers the relevant national and regional policy at which level there is long standing support for data centres as part of the ICT sector. The applicant's submissions to the planning authority and in response to the appeals refers to the 2018 Government Statement on the Role of Data Centres and notes that the NPF supports Ireland as a suitable destination for ICT infrastructure. The response to the appeal references the February 2022 strategy Harnessing Digital. I agree that this publication highlights data centres as core infrastructure and enabler of a technology rich innovative economy and I note that this support is a common thread in similar publications. The RSES policy relies on and references national policy. I conclude that in principle there is strong national and regional support for data centres.

8.2.2. The policy context has however evolved significantly and while still supporting the sector it now includes nuanced guidance which qualifies the support for the sector. The background is the growing concerns at international and national levels relating to climate change and security of energy supply and reservations relating to the impact of large energy users including data centres, as reflected in Eirgrid and CRU publications. The 2021 data provided by Eirgrid is that the Connection Agreements are in place for over 1,800 MVA of MIC for data centres in Ireland with an additional 2,000 MVA requested (out of current demand peak of 5,500 MVA). To put it another way Eirgrid states that data centres could account for 27% of all demand for

electricity by 2030. CRU notes that there has been a disproportionate interest among developers to located in the Greater Dublin Region, which is a constrained region.

8.2.3. In November 2021 Direction of CRU sets assessment criteria for live and future connection applications for data centres, which includes the introduction of locational criterion. The Direction does not provide for a moratorium on new data centres in any region but processing of applications (whether insider or outside of the GDA) shall be prioritised based on the location (constrained or unconstrained), ability to bring on dispatchable generation and / or storage equal to or greater than their demand and ability to provide flexibility in their demand by reducing consumption when needed. The subject data centre has obtained a connection agreement and in the absence of any stated intention in the CRU document to review connections which have been granted, the CRU Direction may be deemed not to be directly relevant to this appeal. It is noteworthy for signalling policy trends.

8.2.4. In view of the above and in the context of the grid connection agreement (and subject to a grant of permission in the concurrent SI application), it might be concluded that the impact of the proposed development on the security of supply in the Dublin region should not be further considered under this planning appeal. The applicant's submission is that it has been confirmed by Eirgrid through the connection agreement received that there is sufficient power available from the existing area network to facilitate the proposed development and that it will not impact or reduce the capacity within the local network to support the neighbouring area. I consider that it is difficult not to definitively support that conclusion and refuse permission for that reason insofar as Eirgrid is the relevant consenting authority and CRU has indicated that it will not be commenting. I note also that while CAP 2023 signals policy change including a review of gas and electricity connection policies for new large energy users, the document does not set out an intention to re-visit existing connection agreements. I therefore consider that the Board should reject third party comments on this matter and should generally accept that the proposed development would not in itself contribute to concerns relating to security of supply to a degree as to support a refusal of permission.

8.2.5. Meeting the challenge of climate goals is a broader issue and requires highly efficient use of national grid infrastructure to ensure that renewables can be fully incorporated and to maximise efficiencies. Notwithstanding the grid connection

agreement being in place there is a need for the principle of the proposed data centre to be assessed under climate related policy and legislation. The remainder of this section of this report deals with the emerging policy which is being shaped in response to climate goals and also to electricity and grid constraints.

8.2.6. I next consider the proposed development in terms of emissions reductions targets and then assess the data centre relative to the updated 2022 Government Statement.

Climate

8.2.7. This is a large-scale facility. With respect to the energy performance and sustainable construction I consider that the Energy Report provides sufficient information to demonstrate that the proposed design is likely to comply with Building Regulations (NZEB) and I note the aim to achieve certification under a sustainability accreditation scheme, which will require assessment of sustainability considerations including reduction of emissions that contribute to climate change and use of renewable energy where feasible. In addition, the applicant has made basic provision within the scheme design for future connection to district heating should demand arise. Use of excess heat at the nearby bioenergy facility was investigated but discounted on the basis of lack of need. The absence of a larger amount of solar PV panels and on-site storage which has been raised by an appellant is not explicitly explained by the applicant who relies on the larger suite of Energia renewable energy proposals as a justification for the proposed development. In general, notwithstanding that there is more opportunity for installation of renewable generation on the site, I accept that the Energy Report demonstrates measures which are relevant to sustainable design, construction and operation. The extent to which the operation of the facility will affect emissions targets is the core consideration with respect to climate effects in my opinion and is addressed below.

8.2.8. I will now attempt to put the GHG emissions from the proposed data centre in context with the targets. Regarding the sectoral emissions ceilings I have referred earlier to the September 2022 publication which sets an absolute figure of 3 Mt_{CO2eq} in 2030 from the electricity sector. Due to its scale there is significant potential for this 150MW data centre to contribute to production of GHGs and to undermine the achievement of national targets for 2030 and 2050. The information provided by the

applicant including in Chapter 9 of the Addendum EIAR, is that there is potential for annual production of 387,900 tonnes of Co_{2eq} per annum which over the period 2021-2035 and on a worst-case scenario would translate into potential to be 0.9% of the total carbon budget for that period. That assessment is based on the existing fuel mix (used in the generation of electricity) and the 150 MW consumption.

8.2.9. The applicant's submission relies on the EU wide emissions trading scheme (ETS) and the renewable energy offsetting arrangements in support of the conclusion that the energy requirements on a day-to-day basis would have a slight impact on climate. The agreement between Energia and the End User in the form of a Corporate Power Purchase Agreement (CPPA) for new renewable energy is referenced. It is stated that the End User is a global technology company which has committed to being carbon neutral on a global basis by 2030 and the End User has been granted exclusivity to Energia's substantial renewable development portfolio for the purpose of these agreements. The agreement would ensure construction of renewable energy projects by Energia that would not otherwise be viable and would not be supported by government or consumer subsidies. Thus, for every unit consumed by the data centre a unit of new renewable energy generation would be dispatched to the wider electricity system to offset it and thereby delivering the objective of operating the proposed data centre on a net zero basis. The applicant also comments that the emissions described are very much a worst-case scenario and that the data centre would be more efficient than a number of smaller servers.

8.2.10. It is evident that the planning authority accepted the general thrust of the applicant's approach as the original planner's report noted the offsetting of energy consumed by the new renewable generation and appeared satisfied with the information provided. By contrast third parties have expressed concern about the lack of detailed information available and object in principle to the proposed development for reason of failure to show how it is compatible with meeting carbon budgets, the 51% emissions reduction obligation for 2030 and the 2050 climate neutral obligation and have also called for the conditions attached by the planning authority to be strengthened.

8.2.11. Regarding compliance with the emerging policy context my considerations follow.

8.2.12. I accept the overall claim that the contribution of renewables to the ETS would not be reduced subject to full and appropriate implementation of the proposal to match the overall annual energy demand with a new renewable supply which would not otherwise be developed. At the international scale the facility has been assessed by the applicant as having an indirect, long-term, negative and slight impact on climate, which I consider is a reasonable conclusion.

8.2.13. The goal of delivering the operation of the proposed development on a net zero carbon basis is stated to be achievable by the use of a CPPA. In my opinion the strength of the applicant's case relating to the CPPA is greatly undermined by the recently published CPPA Roadmap, the CAP 2023 and (as considered later) by the Government Statement. The CPPA Roadmap explicitly supports temporal and spatial matching of the renewable electricity generated with demand – there is no evidence of temporal matching or spatial matching as discussed below. CAP 2023 has emphasised the need that large energy users demonstrate zero emissions during the same hour and geographical location and matching all consumption on a 24-hour 7 day a week basis. This is an onerous requirement. However it is a requirement which appears to be deemed to be a necessary response to climate objectives.

8.2.14. The applicant's Energy Statement notes the use of CPPA agreements which will provide for the establishment of new renewable energy projects that would not otherwise be developed and will not be supported by government or consumer subsidies. These are expected to exceed the annual volume of energy consumed on the site. Insofar as it is relevant, and the overall volume is not insignificant, this position could be accepted. In my opinion the applicant's submissions however do not demonstrate that the renewable energy to be supplied would be provided at the right time or location. It is stated for instance that the offsetting renewable energy projects will be located throughout Ireland. As such the proposed development is contrary to the direction of policy which has been emerging in the last few years whereby there is increased emphasis on spatial matching of renewable supply and large energy user demand. The provision of an annualised equivalent volume of renewable energy generation as proposed would make a significant contribution to the national targets to move towards renewable electricity but is far from an optimal approach in terms of the constraints of the national grid and increased reliance on

renewable sources of electricity. I note the brief reference in the response to the appeals to the solar farms in Meath and North Dublin and address this matter further below.

8.2.15. I consider that by reason of the failure to provide evidence to indicate a temporal match, it must be concluded that for an unknown proportion of time when renewables are not available the data centre will contribute to the demand for reliance on electricity generated from fossil fuel sources. While the siting of the data centre is described as being efficient as it minimises the need for national grid improvements (to serve the data centre) there is no consideration of the implications of the siting for the grid, either on a local, regional or national basis. It is not demonstrated for instance that the grid capacity is in place for the connection of the renewables. There is no information provided relating to flexibility of operation including any commitments for shutdowns or any other evidence to suggest temporal matching would be achieved.

8.2.16. The Board may wish to consider whether other regulatory authorities may impose requirements for control of the electricity demand from the data centre at times when only non-renewables are available. Nothing in the appeal response indicates that this would be so. No information has been provided to suggest that the connection agreement terms can impose these requirements.

8.2.17. Regarding the lack of information relating to the particular renewable energy projects which will be commenced in order to offset the energy used by the data centre, I consider that provided information is unusually sparse, lacks clarity and raises questions for any possible planning enforcement. While the available Energia portfolio is large the figure quoted is only in the order of double the demand of the data centre. Energia is undoubtably a major player and will continue to pursue developments in the sector. Nevertheless, I am not satisfied with the approach taken in this appeal as no specific information has been provided to connect a particular renewable energy project with the data centre and thereby demonstrate the validity of the case made.

8.2.18. It is stated that the renewables will be provided parallel to the ramping up of demand from the data centre. It is reasonable to take into account the fact that by 2030 the existing fuel mix will be very different and the GHG emissions per MW of the data

centre would be reducing over time, while the overall output in MW would be increased as construction proceeds. It is also relevant to note that the data centre construction will ramp up so that the GHG emissions in the early phases will be proportionately reduced. However, other than general statements there appears to be no basis for the Board to conclude that the electricity from the proposed renewable would be in place at the same pace as the demand from the data centre. While there may be commercial sensitivities with some of this information there is equally a requirement on the other side for the Board to have sufficient information on which to base its own judgements. In the absence of this information and taking into account the lack of certainty regarding the offsetting projects and their timelines, I consider that the Board cannot be satisfied that the proposed development would not militate against the achievement of emissions reduction objectives or be in accordance with the CAP 2023.

8.2.19. The parties refer the CPPA planning condition attached in the decision of the planning authority which states:

8.2.20. Prior to the commencement of operation of the development hereby permitted, the developer shall submit for the written agreement of the planning authority details of a Corporate Purchase Power Agreement that the developer has entered into which demonstrates that the energy consumed by the development on site is offset with new renewable energy generation. The Agreement shall comply with the following:

(a) The new renewable energy projects shall not be supported by government, consumer or other public subsidies.

(b) The new renewable energy projects shall be located in Ireland.

(c) The new renewable energy projects shall be provided by the applicant's group, that is Huntstown Power Company Limited.

(d) The new renewable energy generation shall relate to energy that is not being generated at the date of grant of this permission.

8.2.21. Appellants recommended a planning condition requiring that the offsetting renewable energy be installed and operational prior to the commencement of operations. In response the applicant states that this is not reasonable as it would not have regard to the ramping up of consumption at the data centre. In further comments An Taisce

recommends an amendment to allow for the ramping up provided demand for each phases clearly met.

8.2.22. I consider that it is appropriate that the phased demand be considered but a precautionary approach in the context of a climate emergency would support the principle of the recommended condition. In the context of there being no information relating to the project(s) which would offset the electricity used by the data centre I am not satisfied that the Board is in a position to favourably conclude that the renewable projects would be in place to meet demand. I do not consider that the recommended condition sufficiently addresses this matter but the available information does not allow for a more robust and specific planning condition.

8.2.23. Regarding the applicant's comment that the siting avoids the need for provision of additional dispatchable energy on site, I am unconvinced that this is argument is especially robust or relevant as in times of supply constraints when the on-site power would have been triggered the data centre will instead rely on the emergency generators. There is no commitment given to cease operation in such events or during times when power is available but available supply may be threated. It is not clear that such restrictions would be subject to control under the existing connection agreement. It is not clear that , if addressed by condition, such requirements would be compatible with the operators needs.

8.2.24. On a final point, I note that the appeal response states that there is a moratorium on new data centres and that the projected electricity demand growth from the sector will be substantially less than predicted. I do not accept this statement as there remains strong national support for the sector albeit with increased guidance as to how and where they are appropriate. There is no indication of a decline in the market demand and there is an explicit conclusion in the recent CRU policy that a moratorium is not appropriate including for reasons relating to obligations to ensure all reasonable demands are met: this would remain relevant notwithstanding the recent change in emphasis of policy under the revised Government Statement.

8.2.25. I conclude that the Board cannot be satisfied based on the available information that the proposed development would not undermine the achievement of climate targets and thereby contravene climate legislation and policy specifically the provisions of CAP 2023.

Government Statement on the Role of Data Centres

8.2.26. I now address the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy ('the Government Statement) published in July 2022. As it states, the government seeks to enable the twin transitions of digitalisation and decarbonisation, which are complementary. A key theme is that data centres are core infrastructure. That issue is discussed in detail in the Government Statement in the context of the wider digital sector. The Government Statement indicates that there is limited capacity available for further data centre development in the short-term pending upgrades to the electricity infrastructure and the connection of more renewables.

8.2.27. The Statement sets out principles for decision making regarding future data centre development. Prior to examining the proposed development in the context of each of the principles of the Government Statement I will consider the applicability of the Government Statement to this planning appeal. First and foremost the Government Statement is national policy to which the Board must have regard. Secondly there is no lack of clarity in the Government Statement related to its intended purpose; the Statement is intended to be taken into account by decision makers in relevant sectors including in the making of planning decisions.

8.2.28. The Government Statement reiterates some of the matters intrinsic to the CRU November 2021 Direction. However, it also brings new matters to the fore. It appears to me that the Government Statement is more holistic than any previously adopted policy on this sector and by its inclusion of the Economic Impact principle in particular its application can ensure that the development of the data centre sector takes into account proper planning and sustainable development. The Government Statement is therefore highly relevant to this planning appeal – both by reason of its status as national policy and its content.

8.2.29. The **Economic Impact principle** of the Government Statement indicates 'a preference for data centre developments associated with strong economic activity and employment'. The role of data centres includes that they are deemed to be essential infrastructure for companies which employ large numbers of people and for these companies the ability to host data here and use Irish centres to sell products or services is a critical part of their presence in Ireland. This is in my opinion the basis

for interpreting the ‘economic impact’ principle. A data centre associated with a company employing large numbers of people is deemed to be economically important even though it may not in in itself directly employ large numbers of people. In my opinion the Economic Impact principle puts an end to data centre developments which might be considered to be speculative in nature, without a named end user. It also sets a requirement that the end user is a major employer.

8.2.30. In the application documentation there is no information provided which would support any claim that the proposed development complies with the principle of being associated with strong economic activity and employment. While the development is stated not to be speculative the end user is not identified and there is no information provided relating to its role in the Irish economic sector particularly employment provision. I conclude that the Economic Impact principle is not demonstrated to be met in this case.

8.2.31. The **Grid Capacity and Efficiency principle** is related to a preference for data centre developments that ‘make efficient use of our electricity grid, using available capacity and alleviating constraints’. It is set out in the statement including in the executive summary that in the short term the capacity that will be available for new data centres will be in ‘regional locations’. This reflects the fact that there are electricity capacity issues in certain parts of the country. The overall proposed development includes the grid connection which is subject of the parallel application. While noting the comments in the Energy Statement relating to the use of existing infrastructure, I submit that there is no evidence presented to support any conclusion that the overall proposed development including the grid connection complies with the principle of making efficient use of our electricity grid, using available capacity or alleviating constraints. On the contrary, the proposed development would be located in a part of the country which is congested and is most likely to suffer from supply difficulties. While the connection would provide for the taking out as required of one of two named substation (as discussed further in the concurrent application) I do not consider that it is demonstrated that the development having regard to its scale is making use of available capacity within the meaning of this principle.

8.2.32. The Government Statement also tightens up the requirements relating to the additional renewables. In assessing the proposed development in the context of this policy I do not consider that there is an assumption in favour of a development in

principle by reason of a connection agreement being in place or co-locating proximate to the Huntstown plant.

8.2.33. The **Renewables Additionality principle** states a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland. The Government Statement notes that a number of Corporate Power Purchase Agreements (CPPAs) have been put in place by data centres in Ireland in recent years to finance renewable electricity generation projects. It goes on to state that

> 'Data centre operators purchasing CPPAs that 'add additional renewables, and use our electricity grid efficiently, can play a positive role in Ireland's renewable energy transformation. ….However, the location of data centre demand in proximity to renewable generation will be key to this objective'.

8.2.34. Relating to the CPPA Roadmap (figure 1 of the statement) it is stated that the SEAI policy seeks to exploit potential synergies in temporal and spatial matching of the contracted renewable electricity generation and corporate demand to achieve otherwise unattainable emissions reductions for the sector and electricity system. Therefore the guidance is that not only should there be a CPPA in place which adds additional renewables - those renewable sources should be proximate to the proposed development. There is a reference in the applicant's submissions to the development of solar farms in Co. Meath and North Dublin but the reliance in the applicant's documents is on the overall 350MW portfolio of consented renewables which are not under the RESS and will not be built unless supported by a CPPA. In the absence of more information relating to particular project(s) which will be developed in support of the proposed data centre I consider that it cannot be shown that the Renewables Additionality principle is met having regard to the locational aspect of the guidance in particular. I note the scale of the proposed data centre and the national pattern of development of renewable energy development, which is not focused on the GDA. In order to demonstrate that additional renewables will be provided and that these renewables will be suitably sited in a location where there is demand and grid capacity more information is needed. I consider that this principle is amongst the more important of those set out in the national policy, that a high level of proof is required and that evidence is not provided.

