An Bord Pleanála



Inspector's Report

| Board Reference: | 07.VC0091 |
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| Prospective Applicant: | Apple Distribution International |
| Application: | Determination in respect of strategic infrastructure |
| Development: | Proposed 220kV power supply for Apple Data centre, Athenry, Co. Galway. |
| Inspector: | D. MacGabhann |
| Date of Site Inspection: | 18 th June 2015 |

1. INTRODUCTION

- 1.1 This report relates to pre-application discussions held with Apple Distribution International regarding whether or not their proposed 220kV power supply and associated sub-station to serve the Athenry Data Centre, Athenry, Co. Galway constitutes strategic infrastructure as defined by the Planning and Development Act 2000 (as amended).
- 1.2 This report describes the location and nature of the proposed development, the applicant's submission, the consultations held and the legal provisions which are relevant to the proposed development.
- 1.3 It recommends that the proposed development constitutes strategic infrastructure and it sets out reasons and considerations to support this conclusion.

2. SITE LOCATION

- 2.1 The proposed development is situated c.4.5km south west of Athenry on land to the south of the M6 and west of the proposed line of the M17/18 (currently under construction). It comprises agricultural lands to the north east of the site of the proposed Apple data centre and forestry lands forming part of the data centre site (photograph 11).
- 2.2 Residential development lies along the public roads in the vicinity of the site and a national school lies along the public road which runs to the west of the site, south of the M6.

3. THE PROPOSED DEVELOPMENT

- 3.1 Galway County Council decided to grant permission for Phase 1 of Apple Distribution International's European Data Centre on a site of 487 acres (197ha) to the south west of Athenry in September 2015. An appeal against the decision was lodged with the Board on the 22nd September 2015 (our ref. PL07.245518).
- 3.2 The data centre will comprise Apple's European hub for data storage and management. The overall development provides eight data halls and phase 1 of the development comprises the first of these (see attached plans). Overall plans for the site include a 50m perimeter buffer zone, woodland walk within the buffer and retention of native tree species across the site. The site is currently used for forestry and is owned by Coillte.
- 3.3 The power requirement for phase 1 of the data centre is 50MW and the projected power requirement for the whole data centre could reach 240MW over a period of 10- 15 years. Two existing 220kV overhead power lines run to the north east of the data centre site and it is proposed that the supply for the site will be provided from these existing lines. Connections will be required to four existing pylons,

each within 1,500m of the site. The applicant states that the precise alignments of the power connections have yet to be determined, but that it is expected that the connection will require:

- Looped connections to the existing lines (in effect running the two existing lines via the proposed sub-station),
- New overhead lines in the area around the M6 and the proposed M17/18 interchange,
- The erection of seven new 220kV towers and the retiring of three towers,
- An underground cable connection from four sealing end compounds adjoining four new end masts, to the data centre site, and
- The provision of a new 220kV sub-station on the data centre site with typical structures ranging from 2.6m to 30m (see Power Point presentations slides).
- 3.4 The applicant states that EirGrid have indicated that the work will be contestable and Apple will carry out the work directly in order to save time on standard delivery times. Ownership of the power connection, substation and access road to same will transfer to EirGrid on completion.
- 3.5 To construct the power connection the applicant proposes to purchase small pockets of land and wayleaves across the lands along the overhead line route.

4. POLICY CONTEXT

- 4.1 The proposed development lies within the administrative areas of the Regional Planning Guidelines for the West Region and the Galway County Development Plan 2015-2021. Reference is made in both documents to the provision of a strategic economic development corridor between Oranmore and Athenry and the proposed development lies within this corridor.
- 4.2 The site of the proposed development lies within a landscape with a low landscape value rating and low landscape sensitivity rating. It is removed from water features, designated focal views and from sites of ecological interest, including Natura 2000 sites, however, a number of archaeological features lie in the vicinity of the site.

5. APPLICANT'S SUBMISSION

- 5.1 In their letter to the Board seeking a determination on whether the 220kV connection is strategic infrastructure (29th April 2015), the applicant made the following points:
 - The proposed full build out of the data centre will involve an investment of approximately €850m, with the data centre employing up to 150 staff during

the construction process and 150 permanent staff on operation. The data centre will create further employment in local and regional service providers.

