



An
Bord
Pleanála

Inspector's Report ABP-314972-22

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| Development | Permission for a synchronous compensator (electricity grid stabilization) development within the townland of Killeena, near Knockraha, Co.Cork within a site area of approximately 0.8 hectares and all associated works |
| Location | Killeena, Knockraha, Co.Cork |
| Planning Authority | Cork County Council |
| Planning Authority Reg. Ref. | |
| Applicant(s) | Killeena Energy Limited |
| Type of Application | Planning Permission |
| Planning Authority Decision | Grant with conditions |
| Type of Appeal | Third Party Appeals |
| Appellant(s) | Tony and Eileen Dunlea James O'Mahony and Patricia O'Mahony |
| Observer(s) | Road L6989 Residents Association |

Knockraha Area Community
Association CLG

Date of Site Inspection

18th April 2023

Inspector

Susan Clarke

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1.0 Site Location and Description

- 1.1. The site of the proposed development is located in the townland of Killeena, approximately 1.5km southeast of the village of Knockraha and 12km north-east of Cork City. The site (measuring 0.8ha) comprises agricultural grasslands and the surrounding area is predominately pasture. The rural landscape is characterised by dispersed housing and agricultural fields enclosed by semi-mature to mature hedgerows. There is an old vacant stone dwelling located c100m to the east of the site. I note from my site visit that this house would appear to have been inhabited for a significant period of time. The next habituated house in that direction is c.460m away. To the west, the nearest dwelling is c500m from the site.
- 1.2. The site is on the southern side of the local road L6989. On the northern side of this road is the Knockraha 220kV substation. An existing 110kV overhead line traverses the western site boundaries of the subject site. The site slopes in a northeast/southwest direction. The closest watercourse is the Killeena Stream located approximately 0.55km south of the proposed development.
- 1.3. A set of photographs of the site and its environs taken during the course of my site inspection is attached to this Report.

2.0 Proposed Development

- 2.1.1. The proposed development consists of:

- a) A High Inertia Synchronous Compensator (HISC) Compound (0.1 hectares)

- 1 No. High Inertia Synchronous Compensator (HISC) building enclosed within a steel clad framed, housed structure (12.1m max height and 504 sq m);
- Supported by an electrical container area (356sq m) consisting of 8 No. electrical equipment containers with a total area of 238 sq m (each container measuring 29.75 sq m).

External cooler area measuring 180 sq m consisting of 4 No. external cooler units, (each one measuring 30.5 sq m).

1 Auxiliary and Start up Static Frequency Converter (SEC) Transformer

1 Generator circuit breaker, 1 emergency diesel generator and 1 associated diesel storage tank.

b) A High Voltage (HV) Compound (0.04-hectares)

- Main Transformer
- HV equipment

c) A Gas Insulated Switchgear GIS Building Compound

1 High Voltage Gas Insulated Switchgear compound (0.16ha) including a HV Gas Insulated Switchgear (GIS) housed structure (13.5m max height and 558 sq m)

d) Provision of a vehicular entrance onto the L6989, internal access tracks, fencing, temporary construction compound, landscaping and drainage (0.48-hectares).

2.1.2. The compounds will be positioned side by side with the GIS Compound to the north and the HISC and HV compound to the south side of the site. The compounds will be enclosed by a palisade fence, with an outer security fence.

2.1.3. The Applicant advises that a separate permission will be sought in respect of an underground cable connection between the proposed development and the Knockraha substation.

2.1.4. Permission is sought for a period of 10 years.

2.1.5. In addition to a Planning Application Form and Statutory Notices, the application included supporting documents (in association with engineering and landscaping drawings) as follows:

- Planning and Environmental Report
- Appropriate Assessment Screening Report, including a Construction Management Plan and an Environmental Management Plan
- LVIA Photomontages.

Furthermore, a draft construction management plan was submitted at RFI Stage.

2.2. **Amendments to Original Scheme Proposed as Part of an RFI Response**

2.2.1. The following amendments were made to the original scheme on foot of a Request for Further Information (RFI) (dated 29th April 2022):

- Confirmation that 10% of the overall hedgerow species mix will comprise of advanced nursery stock.
- The buildings are proposed to be finished in a dark green colour.
- Advised that abnormal loads would have to exit at Junction 18 on the M8, while normal construction activity can utilise a haul route that continues to Junction 16 on the motorway.

2.3. Amendments to Original Scheme Proposed as Part of an CFI Response

- Confirmation that 50% of the overall hedgerow species mix will comprise of advanced nursery stock.

3.0 Planning Authority Decision

3.1. Decision

Cork County Council issued a Notification of Decision to Grant Permission on 4th October 2022, subject to 30 No. conditions. In summary, key conditions to note include *inter alia*:

- Condition No. 2: Duration of permission shall be 10 years from the date of grant.
- Condition No. 3: A comprehensive scheme of hard and soft landscaping to be submitted and agreed with the Local Authority prior to commencement.
- Condition No. 4: The buildings shall be dark green in colour.
- Condition No. 6: A fire cert shall be obtained and submitted to the Local Authority prior to commencement.
- Condition No. 12: No traffic coming and going to the proposed site shall travel along the L-2964 towards Knockraha village. All traffic shall approach the site from the L-3604 and the L-2966 at Pigeon Hill Crossroads.
- Condition No. 23: Noise levels emanating from the proposed development when measured at Noise Sensitive Locations shall not exceed 55 dBA (30 minute LAR) between 0700 hours and 1900 hours, 50 dBA (30 minute LAR) between 1900 hours and 2300 hours and 45 dBA (15 minute Leq) between 2300 and 0700 hours. All sound measurements shall be carried out in

accordance with ISO Recommendations R 1996 - "Acoustics-Description and Measurement of Environmental Noise Levels" as amended.

- Condition No. 24: A noise monitoring programme shall be implemented to monitor the impact of noise emissions arising from the proposed development.
- Condition No. 29: A Construction Environmental Management Plan shall be put in place and agreed in writing with the Local Authority prior commencement.