8.2.35. I note that the Government Statement contains other matters for example relatively to community involvement. These matters are not insignificant but in the context of the larger issues I do not propose to further discuss them.

8.2.36. It is also appropriate to reference the grid connection which is in place and which the applicant states is testament to the suitability of the site. I note that while the recent CRU document states explicitly that the Direction applies to applications going through the grid connection process the Government Statement is silent in terms of its application. My conclusion is that for the purposes of the planning process the principles set out are all relevant – the Government Statement does not indicate that these principles do not apply to cases where the connection agreement is in place. There would be nothing to support the conclusion that because the proposed data centre has its grid connection agreement that it is excluded from consideration in terms of the revised policy approach to data centres.

Conclusions

8.2.37. I conclude that the proposed data centre does not meet the criteria set down in the Government Statement and that having regard to the demand for developments of this type and the Economic Principle, the electricity constraints in the Dublin region and the information presented in relation to the offsetting renewables which is not shown to meet the current policy requirement of temporal and locational matching, the proposed development is not shown to be in accordance with the Government Statement and with climate policy and permission should be refused.

8.2.38. I am not satisfied based on the available information that the proposed development would not undermine the achievement of climate targets and thereby contravene climate legislation and policy. I consider that there are gaps in the analysis with respect to matching of demand and supply and also a lack of clarity regarding the relevant offsetting projects. I therefore agree with the appellants that it is not demonstrated that the proposed development complies with CAP 2023.

8.2.39. I would highlight the fact that the Government Statement was published after the submission of the response to the appeal by the applicant and that the applicant has not had an opportunity to address the Statement. The Board may wish to consider whether the recommendation below insofar as it relates to the Statement would constitute a ‘new issue’ in this case which has not heretofore been put to the

applicant. My conclusion is that referral to the applicant on this matter would not be warranted for two main reasons. Firstly policy evolves all the time and the requirement of the Board is to have regard to current provisions. Secondly apart from the Economic Impact Principal the significant measures contained in the Statement are broadly in line with the policy direction signalled in other publications, which were available to the applicant.

8.3. Fingal County Development Plan

8.3.1. Having regard to the submissions received and to provide a full assessment of the planning context it is relevant to examine in particular the zoning objective and location suitability.

8.3.2. Regarding the Fingal Climate Action Plan, which has been referenced by third parties I have outlined the nature of the provisions earlier and conclude that they are mainly relevant to the actions of the local authority and I do not reference it further.

Zoning

8.3.3. The rationale for the proposed development and compliance with the zoning objective HI is set out in section 1.4 and section 5 of the Planning Application Report. The applicant's submission refers to the vision for the HI zoning as to 'facilitate opportunities for industrial uses, activities and processes which may give rise to land use conflicts if located within other zonings'. Such uses activities and processes would be likely to produce adverse impacts as noted in the development plan which might include noise, dust or visual impacts. The applicant states that while existing and permitted data centres are located on lands zoned GE or HT the nature of the proposed development at 75,000 m² gross floor area on a 13-ha site, the scale of the required site dispatchable generation and scale and size of ancillary plant and co-location adjacent to Huntstown power plants justifies the proposal. It is stated that if the development was located on lands zoned GE or HT there would be a need for new thermal dispatchable power generation which would have to be designed to run on a regular basis and for long periods of time and would be in addition to any emergency backup generation that may be proposed. Furthermore it is considered that the scale, massing and visual impact would conflict with the traditional business park setting of GE and HT land-use openings.

8.3.4. I reject the general thrust of the applicant's case which essentially attempts to justify a need for this development to be located on lands zoned for heavy industry. I reject that proposition as the main requirement for heavy industry under the development plan relates to the impact of the use. The applicant's submissions on air and noise impacts in its operation stage could be relevant in terms of the nature of the use and the justification for this development within the heavy industry zoning. However, the applicant's submission is that there will not be a significant negative long-term impact on the closest residences. Predicted changes in background noise levels are stated to be less than 1 dB and ambient noise level will continue to be dictated by road traffic noise in the area. Relating to building services noise/emergency site operation the applicant's case is that proprietary noise and vibration control measures when employed will ensure that the noise emissions from building services plant do not exceed the adopted criteria (normal EPA standards) and that the noise impact would be negative, not significant and long-term. Changes in noise levels associated with additional vehicles is described as imperceptible. The modelling of air quality impacts show that there will be compliance with national and EU ambient air quality limit values and no significant impact on human health. Waste quantities which will be generated are anticipated to be relatively small. Finally I note that the layout and design respond to the more sensitive land uses to the north and the east. In conclusion I find no basis for concluding that the proposed development is heavy industry and a suitable form of development for this zoning.

8.3.5. There is however another aspect to the policy context which the applicant relies upon and that is section 11.4 objective Z04 of the development plan with respect to transitional zones. The site is described as being transitional in nature adjoining GE zoned lands to the east and HI zoned lands to the west and the data centre is considered acceptable on this basis. The planning report relies on the fact that the zoning to the immediate east of the site is for general employment and that there are residential properties located within that zoning. On that basis the subject site is deemed to be considered to be a transitional zone between two land use zonings and the submission is that the site layout is cognisant of the transitional nature from heavy industry uses including quarry and power plant to the west and residential and general employment to the east. I consider that there is some merit to this argument and I would not conclude that the proposed development constitutes a material

contravention of the development plan. Nevertheless, I consider that a more suitable use of the site would incorporate heavy industry use at the west and a less intensive use at the eastern side. I have set out a reason for refusal on that basis.

8.3.6. If there is a surplus of lands in the area zoned HI then that is a matter which would warrant a change of the stance I have set out in relation to the zoning and reason 2. There is no indication from the planning authority that there is any such excess but the planning authority did not refuse permission for the development for reason of the zoning. In the circumstances I consider that it would be in accordance with the proper planning and sustainable development of the area that western side of the site in particular be reserved for heavy industry.

8.3.7. In the event that the Board grants permission I would recommend in the interest of clarity that the wording of the order/direction clarifies that the basis for any such decision includes section 11.4 objective Z04 and is not reliant on the heavy industry zoning.

Location suitability

8.3.8. Regarding the site location the applicant references the benefits from co-location with the major power plant which matter is summarised in the Energy Report as relating to:

(a) minimising the need for national grid network improvements

(b) being the most energy efficient location as electrical losses from transferring over long distances are minimised

(c) avoiding the requirement to build new on-site dispatchable gas power generation

(d) being adjacent to the bioenergy plant and possible use of excess heat in the A.D. process which would make both developments more efficient.

8.3.9. . As noted in the Statement the thrust of policy is that new data centres will be in regional locations. The proposed development will utilise electricity in the GDA and while there will be provision of offsetting renewables in another location these renewables in themselves cannot be discounted as requiring significant grid improvements. In the event that the data centre site was developed in a regional

location proximity to the renewable source could minimise the need for grid improvement.

8.3.10. I note the reference by third parties to the desirability of locating the facility so as to enable district heating and the allowance in the design of the proposed development to enable this to be progressed in the future. The potential use of excess heat generated from the data centre being used in the anaerobic digestion process was subsequently ruled out following investigation which showed that there is more heat energy produced than is required at the bioenergy plant. There is no indication that the site suitability can be justified or is optimal in respect of potential use of waste heat.

8.3.11. I therefore reiterate that I am not satisfied that the applicant has made a robust case for the suitability of this site in terms of the use of existing infrastructure and the regional / national planning of infrastructure.

Conclusion

8.3.12. I conclude that the proposed development does not comply with the HI zoning and that the locational suitability is not sufficiently demonstrated. In the interest of the proper planning and development of the area an alternative development model for the site is appropriate in my opinion.

8.4. Water

8.4.1. I consider that the significant planning issues arising relating to water are as follows :

- Public water supply and infrastructure – whether the proposed development would adversely impact a planned wastewater infrastructure project, undermine local water supply or result in unacceptable demand.
- Flood risk and design of site drainage.

Public water supply and infrastructure

8.4.2. The Greater Dublin Drainage scheme infrastructure includes an orbital sewer which passes to the south of the site. It emerged during the consideration of the application by the planning authority that while the proposed development would not directly affect the relevant route (subject to ongoing legal proceedings) there is potential conflict with a possible variation to that route which might be considered by

Irish Water and which it wishes to reserve as an option. The matter was subject of a request for further information. The applicant in response proposed to incorporate a 10m wide service corridor and a 10m wide working space (20m in total) and along the eastern site boundary. Irish Water has confirmed that it is satisfied that the proposed development addresses all queries. Both the applicant and Irish Water indicate that the matter could be addressed by condition, which seems to me to be appropriate. There are no further matters relevant to the Board's consideration of this case.

8.4.3. The submitted report of CSE entitled Engineering Planning Report – Drainage and Water Services addresses the topic of availability of water supply. Irish Water responded favourably to the pre-connection enquiry in March 2021 when they provided a confirmation of feasibility to provide a water supply to the site. This was subject to upgrade works involving replacement of 1500 m of water main in the R135 as well as upgrade of water pumps at Ballycoolin Tower which is to be partly funded by the developer as a condition of the supply. I note that the third parties express concern relating to the impact on the local area by reason of water supply. I consider that the requirements of Irish Water fully address any implications by providing for a local infrastructure upgrade. I conclude that there is no likelihood that the proposed development will significantly adversely impact on the water supply in the locality.

8.4.4. The wider issue raised by in observations to the planning authority and in appeals relates to the amount of consumption at the proposed development when operational, including in a regional context and considering adverse impacts of climate change. The requirement for operational purposes based on consumption of 45 l/person/day is not significant in the context of the relatively low staffing levels and the location of the site in an urban area. The estimated peak process water demand at the facility is estimated at 56 l/s and it is stated that this demand will only occur during extreme warm ambient days, estimated to be 24 hours per annum subject to further modelling. There will be on-site storage of 2590 m^3 which is stated to be sufficient for evaporative cooling hours in the worst-case 48 hour. The water requirement for Buildings A and B is 2421.2 m^3 per annum per building. These volumes are not unduly significant in my opinion and taking into account the on-site storage and the upgrade requirements I agree with the conclusions of the planning

authority and consider that the development is acceptable in relation to water demand.

8.4.5. I conclude that the proposed development would not adversely affect public water infrastructure or water supply.

Flood Risk and Site Drainage

8.4.6. The subject development has been subject of a **flood risk assessment** prepared by Clifton Scannell Emerson. The OPW flood mapping review did not uncover any history of flooding. Having regard to the location within Flood Zone C and the nature of the development I agree with the conclusion that a Justification Test is not required under the OPW guidelines 2009. CSE report the presence of an existing ditch which crosses the site and which originates adjacent the southern site boundary and flows in a northerly direction where it forms Huntstown Stream which drains to the Ward River. The ditches which traverse the site are to be diverted and for this reason and having regard to the separation from Huntstown stream proper there is deemed to be a very low risk of fluvial flooding. Moderate risk of flooding is identified from the internal drainage system which will service the development. These risks would include rising groundwater level on the site, flooding from surcharge in of the surface water network and flooding due to human or mechanical error. CSE state that provided the drainage system is designed in accordance with relevant regulations to take account of 100-year storm return periods plus allowance for climate change and subject to proper operation and maintenance the proposed development would cater for a large pluvial storm.

8.4.7. I note the submitted document prepared by CSE entitled Engineering Planning Report – Drainage And Water Services which reports on the surface water network design, identifies areas where permeable paving is to be used and describes the need for two attenuation basins which will be located in the north and west of the site. This is a professional submission in relation to which none of the third-party submissions or appeal have raised any specific concerns. The stated concerns include the need for site drainage upgrade to ensure no flood risk and I am satisfied that the applicant's proposals are sufficient in this respect and that the standard condition relating to surface water discharge is appropriate in this case.

8.4.8. To conclude, I consider that having reviewed the information submitted by the applicant that there is no significant risk of flooding associated with the proposed development.

8.5. Roads and traffic

8.5.1. The site is proximate to the national road network, specifically the N2, and the local road network has been upgraded to accommodate the large volumes of heavy traffic in the area. The key matters arising relate to the upgrade of the N2 / North Road junction and layout of North Road, the site entrance and car parking.

8.5.2. The **N2 and North Road** provide access to an area of land containing major industrial facilities including Energia Power Station, Huntstown Quarry, the proposed biosolids storage facility and other development including the garden centre to the east of the site and Dog's Trust to the north. This area was isolated from the remainder of North Road by the construction of the M50 and effectively is a cul de sac from the N2 which serves a major industrial area with some residential uses. The capacity issues relating to the junction of the N2 and North Road have led to attachment by the planning authority of a special contribution condition related to works at the junction. That approach has also been undertaken in other planning decisions and is appropriate in my opinion. The amount relates to the area of land involved and I accept the basis for this condition, which has not been appealed by the applicant and consider that the amount is demonstrated to be appropriate. There is no information presented to indicate that any safety conditions arise pending completion of the upgrade of the junction.

8.5.3. An observer has called for the funds contributed under the special contribution to be towards traffic calming on North Road. I do not recommend this approach and consider that the main junction upgrade is in greater need and that the traffic calming can be achieved through traffic enforcement / discussion with drivers. A small number of companies would generate most HGV traffic and some internal control over drivers should be feasible. The applicant has committed to the reservation of lands for the future development of a 2m wide cycle path and footpath along part of the North Road as part of an overall upgrade in this area. I am satisfied that having regard to the land use patterns that the planning conditions attached by the planning

authority as relevant to pedestrian and cycle facilities and the payment towards the upgrade of the N2 / North Road junction are appropriate.

8.5.4. I next refer to the **site entrance** proposed. The layout presented shows that the data centre site would be served by a primary entrance at the eastern site boundary and by a secondary entrance for emergency / maintenance to the south which is within the substation site. A third party calls for the function of the two planned entrances at the eastern side of this data centre site to be reversed so that the main data centre operational entrance is not opposite centre the existing garden centre. Following inspection and consideration of the information presented in the application documents I am satisfied that the proposed arrangements is the optimum. In this respect I reference the low-key nature of the existing garden centre which would not be likely to generate high volumes of traffic and I consider it reasonable to conclude that there is no reasonable likelihood of conflict between the proposed data centre traffic and garden centre. The vehicular entrance allows for a pull-in off North Road thereby avoiding queueing on the road. Furthermore, I note the very significant levels of quarry traffic which utilise the access road to the south of the site and the arrangement for vehicular movement at that road, involving a requirement to turn at the entrance to Energia Power Plant prior to coming round to the southern site boundary. An alternative arrangement whereby the data centre campus was entered from the south and egress by way of North Road would give rise to additional, and in my view unnecessary traffic along the main entrance route to the quarry / power station. I do not accept the suggestions made and I do not consider that material changes are warranted in the interest of traffic safety. I note that there is sufficient space for a turning lane into the site if that was deemed appropriate in the future but that the applicant's assessment is that there is not enough operational traffic to justify this, which I accept, including in the context of the existing land uses.

8.5.5. For the construction phase and to allow for phase development of the two data halls the site will be accessed by two entrances from North Road. With respect to the construction phase the management of construction worker vehicles will be achieved by regulation of the number of on-site parking spaces and the use of an overflow surface car park at a nearby location. The proposed development itself will be subject to a CEMP which will include regulation of construction traffic. I do not

consider that any material planning issues arise and I note the acceptance of the planning authority in addition to the arrangements.

8.5.6. With respect to the permanent level of **car parking** proposed at the site the applicant states that the provision of 208 car parking spaces including 10 no. accessible spaces and provision for electric vehicles is sufficient to accommodate the peak parking demand for the site and is less than the maximum figure calculable under the development plan Table 12.8 for a data storage facility. In addition the applicant states that cycle parking is provided which is stated to be commensurate with the needs for the future staffing numbers. The design has taken into account and not exceeded the development plan requirements and for that reason I am satisfied that proposed car parking and cycle parking is acceptable.

8.5.7. The planning authority request for further information and the applicant's response together with the internal reports address a number of matters of detail. I am satisfied that there are no significant outstanding issues. I note and concur with the recommended conditions relating to 2m footpaths and cycleways, construction management, Road Safety Audits, provision of charging points, agreement on a Mobility Management Plan and in the event that permission is granted these should be attached.

I conclude that the development is acceptable in terms of roads and traffic issues.

8.6. Design and layout

8.6.1. The subject development having regard to its scale, height and 13 ha site will result in considerable landscape change and potential visual impacts. The subject development would be positioned at a large site and in an area where there is a dominance of heavy industrial uses to the west and south but where the context to the north and east is more sensitive. The existing houses along the eastern site frontage to be demolished as part of the proposed development. However at the opposite side of the road are some small-scale residential and commercial developments which would be sensitive to visual impacts associated with the proposed development which is of considerable height (28.6m to parapet level with ventilation shafts and lift core overruns to 32 m in height) and significant scale (overall floor area of 75,775 m^2).

8.6.2. I consider that it is evident from the application submissions in their entirety that the pre-application consultation phase and the consideration of the application by the planning authority have resulted in consideration of alternatives and resulted in suitable design modifications which have reduced the massing of the data hall buildings and enhance the elevational treatment.

8.6.3. The site layout provides for Buildings A and B to be set back from North Road to provide mitigation to visual impact and also noise emissions. This allows for the creation of a large, landscaped belt particularly along the eastern site boundary and also along the access road at the south and to the north adjacent Dog's Trust. Between the two main data halls and the eastern site boundary and number of smaller structures (water tanks and water treatment plant) are also located. Having regard to the emerging pattern of development in this area and the site zoning and taking into account the design and landscaping proposals, I consider that the development is acceptable in terms of landscape proposals and site layout. Indeed I would note that the design and character of the proposed development have emerged on the basis that the subject site is deemed to be within a transitional zone between the heavy industry to the west and the general employment lands to the east. The further information response submission of Henry J Lyons states that the proposed development represents an effective transition between the land use zones and I agree with this conclusion. Having regard to the heavy industry zoning which pertains to this large site I consider that more overtly industrial forms of development would not be deemed to militate against the achievement of the zoning objective.