- The proposed 220kV power connection is required to allow the proposed Apple data centre development to proceed.
- The proposed development lies within the Strategic Corridor between Oranmore and Athenry identified in the Regional Planning Guidelines for the West Region and the Galway County Development Plan 2015-2021. The Regional Planning Guidelines state that economic corridors, in particular industrial corridors such as the Oranmore-Athenry corridor, must be developed and promoted and serviced to high international standards to attract Foreign Direct Investment.
- Key economic development priorities in the Guidelines include providing appropriate zoned land with adequate infrastructural services to accommodate enterprise, provide the infrastructure required to attract investment into the region, support all indigenous industry and promote linkages with multi-nationals.
- The proposed 220kV power connection will supply electrical power to a key site in the Oranmore-Athenry Strategic Corridor.

6. CONSULTATIONS – SUMMARY OF KEY ISSUES AND ADVICE

6.1 Three pre-application consultative meetings were held with the prospective applicant. Minutes of these meetings are on file.

First Meeting (28th May 2015)

- 6.2 The prospective applicant made a Power Point presentation providing further details on the nature of the proposed development, the Apple data centre and details regarding the proposed loop-in connection and underground trench (see attachments). In addition, the applicant's clarified the following:
 - The entirety of the proposed sub-station and access road to same, on completion, will be taken over by EirGrid and form part of the national transmission network. The sub-station would have capacity for other development and would allow for future expansion.
 - The site had been selected for the development because of its access to renewable energy (on a regional basis) with the applicant's intention being to invest in wind energy to offset that consumed.
 - Key milestones for the project include the lodging of the planning application for the data centre with the planning authority and enabling works, to commence in July 2015, assuming no appeal in respect of the planning application.

- The applicant hoped to lodge a planning application for the proposed development in July 2015 and an EIS for the application had commenced along with consultations with local stakeholders.
- The development was not located in a Gaeltacht area.
- 6.3 The applicant queried:
 - Whether the proposed 220kV power supply constituted strategic development.
 - If the proposed development constituted strategic development, would the subsequent application fall under section 182B or section 37E of the Planning and Development Act 2000, as amended?
- 6.4 The Board's advisors preliminary advice was that the development did comprise strategic infrastructure and that Section 182 would be the relevant legislative mechanism as electricity transmission is involved.
- 6.5 Other matters raised by the Boards advisors included:
 - An EIS should be provided for the proposed development. The EIS should be a stand-alone document but should have to reference that already prepared in respect of the Phase 1 planning application made to Galway County Council and in particular address cumulative impacts.
 - That the applicant address the following issues in the application to the Board; the strategic economic corridor, the design of the proposed development, the technical requirement for the power supply and proposed use of the substation (by Apple and within the network), the potential issue of project splitting with respect to two planning applications and the phasing of the proposed development.
 - That the applicant submits with the application, if possible, correspondence from EirGrid supporting the development.
 - The desirability of public consultations prior to lodgement of an application.

Second Meeting (4th November 2015)

- 6.6 The prospective applicant gave a short presentation on the current status of the project making the following points:
 - The proposed development had not changed substantially since the first meeting.
 - A meeting had been held with Transport Infrastructure Ireland in relation to the required M17/M18 interface.
 - The proposed link into the two existing 220kV lines was required in order to ensure a continual and robust power supply to the data centre.
 - Final specifications for the sub-station were currently being finalised with EirGrid (typical sub-station layout included in presentation slides, on file).

- A short consultation pack had been issued to statutory and non-statutory consultees and there were further plans to engage with the local community.
- The proposed applicant intended to lodge an application with the Board for the development in December 2015, once discussions with EirGrid had been finalised.
- 6.7 The Board's advisors indicated that it was the Board's intention to deal with the application for the proposed development and the appeal for the proposed data centre at the same time, with the same Inspector allocated to deal with both cases.
- 6.8 The Board noted the following matters to be addressed in the planning application for the proposed development:
 - Alternative locations for the proposed development, consistency with strategic policies in respect of the Economic Development Corridor in which the site is located, reasons for not pursuing a site within zoned land.
 - Consistency with relevant national, county and regional planning policies.
 - Cumulative impacts of the proposed data centre and proposed development.
 - Demand for power and the consequences of this for generation of electricity and possible conflict with strategic energy policy documents and international commitments to reduce greenhouse gas emissions.
 - Clarity regarding the source of energy for the development.
 - EIA topics to be addressed (see note of meeting).
 - Alternative methods for connecting to the grid.

Third Meeting (8th January 2016)

- 6.9 The prospective applicant advised that it wished to expand on three topics discussed at previous meetings namely, site location/zoning/alternatives, renewable energy and cumulative impacts.
- 6.10 With regard to site location/zoning/alternatives, the applicant advised that the SID application would provide contextual background information, on a national, regional and local basis, to demonstrate how the subject site was selected. This would include information on alternative sites considered.
- 6.11 The Board's advisors stated that the rationale for the location of the development in relation to the energy connection would have to be demonstrated within the application. Further, the Board advised that the design of the substation should be presented to show how it would facilitate the instant development, any future developments and any indirect effects arising from same.