3.2. Planning Authority Reports

3.2.1. Planning Reports

Executive Planner (28th April 2022): Key points to note from this report include:

- European, national, regional, and local policy context for the proposed development is outlined.
- The proposed development would enable stabilisation of the electricity grid and can be considered to be strategically important.
- No details provided as to whether other locations were considered for the proposed development.
- Insufficient justification provided as to why a 10 year permission is being sought.
- Information submitted would indicate that the proposed development does not fall within the projects listed in Annex 1 and therefore under the EIA Directive would not trigger the requirement for a mandatory EIA. Further information is required to complete the assessment for potential impact on population and human health.
- The proposed landscaping plan is limited in information and does not provide sufficient details. Concerns regarding the long-term viability and management of the proposed planting to ensure screening in perpetuity.
- Recommends that buildings are dark green.

- Insufficient justification as to why the proposed development has not been located adjacent to the eastern boundary of the site which would benefit from the screening provided by the existing trees.
- Construction Management Plan required to address inter alia air quality during construction and mitigation, and waste management.
- Queries why haul route comes off the M8 at junction 18 and goes onto the R639 instead of continuing on the M8 to junction 16 for Watergrasshill.
- Notes the further information requested by the Local Authority's Environment Engineer in relation to noise impacts.
- The proposal, due to its location, would not result in a detrimental impact on the current levels of daylight, sunlight or outlook to the nearest residential properties.
- Recommends CEMP is prepared, and AA screening be subsequently completed.
- Lighting units will be hooded to minimise light impacts/spillage.
- Proposal considered to have a limited impact on existing biodiversity.
- Proposed development will not result in significant impacts in terms of geology and soils.
- Given the lack of any known monuments within the site and the distance to closest monuments, it is considered that there will be no significant effect on Archaeology, Architectural and Cultural Heritage.
- Queries whether a water source is required for the site for the purposes of firefighting.
- Concludes by recommending a further information is sought in relation to 12 No. items. (See Section 3.2.2.)

Senior Executive Planner (29th April 2022): Endorses the Executive Planner's recommendation to request further information.

3.2.2. A Request for Further Information (RFI) was issued on 29th April 2022 in relation to nine points (with subsections). The points requiring additional information related to

inter alia: site selection, landscaping, building colour, noise impact assessment, requirement to prepare a draft construction management plan, haul routes, and water supply.

Executive Planner (7th July 2022): I note the following from the Executive Planner's Report, which was prepared on receipt of the Response to the Local Authority on 10th June 2022:

- Insufficient justification provided with regards to the root protection zone of the mature trees on the eastern boundary, to demonstrate the extent of the buffer required from these trees.
- Insufficient details as to the required set back from the existing agricultural entrance, to ensure that adequate sightlines are maintained for that entrance.
- Insufficient justification as to why all the proposed planting on the site cannot be semi-mature planting.
- Dark colour proposed on the buildings is considered acceptable.
- Notes concerns from Environment Officer regarding potential for tonal noise.
- Recommends that a condition be imposed requiring the applicant to obtain a fire certificate and submit a copy to the planning authority prior to commencement of development.
- Concludes by recommending a further information is sought in relation to three items.

Senior Executive Planner (7th July 2022): Concurs with Area Planner's recommendation to seek further information from the Applicant.

3.2.3. Further Information was requested on 7th July 2022 in relation to three points. The points requiring additional information related to inter alia: root protection zone of mature trees on the eastern boundary to demonstrate the extent of the buffer required from these trees, sightlines from existing agricultural entrance, justification for not providing semi-mature planting, and potential tonal noise levels.

Executive Planner (3rd October 2022): I note the following from the Executive Planner's Report, which was prepared on receipt of the Response to the Local Authority on 8th September 2022:

- The entrance and structures are a sufficient distance from the trees on the eastern boundary of the field to prevent an impact on the root protection zone. It is considered that on balance the applicant has submitted sufficient information to justify the entrance in the current location.
- The landscape plan is very limited in detail. The more specific detail provided refers to typical hedgerows, rather than being specific on the landscaping plan as to how many trees will be planted. As a result it is recommended that this information is sought by condition.
- On the basis of the information submitted, it is concluded that the proposed development does not require a mandatory EIA or a sub-threshold EIA.
- Concludes recommending permission be granted, subject to condition.

Senior Executive Planner (4th October 2022): Concurs with Area Planner's recommendation to grant permission, subject to condition.

3.2.4. **Other Technical Reports**

Engineering Report (17th June 2022): No objection, subject to condition.

Environment Report (19th September 2022, 4th July 2022 and 26th April 2022): Initial concerns in relation to noise impacts, particularly potential tonal noise during the operational phase of the development. However, subsequent to further information being submitted by the Applicant, the Officer had no objection to the proposal, subject to condition, including that noise levels are restricted and that a noise monitoring programme be prepared and submitted within one month of the survey.

Area Engineer's Report (25th April 2022): No objection, subject to condition.

3.3. **Prescribed Bodies**

IAA (4th April 2022): No observations to make in respect of the application.

Geological Survey of Ireland: No comments received.

Gas Networks Ireland: No comments received.

An Taisce: No comments received.

Development Applications Unit: No comments received.

The Heritage Council: No comments received.

3.4. Third Party Observations

3.4.1. Four third-party observations were made to the Local Authority in respect of the proposed development. The key points can be summarised as follows:

- The site is not zoned for industrial development.
- The proposal is not Strategic Development.
- Health and safety concerns, including pedestrian safety on L6989.
- Concerns raised in relation to noise, lack of security and non-planning compliance on the existing substation site.
- Concern in relation to the overprovision of energy facilities in the wider area and the cumulative impacts from same.
- Concerns in relation to noise impacts from the proposal, and the cumulative impact of the proposal and the existing substation and permitted Celtic Interconnector development.
- Queries the validity of the application.
- Concerns regarding compliance with proposed haul routes.
- Hours of construction unacceptable in a rural area.
- Proposal is out of character with the area.
- Proposal will result in overshadowing.
- Submitted photomontages misrepresent the proposal.
- Little to no consultation with local community.
- Proposal will require an aviation obstruction light.
- Proposal will interfere with area been used to observe the winter solstice.