8.6.4. The architectural design of the proposed development, which is considered in the report of Henry J Lyons and the EIAR has been subject of a number of iterations notably with respect to the layout of the site, massive buildings and external finishes. The revised photomontages submitted to the planning authority on 11 February 2022 show how the design evolved and include earlier iterations considered during pre-planning application consultations. I am satisfied that the modifications undertaken constitute an improvement. The external finishes which include bright reflective tiles of perforated metal sheeting were incorporated as screens at the flue as part of the further information response. This provides for a unified and aesthetically pleasing design approach. I consider that the design of the proposed development is

satisfactory and that the new development will make a positive contribution to the area.

8.6.5. Regarding the potential for impact on the dwellinghouses at the opposite side of the road I note as follows. The immediate context along North Road is defined by the landscaped belt along the perimeter. The presence of the large data centre buildings and associated infrastructure including flues will be evident in views along North Road and will change the character of the area. The applicant acknowledges that there will be long-term negative visual impacts associated with the proposed development. This conclusion needs to be read in the context of the assessment of visual impact set out in the report of Kevin Fitzpatrick Landscape Architecture which describes the existing views as having no significant aesthetic qualities. I consider that this is a reasonable description and, in this respect, I would reference the absence of specimen trees or prominently located buildings of architectural merit and the absence of protected views or landscapes of scenic amenity value. However there is an open expansive view which would be valued by local residents in the immediate area. The data hall buildings would be very prominent in this view were not for the proposed landscaping which includes berms and woodlands. As landscaping matures the level of screening provided will increase. I agree with the assessment that the negative impacts will reduce as the screening matures. Based on these considerations above I am satisfied that there are no further significant design modifications warranted and no reason to refuse permission or amend the proposed development.

8.6.6. In terms of the wider views I note that one of the photomontages assesses the view from the pedestrian flyover at the M50. This expansive view is over a largely industrial landscape which has no aesthetic value and the proposed development would read as continuation of the existing built landscape. This is assessed as a moderate and long-term negative visual impact but the area from which this expansive views offered is described as extremely limited.

8.6.7. I conclude that the development is acceptable in terms of its design and layout and that the landscape mitigation measures particularly along North Road will successfully mitigate any negative impacts.

8.7. Residential amenity

8.7.1. With respect to the impacts on the adjacent residential amenities I note that residents refer to the likely injury to residential amenity of the nearby dwellinghouses as a result of visual intrusion and overshadowing. The evening skyline will be permanently altered and the expansive open view which is currently enjoyed by residents will be obliterated. However, as I have addressed elsewhere a new landscape character will be put in place and I am satisfied that the proposals in this respect as well as the design and layout of the proposed data halls will mitigate any perceived adverse effects.

8.7.2. I dispute the alleged impact on daylight which is claimed by a local resident. I am satisfied that there would be no likelihood of such impacts on the basis of the orientation and the existing boundary features. I am not convinced that there is any potential for significant additional overshadowing of residential properties related to the data centre development.

8.7.3. I reference my earlier conclusions in relation to the site zoning wherein I concluded that the proposed development at this site which is zoned for heavy industry would not give rise to significant adverse effects following mitigation. This is relevant to the amenities of surrounding properties including the nearby dwellinghouses.

8.7.4. With respect to the potential for dust emissions I do not consider that there is potential for significant adverse effects except during the construction phase when some fugitive dust emissions are likely. I do not consider that a refusal of permission would be warranted for this reason. Similarly I note that while there would be potential for noise and disruption effects during the construction of the proposed development there is no indication based on the submissions of third parties, the site context and having regard to the mitigation in the EIAR, that there would be anything other than short-term effects of the type which would be associated with any development at this site. I note in this respect that vehicular traffic levels are not out of the ordinary for a site of this size and that the construction will involve standard construction methods and relatively limited earthworks.

8.7.5. I note the concerns set out by nearby residents in relation to the potential for noise effects from emergency generators. These will be used infrequently. In addition the data centre design sets standard noise criteria which will have to be met which will

include appropriate measures to minimise noise generated and to mitigate any effects on sensitive receptors. It is acknowledged in the EIAR that a low level of plant noise will be associated with the operation of the data centre. I consider that in the context of the existing noise levels there would not be a major change taking into account the distance between the proposed development and the residential receptors and the noise levels to which the development will adhere. I do not consider that the objection based on operational noise can be sustained.

8.7.6. I note that some of the concerns expressed are relevant only to the nearby bioenergy facility and not to this appeal.

8.7.7. I conclude that the proposed development is acceptable in terms of residential and related amenity effects.

8.8. **Other matters**

8.8.1. Huntstown Power Station is a lower tier **COMAH site**. The proposed data centre site is within the consultation distance and accordingly was referred to the HSA. An application report prepared by AWN Consulting addresses the land use planning implications arising and identifies the inner, middle and outer risk contours associated with the power plant where there are hazards associated with fuel oil, LPG and natural gas, which is most relevant to the substation site. The Planning Report states that the proposed data centre lies outside the Outer Zone and it is therefore concluded that the level of individual risk at the proposed development is acceptable. The AWN report notes that the Outer zone extends to the site – the contour barely overlaps the north-eastern corner of the site boundary but does not extend to the active parts of the site. I consider that the AWN report, which is based on the standard assessment method and was undertaken by a company with suitable expertise and track record in this sector can be relied upon for the assessment of risk from the power plant. The assessment involved the identification and modelling of the major accident scenarios, assignment of frequencies and the assessment of risk and generation of individual risk contours. The report concludes that the level of individual risk at the proposed development is acceptable. I am satisfied that the conclusions of the report can be relied upon. The HSA submission does not advise against a grant of permission. I conclude that the development is acceptable in terms of the land use planning requirements under COMAH.

8.8.2. With respect to the potential for biodiversity impacts I refer to **potential impacts on trees.** The Arboriculture Report submitted with the application report the total of 45 trees or groups of trees and 17 hedgerows which were subject to survey period the native hedgerow's and the shelter belts to the south-east and south-west are noteworthy. The category of trees and hedgerows is overwhelmingly category C according to the Arboriculture Report. The assessment notes that due to the scale and extent of works there would be a requirement to remove many of the trees and hedgerows. The planned replanting of native trees and hedgerows is stated to mitigate losses sustained period the report identifies the individual trees, groups of trees and hedgerows and six individual recommendations for their protection or removal as well as providing details relating to protection during construction. I am satisfied that the removal of trees and hedges does not constitute a significant biodiversity impact.

8.8.3. With respect to **biodiversity** in general, the presence of habitats or species of value within the site the on-site drainage ditches have been assessed in order to determine if they are significant water courses or streams which should be protected free from development in accordance with objective WQ05 of the development plan, which is to maintain these areas free of development. The conclusion presented is that these on-site ditches are man-made features which have intermittent character and due to their ephemeral nature, they have no fisheries value and they are unfavourable for amphibians. On site there are channels which will support water on a seasonal basis and thereby could offer potential breeding conditions for a smooth newt or be a habitat for common frog. However, no common frog or smooth newt was detected in the updated surveys of June 2022 and I accept the applicant's reasoning that the 1km distance to the quarry ponds, which is the nearest known newt habitat is too far for newts to travel. I note that the submission of Fisheries Ireland opposes infilling on site drains but provides no evidence of these features having any ecological value. I consider that it can be reasonably concluded that there is no requirement including by reference to objective WQ05 to prohibit the infilling of drains across the site.

8.8.4. During the consideration of the application by the planning authority the impact on bats was of concern. The updated bat survey report dated June 2022 re-assessed the subject 12.9 ha site which also contains two dwellinghouses and further examined the trees. There was no signs of bats in the houses which are to be

demolished or in trees which have already fallen or will be removed. The relevant databases in addition do not show any bat records near the site.

8.8.5. I consider that there is no indication of any significant adverse biodiversity effects which would warrant a refusal of permission or significant amendment to the scheme and I further address the topic below in terms of EIA.

8.8.6. Regarding **cultural heritage** and related effects, no significant issues arise. I have no objection to the demolition of the single storey dwelling houses located at the eastern side of the site. These are simple 20th century structures and in the context of the overall 13 ha site development their removal does not conflict with the proper planning and sustainable development of the area. There are no protected structures in the vicinity of the site. The main potential impact relates to archaeology at two locations within the data centre site. The geophysical surveying and the archaeological testing undertaken are reported in the EIAR. No features of archaeological potential were identified. The substation site itself has been subject to development and I accept the conclusion that the risk of subsurface archaeological features surviving is negligible. Archaeological monitoring will be required along the route of the north-south drainage channel which was not subject of geophysical survey or archaeological testing to date. There are no potential impacts on architectural heritage. I conclude that the development is acceptable in terms of archaeological, architectural incurred cultural heritage.

8.8.7. Having regard to the **proximity to Dublin airport** an assessment has been undertaken by the applicant of the aeronautical impact taking into account the overall height of the proposed structures and the potential for glint and glare impacting on aircraft. Part of the assessment is recorded in the ASAP Safeguarding Assessment report which refers to consultation with IAA. This assessment of building heights and locations concludes that there would be no impact on instrument flight procedures. On a separate matter, I note that the solar panels on the rooftop will be orientated so as to minimise glare to aircraft travelling overhead. In conclusion, I consider that sufficient assessment has been undertaken and that the operation of the airport will not be impacted by the proposed data centre. I would recommend that a standard condition relating to crane usage during construction be attached in the event that permission is granted.

8.8.8. Regarding the location of the site within the airport **Outer Noise Zone** this is relevant to health and safety at the facility and the matter is within the applicant's control and has been sufficiently addressed in the submissions.

8.8.9. The **Glint and Glare Assessment** report prepared by Macroworks considered the roof mounted photovoltaic (PV) panel installation on the roof of the data centre buildings. I have referred earlier to the impact on the operation of the airport which was deemed to be not significant and I now provide further background on this issue. The site is also located close to the N2 which is 200 m to the east and is 700 m north of the M50. The PV panels are stated to be fixed (non-rotating) and to be orientated to the south or west. The assessment methodology uses approved tools based on federal aviation administration methods which have been adopted for use by the Irish aviation authority. This is considered to be the accepted industry standard for considering glint and glare effects on aviation related receptors. The report considers the highest of the air traffic control towers and all six runway approaches including the recently proposed northern runway. Of these approaches to were considered to have the theoretical potential to receive glare which is at a level of intensity which is considered to be acceptable. There is no theoretical potential for glare at the air traffic control towers. The overall conclusion therefore is that there will not be any hazardous glint and glare effects on Dublin airport aviation receptors as a result of the PV panels. No assessment is done for effects on the national roads.

8.8.10. A submission on file from the EPA to the planning authority states that from the documentation it is not possible to determine if Class 2.1 of the EPA Act applies to the emergency generators. An IE licence is not required for the emergency generation provided it is not operating at greater than 50MW thermal input for more than 18 hours annually. No licence application has been received. This issue does not seem to have been conclusively resolved and it is therefore not clear whether the development would be subject of an IE licence.

8.8.11. Contrary to submissions made to by third parties, the CRU was notified of the application by the planning authority.

8.9. Conclusion

8.9.1. I conclude that the proposed development is not demonstrated to be compatible with the Climate Action Plan, is not in compliance with the Government Statement and that having regard to the conclusions drawn by the applicant it is not reasonable to describe the development as heavy industry. I therefore conclude that the proposed development is not in accordance with the proper planning and sustainable development of the area.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. The application submissions include an Environmental Impact Assessment Report which was revised during the course of consideration of the planning application in response to a request for further information. The revised report is entitled Environmental Impact Assessment Report (Addendum) – Development of two data halls and ancillary structures on lands adjacent to Huntstown Power Station, prepared by AWN Consulting, February 2022.

9.1.2. This section of the report comprises an assessment of the likely significant effects of the proposed development. It addresses compliance with legislation, describes and assesses the likely significant direct and indirect effects of the development against the factors set out under Article 3(1) of the EIA Directive 2014/52/EU. It considers cumulative effects and interactions and the vulnerability of the proposed development to major accidents and disasters.

9.1.3. Except where otherwise explicitly stated the statements below reflect my own conclusions which were reached following consideration of all documentation with particular reliance on the EIAR and all submissions.

9.1.4. There is considerable overlap between this section of this report and the EIA section of the concurrent application relating to the substation.

9.2. Compliance with Legislation

9.2.1. The legislation relevant for the purpose of considering whether the information contained in the EIAR is adequate is A94 of the Planning and Development Regulations 2001, as amended, and the provisions of A5 of the EIA Directive 2014.

9.2.2. The EIAR is in four volumes. Volume 1 comprises the non-technical summary. Volume 2 is the EIAR (Main Text). Volumes 3 and 4 comprise the appendices.

9.2.3. Following examination of these documents I consider that the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors:

(a) population and human health;

(b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;

(c) land, soil, water, air and climate;

(d) material assets, cultural heritage and the landscape

and equally considers the interaction between factors referred to in points (a) to (d).

9.2.4. In accordance with article 5 and Annex IV, the EIAR provides a description of the project comprising information on the site, design, size, characteristics and other relevant features as revised during the consideration of the application by the planning authority. It also provides a description of the likely significant effects of the project on the environment and a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment. The Addendum EIAR in particular addresses the cumulative effects arising including with respect to the planed substation subject of the concurrent SI application.

9.2.5. The EIAR provides a description of the evidence used to identify and assess the significant effects on the environment and the guidance which has been taken into account in its preparation. The EIAR provides an adequate description of baseline information used to identify and assess the significant effects on the environment. I consider that the documents presented are suitable and that the submitted detail of information in relation to the nature of the proposed works and the manner in which

the development will be constructed and operated provides a good basis for understanding and for assessment of likely significant impacts. Any difficulties which were encountered in compiling the required information are identified.

9.2.6. I note that an observers set out a range of considerations with respect to the EIAR and its adequacy and I have addressed some of the topics above including with respect to climate. The observers comments relating to the EIAR include:

- There has been a failure to comprehensively assess the role of data centres in the region and their impacts.
- The entirety of chapters should not have been updated in response to the further information.
- The noise conclusions with respect to there being no need for mitigation measures for noise along the regional road are not robust.
- Other matters which are considered below.

9.2.7. I disagree with the observer's objection to the manner of response to the further information and I consider that the use of track changes allows all parties to easily distinguish between the original submission and the additional information / amendments and that this approach provides for ease of public participation. While the approach taken makes for a lengthy document it is set out in a manner which allows for clear consideration of the two separate project proposals and the combined projects which is described as the Overall Development.

9.2.8. Regarding the adequacy of the EIAR I consider that it is based on high-quality data and relies on and uses recognised guidance and assessment methodologies. I am satisfied that the EIAR has been prepared by competent experts. I consider that the EIAR complies with legislative requirements and is sufficiently comprehensive and is up to date. In view of the lapse of time some of the biodiversity surveys were updated in response to the further information submitted.

9.2.9. My assessment below is based on the information provided by the applicant, including the EIAR and the submissions made in the course of the application. The response to the requested further information has also been considered.

9.2.10. I am satisfied that the information provided in the EIAR is adequate for the purposes of the Environmental Impact Assessment to be undertaken.

9.2.11. In the EIAR the term Overall Development is used to describe the entirety of the project namely the data centre and associated works subject of the planning appeal under ABP-313583-22 and the 220kV substation subject of the SI application to the Board under ABP-311528-21. The separate developments are subject of individual assessment for the purposes of EIA and also cumulative assessment.

9.3. Alternatives

9.3.1. There is a requirement under the 2014 EIA Directive that an EIAR include a description of reasonable alternatives studied by the developer and an indication of the main reasons for the selected option must be given. In the submitted EIAR alternatives are addressed in Chapter 4.

9.3.2. The EIAR considers the topic of alternatives including with respect to alternative locations, designs and layouts, processes and do-nothing.

9.3.3. The suitability of the data centre location is stated to relate to the co-location benefits, connection offer, short grid connection, transport network and the scale of the site. The Overall Development is considered to be an effective and appropriate use of the site and to comply with relevant policy, including zoning.

9.3.4. The design of the proposed data centre is stated to have evolved from a number of iterations which are stated to have determined the most efficient design and layout having regard to the surrounding site context, requirements of the end user and site constraints including power lines. Option 1 comprising three blocks were deemed to have significant adverse visual impact and in addition did not provide for a large enough site for the substation which had not been subject to detailed design. Option 2 proposed during pre-application consultations presented a reduced scale, massing and site coverage, retained the height of Option 1 but provided for increased setbacks from receptors and enhanced landscaping buffers. The visual impact was still considered to be negative and moderate but the additional space for landscaping was beneficial. Option 3 retained the general form, massing and siting of the previous option but with a slight increase in building footprint and design efficiencies and internal plant changes which significantly reduced water demand by incorporating a free air-cooling system. Option 4 incorporated the site of the two dwellinghouses at North Road thereby providing opportunities for perimeter berming

and enhanced visual screening. Revised external facades comprising a mosaic of square panels of varying depths and angles were included. Process water was reduced from 23,615m^3 / year (Option 3) to 4,842 m^3 / year and water storage on site was increased. Option 5 which was submitted in response to the further information request incorporated a change to the proposed flues to incorporate the same perforated metal sheets shown in the facades in Option 4.

9.3.5. Regarding alternative processes considered the siting is stated to avoid the need for new on-site power generation. The efficiency of the design of data centres is outlined with respect to the buildings. There is no flexibility to the applicant to select alternative processes for integration into the national grid. The substation will have to adhere to the requirements of ESBN with respect to the diversion of cables and the standard Eirgrid processes with respect to the substation. There was limited opportunity for alternatives due to the need to comply with relevant requirements and ensure an efficient and safe service.

9.3.6. The do-nothing alternative as relevant to the data centre site would mean that the objectives of the development plan are not met and the benefits of maximising use of the existing infrastructure by developing the site for a data centre would not accrue. I have discussed the zoning objective above in the planning assessment section of this report and I do not agree with the conclusion presented in the EIAR in relation to the centre. The applicant states that the lack of development of the substation would mean that there would not be increased strengthening and resilience of the network in the area – and no provision of facilitative infrastructure for the proposed data centre. I am in general agreement with this statement.

9.3.7. In the report above I have noted relevant public submissions. For the purposes of EIA I consider that the EIAR provides a comprehensive account of the alternatives which were considered. I am of the opinion that the information provided complies with the legislative requirements.