- 6.12 With regard to renewable energy, the prospective applicant confirmed its commitment to utilising 100% renewable energy in the data centre, with direct agreements made with renewable energy provides, purchased from the single energy market and provided via the grid.
- 6.13 The Board advised that the prospective applicant demonstrate in the application for the proposed development how this commitment to the use of renewable energy would be achieved in practice (methodology and practicality). Further the Board advised that the application should indicate the energy requirements for phase 1 of the project and all subsequent phases and demonstrate that the proposed 220kV connection could provide adequate capacity for all phases.
- 6.14 With regard to cumulative impacts, the applicant clarified that the EIS would include impacts arising from the first phase of the development and all subsequent phases. The Board advised that the EIS might also address indirect effects of the development, for example, the consequences, if any, for the national grid and climate change.

7. LEGISLATIVE PROVISIONS

Strategic Infrastructure

- 7.1 Section 37A of the Planning and Development Act 2000, as amended, requires that any development falling within the seventh schedule of the Act shall be made to the Board, subject to a number of conditions being satisfied.
- 7.2 Listed in Section 1 of the seventh schedule is energy infrastructure including 'An industrial installation for carrying gas, steam or hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables, where the voltage would be 220 kilovolts or more, but excluding any proposed development referred to in section 182A(1)'.
- 7.3 Section 182A(1) of the Act refers to electricity transmission lines and requires that where an undertaker intends to carry out development comprising or for the purposes of electricity transmission, an application for approval shall be made to the Board.

'S182A-(1) Where a person ...intends to carry out development comprising or for the purposes of electricity transmission.., the undertaker shall prepare, or cause to be prepared, an application for approval under section 182B and shall apply to the Board for such approval accordingly'.

7.4 Section 2(1) of the Act defines strategic infrastructure to include 'any proposed development referred to in section 182A(1)'.

7.5 Section 182A(9) of the Act refers to the term transmission and states that is shall be construed in accordance with section 2(1) of the Electricity Regulation Act, 1999, but that it shall also include the transport of electricity by means of a high voltage line where the voltage would be 110 kilovolts or more, or an interconnector.

'S182A(9) In this section 'transmission' in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999, but for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of –

- (a) a high voltage line where the voltage would be 110 kilovolts or more, or
- (b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.'

7.6 Section 2(1) Electricity Regulation Act, 1999 defines transmission as:

'the transport of electricity by means of a transmission system, that is to say, a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board'.

7.7 Section 2(1) of the Act defines electric plant as follows:

'any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity, other than— (a) an electric line,(b) a meter used for ascertaining the quantity of electricity supplied to any premises, or (c) an electrical appliance under the control of a consumer'

Environmental Impact Assessment and Appropriate Assessment

7.8 Section 182A(2) of the Planning and Development Act, 2000 (as amended) requires that in respect of development referred to in section 182A(1), which belongs to a class of development for the purposes of section 176 (prescribed classes of development requiring environmental impact assessment), the undertaker shall prepare an environmental impact statement or Natura Impact Statement in respect of the proposed development.

- 7.9 Schedule 5 of the Planning and Development Regulations, 2001 (as amended) sets out prescribed classes of development, for which an environmental impact assessment is required.
- 7.10 Part 1(20) of Schedule 5 refers to 'Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres.
- 7.11 And Part 2(3)(b) to 'Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more'.
- 7.12 In its functions the Board is required to take appropriate steps to avoid in an European site the deterioration of habitats and/or the disturbance of species for which the site has been selected (section 177S, Planning and Development Act, 2000, as amended). The main mechanism for determining the impact of a proposed development on a European site is through the process of appropriate assessment.

8. ASSESSMENT

Strategic Infrastructure

- 8.1 The proposed development entails looping the existing two 220kV power lines in and out of the proposed sub-station. In practice, this involves constructing additional towers (and retiring towers) and routing the power lines via overhead lines, sealing end compounds and underground connections to a new sub-station and out again to the two 220kV power lines.
- 8.2 Power from the sub-station will serve the adjoining Apple data centre but capacity will remain for other development in the area and the sub-station could be further developed by EirGrid in the future. On completion ownership of the sub-station will transfer to EirGrid and it will form part of the transmission system.
- 8.3 Having regard to the above, I would consider therefore that the proposed development falls within the definition of electricity transmission referred to in Section 182A(1) of the Planning and Development Act 2000 (as amended) and as defined in Section 2(1) Electricity Regulation Act, 1999, in that it comprises the high voltage lines and electric plant (sub-station) which will be used to convey electricity from a generating station to a substation, forming part of the national transmission system.
- 8.4 This interpretation of the legal provisions is consistent with cases which have previously come before the Board in respect of like development (VC0009/32/39/42/46/49/62/87). In other instances where the Board has concluded that proposed electricity development did not constitute strategic

infrastructure or development under section 182A of the Act this was generally due to the modest nature of the development, for example, serving a local distribution purpose, comprising replacement of existing infrastructure or modifications to same (VC0069/74/86).