4.0 Planning History

4.1. Subject Site

- 4.1.1. ABP Reg. Ref. 311031-21: An Bord Pleanála issued a S182A Declaration on 21st October 2021 advising that the provision of an on-site single bay GIS substation and a 220kV underground cable for the purposes of connecting an adjoining proposed synchronous compensator to the Knockraha 220kV substation does not fall within the scope of Section 182A of the Planning and Development 2000 (as amended) and that a planning application should be made in the first instance to Cork County Council.

4.2. Knockraha Substation and Adjoining Lands

- 4.2.1. I note that there are a number of planning applications relating to the Knockraha 220kV substation located northwest of the proposed development.
- 4.2.2. I highlight that An Bord Pleanála granted permission for the Celtic Interconnector in May 2022 subject to 24 No. conditions (ABP: VA04.310798). The permitted development includes for the provision of transformers to be located immediately east of the Knockraha substation.
- 4.2.3. Planning permission has been sought by Island Stability Services Limited for the development of a low carbon inertia services (LCIA) grid support facility, which would connect to the adjoining Knockraha Substation (Reg. Ref. 234234). The proposed development is to be located immediately east of the permitted Celtic Interconnector substation (i.e. north of the subject site). At the time of writing this Report, the Local Authority had not issued a decision in respect of the proposal.

5.0 Policy Context

5.1. National Planning Framework: Project Ireland 2040

- 5.1.1. A key focus on the transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing the country's prodigious renewable energy potential.

5.2. **Climate Action Plan 2023**

- 5.2.1. The Climate Action Plan 2023 is prepared in accordance with the Climate Action and Low Carbon Development (Amendment) Act 2021 and follows the introduction of economy-wide carbon budgets and sectoral emissions ceilings. The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government.

5.3. **Southern Regional Spatial and Economic Strategy (RSES)**

- 5.3.1. The Regional Spatial and Economic Strategy sets out a strategy to implement the NPF in the Southern Region, including Cork. Chapter 8 deals with Water and Energy Utilities with Section 8.2 of the document dealing with the Strategic Energy Grid. It seeks to promote sustainable economic growth, low carbon technology and an increased supply and provision of renewable energies so as to bring about positive regional benefits, such as sustainable development of renewable energy infrastructure. The RPG also states that Regional Climate Change Strategy and Local Climate Change Strategies will aim to reduce reliance on fossil fuels and promote renewable energy sources.

5.4. **Cork County Development Plan 2022-2028**

- 5.4.1. During the Local Authority's assessment of the proposed development from when the application was first lodged in March 2022, the Cork County Development Plan 2014 was reviewed and updated. The relevant development plan to this assessment is the Cork County Development Plan 2022-2028, which came into effect on 6th June 2022.
- 5.4.2. The site is situated within the Metropolitan Greenbelt.

Objective RP 5-13: Land Uses within the County Metropolitan Greenbelt states:

“Preserve the character of the Metropolitan Greenbelt as established in this Plan and to reserve generally for use as agriculture, open space, recreation uses and protection / enhancement of biodiversity of those lands that lie within it”.

Objective RP 5-17: Strategic and Exceptional Development states:

“Recognise that there may be development of a strategic and exceptional nature that may not be suitably located within zoned lands and that such

development may be accommodated successfully in Greenbelt locations. In such circumstances, the impact on the specific functions and open character of the Greenbelt should be minimised”.

Objective CS 2-3 relates to the County Metropolitan Cork Strategic Planning Area and states *inter alia* in subsection (c): *Maintain the principles of the Metropolitan Cork Greenbelt to protect the setting of the City and the Metropolitan Towns and to provide easy access to the countryside and facilities for sports and recreation.*

Objective BE 15-13 relates to Noise and Light Emissions and states:

- (a) Seek the minimisation and control of noise pollution associated with activities or development, having regard to relevant standards, published guidance and the receiving environment.*
- (b) Ensure noise-sensitive developments are adequately protected from potential sources of noise (e.g. national roads). New developments should take account of, and mitigate against, any existing noise sources.*
- (c) Support the implementation of Noise Action Plans prepared for the Cork County area. Seek the minimisation and control of light pollution associated with activities of development, having regard to relevant standards, published guidance and the receiving environment and Dark Sky principles.*
- (d) Review and update Cork County Council Policy Guidelines for Public Lighting to take account of impacts of public lighting on wildlife and night skies.*

5.4.3. The site is located within an area identified as ‘Fissured Fertile Middleground’ landscape character type, which is not designated as a ‘High Value Landscape’ in the Landscape Character Assessment (2007).

5.4.4. Chapter 13 of the Development Plan addresses Energy and Telecommunications. Section 13.16 relates to the Transmission Network which notes that Cork has a very strong electrical grid and substation network, with this network instrumental in supporting the development of the renewable energy industry in the county. Objective ET 13-21a (Electricity Network) states “*Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage, and distribution network infrastructure*”.

5.5. Natural Heritage Designations

5.5.1. The site is c. 4.7km to the Great Island Channel SAC (site code: 001058) and Cork Harbour SPA (site code 004030).

5.6. EIA Screening

5.6.1. The application is supported by a Planning and Environmental Report that includes an EIA Screening (Section 4.0). It rules out the need for mandatory EIA. I accept that the proposed development does not fall within a class of development set out in Part 1 or Part 2 of Schedule 5 of the Planning and Regulations 2001, as amended.

5.6.2. EIA screening was carried out having regard to the criteria listed in Schedule 7 of the Planning and Development Regulations, 2001. Having regard to the limited scale (0.8ha), location and the characteristics of the proposed development and the types and characteristics of potential impacts, I agree with the conclusions reached in the report that there is no real likelihood of significant effects on the environment arising from the proposed development and EIA is not therefore required.