9.4. **Public participation.**

9.4.1. I have summarised earlier the observations received in relation to this appeal. There have been no requests for an oral hearing.

9.4.2. As set out in the EIAR the applicant's approach to public consultation did not extend beyond the minimum legal requirements. There were a range of meetings with the

planning authority in the form of pre-application meetings and with statutory bodies in relation to water supply and electricity grid.

9.5. Environmental Impact Assessment Overview

9.5.1.

9.5.2. The issues arising can be addressed under the following headings:

Population and Human Health

Biodiversity

Hydrology, Land, Soil, Geology and Hydrogeology

Air & Climate including Noise and Vibration

Landscape and Visual Impact

Archaeology, Architectural and Cultural Heritage

Material Assets including Waste and Roads and Traffic

Interaction of the foregoing

Transboundary Effects

Major Accidents and Disasters.

9.5.3. In considering the foregoing the Board should have regard to the other sections of this report.

9.6. Population and Human Health

Existing Environment

9.6.1. The submitted information shows that the socio-economic profile of the area largely follows national trends save for the fact that it is generally marginally below average under the deprivation index and is also an area of relatively high population and activity. The nearest residential site locations are one off houses to the south and east. The Dogs Trust facility has overnight staff accommodation. It employs 83 staff members and volunteers. Other employers include a home and garden centre, the power plant, the quarry and AD facility. The nearest schools are 2 km from the site.

Potential Impacts

9.6.2. The main potential impacts on population and human health are assessed in a range of relevant chapters of the EIAR and are separately considered therein and are now discussed in summary.

9.6.3. The data centre has potential air quality, noise, visual and traffic related impacts which could have consequences for human beings and human health.

9.6.4. There will be a positive economic impact due to employment (1050 construction and 181 full-time staff) as well as indirect positive impacts on the wider economy.

9.6.5. The data centre would result in adverse impacts on local amenity as a result of the change from an agricultural environment to a built environment.

9.6.6. The substation will have an imperceptible positive effect on local businesses during construction. It will have air quality, noise, visual and traffic related impacts. There would be no impact on local amenities or the local population and no noticeable long-term changes to landscape character.

9.6.7. As the data centre will require electric power supply from the national grid and this will be drawn directly from the national grid the applicant's submission in section 5.5.3 is that there is no anticipated impact on local businesses or business users. I accept this conclusion in general. However, the more significant matter is the potential for threats to security of supply in the wider region which the applicant states does not arise as indicated by the granting of a grid connection by Eirgrid. The EIAR does not contain an assessment of the impact of data centres as a subset of all developments in the region and I do not consider that this would be a normal part of the EIAR process.

9.6.8. The proposed development will not impact groundwater source protection zones. There are no significant population or human health impacts relevant to water as a result of the data centre.

9.6.9. The EIAR statement with respect to there being no impact from the data centre on mineral resources is accepted. It follows therefore that there is no impact on population by reason of loss or sterilisation of a mineral resource which might otherwise generate employment.

9.6.10. There are potential impacts on human health during construction of the data centre as a result of fugitive dust emissions, engine emissions and change in traffic flows on

adjacent roads and for air emissions during operation of the on-site emergency generators. Any dust impacts would be short-term, negative and imperceptible. Noting the contents of Chapter 9 and taking into account my comments below under the Air section, I do not consider that it is evident that there is human health impacts related to the emergency generators can be excluded. In Chapter 9 the applicant acknowledges that running of the emergency generators for over 33 hours per annum will breach air quality standards which are based on protection of human health and makes no commitments to mitigate this effect. On the other hand it is stated in Chapter 5 that the operation complies with the ambient air quality standards. The information in the two chapters appears contradictory.

9.6.11. There are potential impacts on human health during construction of the substation as a result of fugitive dust emissions, engine emissions and change in traffic flows on adjacent roads. Any dust impacts would be short term, negative and imperceptible.

9.6.12. There are potential impacts on human health from noise and vibration as a result of construction of the data centre. I consider that the assessment of noise associated with construction activities as negative, moderate and short term is reasonable based on the information presented in chapter 10 and I concur that the associated vibration levels are likely to be neutral, not significant and short-term. The long-term impacts on the nearest residential and commercial properties across the road would mainly arise due to operational traffic and would not be significant. As further considered later I do not consider that the operation of the data centre would result in levels of noise or vibration which would significantly impact the small local population or the operation of the businesses nearby including Dogs Trust.

9.6.13. The potential impacts on human health from noise and vibration as a result of construction of the substation would be not significant having regard to the items of plant that would be used and the location of the site which is remote from houses. Operational phase impacts as assessed in chapter 10 would be not significant, negative long-term impacts at the closest residences and businesses.

9.6.14. Regarding health impacts from traffic no significant construction or operation impacts are likely with respect to the data centre taking into account the site context and the pattern of development. With respect to the effect of additional traffic movements on human beings there will be short-term slight and negative impacts during

construction and long-term slight and negative impacts during operation as may be concluded from the information presented in Chapter 13.

9.6.15. With respect to the potential health impacts due to traffic associated with construction and operation of the substation I consider that predicted impacts would be short-term, neutral and not significant and long-term neutral and imperceptible.

9.6.16. The construction of the data centre has potential for impacts on the health and safety of workers during the construction phase. These activities will be subject to relevant legislation thereby minimising the likelihood of impacts on health and safety.

9.6.17. The construction of the substation will be undertaken in accordance with relevant health and safety legislation. There is potential for impacts on health and safety of workers during construction. The substation site is proximate to the power station which is a lower tier COMAH site. The HSA does not advise against a grant of permission. The relevant LUP risk contours for the outer and middle zone of the power station extend to the development site. The individual risk contours corresponding to the inner LUP zone does not extend to the development site and therefore the site is acceptable in accordance with land-use planning guidance under COMAH.

9.6.18. Having regard to the assessment presented in policy documents of the Eirgrid and ESB as well as the location of the site relative to residential development it may be concluded that there is no likelihood of potential impacts associated with electromagnetic fields from the data centre or the substation.

9.6.19. The demolition of two houses which fall within the data centre site would not have a significant effect on the housing stock available to the local population.

Mitigation

9.6.20. The construction of the data centre is of relatively short duration and it may be reasonably concluded that nuisance impacts on the receptors in the vicinity of the site will be short-term and temporary. The requirement for mitigation is stated to be limited to normal landscaping, noise and construction mitigation outlined in other sections of the report and implementation of a CEMP. The landscape and visual impacts which are of particular concern to local residents have been subject of a number of design iterations and the changed character is in line with the zoning of the site. Nearby residents have objected to the EIAR conclusions with respect to

operational phase noise which I assess further under the relevant topic. It may be concluded that (other than the air quality impacts noted below) no specific remedial or reductive measures are required for the operation phase.

9.6.21. No mitigation is proposed in relation to the breach of air quality standards which may occur in the event of the running of emergency generators. There is no assessment provided of any potential human health consequences.

9.6.22. Having regard to the pattern of development and the nature of the substation development it may be concluded that there is no requirement for additional remedial or mitigation measures to protect human health and population subject to implementation of the measures outlined in the individual chapters of the EIAR. This would include normal landscaping, noise and construction mitigation and implementation of a CEMP.

9.6.23. To minimise the potential for impacts on soils and geology as a result of the data centre a number of adopted mitigation measures are presented in the relevant chapter. It is reasonable to conclude that no significant impacts on natural resources or material assets would be anticipated. This means that there is no adverse effect on the local economy and the population reliant on employment.

Residual Impacts

9.6.24. I agree that the amenity of the Dogs Trust has been considered in the design and mitigation and that no significant residual effects are likely.

9.6.25. The proposed data centre will result in a positive, moderate and long-term impact in relation to increased job opportunities during construction and in the long-term.

9.6.26. The residual impacts related to the substation fall under the topics of air quality, noise and visual effects and are not relevant to local businesses.

9.6.27. There are no residual effects on population and human health as a result of noise and visual effects.

9.6.28. The applicant concludes that the overall development of the data centre and substation will have a residual positive, moderate to major and long-term impact due to job opportunities and accessibility to jobs during construction and operation. I largely accept this conclusion. However as the land is zoned and the nature of the

development is not intensive in terms of employment levels, I consider that the impact is moderate rather than major.

9.6.29. Having regard to the zoning of the site a business or industrial use or is envisaged and the experience of local residents in terms of the visual amenity of the datacentre has to be considered in this context. Taking into account the design of the development and the treatment of the eastern side of the site in terms of landscaping and the building line adopted, I agree with the conclusion presented that the impacts on local amenities will be neutral, not significant and long-term.

9.6.30. The substation due to its location will have an imperceptible impact which is neutral and long-term in terms of the population and human health.

9.6.31. Subject to compliance with the ambient air quality legislative limit values the impact of construction of the data centre will be neutral, imperceptible and short term with respect to human health.

9.6.32. The air quality impacts on human health as a result of the construction of the substation, subject to compliance as envisaged with the ambient air quality legislative limit values will be temporary and imperceptible and for the operation phase will be long-term and imperceptible.

9.6.33. The air quality of effects which were assessed in chapter 9 will meet relevant national and EU ambient air quality limit values and therefore not result in a significant impact on human health during normal operation. The impact can be assessed as negative, slight and long-term. There is an acknowledged breach of air quality standards related to the emergency generators which has not been properly assessed and in relation to which the residual effects are not described. The effects on human health relating to air quality have not been assessed fully either in Chapter 5 or Chapter 9.

Cumulative Impacts

9.6.34. I consider that it may be concluded that the residual impact of construction of the overall development will be neutral, imperceptible and short term with respect to human health having regard to the information presented in Chapter 9, the mitigation measures to be implemented during construction and the nature of the works.

9.6.35. Regarding the operation of the overall development taking into account the dispersal of emissions and subject to adherence to national and EU ambient air quality limit values it may be concluded that the residual impact is likely to be negative and short term with respect to human health. The EIAR has clearly indicated that adherence to national and EU ambient air quality limit values will not be achieved and the significance of the effect on human health cannot be assessed.

9.6.36. The cumulative impacts of the overall development together with any relevant existing or permitted developments during construction as relevant to human health relate mainly to potential for cumulative dust emissions and simultaneous construction of permitted developments within 350m. Relevant in this respect is the permitted developments relating to overhead power lines and the operation and restoration of Huntstown quarry. It is considered that taking into account the mitigation measures to minimise environmental impacts there is limited potential for cumulative impact on human health and no significant cumulative impact anticipated.

9.6.37. The cumulative impacts of the overall development with any relevant existing or permitted developments during the operation as relevant to human health relate mainly to air and noise. The nearby power station is a licensed facility under the Industrial Emissions Directive. The air emissions were assessed in the cumulative assessment in chapter 9. It is demonstrated that the limit values may not be met for the worst-case scenario. The consequences for human health needs further assessment.

9.6.38. Cumulative noise emissions from the overall development are predicted based on noise modelling to meet the adopted criteria. As the baseline assessment takes into account existing developments in the locality and there are no other permitted developments which are likely to be relevant to the noise assessment, the cumulative assessment scenario is predicted to be within the relevant noise criteria.

9.6.39. It is therefore concluded that there will be no significant cumulative impact associated with the operation phase of the permitted developments and the overall development subject to mitigation measures being implemented.

Monitoring

9.6.40. I accept the applicant's position that there is no requirement for monitoring in relation to population and human health.

Conclusion

9.6.41. In conclusion the main impacts relevant to the topic of population and human health are as follows. In the foregoing I have relied on some information and conclusions from some of the later sections in this report.

Positive moderate long-term economic impacts from increased employment as a result of the data centre which is facilitated by the substation.

Neutral moderate long-term effects on local amenities due to the change in the visual environment of the area which is the place of residence for a small population as a result of the construction of the data centre.

Short-term effects on human beings due to noise, air and traffic related disruption during construction of the data centre and substation, which will be mitigated by adherence to relevant guidance and measures in the EIAR.

Negative long-term air quality effects on human health as a result of the operation of the data centre and in particular the use of on-site emergency generators, which is facilitated by the substation.

Negative, slight and short-term air quality effects as a result of construction of the data centre.

9.7. Biodiversity

Existing Environment

9.7.1. The site is of low local ecological value as reported in the surveys undertaken.

9.7.2. The data centre site comprises farmland which is divided into six relatively small fields. The fields are bounded by relatively small hedgerows.

9.7.3. The substation site includes some brownfield lands adjacent the power station and some farmland.

9.7.4. Within the data centre site there are small drains which connect to a deep drainage ditch which bisects the substation site. This ditch is the main channel to take water from the overall site and it is intermittently hydraulically connected to Huntstown stream to the north.

Following a number of inspections of the large ditch within the substation site it is reasonably concluded that it has no fisheries value. The species recorded during the habitats survey do not include rare species. One area of Japanese knotweed identified in May 2019 was subject of a treatment programme in 2020.

With respect to fauna at the data centre site, the surveys targeted badgers, otters and bats, birds and amphibians. Two mature ash trees show bat roosting potential but no bats were recorded in the surveys which were updated in 2022. There were no signs of winter bird species, no signs of Peregrine Falcon and the breeding birds recorded included regular passerines. The drainage ditch surveys which were updated in 2022 did not find any common frogs or newts.

Regarding fauna at the substation site known badger setts or signs of otter were identified. Bat calls were recorded from the central east – west hedgerow (four number species in all). Bird species recorded included regular passerine is and there were no signs of winter bird species or Peregrine Falcon. The drainage ditches were deemed unsuitable for newt and frogs and none were recorded.

Potential Impacts

Impacts on habitats at the data centre site include loss of arable and modified grassland habitats which in terms of ecology would be considered a neutral and imperceptible impact. There will be a loss of 730 m of low value internal hedgerow while 1.7 km of hedgerow would be retained and conserved. Potential for downstream effects on surface water during construction could arise. There is no potential for impacts on badgers, otters or amphibians as a result of the construction. There are potential impacts on bats as a result of disturbance, loss of feeding and loss of potential roosting habitat is possible. There may be impacts on nesting birds as a result of vegetation removal.

At the substation site a minor loss of modified grassland habitats would not be considered to be significant in terms of ecology. There will be a loss of 150 m of internal hedgerow which is predominantly of low value. There are potential downstream effects on surface water which could be negative. There is no potential for impacts on badger, otter or amphibians. There are potential impacts on bats as a result of disturbance, loss of feeding and loss of potential roosting habitat is possible. There may be impacts on nesting birds as a result of vegetation removal.

Operation phase impacts at the data centre site resulting from deterioration in water quality could significantly impact on downstream habitats and species. Operational phase lighting could alter the behaviour of bats and their prey.

Operation phase impacts at the substation site resulting from deterioration in water quality could significantly impact on downstream habitats and species. Operational phase lighting could alter the behaviour of bats and their prey.

Mitigation

9.7.5. In order to mitigate potential impacts on birds the standard approach of avoiding cutting of vegetation within the nesting season is proposed. Felling of mature trees which may host bat roosts will be within the appropriate period and under supervision of a bat specialist. If roosting bats are confirmed to be present an application for a derogation licence will be made. The landscape strategy to be employed at the data centre site will provide for increased biodiversity as a result of the additional planting which is proposed. Further measures include native species rich treelines, wildflower meadows and hedgerow planting. Shallow sloping margins and native planting are to be installed at the edges of surface water ponds. Thus the EIAR indicates that the existing ecological corridors will be strengthened to support local wildlife and I accept this conclusion. Lighting design and control will minimise the extent of light spill.

9.7.6. Potential impacts at the substation site include standard measures to protect birds and bats, similar to those engaged for the data centre site. The landscape strategy relevant to the substation site includes enhancement and strengthening of existing hedgerows, retention of existing trees and planting of new native hedgerows. In this way the existing ecological corridors are stated to be strengthened and I accept this conclusion. Planting of woodland along the site boundaries and on earth and berms will create dense belts of native woodland which will act as habitat and form ecological corridors connecting with other landscape elements in the site. Light overspill will be minimised through design and control of operation.

Residual Impacts

It may be reasonably concluded that the residual impact on birds and bats after mitigation would be described as neutral, imperceptible and long term at the data centre site. While there will be a loss of relatively low value habitats including 730 m

of hedgerow these are low value habitats which are not host to rare flora or many mammals. The commuting and feeding habitats at the edge of the site would be retained and the ecological value enhanced through the planted areas proposed. Due to the retention of the outer perimeter boundary and having regard to the proposed lighting the original impact on bats is considered neutral, imperceptible and long term. The development of substantial green belts along the northern, eastern and southern boundaries and integration of surface water attenuation ponds, landscaping and planting is stated to be a positive, moderate and long-term impact. I would agree with this conclusion.

At the substation site the residual impact on birds after mitigation would be described as neutral, imperceptible and long term. Due to the retention of the outer perimeter boundary and having regard to the proposed lighting the impact on bats is considered neutral, imperceptible and long term. The development of substantial green belts along the northern, eastern and southern boundaries and integration of surface water attenuation ponds, landscaping and planting is stated to be a positive, moderate and long-term impact and I agree with this conclusion.

The conclusion set out above in relation to the positive, moderate and long-term impact arising from the green belts along the northern, eastern and southern boundaries is particularly important with respect to the overall development site.

Monitoring

Apart from the supervisory role of the bat specialist during the felling of trees there are no ecological monitoring proposals presented for the data centre or substation site. Subject to appropriate water quality monitoring this is acceptable.

Cumulative Impacts

I agree with the assessment undertaken in section 8.9.1 that during construction the potential in combination effects from the permitted underground cabling and the proposed overall development would be neutral and imperceptible having regard to the conditions attached to the extant permissions. I consider that this conclusion may also be drawn for the operation phase in combination effects. I consider that it is highly likely that the ongoing undergrounding of overhead cabling will in any case be completed prior to commencement of the proposed development.

Conclusion

9.7.7. In conclusion the main impacts relevant to the topic of biodiversity are as follows.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the data centre site as a result of landscape proposals.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the overall site as a result of landscape proposals.