Environmental Impact Assessment and Appropriate Assessment

- 8.5 The proposed development falls below the threshold for EIA as set out in Part 1 (2) of Schedule 5 of the Regulations but it may be considered to fall within Part 2 subsection 3(b), in that it comprises the transmission of electrical energy by overhead cables, not included in Part 1 of the Schedule, where the voltage would be 200kV or more.
- 8.6 The Planning and Development Regulations 2001, as amended, provide guidance in the case of sub-threshold development on the criteria for determining whether a development is likely to give rise to significant environmental effects to warrant an environmental impact assessment, including the characteristics of the proposed development, location of the proposed development and characteristics of potential impacts.
- 8.7 The proposed development comprises the construction of new overhead power lines across the M17/18, new towers, sealing end compounds, underground cabling and a sub-station with vertical structures up to a height of 30m. Whilst the development is located in an area which does not appear to be particularly sensitive, and is itself relatively modest in scale in comparison to the adjoining data centre, significant impacts may nonetheless arise by virtue of the characteristics of the proposed development, for example, as a result of construction works in close proximity to the M17/18 or the visual effects arising from the proposed structures. In addition, the proposed development comes forward as an integral part of the proposed European Data Centre and provides the substantial power supply for the centre. Significant environmental effects may arise as a consequence of this demand. It is also possible that significant incombination and cumulative effects arise as a consequence for the two concurrent and integrated developments (e.g. land take, visual and traffic effects).
- 8.81 note that an environmental impact statement has been prepared for the proposed data centre. Whilst the proposed development forms an integral part of the data centre development, it comes forward for assessment as a stand-alone project. In view of the risk of significant environmental effects arising as a direct result of the proposed development and as a result of in-combination and cumulative effects with the proposed data centre, outlined above, and the government's guidance on the need for environmental impact assessment in the case of sub-threshold development, I consider that environmental impact assessment of the proposed development is warranted.

8.9 With regard to appropriate assessment, it would appear that the proposed development is removed from the local network of Natura 2000 sites. However, given the limited information on file regarding the proposed development and how it interacts with the environment, I would recommend that the Board seek an appropriate assessment screening report from the applicant to enable a formal determination in respect of the likely effects of the development on any European sites.

Prescribed Bodies

8.10 In view of the scale, nature and location of the proposed development, as described in this report, it is recommended that the prospective applicant should consult with the prescribed bodies listed in the attached Appendix in respect of any future application for approval.

9. CONCLUSION AND RECOMMENDATION

Having regard to the above, I recommend therefore that the Board serve a notice on the prospective applicant, under section 182A of the Planning and Development Act, as amended, stating that it is of the opinion that the proposed development constitutes strategic infrastructure for the following reasons. In addition, I recommend that the Board require an EIS to be prepared under Section 176 of the Planning and Development Act 2000 (as amended) and request an appropriate assessment screening report to accompany the planning application made.

REASONS AND CONSIDERATIONS

Having regard to the provisions of the Planning and Development Act 2000, as amended, and the specific nature of the proposed development which comprises:

- The looped in connection to two existing 220kV power lines, which form part of the national transmission system,
- The construction of new 220kV overhead power lines, associated lattice towers and an electricity sub-station,
- On completion the transfer of ownership and management of the sub-station to EirGrid,
- The additional capacity within the sub-station that will be available within the transmission system and the scope for future expansion of the sub-station,

It is considered that the proposed development falls within the scope of Section 182A of the Planning and Development Act, 2000, as amended. Accordingly the

proposed development would be strategic infrastructure within the meaning of the Act and any application for approval must therefore be made directly to the Board.

Deirdre MacGabhann Senior Planning Inspector 14th January 2016

Appendix

VC0091 - Prescribed bodies

Minister for the Environment, Heritage and Local Government Minister for Communications, Marine and Natural Resources Planning authority in which the development is situated (Galway County Council) Transport Infrastructure Ireland (previously National Roads Authority) Minister for Transport An Taisce The Heritage Council The Regional Planning Authority for the West Region The Minister for Agriculture and Food Commission for Energy Regulation Inland Fisheries Ireland Irish Water