6.0 The Appeal

6.1. Two Third-Party Appeals

Two Third-Party Appeals were submitted to An Bord Pleanála from local residents opposing the Local Authority's decision. Their grounds of appeal are summarised below.

6.1.1. Tony and Eileen Dunlea, Ballynanelagh, Knockraha

- The 'industrial' development does not comply with the CDP.
- The proposal does not meet the test of "Strategic and Exceptional Developments" as An Bord Pleanála deemed the project not to be SID.
- It is irrelevant that the site is on the border of the Green Belt and Rural Housing Control Zone.
- The proposal would industrialise the area having regard to the extant and permitted development surrounding the Knockraha substation. This would have

a significant negative impact on the area and local residents, particularly in relation to noise.

- The cumulative effects of the proposed development and the permitted Celtic Interconnector have not been considered by the Applicant. It is likely noise limits would be exceeded.
- Permission should be refused on site selection/justification grounds:
 - Field No. 2 (as identified in the RFI Response June 2022) directly east of the substation is obviously a more suitable location as it is adjacent to the existing substation. If the proposal was “Strategic and Exceptional Development”, the overhead lines on this site could be diverted.
 - The proposal should have been forced to move further east in order to use the existing mature trees/hedgerow to screen the building.
 - The arguments made in relation to sightlines and trees are misleading. The sightlines are in excess of what is required by Condition No. 7.
 - Questions the requirement for a 85m separation distance from the trees in order to protect the roots.
 - Question whether lands to the east are being left vacant to facilitate a “temporary construction compound and laydown area”?
- Significant noise from Knockraha substation and concerns regarding noise impact from the proposed development. Requests that the application is refused on this basis.
- Requests that the Board, should permission be granted, address Condition No. 23 relating to noise. The Condition as worded means that tones and impulses cannot be penalised in line with the EPA’s NG4 guidance. The Condition does not include the clause about their being no tones or impulses at night. They should not be permitted at any time. This is a glaring omission. Suggest a revised condition as follows:

“Noise levels emanating from the proposed development when measured at the site boundary shall not exceed 55dB LAeq 30 min during 07-00-1900h, 50dB LAeq 30 min during 1900-2300h, and 45 dB

LAeq 30 min during 2300-0700h. The development shall not give rise to audible tones or impulses beyond the boundary at any time. The development shall not give rise to audible tones internally or externally at any noise sensitive location. The development shall not give rise to tones internally at noise sensitive locations when assessed using narrow band analysis as set out in annex D of British Standards BS4142:2014+A1:2019 methods for rating and assessing industrial and commercial sound (2019)”

- The road from Pigeon Hill to the proposed site is narrow and has no passing bays. The risk of traffic accident will increase at school times. It also serves local farmers, which can result in a constant flow of tractors and trailers during silage season.
- The road surface in the Pigeon Hill and surrounding area is deteriorating. Increased traffic from the proposal will exacerbate the problem.
- The site is very visible at a height of +155m OD. The Applicant’s study area only extends to 2km, however the taller buildings will be seen from much greater distances and will look out of character.
- The site’s rural setting, elevated, exposed location with limited opportunity for screening makes it unsuitable for the proposal.

6.1.2. James O’Mahony and Patricia O’Mahony, Killeena, Knockraha, Cork

- The proposal contradicts the aims and objectives of the Metropolitan Cork Greenbelt Area (RCI 5-3) and would create an industrial theme, having a significant negative impact on the area.
- The proposal would have a negative visual impact on the area and contradict CS 4-1(b) of the Development Plan.
- The photomontages do not give an accurate representation of the scale of the development within the rural area.
- Huge concern regarding the cumulative noise levels from the proposed development, existing substation and Interconnector.

- The L6989 is used as a local amenity for walking. Increased construction traffic from the proposal would pose a danger to all road users. Furthermore, the existing road network is in poor condition and is unacceptable for large construction traffic.
- Concerns regarding the high level of maintenance required with the proposed foul sewer system, and the potential smells and contaminants from same should maintenance be neglected.
- Consultation with the developer was vague and the representative was unable to satisfactorily address questions. Consultation was void of information in relation to the proposal.

6.2. Applicant Response

6.2.1. The Applicant submitted a combined First-Party Response to the Board on 28th November 2022 in respect of the Third-party Appeals. The key points raised can be summarised as follows:

- Section 182 has strict thresholds as to whether a project falls into Section 182A, the determining factor is not whether the project is considered 'Strategic' or not. The Local Authority considered that the proposed development would enable stabilization of the electricity grid and can be considered to be strategically important.
- The proposal does not contravene Policy Objective RCI 5-3 and is consistent with RP-15.
- Request the Board to have due regard to emergency regulation proposed under Article 122 by the European Council calling for the immediate speed up and permitting for renewable energy projects such as this proposal during the ongoing energy and climate crisis.
- The immediate area is very much a transition area between the Greenbelt area and the Rural Housing Control Zone, the area is also industrial in character with the established Knockraha substation located immediately to the northwest of the site and multiple overhead electrical transmission lines leading into and out of the substation.

- The site has been sensitively selected and designed so to minimize visual and landscape impact. The receiving environment has sufficient capacity to accommodate the development of its nature especially given the importance of the project to provide stability to the grid and the site selection criteria requirement for the project to be located close to an established electrical substation.
- The planning application and subsequent Responses in June and September considered the cumulative impacts from the proposal, the existing substation and the Celtic Interconnector. The Applicant will liaise with the Local Authority to ensure that no cumulative construction impacts take place. The Celtic Interconnector is to provide underground cabling to Knockraha substation and any above ground works will be contained within the curtilage of the substation. Therefore the perceived industrial character should only relate to Knockraha substation and the proposed development.
- The Applicant is not in a position to request the overhead lines are re-routed to accommodate the proposed development.
- The site location was justified for the proposal in terms of the distances from the treeline along the eastern boundary of the field and sightlines.
- Even if the site entrance was to be designed with a 90m sightline, it would require the felling of mature trees and therefore would have a similar effect.
- A temporary construction compound will likely be required for the project however a location has not yet been identified.
- It is acknowledged that NG4 does not permit tonal noise at night-time periods.
- It is not possible at this stage to determine the potential for tonal noise; it can only be determined at detailed design stage when the specific technology for the facility is selected, agreed, and the accompanying housing structures designed.
- Tonal noise can be mitigated at detailed design stage through measures such as improved enclosure design, quieter plant and equipment selection, preference to less tonal equipment, noise attenuation of ventilation systems, and tuned soundproofing.