9.8. Hydrology, Land, Soil, Geology and Hydrogeology

Existing Environment

9.8.1. The data centre and substation site hydrology are hydrologically interconnected. There is a series of shallow ditches which run along the field boundaries within the data centre site and which would be intermittent in nature. The site drainage would flow in a northerly direction towards Huntstown stream 800m to the north passing in the first instance through an internal ditch which is within the substation site. Huntstown stream discharges to the Ward River 6.6 km downstream which in turn discharges to Malahide estuary. The EIAR reports the most recent status recorded by the EPA in 2017 in the Ward River as 'good' at a location 1.2 km downstream from the merge with Huntstown stream. The hydrological features are classified as of local importance.

9.8.2. Within the site is a ditch which will have to be diverted and this will be undertaken in accordance with OPW guidelines to avoid flood risk. As considered under the planning assessment above I am satisfied that there is no flood risk associated with the development of the data centre or substation or the overall development.

9.8.3. I note the comments with respect to the connectivity to Malahide estuary, the limited potential for emissions and the likelihood of containment within the first 1 km of Huntstown stream. I agree that the hydrological connection to the estuary 9.5 km away is of imperceptible significance.

9.8.4. Site investigations show that the vulnerability of the data centre site is described as High (3-5m overburden) at the north-east of the site and Moderate (5-10m) throughout the remainder.

9.8.5. The substation site vulnerability is High and Moderate.

9.8.6. The Dublin Groundwater Body status is ‘good’. The bedrock and soil features are rated as of high importance. In the absence of wide use of the aquifer for public water supply the hydrogeological features at the data centre and the substation sites may be rated as of low importance. There are no wells drilled or springs at the site or surrounding area and the nearest recorded wells are 0.5 km to the east. The closest groundwater source protection zone is 10 km to the west.

9.8.7. Following analysis of soil samples the EIAR records clay subsoil, no fill material and no recorded contamination at the data centre site.

9.8.8. The conceptual site model presented in 6.3.16 records highly varied bedrock depth throughout the site and groundwater levels varying between 1.85 mbgl to the north-east and 4.07 mbgl to the west.

Potential Impacts

9.8.9. The potential for construction phase impacts due to both the construction of the data centre and the substation on the hydrological environment would relate to excavations, possible discharge of rainwater/dewatering and potential for spillages. As a result of these activities there is potential for increased sediment loading and contamination with pollutants associated with construction including hydrocarbons, wastewater and concrete and, if encountered, by contaminated soil.

9.8.10. In the operation phase the notable features of the data centre include the increase in hardstanding and the storage of substances within the datacentre, mainly related to the emergency generators and transformers, which will be situated at ground floor level within a generator compound which is an area of hardstanding. The risks to water would be low having regard to the mitigation for containment, delivery and distribution and the use of interceptors on the stormwater system. The surface water network would contain and convey surface water associated with the one in 100-year event and avoid overland flooding and provide for discharge at greenfield rates to Huntstown stream.

9.8.11. Cooling water drainage will involve pumping of flows to a water treatment plant and reuse of this water within the site. The process demand for the data centre is estimated overall as 4842.4 m^3 per annum and of this the 48-hour evaporative cooling demand is 2590 m^3. Irish Water has given confirmation of feasibility in relation to water and wastewater services for the overall development.

9.8.12. At the substation site there is potential for construction phase impact on the hydrological environment as a result of excavations, discharges of collected rainwater/dewatering and potential spillages of hydrocarbons and other substances. As a result of these activities there is potential for increased sediment loading and contamination with pollutants associated with construction including hydrocarbons, wastewater and concrete.

9.8.13. The key operational activities relevant to hydrogeological impacts are the increase in hardstanding, storage of hazardous material in bunded areas, the surface water management proposals for the site involving drainage into two separate sites catchments and foul drainage and water supply requirements. There is shown to be sufficient capacity to ultimately outfall to the Huntstown stream. The foul drainage from the substation building will be pumped off site into the adjacent data centre development private sewer and from there to the foul sewer on the R135. Water supply including for fire purposes will be provided from the data centre connection.

9.8.14. The relevant characteristics of the development of the data centre include excavation of 35,616 m^3 of material. An additional excavation of 12,045 m^3 is proposed for the substation development. The majority of material will be reused on site. A net import of suitable engineering fill of up to 81,929 m^3 for the data hall site and 5,000 m^3 for the substation development is estimated.

9.8.15. The planned earthworks for the data hall buildings will require excavations of up to depths of 3.5 mbgl and thus may encounter some localised areas of subsoil and bedrock and possible groundwater ingress. The proposed development will result in an overall increase in hardstanding of 8 ha at the data centre site.

9.8.16. The overall site will be served by two separate surface water drainage networks flowing to surface water attenuation ponds including one which is largely within the substation site and ultimately discharging to Huntstown stream 800 m to the north.

9.8.17. Storage of hazardous material is associated with the 29 emergency generators at each of the data halls within the data centre site.

9.8.18. The construction and operation phases of the data centre is as described in summary in table 6.6.

9.8.19. Having regard to the site investigation results it may be concluded that there is a low risk of encountering contaminated soils during construction of the data centre.

Bedrock will only be encountered towards the north-east of the site. Groundwater ingress can be expected and this will require localised dewatering during construction but the volumes will be low. The deepest excavation within the data centre site is 5 mbgl. There is potential for accidental spills and leaks including of suspended solids, concrete, hydrocarbons and wastewater and these may result in localised contamination of soils and geology within the data centre site. The potential for significant downstream impacts is considered highly unlikely as any emissions would be assimilated in the freshwater environment of the first 500 to 1 km of Huntstown stream.

9.8.20. At the substation site there is a low risk of contaminated soils being encountered during construction as confirmed by site investigation. Maximum excavation level would be 4 mbgl and bedrock would not be encountered at this depth. An estimated 12,045 m^3 of excavated soil will be generated and import of 5,000 m^3 of engineering fill required. Groundwater ingress would be expected where excavations below 4 mbgl occur but water volumes would be low. The potential for accidental spillages related to construction are as described for the data centre. The potential for downstream impacts is considered highly unlikely.

9.8.21. The loss of agricultural soil is considered to be small in the context of the overall region and the site is zoned for development. There will be no impact to mineral resources in the area.

9.8.22. During the operation phases no discharges to ground or water abstraction are associated with the data centre. The source of process water is from the mains and with provision for on-site storage. There are no issues with the provisions of an adequate supply having regard to the requirements of Irish Water.

9.8.23. Storage of potentially polluting material will be in suitable tanks and bunded areas. Accidental discharges would be likely to be contained by the hardstanding areas and drainage infrastructure. The increased hardstanding of 8 ha will have a minor effect on recharge of water due to the use of SUDs techniques and the impact on the overall groundwater regime will be insignificant.

9.8.24. During operation of the substation there is no requirement for bulk fuels or chemical storage or for discharge to ground or abstraction of groundwater. Accidental spillages are likely to impact the stormwater drainage and to be contained and

mitigated through petrol interceptors. The increased hardstanding area of 2245 m² will have a minor effect on local recharge considering the limited scale of the area.

Mitigation

9.8.25. The employment of the CEMP as relevant to mitigation for land, soil and hydrogeology is relevant also to hydrology due to the interrelationship between these environmental resources. Mitigation relevant to the surface water environment during construction of the data centre is outlined in section 7.6.1.2 and includes discharge of construction water to the foul sewer (if required), silt reduction measures, hydrocarbon interceptors, discharge after monitoring of small quantities of groundwater and collected rainfall to the stormwater sewer network. Consideration of weather conditions will be undertaken to minimise risk of run-off and the distance of topsoil piles from surface water drains. A range of standard measures relevant to fuel and chemical handling are outlined including with respect to undertaking of a risk assessment for wet concrete. Ongoing inspections will be made to detect contaminated soil.

9.8.26. Similar measures are presented with respect to the construction mitigation for the substation site including the adoption of a CEMP and measures relevant to surface water run-off, fuel and chemical handling and soil removal and compaction including separation and suitable disposal of any identified contaminated soil.

9.8.27. The operational phase mitigation for the data centre as described in the EIAR essentially requires the implementation of an Environmental Management Plan and application of proper environmental procedures throughout the site including with respect to fuel storage. Discharges to the sewer will all be in accordance with the licence requirements of Irish Water. Regarding stormwater and foul sewer drainage design measures incorporated include measures to minimise the likelihood of spills entering the water environment, including from refuelling areas and car parks.

9.8.28. Regarding the operational phase of the substation there is no requirement for bulk fuels or chemical storage and no requirement for discharge to ground or abstraction of groundwater. The installation of petrol interceptors as part of the SUDs will ensure capture of oil or hydrocarbon contamination prior to discharge. The site will be operated in accordance with the ESB networks EMS and there will be a comprehensive emergency response and standard operating procedures.

9.8.29. Within the overall development site there will be full attenuation for the increase in hardstanding area in accordance with the requirements of the GDSDS as well as measures put in place to minimise the likelihood of spills entering the water environment including with respect to the design of the car park and fitting of hydrocarbon interceptors.

9.8.30. The Construction Environmental Management Plan which is included in Appendix 6.5 of the EIAR contains mitigation measures to be implemented. This will be a live document and will include all mitigation measures outlined in the EIAR and planning conditions and will be formulated in accordance with best international practice. During works control of soil excavation will be in accordance with best practice and all soil and aggregate to be imported will be from suitable vetted suppliers. All fuel storage will be in bunded areas and refuelling practices will include use of a designated area away from surface water gullies drains. Ready mixed concrete will be brought to site by truck wash down and wash out will take place at an appropriate off-site facility. The control of water during construction will be as described in 6.6.1.5 and will include measures to minimise erosion and deal with any required localised pumping.

9.8.31. At the substation site to reduce impacts on soils and geology measures which will be adopted will include control of soil excavation and export, fuel and chemical handling and control of water during construction. A CEMP will be adopted as the main mitigation measure and will remain a live document. It will incorporate requirements and standards to be met during construction and include the relevant mitigation outlined in the EIAR.

9.8.32. During the operation of the data centre the potential for accidental discharge related to the emergency generators and diesel fuel belly tanks will be contained by the on-site drainage network and associated hydrocarbon interceptors installed as part of the SUDs and these will capture potential oil or hydrocarbon contamination prior to discharge. An Environmental Management Plan will apply during the operational phase incorporating mitigation and emergency response measures.

9.8.33. During operation of the substation there would be no requirement for bulk fuels or chemical storage and no requirement for discharge to ground or abstraction of groundwater. The risk of accidental discharge arises but can be contained by the

hardstanding area and retention interceptors before discharge to the attenuation system. Emergency response procedures will accord with ESBN requirements.

Residual Impacts

9.8.34. I accept the assessment in the EIAR which concludes that the predicted residual impacts on the hydrological environment would be short-term, imperceptible and neutral and that the same conclusion can be drawn for both the data centre and the substation sites and the combined development for the construction phase. I find that this conclusion is robust taking into account the nature of the site conditions and the construction involved in the development of the data centre and substation and I conclude that there can be considered to be a high likelihood of successful implementation of the mitigation measures which are described.

9.8.35. With respect to the operational phase taking into account the nature of the data centre and substation operations the predicted impacts on the hydrological environment can be mitigated and the residual impact will be long-term imperceptible and neutral for the individual developments and the overall development.

9.8.36. There is no evidence to support any concerns which are expressed by third parties in relation to the usage of water for the operation of the data centre. In this respect I note also that the consideration of alternatives by the applicant has significant reduced the requirements for process water.

9.8.37. Following mitigation the applicant's assessment is that the predicted impact on hydrology, land, soil, geology and hydrogeology as a result of construction of the data centre will be short-term, imperceptible and neutral. I concur with this conclusion having regard to the information provided relating to the receiving environment, the nature of the proposed development including the depth of excavation, the standard construction techniques involved and the mitigation measures which are described.

9.8.38. Following the implementation of mitigation measures and during the construction of the substation the predicted impact on land, soil, geology and hydrogeology can also reasonably be assessed as being short term, imperceptible and neutral for the same reasons.

9.8.39. With respect to the operational impacts the potential for impact on lands, soils geology and hydrogeology are limited to spillages associated with the generators

and diesel at the data halls and this would be regulated by an Environmental Management Plan incorporating mitigation and emergency response measures. I consider that the conclusion of a long-term, imperceptible and neutral impact is reasonable.

9.8.40. Regarding the operation of the substation there is limited potential for accidental discharge as there is no requirement for bulk fuels or chemical storage. Any accidental impact would be mitigated by the stormwater drainage system and implementation of an Environmental Management Plan incorporating mitigation and emergency response measures and following these it is in my opinion reasonable to conclude that the residual impact would be long-term, imperceptible and neutral.

9.8.41. With respect to the overall development subject to the implementation of mitigation measures outlined the residual impact during the construction phase would be likely to be short-term, imperceptible and neutral and during operation to be long-term imperceptible and neutral. I consider that this conclusion may be accepted.

Monitoring

9.8.42. Monitoring during the construction phase as described in the EIAR is of standard nature for both the data centre and substation sites. Monitoring will be required to ensure that surface water run-off and sediment controls are operating successfully. Also, regular inspection of activities involving concrete pouring and refuelling will be undertaken as well as inspections to ensure that no contaminated soil is present.

9.8.43. In the operation phase the maintenance of the surface water drainage system and foul waters will be undertaken. There would be no requirement for groundwater monitoring but there will be a requirement for maintenance of the surface water drainage system including the hydrocarbon interceptors and foul sewers. No measures are required in relation to flood risk or water abstraction.

Cumulative Impacts

9.8.44. During the construction of the overall development the applicant's submission is that the potential for cumulative impacts due to contaminated run-offs to local surface waters is low because of the week indirect hydrological connection to the local drainage network and onto Huntstown stream and the Ward River. I consider that this conclusion is reasonable. In the event of overlap between the construction phases of the data centre and the substation and the undergrounding of cables there

is potential for cumulative impacts which are assessed in the EIAR as being neutral and imperceptible. I accept this assessment noting the limited scale of the underground cabling works, the likelihood that these will be undertaken prior to the substantive development in any case and having regard to the planning conditions attached to the relevant permissions.

9.8.45. Huntstown quarry is in a separate catchment and there is no potential for in combination effects due to the lack of hydrological connections. It may be reasonably concluded that there is no cumulative impact on surface water status as a result of the conclusions drawn earlier in relation to the overall development. Subject to implementation of mitigation measures as described including management of water quality run-off it can be concluded that there would be a short-term neutral imperceptible residual impact on hydrology relevant to the construction phase of the overall development.

9.8.46. With respect to the operational phase there is no potential for increased flooding due to the compliance with the GDSDS and provision of suitable attenuation on site. Apart from Huntstown quarry there are no significant existing or permitted projects capable of a significant cumulative impact on the hydrological regime. There is no likelihood of cumulative impacts as a result of the water supply requirements and foul drainage loading from the overall development. It may be concluded that the residual cumulative impact on water and hydrology for the operation phase is long-term neutral and of imperceptible significance.

There is limited potential for cumulative impacts associated with the undergrounding of cables which has been permitted within the site and in relation to which planning conditions have required measures to minimise environmental impacts. There is potential for a neutral and imperceptible cumulative impact according to the EIAR, which is a reasonable conclusion. I consider that it is highly likely that the ongoing undergrounding of overhead cabling will in any case be completed prior to commencement of the proposed development.

9.8.47. The EIAR also notes the dewatering occurring at the quarry 300 m to the west and that this is likely to have a local influence and groundwater flow. Having regard to the limited depth of excavation associated with the data centre and substation projects and limited anticipated dewatering it is reasonably concluded that no cumulative

effects on the groundwater regime would be anticipated due to the operation of the quarry and construction of the data centre, the substation or the overall development. Again, I consider it is reasonable to conclude that the cumulative impact would be neutral and imperceptible as stated in the EIAR.

9.8.48. With respect to the operation phase potential cumulative impacts could be associated with the overall increase in hardstanding and the associated reduced recharge to ground and increase in surface water run-off and from accidental spillages of potentially contaminating material. No activities within the operational phase of the overall development would further impact in cumulative terms with the dewatering effect of the quarry. The power station is regulated and incorporates design measures to prevent contamination of groundwater or soil environment in the event of accidental releases of fuel. I concur with the assessment in the EIAR that there will be no cumulative impact to groundwater quality and that the overall development would have a long-term, imperceptible significance with a neutral impact on soil and water quality.

Conclusion

9.8.49. In conclusion the main impacts relevant to the topic of hydrology, land, soil, geology and hydrogeology are as follows.

Short-term effects on hydrology, land, soil, geology and hydrogeology during construction which can be mitigated by measures including the implementation of a Construction Environmental Management Plan resulting in an imperceptible residual effect. This is relevant to the data centre and substation individually and to the overall development.

Potential long-term effects on hydrology, soil and hydrogeology during the operation of the data centre in the event of accidental spillages, which will be mitigated by the incorporated design features which will contain potential pollutants and by the implementation of an Environmental Management Plan and will be imperceptible. This is particularly relevant to the operation of the data centre but has relevance also to the substation and the overall development.

9.9. Air and Climate including Noise and Vibration

9.9.1. Air and Climate

Existing Environment

9.9.2. The environs of the site include a number of heavy industrial uses and there is a relatively high use of adjacent roads by HGVs. There are a number of sensitive receptors in the area which would be susceptible to dust and vibration effects if they occurred including residents and the animal welfare facility.

9.9.3. The existing air quality information presented is that levels of relevant compounds and particulars are well below national and EU ambient air quality standards.

9.9.4. A submission on file from the EPA to the planning authority states that from the documentation it is not possible to determine if Class 2.1 of the EPA Act applies to the emergency generators.

Potential Impacts

9.9.5. The proposed development by reason of the large scale of the data centre construction site has the potential to give rise to significant dust impacts during construction. The particular activities relevant would include excavation works, infilling and landscaping activities and storage of spoil and demolition of 2 no. dwellinghouses all of which could adversely impact the amenities of the limited number of nearby residential properties for the duration of construction. The greatest impacts would be experienced within 50m of the site of deposition but impacts at up to 350m are possible. Based on the location of the houses there is ‘low’ potential for adverse effects due to dust.