- It would not be reasonable to include such a noise condition as suggested by the Appellants relating to the inside a private dwelling with various potential internal sources of tonal noise.
- The limit values and noise criteria proposed for the site are derived from EPA NG4 guidance and thus the Local Authority have applied these standards in generating Condition No. 23 of the grant of planning.
- It is respectfully submitted that Cork County Councils requirements as also set out in Condition No. 24 is robust, as it requires continuous noise monitoring upon completion post construction to confirm the noise criteria are met and capping noise limits are in accordance with ISO recommendations, and agree a methodology prior to commencement of operations applied in ensuring that the full standards in relation to monitoring noise emissions are met.
- Traffic will be minimal during the operational phase.
- Various mitigation measures proposed in the application to mitigate traffic impacts during construction. In addition, the Local Authority has imposed a number of traffic management conditions.
- The proposal would not result in significant increase in the sprawl of industrial facilities.
- The ZTV Map submitted with the application illustrates where the proposal would be visible in the landscape. It is unlikely that the proposal would appear overbearing when viewed from Cork City. For viewpoints in closer proximity, the impact of the proposal would be mitigated by a number of conditions on landscaping boundary treatments to reduce any visual impact.
- The foul water proposal is in accordance with best practice and negates the requirement for the installation of a treatment system on site. Such a system cannot be justified due to the infrequent nature of visitors on the site.
- The Applicant has appointed a Community Liaison Team to engage with the local community. During consultations with the local community prior to the application being submitted to the Local Authority, the applicant found that the vast majority of locals had no problems with the proposal. The common topic

of discussion was Ireland's future energy security, and actions that needed to be taken for renewable energy to help climate change.

6.3. Planning Authority Response

6.3.1. A response from the Local Authority's Planning Department was received by the Board on 22nd November 2022 in relation to the appeals. In summary, the Planning Officer advised that they have no more comments to make and that the reasons for granting conditional planning permission are detailed in the Planner's and Senior Executive Planner's reports.

6.4. Observations

6.4.1. An Observation from the Road L6989 Residents Association was submitted to the Board on 28th October 2022 in respect of James O'Mahony and Patricia O'Mahony's Third-Party Appeal. The key points raised can be summarised as follows:

- Permission should not be granted for the industrial facility to be built in a Green Belt.
- Questions why the Local Authority only requested the Applicant to advise why sites adjacent to the substation or within the landholding, and not a 500m wider area, were not considered. As such, only adjacent sites were examined. There are many other sites with lower topographies, better camouflaged and not impaired by overhead power lines.
- Neither ESB nor Eirgrid have had any difficulty or health and safety issues traversing under the power lines in works to the existing substation.
- An application has been lodged by a private developer on a different site in the area for a synchronous condenser on 2.2ha compound with connection to the existing substation.
- Eirgrid previously considered that developing a converter station next to the existing substation may have been better from a technical perspective, however due to the amount of existing electrical infrastructure already in situ, they located it in an industrial station elsewhere.

- It is unacceptable to grant permission for additional electrical infrastructure acknowledging the noise impact from the existing substation. Having regard to the Local Authority's noise condition it may take an indefinite period to comply with the standards.
- The photomontages do not adequately demonstrate the scale of the structure and impact on the local area.

6.4.2. An Observation from the Knockraha Area Community Association was submitted to the Board on 23rd November 2022 in respect of Tony and Eileen Dunlea's Third-Party Appeal. In summary, the Observation advises that the Association strongly supports the Third-party Appeal and states that the grounds of appeal have been carefully researched and are entirely genuine and the cause of serious concern of the local community.

6.5. **Further Responses**

None.

7.0 **Assessment**

Having examined the application details and all other documentation on file, including the Third-Party Appeals, Observation and Responses and inspection of the site, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues on this appeal are as follows:

- Principle of Development at this location
- Site Selection
- Visual Impact
- Noise
- Traffic
- Other Matters

Each of these issues is addressed in turn below.

7.1. Principle of Development at this location

- 7.1.1. The proposed synchronous compensator is to provide stability to the management of the national grid. At any given time, the consumption of electricity must be matched by the generation of electricity in order to maintain a balance of electricity supply. To support the high levels of wind and solar integration, the grid needs supplementary services such as 'inertia' (resistance to change) to ensure its stability. Traditionally, conventional fossil-fuel generators were used for this purpose, emitting large amounts of CO₂. The proposed synchronous compensator is a zero-carbon technology and will eliminate the fuel costs and the CO₂ emissions generated by traditional plants.
- 7.1.2. The proposed development would facilitate the integration of higher levels of renewables into the electricity grid. It will support the decarbonisation of the electricity sector in line with international, national, regional and local policy objectives and will provide the necessary stability to the grid on a long term and continuous basis.
- 7.1.3. The Appellants argue that the proposed development is inappropriately located within the Metropolitan Greenbelt and as such contravenes the Development Plan. The Appellants state that the proposed development was not considered to be 'Strategic' by An Bord Pleanála as per the S182A declaration in relation to Reg. Ref. 311031-21.
- 7.1.4. For ease of reference I reiterate that Objective RP 5-13 (Land Uses within the County Metropolitan Greenbelt) states:

“Preserve the character of the Metropolitan Greenbelt as established in this Plan and to reserve generally for use as agriculture, open space, recreation uses and protection / enhancement of biodiversity of those lands that lie within it.”

and Objective RP 5-17 (Strategic and Exceptional Development) states:

“Recognise that there may be development of a strategic and exceptional nature that may not be suitably located within zoned lands and that such development may be accommodated successfully in Greenbelt locations. In such circumstances, the impact on the specific functions and open character of the Greenbelt should be minimised.”

- 7.1.5. Whilst the proposal is not strategic in a legislative sense as determined under Reg. Ref. 311031-21, from a practical perspective, it is strategic as its utility is dependent

on its proximity to a substation. In my opinion, the proposal can be considered exceptional on the basis of its requirement to be within a short distance of the Knockraha substation. There are clear advantages which arise from locating the proposed development in close proximity to the existing substation in terms of financial and environmental impacts; additional cabling would be required for more remote locations. Having regard to the foregoing, in my opinion, the proposal is consistent with RP5-17 and Objective ET 13-21a (Electricity Network).

7.1.6. In conclusion, I consider that the proposed development is acceptable in principle in this location, which is strategically positioned in close proximity to the existing substation, providing ease of connection to the national grid.

7.2. Site Selection

7.2.1. The Appellants argued that permission should be refused on site selection/justification grounds. At the outset, I highlight that as the project is not subject to EIA, there is no mandatory requirement to consider alternative sites. Notwithstanding this, the Local Authority sought further information from the Applicant in relation to other local alternative sites adjacent to the substation or within the landholding that could accommodate the proposal. In response, the Applicant advised that the following criteria were applied in the site selection process:

- Within 500m of the Knockraha substation.
- A setback of at least 300m from any house or amenity grounds.
- Good access from the L6989.
- As close to the 220kV substation as possible to minimise the extent of underground cabling.
- Avoidance of overhead lines and buffers as per Eirgrid specifications.

7.2.2. Figure 2-1 attached to the Applicant's RFI Response (June 2022) illustrates that ten sites surrounding the substation were considered. Having regard to the above criteria, the subject site was selected as the preferred site. I consider the site selection process to be practical and reasonable. For the reasons outlined above regarding the advantages of locating the proposal in close proximity to the existing substation, I do not concur with the Observer's suggestion that sites in excess of 500m are required

to be considered, having regard to the availability of appropriate sites at shorter distances to the substation.

- 7.2.3. The Dunlea Appeal argues that Field No. 2 (as identified in the RFI Response, June 2022) (i.e. the lands on the northern side of the L6989, opposite the subject site) is more appropriate as it is adjacent to the existing substation. The Appellants argue that the overhead lines on this land could be redirected. However as highlighted by the Applicant, they do not have the authority to direct Eirgrid to relocate the lines. Furthermore, having regard to the availability of other sites in the area, I do not consider such a proposal is necessary.
- 7.2.4. Notwithstanding that site No. 1 (i.e. east of the substation between the 220kV and 110kV lines) was discounted by the Applicant having regard to its proximity to houses and distance from the public road, I note that planning permission was recently sought by a private developer for a low carbon inertia services (LCIA) grid support facility on a site area of 2.2ha. However, as outlined in Section 4.0 above, this application has not yet been determined by the Local Authority.
- 7.2.5. Furthermore, notwithstanding the subject site could be potentially relocated in an easterly direction, I do not consider that the impacts on the area from such a redesign, particularly in terms of visual impacts, would be substantially reduced. On the contrary, such a proposal, depending on the extent of such a redesign, may result in the loss of some of the mature trees in order to accommodate sufficient sightlines.
- 7.2.6. In summary, in my opinion, sufficient justification for the site selection has been provided. Whilst there may be a limited number of other sites available in the immediate vicinity (i.e. within 500m of the substation) that could potentially accommodate the proposal, I do not consider that they would significantly reduce the primary impacts on the area, as discussed in further detail below. Having regard to the foregoing, I do not recommend that permission is refused on the basis of site selection.

7.3. **Visual Impact**

- 7.3.1. The Appellants argue that the proposed development will result in an industrialised landscape having regard to the extant and permitted development surrounding the Knockraha substation. The O'Mahony Appeal states that the photomontages are indicative and do not give an accurate representation of the scale of the development within the rural area.

- 7.3.2. As mentioned above, the site is located within an area identified as a 'Fissured Fertile Middleground' landscape character type, which is not designated as 'High Value Landscape' in the Landscape Character Assessment (2007). There are no scenic views or scenic routes in the area with the potential to be impacted. Whilst the surrounding landscape is not identified as being particularly sensitive in terms of landscape value, the visual impacts of the proposed development on the local rural community must also be considered. I carried out a detailed site inspection of the subject site and surrounding area. As outlined above, the rural landscape is characterised by dispersed housing and agricultural fields enclosed by semi-mature to mature hedgerows. However, as is evident in Photos 1 and 2 attached to this Report, the existing substation and overhead lines are visually prominent features in the immediate landscape.
- 7.3.3. A landscape and visual impact assessment was included as part of the Planning and Environmental Report. Details of the Zones of Theoretical Visibility (ZTV) are indicated in Figure 10.4 of the Report. In addition, an associated booklet of seven photomontages was submitted with the application. The photomontages were subsequently updated at RFI stage, on foot of a request from the Local Authority to amend the colour of the buildings from a light green to a darker green. The photomontages demonstrate the impact at all viewpoints namely close, mid and distant. I consider that the photomontages are comprehensive in their extent, are representative of the main views available towards the site. However, whilst they may be accurate with regard to a camera view, they do not accurately reflect what would be seen by the naked eye at the respective locations in that the infrastructure will appear closer than they do in the photomontages. Notwithstanding this, such photomontages are only a tool, albeit a useful tool, in assisting and informing an assessment of the potential effects of the proposal.
- 7.3.4. Viewpoints 1, 4, 5, 6, and 7 clearly demonstrate that the proposal would have an imperceptible impact on the landscape. Viewpoints 2 and 3 are positioned at closer ranges to the subject site in comparison to the other viewpoints. Viewpoint 2 clearly illustrates the scale of the proposal and demonstrates that the proposal will have a moderate visual impact on the receiving environment. However the dark green colour on the buildings and screening provided by the proposed planting, make a positive contribution to integrating the proposal into the rural landscape. Electrical