9.9.6. During the construction phase there is also potential for impacts associated with vehicular traffic emissions.

9.9.7. The assessment of the data centre operational air quality impacts involved air quality modelling in accordance with recognised approaches and guidance. The worst-case scenario involved the running of all 56 diesel operated emergency generators. The combined effect of the nearby power plant was also taken into account. Modelling of different stack heights was undertaken to assess dispersion effects. The results of this assessment showed that in the event of the worst-case scenario described there

would be exceedances of the ambient air quality standards in the event that the standby generator is operated for over 33 hours.

9.9.8. The character of air quality impacts associated with the construction of the substation would be similar to that of the data centre site but the significance of effects is reduced by reason of the greater separation to residential development.

9.9.9. There are no significant air quality effects associated with the substation in the operation phase.

9.9.10. There is potential for indirect, long-term negative impacts on climate.

9.9.11. The baseline environment described with respect to climate includes EPA data on national emissions and the likelihood of exceeding EU targets. I accept the conclusion drawn that the potential impact on climate change and transboundary pollution from the construction of the datacentre and the substation individually and in combination would be short-term and imperceptible in relation to these EU targets for national emissions.

9.9.12. During operation of the datacentre the EIAR addresses climate effects under section 9.5.2.2 which states that the electricity supplier for the site holds a CRU certified fuel mix disclosure guaranteeing every megawatt-hour that they supply in the market is from renewable sources. This statement is not contained in any other part of the application documentation and does not seem compatible with the sourcing of electricity from the adjacent gas-fired power plant. In the event permission is granted the Board may wish to query this matter. I consider it appropriate to rely on section 9.7.2.2 in terms of the climate impacts of the operation of the datacentre. This provides information based on the national fuel mix and translates the amount of CO2 equivalent per year as have been described under the planning assessment above. This concludes that there would be an indirect, long-term, negative and slight impact on climate without mitigation. There are no significant direct climate impacts due to the operation of the proposed substation.

Mitigation

9.9.13. As mitigation for air quality impacts which are likely during the construction of the data centre the applicant proposes to employ standard mitigation techniques including good site planning and management and other standard dust minimisation

measures. A performance measure will be developed to ensure that the plan is successful.

9.9.14. During normal operation of the data centre there is no need for further specific mitigation measures as the stack height has been selected to ensure that air emissions are sufficiently dispersed so as to comply with relevant standards. In the event of the running of emergency generators for over 33 hours air quality standards would be exceeded and no mitigation is provided by the applicant in respect of this impact other than to state that UK guidance recommends there should be no running time restrictions placed on backup generators which provide power on site only during an emergency power outage.

9.9.15. There requirement for mitigation related to the construction of the substation is limited to standard measures as presented for the data centre. There are no requirements for mitigation relevant to the operation of the substation.

9.9.16. The applicant submission is that by the use of the proposed offsetting arrangement there will be a mechanism to secure additional renewable energy generation which will offset the power consumption for the data centre and will mitigate the climate impacts.

9.9.17. **Residual Impacts**

9.9.18. Following on from my earlier discussion relating to human health and the considerations above relating to use of the emergency generators I conclude that there is potential for adverse long-term residual air quality effects.

9.9.19. Following earlier discussion under the planning assessment section of this report I accept that the offsetting mechanisms which are planned could constitute mitigation leading to a reduction in climate impacts. However, my conclusion is that the climate impacts would not be offset in their entirety and that there is potential for significant adverse effects including in the detail of those arrangements and the grid connections agreement and therefore the migration is uncertain.

9.9.20. The licencing of the project by the EPA, if undertaken, could result in reduction of residual air quality effects but there is uncertainty in relation to this process.

Conclusion

9.9.21. In conclusion the main impacts relevant to the topic of air and climate are as follows.

9.9.22. Potential for adverse residual air quality effects related to the operation of the emergency generators. I note the EIAR conclusion that the impact on human health related to air quality is long-term, slight, negative but this is based on the conclusion that the relevant air quality limit values are complied with, which is not demonstrated.

9.9.23. Potential for significant adverse climate effects which will be mitigated by the provision of offsetting renewable energy resulting in a residual effect on climate.

9.9.24. **Noise and Vibration**

Existing Environment

9.9.25. The receiving environment includes a limited number of noise sensitive receptors at locations proximate to the site of the data centre. Background noise levels are dominated by traffic and are high. The levels of traffic at the adjacent roads to the east and south of the overall site would include significant numbers of HGVs and observers describe noise and vibration effects from the existing developments which are attributed to nonadherence to existing speed limits.

9.9.26. The site context of the substation site is somewhat at a remove from noise sensitive receptors.

Potential Impacts

9.9.27. The construction of the data centre will result in typical construction activity related noise on the site and works will be undertaken in general in daytime hours with occasional weekday or evening works. The plan is to ensure that evening activities will be managed by reducing the amount of work undertaken. In the daytime hours during construction there is potential for significant levels of noise from traffic and the works on site as well as for vibration which would be associated with heavy vehicles travelling on roads proximity to sensitive locations. Based on the nature and location of the work and taking into account the plant which will be used there is no potential for significant impacts except at the Dogs Trust in relation to site preparation works. Potential construction noise at this location are predicted to be 58 to 68 $dBL_{Aeq, 1hr}$ which is not out of keeping with the ambient levels at this location.

9.9.28. With respect to the noise -related impact of vehicle traffic this is of concern to 3rd parties who comment on the existing effects and referenced the lack of adherence to speed limits. The submission in the EIAR notes that for there to be a 1dB noise

increase there would have to be an increase in 25% of traffic volumes, and on that basis there will not be a significant noise impact. I agree with this conclusion.

9.9.29. Overall it may be concluded that the likely noise impacts associated with the construction on the site would be negative, moderate and short-term. I accept this conclusion which is presented in the EIAR are based on the existing conditions, the adherence to daytime working hours and the measures set out relating to weekend working or evening working, if required, which can be subject of further agreement in the final CEMP.

9.9.30. Regarding the construction impacts due to vibration it may be concluded that vibration impacts would be neutral, not significant and short-term. This conclusion presented in the EIAR is robust based on adherence to relevant TII guidance and allowable vibration limits and also having regard to the nature of the works which comprise standard construction methodology.

9.9.31. Relating to the construction of the substation this will involve typical construction activity and will primarily be undertaken during daytime hours on weekdays and on Saturday mornings with occasional weekday evening works being possible. There is potential for generation of significant levels of noise from the construction and from the flow of vehicular traffic. Traffic movements along the roads will give rise to vibration effects at sensitive locations proximate to the road. The baseline environment is dominated by heavy traffic and roads in the vicinity and noise levels are high. No items of plant would be expected to give rise to noise levels in exceedances of those in the area and on that basis construction noise impact can be deemed to be not significant based on relevant guidance.

9.9.32. The operation of the data centre will introduce additional building services plant and additional traffic on the existing roads. Modelling for three different scenarios including the day-to-day, emergency situations and generation testing is undertaken. The modelling undertaken includes the substation development in terms of the noise predictions presented. The results of the modelling scenarios is presented in the form of noise contour maps. When compared with the relevant daytime noise criteria all locations are within the relevant limits. I note that the text of the EIAR refers to the predicted levels at the nearest commercial operations. It is clear from the noise contour maps that the residential locations will not experience noise levels which

exceed the adopted criteria. It is also confirmed in the assessment that there are no tonal noises associated with the facility. I note that some of the assessment scenarios cover very short durations. Table 10.19 presents a review of the predicted changes in existing noise levels and based on the EPA glossary of impacts all of the changes in noise level are imperceptible.

Mitigation

9.9.33. The outlined mitigation measures for the construction and operation phases of the datacentre and substation include adherence to standard guidance on the control low noise and vibration from demolition and construction and implementation of practicable noise control measures such as selection of low noise generating plant and erection of barriers as necessary. Similar measures are presented for the data centre and the substation during construction.

9.9.34. A noise and vibration management plan is presented in Appendix II 10.4 and this states that mitigation measures should be implemented where necessary in order to control impacts to nearby sensitive areas within acceptable levels. It sets out general parameters as to how this can be achieved including with respect to screening and monitoring.

9.9.35. In the operation phase mitigation for the datacentre includes minimising noise from external plant by careful selection of generating equipment and suitable design of attenuators for stacks and exhausts.

9.9.36. There is no requirement for traffic -related mitigation measures associated with the datacentre or the substation having regard to the limited additional traffic which will be generated.

9.9.37. The operation of the substation will not give rise to significant noise or vibration and no mitigation measures are required.

Residual Impacts

9.9.38. It is relevant to note that the residual noise impacts will vary including as the construction of the data centre reaches higher levels and having regard to the fact that one data hall is likely to be operational while the others being constructed and other factors. I accept the overall conclusion however that while noise impacts on sensitive receptors will occur it is demonstrated in the application documents that

there would not be a significant impact at residential locations following implementation of the outlined mitigation measures.

9.9.39. During construction of the substation following mitigation the noise and vibration impacts would be not significant, negative and short-term. At this time the datacentre development site will be the main noise sources for the sensitive receptors to the east and north of the site.

9.9.40. In the operation phase ambient noise levels associated with the nearby heavily trafficked road network will continue to dominate the acoustic environment but there will also be audible levels of plant noise, notably when there is a lull in traffic noise. I accept the conclusion presented that the character of the noise environment in the vicinity of the data centre will not change and that the residual impact due to operation of the datacentre on sensitive receptors would be negative, not significant and long-term. A commitment is given to ensure that the adopted criteria is not exceeded at the façade of any nearby noise sensitive locations. This is a critical measure and it addresses the comments made by third parties.

Cumulative Impacts

9.9.41. The EIAR has assessed the noise and vibration impacts from the datacentre and substation facilities on a cumulative basis including with respect to the noise modelling undertaken. I consider that there is no likelihood of significant cumulative noise or vibration effects with other developments.

Monitoring

9.9.42. Two important monitoring initiatives are presented in the EIAR. During the construction phase noise and vibration monitoring at critical locations will be done as part of the construction noise and vibration management plan which is to be developed and which is presented in the draft.

9.9.43. During the commissioning of the data centre a commissioning noise survey is considered appropriate to ensure that relevant noise criteria are complied with.

9.9.44. Similar measures are outlined during the construction and commissioning of the substation.

Conclusion

9.9.45. In conclusion the main impacts relevant to the noise and vibration impacts are as follows.

9.9.46. Construction noise and vibration impacts from the data centre which will be managed under a Noise and Vibration Management Plan, implementing best practice and which will not exceed standard adopted criteria and may be considered to be slight, negative and temporary impacts.

9.9.47. A low level of plant noise associated with the operation of the data centre which in the context of existing noise levels is expected to be in audible and would be deemed to be negative, not significant and long-term impact.

9.9.48. The substation noise and vibration impacts are less significant.

9.10. Landscape and Visual Impacts

Existing Environment

9.10.1. The highly varied site context has been described above and includes major roads, large-scale heavy industrial uses, electrical infrastructure and small commercial and residential uses as well as farmland. The subject data centre site is dominated by grassed fields. Part of the substation site is brownfield. Trees and hedgerows contribute to the landscape character of the site as viewed in particular from the regional road. The trees are not visually prominent except in the context of the otherwise featureless and flat site character. I agree with the statement presented that the subject lands has no inherent aesthetic qualities of note. No specific landscape development plan policies are relevant to the site or wider landscape.

Potential Impacts

9.10.2. The data centre will result in significant landscape and visual impacts as a result of the removal of trees and vegetation and the introduction of features associated with construction and creation of a new landscape with new largescale buildings and structures. As part of the development there will be landscape and visual impacts due to the introduction of a new landscape involving significant belts of native woodland on undulating earth berms.

9.10.3. The significance of landscape and visual impacts at the substation site are relatively limited due to the location, size and character of that site and the scale of the proposed development.

Mitigation

9.10.4. The data centre mitigation measures are incorporated in the proposed development and have evolved through discussion with the planning authority and consideration of a number of design iterations for the data centre building as well as the incorporation of earth modelling and large tree planting which will provide a high level of visual screening. Construction phase mitigation will include protection of trees and vegetation. Visual impacts affecting residential properties nearby will be mitigated including by consideration of lighting effects and operation of a well-managed site. In the operation phase the main mitigation measures include management of new planting.

9.10.5. The screening of the substation site is stated to have derived from the measures which are incorporated in the data centre landscape strategy. Visual impacts will be mitigated including by consideration of lighting effects and operation of a well-managed site. In the operation phase the main mitigation measures include management of new planting.

Residual Impacts

9.10.6. I agree with the overall conclusion presented that the operation of the data centre while it will give rise to a notable change in landscape character which would be perceived as negative in the short term would following implementation of the landscape plan be acceptable as any negative visual impacts on residents would be reduced and a new landscape character formed. The applicant provides an assessment of visual impacts from specific locations in the form of photomontages and this explicitly addresses visual impacts. The general conclusion is that the predicted impact at the construction phase is a negative visual impact and during operation as the woodland screening matures the negative impact reduces. In terms of the building design iterations which were undertaken the conclusion presented in general is that there is no change to the visual impact and this conclusion is in my opinion indicative of the approach taken in the overall chapter which is precautionary with respect to the landscape and visual impacts.

9.10.7. With respect to the substation the removal of vegetation and change of landscape type are described as resulting in negative long-term effects of moderate significance which I consider is a reasonable assessment. When considered in isolation the substation would be viewed against the backdrop of the power station.

9.10.8. With respect to the overall development the residual impacts for the construction phase will be not unlike those for the data centre. I concur with the assessment that there would be negative short-term landscape and visual impacts of moderate significance. The overall development will alter the landscape character and existing views and visual amenity in the area consistent with emerging trends. I agree with the applicant's conclusions that the visual impact of the new landscape will be positive, significant and long-term while the introduction of the new built structures would result in negative long-term visual impacts of moderate significance.

Monitoring

9.10.9. Monitoring proposals presented by the applicant are in the form of construction site management and protection of existing trees and maintenance of the planned landscaping. No further measures would be needed.

Cumulative Impacts

9.10.10. Apart from the consideration of the overall development above I do not consider that the permitted undergrounding of cables, or any other development would result in a different conclusion with respect to landscape or visual impacts.

Conclusion

9.10.11. In conclusion the main impacts relevant to the topic of landscape and visual impacts are as follows.

Positive significant long-term impacts due to the introduction of new landscape features associated with the data centre and the overall development.

Negative long-term visual impacts of moderate significance due to the introduction of the new buildings associated with the data centre site.

9.11. Archaeology, Architectural and Cultural Heritage

Existing Environment

9.11.1. Utilising a 1.5 km study area the EIAR presents an assessment of archaeological, architectural and cultural heritage landscape. While there are a number of recorded archaeological sites within this zone, I agree with the EIAR conclusion that none of these will be directly or indirectly impacted. The lands between the regional road and the large internal ditch (which encompasses all of the data centre site and the greenfield part of the substation site) was subject of geophysical survey which identifies the probable remains of an oval enclosure and possible remains of other ploughed damaged archaeology. Following that the same lands were subject to archaeological testing which confirmed the presence of an enclosure and associated linear features and pits. A further detailed programme of pre-development archaeological testing was undertaken under licence within the lands available, which constituted the majority of the data centre and substation sites.

9.11.2. There are no architectural resources or cultural heritage landscapes within the vicinity of the data centre or substation sites at locations where there is potential for impacts.

Potential Impacts and Mitigation

9.11.3. The site of the data centre will be affected only - no previously unrecorded features were identified during the geophysical survey and archaeological testing of the eastern portion of the substation site and the remainder has been previously developed in the past. The full archaeological resolution of the remaining lands will have direct, negative and profound impacts on subsurface archaeological features. The overall impact can be considered to be neutral and not significant following full excavation and reporting as it will add to academic knowledge. The approach in the EIAR and the conclusions drawn are in keeping with accepted practice and understanding relevant to archaeology and I accept the conclusions.

9.11.4. For the construction phase mitigation measures are set out in section 12.6.1 in relation to the data centre site. And archaeological monitoring brief should be implemented at Field 1 (which holds the drainage channel which runs through the substation site). Two areas which are defined as archaeological area one and area two (figure 12.11) will require archaeological excavation and preservation by record

of features, deposits or structures identified. This will be undertaken under licence to the National Monuments Service.

9.11.5. There is no likelihood of architectural or cultural heritage impacts at the site of the datacentre or substation.

Cumulative Impacts

9.11.6. The cumulative impact of the overall development is considered neutral and significant. Previously unrecorded archaeological features which have been discovered will be fully excavated under licence and preserved by record thereby contributing to academic and cultural knowledge. I consider that there is no likelihood of cumulative impacts with any relevant existing or permitted developments

Conclusion

9.11.7. There will be a neutral significant archaeological impact as a result of the full excavation under licence of previously unrecorded archaeological features.

9.11.8. There is no likelihood of impacts on architectural or cultural heritage.

9.12. Material Assets, Waste and Roads and Traffic

9.12.1. Material Assets

Existing Environment

9.12.2. The 150MW data centre development will constitute a large energy user in the area which will be served by an on-site substation with provision for connection to the adjacent future substation subject of the concurrent application. The positioning of the data centre site adjacent to Huntstown Power Station is outlined by the applicant as providing certain advantages with respect to loss of drop of power and the availability of direct connection and avoidance of a need for provision for example of a gas fired power plant on the site.

9.12.3. The matter relevant to EIA and material assets relates to the potential for disruption to the electricity supply in the area, which is known to be constrained. The applicant relies on the connection agreement in terms of demonstrating that there is sufficient power supply in the area.

9.12.4. There are proposals to install some renewable generating infrastructure as part of the design of the data centre. There is provision for emergency generators to provide backup power at the data centre in the event of power outages.

9.12.5. The lands are traversed by overhead power lines in relation to which permissions have been granted for their relocation. To serve the construction of the data centre a temporary substation will be put in place.

9.12.6. There is no existing public surface water infrastructure available. The planned surface water drainage for the overall development will discharge northwards to Huntstown stream and the Ward River. At the data centre site two separate surface water drainage networks and two separate surface water attenuation basins are to be developed. Surface water from the substation development would be accommodated within the surface water drainage system for the data centre development.

9.12.7. There is an existing foul sewer located in the R135. For the duration of construction of the data centre it is envisaged that there will be use of portable sanitary facilities and subject to relevant approvals temporary connections to existing services will be established. The permanent arrangement will involve a private sewer and pumping station and a pre-connection enquiry form submitted to Irish Water received a favourable response.