infrastructure, such as substations and high voltage overhead powerlines, by virtue of their large size of associated structures can be difficult to completely screen from view. As such, in my opinion, a redesign of the proposal to located it in a more easterly direction, would have a limited effect on the overall visual impact on the area due to the height and scale of the proposal. Nonetheless, creative planting can assist in significantly reducing the overall visual impact of such development on the landscape, which is clearly illustrated in Viewpoints 2 and 3. As such, I concur with the Local Authority that a minimum of 50% of the planting to be provided on site should be mature. I recommend that should the Board grant permission for the proposal, that a detailed landscaping plan, including a maintenance plan be submitted and agreed with the Local Authority prior to the commencement of the development. As is evident from the ZTV Map, the proposal will not be visible from Knockraha village. In summary, I consider the magnitude of change in terms of the visual impacts arising from the proposed development on the area, which is already impacted by multiple overhead lines and electricity pylons, to be limited.

- 7.3.5. In relation to the cumulative impact from the proposal with regards to the Knockraha substation and the permitted Celtic Interconnector, I have examined the photomontages prepared in respect of the Celtic Interconnector that relate to Knockraha. (As stated above, a planning decision has not yet been issued in respect of Reg. Ref. 234234 and as such, it has not formed part of the cumulative assessment.) As outlined above, the Celtic Interconnector includes for transformers to be located adjacent to the Knockraha substation to convert the 400kV power from the interconnector to 220kV power. In my opinion, the permitted development will be imperceptible from the village and wider landscape and as such, whilst it is not included in the photomontages for the subject case, I do not consider that the cumulative impact from the proposal and the Celtic Interconnector would be significant. In summary, I do not consider that the proposal will have a negative cumulative impact on the area.
- 7.3.6. In conclusion, having regard to the need for the proposed development as an important piece of infrastructure necessary to provide stability to the national grid, the location of the site in a landscape with a low sensitivity rating, the proximity of the existing Knockraha substation and the mitigation measures proposed to screen the

site, I consider that the proposed development would be acceptable in terms of its localised impacts on the landscape and visual amenities of the area.

7.4. Noise

- 7.4.1. Similar to the concerns raised in relation to the cumulative visual impact from the proposal, existing substation and Celtic Interconnector, the Third-party Appellants raise concerns in relation to noise impacts, particularly in relation to potential tonal impacts, from the proposed development. The Appellants state that there is a 'hum' from the existing substation. The Dunlea Appeal argues that Condition No. 23 attached to the Local Authority's Notification of Decision to Grant Permission will not include for potential tonal impacts, and suggest a revised condition be attached should the Board grant permission for the proposed development.
- 7.4.2. The noise and vibration emissions associated with the proposed synchronous compressor is assessed in Chapter 8 of the Planning and Environmental Report. In summary, it describes the existing baseline noise environment, the guidance used for the assessment of construction/operational noise and vibration. It provides details of a noise survey conducted in proximity to sensitive receptors close to the site and predicted noise and vibration levels associated with the construction and operational phases of the development. The overall conclusion reached is that predicted noise levels at sensitive receptors will be below the relevant noise limits for both the construction and operational stages of the development. No significant vibration impacts are predicted for either the construction or operational phases of the proposed development which would be perceptible to human receptors or cause damage to buildings.
- 7.4.3. A range of standard best practice mitigation measures are proposed during construction to reduce potential impacts on the local community. These include controls on hours of construction, use of appropriate plant and equipment with low noise level generation, appropriate maintenance of silencers and other machinery/equipment and proposals to locate noise generating equipment as far as possible from noise sensitive receptors.
- 7.4.4. As outlined above, the Local Authority's Environmental Officer raised concerns in relation to potential noise impacts from the proposal and requested that the Applicant

provide further information in relation to the location of noise monitoring locations used to establish the baseline and identification of the noise sensitive receptors. In addition, the Officer requested that the Applicant outline and detail predicted operational and cumulative noise levels in relation to tonal/impulsive elements. In response, the Applicant highlighted that there are three noise sensitive properties within 500m of the proposed development and two further located just beyond this threshold. Furthermore, the Response highlights that the assessment was conducted in accordance with EPA's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) (2016). Table 4.1 of the RFI Response outlines that the predicted operational noise levels for the proposed development both on its own and cumulatively with the existing substation and the Celtic Interconnector for the five closest receptors (the closest being 450m from the subject site – identified as Receptor 1). It indicates that Receptors 1 and 4 would experience a maximum cumulative noise level of 37.6LAeq and 36.36LAeq, respectively, while the remaining receptors would experience noise levels ranging from 26.4LAeq to 29.9 LAeq. The Applicant states that *“as the night-time has the most onerous criteria , a limit of 45 dB LAeq,T applies at locations R1 and R4. This is because the background noise is slightly higher at these properties from the existing Knockraha substation. At the remaining locations considered as part of this assessment a limit of 35 dB LAeq,T applies.”* The Applicant concludes that as the predicted noise levels are within the EPA's noise limits, no mitigation is proposed.

- 7.4.5. As outlined by both the Applicant and in the Dunlea Appeal, the EPA guidance requires that there is no tonal noise at night. In response to the Local Authority's concerns regarding the potential for such noise, the Applicant advised that it is not possible to assess tonal noise prior to the installation of the equipment. The Applicant outlined a number of noise control measures that would be considered during the detailed design phases to address potential tonal noise, including: improved enclosure design, selection of quieter plant and equipment, requesting tonal information of key equipment from suppliers so that preference is given to less tonal equipment, noise attenuation of ventilation systems to enclosures, and consideration of tuned soundproofing to control noise at certain frequencies). The Local Authority's Officer considered this acceptable, and I highlight that Condition No. 23 attached to the Notification of Decision to Grant states:

Noise levels emanating from the proposed development when measured at Noise Sensitive Locations shall not exceed 55 dBA (30 minute LAR) between 0700 hours and 1900 hours, 50 dBA (30 minute LAR) between 1900 hours and 2300 hours and 45 dBA (15 minute Leq) between 2300 and 0700 hours. All sound measurements shall be carried out in accordance with ISO Recommendations R 1996 - "Acoustics-Description and Measurement of Environmental Noise Levels" as amended.