9.12.8. For the construction of the substation there will be use of portable sanitary facilities and wastewater will be tankered off site. A permanent foul drainage from the substation will be pumped to the proposed data centre private sewer.

9.12.9. There is an existing watermain located in the R135. The data centre will require water for drinking and sanitary facilities as well as for the cooling system and the data hall air handling units. At full load the temporary evaporative cooling will have a peak demand of 56 l/sec which is estimated to be required for approximately 24 hours per annum. On site storage for 48-hour period is to be provided and this will be filled from the mains primarily but also from rainwater harvesting. The design iterations undertaken have reduced the water supply requirements. Irish Water has confirmed that the connection is feasible subject to off-site upgrade works which are described above.

9.12.10. The water supply requirements associated with the substation are insignificant and will rely on the proposed private water supply at the data centre.

9.12.11. The requirement for telecommunications will be met by way of temporary and permanent services. There are existing underground ducts adjacent the overall site that will be utilised.

Potential Impacts

9.12.12. In terms of material assets the EIAR assesses the full extent of the potential impacts some of which I consider to be of very minor nature and thus are not considered further in this report. I note for example the requirement to store diesel at levels which are below the COMAH thresholds, the loss of agricultural lands which is in keeping with the site zoning and the potential impacts including with respect to wastewater. I note the conclusion presented in the report of the planning authority that the overall development will not have any significant impact on material assets and in general I agree with this conclusion.

9.12.13. The potential for impact on the power supply in the region cannot however be dismissed for the purposes of EIA having regard to the supply constraints in the Dublin region. I consider that the proposed data centre by reason of its scale has the potential to reduce the capacity available within the local electricity network. I have drawn this conclusion in the context that while I did not conclude that this warranted a planning reason for refusal there is not sufficient information provided relating to the future regulation of operation of the data centre or the requirements of the grid connection agreement to rule out the potential for significant effects.

9.12.14. I consider that the provision of on-site renewables as part of the design of the development is adequate and sufficient and that while not catering for operational requirements it will support the operation of the facility and thereby reduce the pressure on the local supply and thus constitute a positive impact.

9.12.15. The topic of water supply impacts are subject of objections from third parties. In the absence of mitigation there is potential for significant adverse impacts on the local water supply, which is already stated to be deficient.

Mitigation and Residual Impacts

9.12.16. The EIAR sets out a range of mitigation measures which are relevant to the suite of potential impacts under the heading of material assets, which is broad in nature. These mitigation measures reinforce my earlier conclusion that setting aside the issues related to water and power, the potential for residual impacts on material assets does not warrant further consideration and I refer to the detail presented on this issue in the relevant EIAR chapter.

9.12.17. With respect to the potential for adverse impacts on power supply the EIAR relies on the direct connection to the adjacent power station. Third parties note that there has been no assessment of the growth of data centres on a regional basis. The applicant has referenced the avoidance of an on-site power supply in terms of the proximity to the power station but has not set out why it is considered that there is no threat to security of supply other than to rely on the granting of a Transmission Connection Agreement. On that basis it is concluded in the EIAR that there is sufficient power available from the existing area network to facilitate the proposed development. While I have generally accepted that point from a policy and principal standpoint, it is not easy to draw the same conclusion for the purposes of EIA. In my opinion it is only with the benefit of some of the information underlying the TCA / some assessment of the capacity in the system in the region that the Board can be satisfied that the proposed development would not adversely affect the electricity supply assets in the area and only with that information can the Board complete its EIA and draw conclusions which are favourable to the applicant's case.

9.12.18. On this topic in addition I note the time period which will have elapsed since the TCA was sought and the growth of the demand for electricity in the region in the interim period. Based on the available information and in the absence of information relating to how the TCA would regulate the facility and having regard to the scale and location of the proposed data centre I conclude that there is potential for indirect adverse residual effects on power supply in the region. As stated earlier these effects would not warrant a refusal of permission but may be significant in the context of EIA and should be referenced as a potential significant effect if permission is granted.

Regarding the potential for residual effects on water supply specific remedial works have been set out by Irish Water and the detail of the information presented as part of the application documentation. I am satisfied that the proposed mitigation

measures will address the water supply issues related to the proposed development and that there would be no significant adverse residual effects. In this respect also I have referred earlier to the design iterations and the reduction in water supply which have been achieved.

Cumulative Impacts

9.12.19. I accept the assessment presented in section 14.8 which addresses cumulative impacts on material assets insofar as it relates to permitted developments in the immediate vicinity of the site and to the overall development. It may be concluded that there would be no significant cumulative impacts on material assets relevant to developments in the vicinity of the site.

Conclusion

9.12.20. In conclusion the main impacts relevant to the topic of material assets are as follows.

In the absence of information relating to the future regulation of the data centre operation and having regard to its scale and location of the proposed data centre I conclude that there is potential for indirect adverse residual effects on power supply.

Potential for a significant effect on water supply which is mitigated by the upgrade works which have been prescribed by Irish Water and which the applicant has agreed to implement.

9.12.21. **Waste**

Existing Environment

9.12.22. The proposed data centre development involves destruction of two dwellinghouses which together with the construction waste materials from the construction of the data site are described in detail in sections 15.4.1 and 15.4.2 of the EIAR. At the data centre site most surplus material from excavations is likely to be suitable for reuse on the site.

9.12.23. Excavated topsoil, subsoil tarmacadam and hardcore at the substation site will mainly be removed from the site.

9.12.24. The operational phase of the data centre waste streams includes a variety of hazardous and non-hazardous waste in relation to which proposals for management are described.

9.12.25. The operation of the substation will give rise to very limited amount of waste which will be in the form of food waste and office type waste primarily.

Potential Impacts

9.12.26. In the absence of mitigation there is potential that significant adverse impacts could result as a result of construction of the data centre, substation and the overall development.

9.12.27. In the absence of mitigation during the operation of the data centre there is potential for long-term, significant negative impacts on the environment.

9.12.28. Due to the low volume of waste which would be generated at the substation during operation there is potential for non-significant adverse effects.

Mitigation and Residual Impacts

9.12.29. Mitigation described for the data centre development is primarily in the form of the preparation of resource and waste management plans and implementation of good practice and suitable disposal of materials. Up-to-date EPA guidance is referenced as the basis for preparation of management plans.

9.12.30. Similar measures are set out for the construction of the substation.

9.12.31. Operational phase mitigation measures involves standard approaches to waste management in accordance with relevant regulations and relevant guidance.

9.12.32. I accept the conclusion presented that subject to the implementation of the mitigation measures outlined there will be high rates of reuse, recovery and recycling achieved at the overall site and the relevant legislation requirements will be met.

9.12.33. The residual impact of the proposed development of the data centre in the construction phase will be short-term, imperceptible and neutral.

9.12.34. A similar conclusion would be valid for the substation and for the overall development in the construction phase.

9.12.35. I accept the submission of the applicant that in the operational phase there will be long-term neutral and imperceptible impacts for the individual developments of the data centre and substation and for the overall development.

Cumulative Impacts

9.12.36. I note the availability of a good network of licensed waste management sites in the area. I agree with the conclusion presented that the cumulative impacts from the construction phase and operational phase and other permitted developments would be imperceptible or not significant.

Conclusion

9.12.37. In conclusion the main impacts relevant to waste would be as follows.

Construction phase impacts which will be short-term, imperceptible and neutral.

Operational phase long-term neutral and imperceptible impacts.

9.12.38. These impacts would not be considered to be significant.

9.12.39. **Roads and Traffic**

Existing Environment

9.12.40. The greenfield site of the data centre is served by a number of small entrances and will in the future have permanent access from a new entrance from the R135 and an emergency/secondary entrance by way of the power plant / quarry access road to the south-west. A temporary access for construction will be at the location of an existing entrance at North Road, located north of the proposed permanent entrance. There is a right of way at the location of the secondary entrance off the power plant road.

9.12.41. The proposed substation access will be by way of Huntstown Power Station internal road and the secondary access referred to above.

9.12.42. The data centre and substation sites are located close to the N2, accessed by way of North Road (R135). The priority junction at the N2 off slip / North Road. There is bus service connecting Ashbourne and Ratoath to the city centre with stops on North Road and generally at a 20-minute frequency. There are no collision

hotspots in the vicinity of the site. However the off slip from the N2 to North Road and the signalised Kilshane Cross to the north are both at capacity. At the southern extremity North Road is a cul-de-sac as it was blocked off by the M50.

9.12.43. The baseline conditions were established by traffic surveys which are reported in the EIAR, which established the AM and PM peak hours, took into account permitted development and describes proposed road network improvements, including planned cycle path along North Road.

9.12.44. The construction of the data centre site will be served by a new entrance at the eastern site frontage. The construction stage traffic generation associated with the data centre will be in the order of 200 cars per day and up to 110 HGV and 30 LGV movements.

9.12.45. The entrance to be used for construction of the substation will be from the southern boundary, off the main access road serving the existing power plant and quarry, which is heavily used by HGVs. On completion of construction this entrance would be reserved for exceptional circumstances and the main access would be through the data centre site. Peak daily construction traffic is estimated to be 20 HGV per day at peak and 50 number construction workers at peak. A 24-month construction period is predicted.

9.12.46. Planning permissions in the area have included financial contributions with respect to the improvement of the motorway/regional Road junction and upgrade of footpaths and provision of cycle routes.

Potential Impacts

9.12.47. As noted, the junctions which will be used to access the general area are heavily trafficked and in some cases are above capacity. There is potential for traffic congestion during construction as a result of the increased traffic levels at these junctions.

9.12.48. The construction of the data centre will contribute to traffic levels at the N2 North Road junction and at signalised Kilshane Cross both of which are above capacity as well as at other junctions. The data presented by the applicant shows that the proportional change in traffic levels at junctions in the wider area (including the N2 off slip road and Kilshane Cross) is in the order of 6% at most, below the 10% increase which would trigger a detailed assessment. However in view of the existing

conditions a more detailed assessment was undertaken including for the site entrance, the N2 Off Slip and Elm Road , which is not signalised. I am satisfied that this approach is robust and I note that the permitted restoration at the quarry is likely to be completed and road upgrades in the area are planned but have not been taken into account and the assessment constitutes a worst-case scenario. The summary information presented in Table 13.9 demonstrates a relatively small decrease in network residual capacity for the N2 Off Slip and Kilshane Cross which would be over capacity in any case. I consider that the information presented may be accepted by the Board and that the impact of the traffic increases would be slight taking into account the existing conditions. The other junctions including the site entrance would have spare capacity.

9.12.49. For construction of the data centre the site entrance will be 150m north of the planned permanent site entrance in order to allow for operation of Phase 1(Building B) while construction of Phase 2 is ongoing. There is limited visibility from this entrance and potential for traffic hazard. At the opposite side of North Road are small commercial developments with independent accesses which an observer states will be adversely impacted by the planned entrance to the data centre.

9.12.50. The substation construction traffic will utilise junctions in the wider area including N2 North Road junction and the signalised Kilshane Cross which are and will be lacking capacity and in addition there is potential that the construction of the substation could conflict with the existing high volumes of HGV traffic from the quarry and other development served by the road to the south. The assessment undertaken in relation to the impact of the substation construction traffic is that it will result in a proportional increase in traffic on the adjacent road network during peak times is generally of the order of under 2%, which is assessed as a negligible impact. I accept this conclusion for the junctions other than J3 (Kilshane Cross). In relation to the latter junction the additional flows are not high and as the junction is signalised there is no likelihood of traffic safety concerns but some additional delays are likely but would not be significant. I therefore agree with the conclusion presented in the EIAR that the overall impact on the road network as a result of the construction of the substation would be negligible. In the context of the overall traffic levels it is considered that the estimated increase associated with the construction phase of the data centre will result in short-term, negative and slight impacts.

9.12.51. The impact of the construction of the overall development may therefore be considered to be the same as for the construction of the data centre.

9.12.52. The impact of the data centre operational traffic will be negative as it will coincide with further future capacity issues. by 2032 the junction capacity of the N2 off slip and North Road will be exceeded and for a duration pending the putting in place of the planned upgrade measures there will be a slight negative impact on the road network associated with the operation of the data centre.

9.12.53. There is very little traffic associated with the operation of the substation and no likelihood of significant effects on the road network.

9.12.54. Observers reference potential for conflict with existing developments including the garden centre at the east side of North Road. This is relevant to the construction of the data centre and its operation and I have addressed it earlier and do not consider that there is a likelihood of significant adverse effects.

9.12.55. Comments in relation to operational traffic for the data centre are relevant to the overall development during operation.

Mitigation

9.12.56. The assessment presented in the EIAR and considered above was predicated on a range of assumptions which are in effect design mitigation measures including those outlined below.

9.12.57. It is intended that the substation and phase 1 of the data centre will be constructed at the same time and that the combined level of parking for workers will not exceed 200 (with 33 vehicles being parked at the substation site).

9.12.58. The mitigation measures outlined in the two separate OCEMP documents include a range of standard measures which are suitable for further future agreement with the planning authority. Workers will be bused from a nearby facility such as a DAA surface car park which will operate as a park-and-ride to avoid impact on the road network particularly the local roads. Staff arrivals and departures will not coincide with the peak hours. Due to limited visibility at the North Road entrance for the construction period a banksman will be in place and the entrance is addressed in the OCEMP.

Residual Impacts

9.12.59. I consider that the nature of the impacts arising are subject to mitigation through measures which are already planned and the specific measures set out in the EIAR. I accept the conclusion presented that the overall development of the datacentre and substation would have a long-term, slight negative impact.

Cumulative Impacts

I consider that it may be concluded having regard to the permitted development in the area that there would be no significant long-term cumulative effects in terms of roads and traffic.

Conclusion

9.12.60. In conclusion the main impacts relevant to the topic of roads and traffic are as follows.

9.12.61. Short-term, slight negative impacts due to construction of the data centre which will be mitigated by measures set out in the EIAR and the CEMP which is to be agreed in detail with the planning authority.

9.12.62. Short-term, not significant impacts due to construction of the substation.

9.12.63. Short-term, slight negative impacts from the overall development which will be mitigated by measures set out in the EIAR and the CEMP which is to be agreed in detail with the planning authority.

9.12.64. A long-term slight residual impact associated with the additional operational traffic associated with the data centre.

9.13. Interactions of the Foregoing

9.13.1. I consider that the main interactive impacts arising from the proposed development are adequately addressed in the EIAR in Chapter 17 wherein the majority of impacts are concluded to be neutral.

9.13.2. Some positive interactions are recorded including with respect to land use, alternatives and population as a result of employment creation.

9.13.3. A large proportion of the identified impacts are described as neutral and in general I agree with the assessment set out on these interactions which is in 17.3 of the EIAR. The negative interactions include population and human health and its interaction

with air quality, noise and landscape. However, in relation to air quality it is again reiterated (contrary to the comments in Chapter 9) that the mitigation measures will ensure that the impact of the facility complies with air quality standards and am not satisfied that this is evident from the provided information.

9.13.4. The identified negative impacts are in section 17.4 and include interactions between population and human health and the environmental topics of air quality, noise and vibration and landscape and visual impacts, associated with the construction of the data centre.

9.13.5. Identified negative impacts associated with the substation project are in general not significant.

9.13.6. The conclusions drawn with respect to the data centre would be relevant to the overall development in my opinion.

9.13.7. I agree that the interactions arising would not give rise to significant negative impacts.

9.14. Transboundary Effects

9.14.1. Transboundary effects related to climate impacts would not be significant when considered in an international context. I do not consider that there are any other likely transboundary effects.

9.15. Major Accidents and Disasters

9.15.1. I am satisfied that the technical reports provided addresses all relevant aspects of the topic of major accidents and disasters. The only issues arise in the context that that the location of the substation site lies within the risk zone for the power plant which is the COMAH site and the datacentre site is within the notifiable zone. HSA has indicated that it does not pose a grant of permission. The technical assessments for the two developments show that the risk level is acceptable in the same conclusion may be drawn for the overall development. The development is therefore acceptable in terms of the risk of major accidents and disasters.

9.16. Reasoned Conclusion

Having regard to the examination of environmental information contained above, and to the submission by the planning authority and prescribed bodies and appellants and observers in relation to the two concurrent cases before the Board and to the EIARs particularly the Addendum EIAR, it is considered that the main significant direct, indirect and cumulative effects of the proposed development on the environment are as listed below. In drawing up this list I have taken a precautionary approach and where the significance of impacts cannot be discounted based on the available information, I have assumed that they are significant and included them in the list below.

Positive moderate long-term economic impacts from increased employment as a result of the data centre which is facilitated by the substation.

Neutral moderate long-term effects on local amenities due to the change in the visual environment of the area which is the place of residence for a small population as a result of the construction of the data centre.

Negative long-term air quality effects on human health as a result of the operation of the data centre and in particular the use of on-site emergency generators, which is facilitated by the substation.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the overall site as a result of landscape proposals.

Potential long-term effects on hydrology, soil and hydrogeology during the operation of the data centre in the event of accidental spillages, which will be mitigated by the incorporated design features which will contain potential pollutants and by the implementation of an Environmental Management Plan and will be imperceptible. This is particularly relevant to the operation of the data centre but has relevance also to the substation and the overall development.

Potential for indirect adverse residual effects on power supply.

Potential for a significant effect on water supply as a result of operation of the data centre which has been mitigated by design and will be further mitigated

by the upgrade works which have been prescribed by Irish Water and which the applicant has agreed to implement.

10.0 Appropriate Assessment

10.1. Introduction

10.1.1. The requirements of Article 6(3) as related to appropriate assessment of a project under Part XAB, sections 177U and 177AE of the Planning and Development Act 2000 (as amended) are considered fully in this section. The following are addressed:

- Compliance with Article 6(3) of the EU Habitats Directive
- Screening the need for appropriate assessment
- The Natura Impact Statement submitted
- Appropriate assessment of implications of the proposed development on the integrity each European site.

10.2. Compliance with Article 6(3) of the EU Habitats Directive

10.2.1. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

10.2.2. The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

10.2.3. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

Background on the Application

10.2.4. The applicant has submitted a screening report for Appropriate Assessment / Natura Impact Statement as part of the planning application entitled **Report for the purposes of Appropriate Assessment Screening dated 16 August 2021**. This report which made a finding of no significant effects identified 11 no. European sites within the potential zone of influence of the proposed development.

10.2.5. It was stated that while best practice construction methods are included in the EIAR these are not required to avoid or reduce any effects on European site. These measures were not relied on to reach a conclusion of no likely significant effects on any European site.

10.2.6. It was therefore concluded based on the information supplied that the nature and scale of the proposed development on fully serviced lands, the intervening land-use and distance from European sites, the lack of direct connections with regard to the source pathway receptor model, it may be concluded that the proposed development individually or in combination with other plans or projects would not be likely to have a significant effect on the 11 no. listed European sites or any other European site, in view of the sites conservation objectives.

10.2.7. There followed a more detailed assessment of potential in combination effects. There was considered to be no predicted in combination effects. The conclusion was unchanged.

10.2.8. It was concluded that an appropriate assessment is not required.

10.2.9. The revised screening report submitted with the further information lodged is entitled **Report for the purposes of Appropriate Assessment Screening** and was dated 8 February 2022. This report presents information required for the undertaking of screening for AA in respect of the datacentre and the substation (referred to as the overall development) to determine whether it is likely individually or in combination to have a significant effect on any European sites. The report contains a description of the individual components of the overall development (the data centre is described in section 3.1 and a substation in 3.2). This report identified 11 no. European sites within the potential zone of influence of the proposed development.

10.2.10. The site is described as draining primarily to ground and during extended periods of rain into a large deep drainage ditch adjacent the power plant. The larger

ditch is intermittently hydraulically linked by way of Huntstown stream and Ward stream into Malahide estuary over 15 km downstream the site has limited connectivity to Malahide estuary SAC or SPA.

10.2.11. Table 2 of the document identifies relevant European sites using a source pathway receptor model and outlines the qualifying interests and special conservation interests for each site of the 11 no. European sites.

10.2.12. The screening report notes the intermittent weak hydraulic link between the proposed development and Malahide estuary 15 km downstream. All potential direct and indirect impacts that could result in significant effects on the conservation objectives of European site are presented in table 3. The potential impacts outlined in the construction stage are standard construction phase impacts. Operational phase impacts include direct emissions to air and water, surface water run-off, lighting disturbance, noise and vibration, physical presence of structures and potential for accidents or incidents.

10.2.13. The types of changes which could arise at the European site are identified as reduction or fragmentation of habitat area, disturbance to QI species, habitat or species fragmentation, reduction or fragmentation species density, changes to areas of sensitivity or threats to QI, interference with the key relationships that define the structure or ecological function of the site and climate change. It is stated that by the use of a CEMP the potentially polluting substances will be controlled and effects on Huntstown stream and the Ward River leading to Malahide estuary will be avoided. It is stated that in the absence of these measures the potential for significant effects on water quality in Malahide Estuary is uncertain.

10.2.14. In response to the issue of whether or not mitigation measures are necessary to reach the conclusion that likely significant effects can be ruled out at screening stage is confirmed in the AA screening. It is stated that construction management will be employed to avoid discharge of potentially polluted surface water to the Huntstown stream. Measures to avoid potential pollution of Malahide estuary and its associated European sites will be included in a Construction Environmental Management Plan.

10.2.15. The assessment goes on to examine other planned and permitted projects in the area for the purposes of in combination effects. There are no predicted in

combination effects, it is concluded, as the listed granted applications will have no effect on any European site.

10.2.16. The conclusion is presented in section 6. It states:

- There will be no direct impact on Malahide estuary European sites and no habitat loss or fragmentation as a result of the overall development.
- Potential impacts on or disturbance of SPA bird species can be ruled out given the habitats and distance from all SPA is of over 8 km.
- A worst-case scenario may be considered whereby the overall development would be the source of a significant detrimental change in water quality in Malahide estuary either alone or in combination with other projects are plans listed in Table 4 as a result of indirect pollution via the Huntstown stream and Ward River, without the application of standard mitigation measures. The effect would have to be considered in terms of changes in water quality which would affect the habitats or food sources of the species for which the Malahide Estuary European sites designated.
- The construction of the site will require the control of potential construction stage pollutants e.g. from elevated suspended solids from the dewatering of the site, the volume and time required is uncertain, and from other sources such as cement or hydrocarbons. In the absence of construction management, the potential impact on the Malahide Estuary SAC and/or the Malahide Estuary SPA is uncertain.
- Thus, in line with Departmental Guidance and having regard to ECJ and Irish case law and the 'Precautionary Principle' Stage 2 Appropriate Assessment is required.

10.2.17. As set out above the two reports present different conclusion solely on the basis of the meaning of mitigation and its role in screening. I address this matter further below.

10.2.18. Having reviewed the documents and submissions, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

Screening for Appropriate Assessment- Test of likely significant effects

10.2.19. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on a European site.

10.2.20. The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

Brief description of the development

10.2.21. The applicant provides a description of the project in the AA screening report and the EIAR. In summary, the development comprises:

- demolition of 2 no. dwellinghouses and ancillary structures
- construction of 2 no. data hall buildings (A and B) containing various rooms and facilities with photovoltaic panels and screened plant areas at roof levels
- external plant and 58 no. emergency generators
- provision of a temporary substation, water treatment building, water storage tanks, sprinkler tanks, pump houses
- roads and related infrastructure
- 220 KV substation subject of concurrent application.

10.2.22. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, I consider that the following are relevant for examination in terms of implications for likely significant effects on European sites:

- indirect construction related impacts due to uncontrolled surface water/silt/ construction related pollution.

Given the significant distance between the proposed development and the European sites there is no potential for habitat disturbance /species disturbance during construction.

I note that a worst-case scenario from air emissions was considered whereby the effect of dust on European sites was assessed. A technical note was prepared on

this topic. Given the known characteristics of dust dispersion and the 8 km distance, I am satisfied that there is no potential for significant effects on any of the qualifying interest habitats or species of European sites due to dust.

I accept the applicant submission that there are no relevant ex situ factors of significance to bird species and in this respect, it is noteworthy that no third parties have referenced use of the site by birds which would be special conservation interests of the European sites. I consider that any such potential effect can be discounted.

Submissions and Observations

10.2.23. None of the prescribed bodies submissions contain any matters relevant to appropriate assessment. I note the comment of DAHG under the substation application. DAHG accepted the conclusion of the AA screening report which determined that because of the significant distance between the proposed development and the Malahide Estuary SAC and SPA and the very weak ecological pathway involved, the proposal will not result in any likely changes to the European sites.

10.2.24. One third-party observer states that there are inadequacies and lacunae in AA screening report and the NIS and that there is not sufficient information for the Board to complete AA Screening and AA. The applicant in response notes that the alleged inadequacies and lacunae have not been identified and disputed that there are any such gaps.

European Sites

10.2.25. The development site is not located in or immediately adjacent to a European site. A summary of European Sites within a possible zone of influence of the proposed development is presented in the table below. This is based on the applicant's submissions in the screening reports, which I accept and consider to be accurate. Where a possible connection between the development and a European site has been identified, as is the case for the Malahide estuary sites, these are examined in more detail below.

European Site	Conservation objectives. Qualifying interest /Special conservation Interest.	Distance. Source, pathway receptor.
Baldoyle Bay SAC (000199)	**Conservation Objectives** *Version 1.0, 19 November 2012* To maintain the favourable conservation condition of the qualifying interests in Baldoyle Bay SAC, which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi)	Over 11km distant from proposed development site. No hydrological or other pathways or connectivity.
Malahide Estuary SAC (000205)	**Conservation Objectives** *Version 1.0, 27 May 2013* To maintain or restore the favourable conservation condition of the qualifying interests which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes)	Over 9km distance from proposed development site. There is a hydrological connection – further consideration is therefore warranted. No other pathways or connectivity.

North Dublin Bay SAC (000206)	**Conservation Objectives** *Version 1.0, 06 May 2013* To maintain or restore the favourable conservation condition of the qualifying interests which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes) Humid dune slacks Petalophyllum ralfsii (Petalwort)	Over 10km from the proposed development site. There are no hydrological or other pathways or connectivity.
Rogerstown Estuary SAC (000208)	**Conservation Objectives** *Version 1.0, 14 August, 2013* To maintain or restore the favourable conservation condition of the qualifying interests, which is defined by a list of attributes and targets. **Qualifying interests** Estuaries Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi)	Over 12km from the proposed development site. There are no pathways or connections.

	Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes)	
South Dublin Bay SAC (000210)	**Conservation Objectives** *Version 1.0, 22 August 2013* To maintain the favourable conservation condition of the qualifying interest, which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide	13km from the proposed development site. There are no pathways or connections.
Rye Water Valley / Carton SAC (001398)	**Conservation Objectives** *21 February 2018* To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. **Qualifying interests** Petrifying springs with tufa formation (Cratoneurion) Vertigo angustior (Narrow-mouthed Whorl Snail) Vertigo moulinsiana (Desmoulin's Whorl Snail	12km from the proposed development site. There are no pathways or connections.
North Bull Island SPA (004006)	**Conservation Objectives** *Version 1.0, 09 May 2015* To maintain the favourable conservation condition of the bird species listed as SCIs, which is defined by a list of attributes and targets. **Qualifying interests** Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Teal (Anas crecca)	Over 10km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no

	Pintail (Anas acuta) Shoveler (Anas clypeata) Oystercatcher (Haematopus ostralegus) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Sanderling (Calidris alba) Dunlin (Calidris alpina alpina) Black-tailed Godwit (Limosa limosa) Bar-tailed Godwit (Limosa lapponica) Curlew (Numenius arquata) Redshank (Tringa totanus) Turnstone (Arenaria interpres) Black-headed Gull (Chroicocephalus ridibundus) Wetlands	further consideration is warranted.
Rogerstown Estuary SPA (004015)	**Conservation Objectives** *Version 1.0, 20 May 2013* To maintain the favourable conservation condition of the waterbird population and wetland habitat in Rogerstown Estuary SPA, which is defined by a list of attributes and targets. **Qualifying interests** Greylag Goose (Anser anser) Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Shoveler (Anas clypeata) Oystercatcher (Haematopus ostralegus) Ringed Plover (Charadrius hiaticula) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Dunlin (Calidris alpina) Black-tailed Godwit (Limosa limosa) Redshank (Tringa totanus)	Over 13km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no further consideration is warranted.

	Wetland and Waterbirds	
Baldoyle Bay SPA (004016)	**Conservation Objectives** *Version 1.0, 27 February 2013* To maintain the favourable conservation condition of the waterbird population and wetland habitat in Baldoyle Bay SPA, which is defined by a list of attributes and targets. **Qualifying interests** Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Ringed Plover (Charadrius hiaticula) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Bar-tailed Godwit (Limosa lapponica) Wetlands	Over 11km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no further consideration is warranted.
South Dublin Bay and River Tolka Estuary SPA (004024)	**Conservation Objectives** *Version 1.0, 09 March 2015* To maintain the favourable conservation condition of waterbird population and wetland habitat in South Dublin Bay and River Tolka Estuary SPA, which is defined by a list of attributes and targets. **Qualifying interests** Light-bellied Brent Goose (Branta bernicla hrota) Oystercatcher (Haematopus ostralegus) Ringed Plover (Charadrius hiaticula) Grey Plover (Pluvialis squatarola) – proposed for removal Knot (Calidris canutus) Sanderling (Calidris alba) Dunlin (Calidris alpina) Bar-tailed Godwit (Limosa lapponica) Redshank (Tringa totanus) Black-headed Gull (Chroicocephalus ridibundus)	Over 8km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no further consideration is warranted.

	Roseate Tern (Sterna dougallii) Common Tern (Sterna hirundo) Arctic Tern (Sterna paradisaea) Wetland	
Malahide Estuary SPA (004025)	**Conservation Objectives** *Version 1.0, 16 August 2013* To maintain the favourable conservation condition of the bird species listed as SCIs, which is defined by a list of attributes and targets. **Qualifying interests** Great Crested Grebe (Podiceps cristatus) Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Pintail (Anas acuta) Goldeneye (Bucephala clangula) Red-breasted Merganser (Mergus serrator) Oystercatcher (Haematopus ostralegus) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Dunlin (Calidris alpina) Black-tailed Godwit (Limosa limosa) Bar-tailed Godwit (Limosa lapponica) Redshank (Tringa totanus) Wetlands	Over 9km distance from proposed development site. There is a hydrological connection – further consideration is therefore warranted. No other pathways or connectivity.

Identification of likely effects

10.2.26. Taking into account the nature and extent of the development and the construction works involved at the data centre and substation sites I consider that it may be concluded that there is a very low likelihood of emissions of silt or any other potentially polluting substances to the surface water system. I am satisfied that the application of the best practice measures which are outlined in the CEMP documents

prepared for the data centre and the substation would successfully contain any such emissions within a very close distance of the site. In this respect I refer to the nature of the Huntstown and Ward streams which would provide for easy containment of pollutants in the environment in the event of discharge/spillages. I note that the applicant has referenced the particular issue of dewatering, which is stated in the EIAR to comprise small volumes, if indeed there is any requirement for same. I am satisfied that it may be concluded that there is no likelihood of potential effects which would be of significance to the conservation objectives of the Malahide estuary SPA or SAC due to the downstream distance and nature of the local hydrology and having regard to the best practice measures to be implemented.

10.2.27. I note that the applicant has provided an assessment of other projects and concluded that there is no potential for in combination effects based on the AA screening reports and decisions of the consenting authorities in those cases. I accept this conclusion, which is reasonable and robust in the context of the permitted developments in the area and my conclusions with respect to the proposed development.

Mitigation measures

10.2.28. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise. In drawing my conclusions above, I partly rely on the submitted CEMP documents which were presented with the applications and which are attached to the NIS. In the particular circumstances of this case it is necessary to further discuss these documents.

10.2.29. Separate CEMP documents were prepared for both the substation and the data centre sites. The Outline CEMP which was presented for the data centre facility defines the approach to environmental management during construction and promotes best environmental on-site practices. The nature of the construction works which are described involve site preparation activities such as site clearance, excavations and levelling which will be undertaken using a range of standard construction machinery. The building construction works will involve construction of foundations to construct the building is of standard structural steel frames. Moderate scale excavations and minor dewatering may be required. Temporary storage of

spoil will be managed so as to prevent accidental release of dust and uncontrolled surface water run-off. Surplus material that is recovered from the site will be examined to ensure that it is not hazardous and if hazardous material is encountered it would be transported for appropriate disposal. With respect to dust management and specific mitigation measures this will be in accordance with standard guidance which is listed. Surface water management proposals are described in section 7.5, are of standard nature and in compliance with CIRIA guidance. None of the measures outlined in the submitted CEMP document are anything other than standard mitigation which would be employed at any modern construction site. None of the measures can be described as bespoke or targeting any particular environmental effect.

10.2.30. The CEMP prepared in support of the Mooretown substation application contains a range of measures relating to the site preparation and building construction works phases. There are specific measures set out relating to concrete works, accidental spills and leaks, dust, land clearing and stockpiling. While the approach in this document is different the essential essence of the measures is not dissimilar. The works involved are standard construction works to be undertaken in accordance with mitigation which would be found at any well-run building site. Although there is a section in this document which describes mitigation relevant to ecology these relate to bats, badger and trees and none of the measures outlined are in any way relevant to the European sites within the zone of influence but instead comprise measures to protect local ecology.

10.2.31. To conclude with respect to the contents of the CEMP and whether they would constitute mitigation under the meaning established by recent legal cases, my conclusion is that the documents do not comprise mitigation. In this respect I agree with the statement made in the original AA screening report that these best practice construction methods are not required to avoid or reduce any effects on European site and that these measures are not relied on to reach a conclusion of no likely significant effects on any European site.

10.2.32. My conclusion with respect to Malahide Estuary SAC and SPA is that it is highly unlikely that the proposed development would have an adverse effect on these European sites or their conservation objectives by reason of the very limited

hydrological connection and taking into account the best practice measures outlined in the CEMP documents.

Screening Determination

10.2.33. The proposed development was considered in light of the requirements of 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) would not have a significant effect on European Sites 000199, 000205, 000206, 000208, 000210, 001398, 004006, 004015, 004016, 004024, 004025 or any other European site, in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is therefore not required.

11.0 Recommendation

I recommend that permission be refused for the reasons and considerations below.

1. It is national policy as set out in the Government Statement on the Role of Data Centres published in July 2022 to enable the twin transitions of digitalisation and decarbonisation and to support the development of data centres, which are core infrastructure. The Government Statement indicates that there is limited capacity available for further data centre development in the short-term pending upgrades to the electricity infrastructure and the connection of more renewables and in this regard a range of principles are set down as guidance for the decision makers. It is considered that the information provided in the application and appeal does not demonstrate that the proposed data centre which is located in a constrained region would meet the requirements set down in the Government Statement including in relation to its economic impact, the making use of available grid capacity and the provision of renewables additionality in a form which provides for temporal and spatial matching of the demand from the data centre.

   Therefore, the Board considers that the proposed development would be contrary to national policy.

2. Under the provisions of the Climate Action Plan 2023 published in December 2022 large energy users will need to play a critical role in the decarbonisation acceleration through delivering high levels of flexibility across time and geographical locations, and matching energy consumption with renewable energy generation on an hourly basis and that in the short- and medium-term new demand growth from large energy users, such as data centres will have to be moderated to protect security of supply and ensure consistency with the carbon budget program.

   The Board noted the information provided relating to the proposed offsetting arrangements and the operation of the proposed data centre and considered that it was not demonstrated that the proposed development would comply with the provisions of the Climate Action Plan 2023 with respect to electricity demand management.

3. The proposed development is located in an area zoned HI, for which the land use zoning objective is to 'facilitate opportunities for industrial uses, activities and processes which may give rise to land use conflicts if located within other zonings'. It is considered that the proposed development does not constitute heavy industry and that having regard to the size of the site and its configuration the site is capable of accommodating a heavy industry use and should be reserved partly for such use in the interest of the proper planning and development of the area and to comply with the provisions of the development plan.

Mairead Kenny
Senior Planning Inspector

6 March 2023