Reason: To safeguard the amenities of the area and control noise emissions from the development.

In addition, Condition No. 24 requires:

A noise monitoring programme shall be implemented to monitor the impact of noise emissions arising from the proposed development. The scope and methodology of this programme shall be submitted to and agreed in writing with the Planning Authority prior to the commencement of operations on site. Monitoring points shall be located so as to ensure that monitoring is reflective of the noise emanating from the proposed development. The results of the survey shall be submitted to the Planning Authority within 1 month of completion of the survey. The developer shall carry out any amendments to the programme or additional noise mitigation measures as may be required by the Planning Authority following a review of each or all noise survey results.

Reason: To safeguard the amenities of the area.

7.4.6. I reiterate that the Dunlea Appeal requests that the wording of Condition No. 23 be amended to state:

*“Noise levels emanating from the proposed development when measured at the site boundary shall not exceed 55dB LAeq 30 min during 07-00-1900h, 50dB LAeq 30 min during 1900-2300h, and 45 dB LAeq 30 min during 2300-0700h. **The development shall not give rise to audible tones or impulses beyond the boundary at any time. The development shall not give rise to audible tones internally or externally at any noise sensitive location. The development shall not give rise to tones internally at noise sensitive locations when assessed using narrow band analysis as set out in annex***

D of British Standards BS4142:2014+A1:2019 methods for rating and assessing industrial and commercial sound (2019)” (Bold: My emphasis.)

- 7.4.7. I do not consider that such a condition would be lawful or enforceable with reference to internal audible tones and as such, I do not recommend that it be imposed should the Board grant permission for the proposed development.
- 7.4.8. In conclusion, I consider that the information provided in the planning application and subsequent responses by the Application to be sufficient in order to allow the impacts of the proposed development on the noise environment to be assessed. The primary noise impacts will be associated with the construction stage, but these will be temporary and short term and capable of mitigation by the measures proposed. I am satisfied that subject to suitable conditions, the proposed development can operate within acceptable noise/vibration limits in conjunction with the existing substation and Celtic Interconnector.

7.5. Traffic

- 7.5.1. The Third-Party Appellants argue that the L6989 is too narrow and has too few passing bays to accommodate the proposal and as a result the risk of a traffic accident will increase. Furthermore, it is argued that the road surface is deteriorating and that the proposed development will exacerbate the problem.
- 7.5.2. Chapter 7 of the Planning and Environmental Report that was submitted with the planning application addresses roads, traffic and transportation. Figure 7.1 of the Report illustrates the proposed haul route, which in short, commences in Cork City, before progressing onto the M8 and departing on R639 at Junction 18 to travel to Junction 16 Watergrasshill, where then it continues to travel over the M8 onto the L3012. It then continues to the L3011, L1540, L3602, L7609, L3604 and L6989. As such, the haul route does not go through Knockraha village. The Applicant confirmed at RFI stage that the haul route does not come off at Junction 16 on the M8, as due to a sharp right-handed turn at Junction 16, civil accommodation works would be required for larger components. Normal construction activity can utilise a haul route that continues on the M8 to Junction 16 at Watergrasshill (i.e. and not exit at Junction 18 onto the R639). The Applicant advises that the proposal would lead to an additional 926 HGV trips (two-way) over the 12-16 month construction period, which is calculated to equate to an average daily increase of 4 HGV trips per day. The combined HGV

and LGV average daily increase is estimated to be 44 trips per day during the construction phase. As the proposal will be operated remotely, there are no significant increases in traffic anticipated during the operational phase (two LGV trips per year). Whilst the proposal will result in a significant increase in traffic movements during the construction phase of the proposal, subject to condition including the preparation of a detailed traffic management plan, which should prohibit construction traffic through Knockraha village, I consider this acceptable having regard to the short-term nature of these works.

- 7.5.3. With respect to the condition of the L6989, I did not notice any particularly hazardous issues during my site visit in the area. One of the mitigation measures outlined in Chapter 7 of the Planning and Environmental Report states that “*A pre and post construction road survey will be undertaken on roads used by construction site, construction plant or haul vehicles. Any necessary measures shall be put in place at the site entry/exit points.*” I consider this to be an appropriate and reasonable measure to ensure that road conditions do not deteriorate during the construction phase of the proposed development.
- 7.5.4. With respect to sightlines, the Applicant proposes 160m sightlines, while Condition No. 7 attached to the Notification of Decision to Grant only requires 90m in both directions. Having visited the site, I consider that there is adequate visibility having regard to the relatively straight layout of the road. Having regard to the location of the development on a straight road in a rural area and the volume of traffic on same, I am satisfied that 90m sightlines are acceptable and I do not consider that the proposal would result in a traffic hazard. In addition, I note that such sightlines would require fewer felling of the trees.
- 7.5.5. In conclusion, I consider the proposed development to be acceptable in terms of traffic safety and convenience.

7.6. Other Matters

Foul Water Disposal

- 7.6.1. The O’Mahony Appeal raises concerns regarding the high level of maintenance required in respect of the proposed foul sewer system, and the potential smells and

contaminants from same should maintenance be neglected. The foul system consists of an underground pipe network, foul manholes and 18m³ full retention foul effluent storage tank. The tank will have an associated high-level alarm which will be connected to the GIS building. The foul holding tank would be maintained and emptied bi-annually by a licenced contractor to treat and dispose of the foul water in accordance with a valid waste collection permit. The Applicant states that the foul water proposal is in accordance with best practice and negates the requirement for the installation of a treatment system on site, which cannot be justified due to the infrequent nature of visitors on the site. Having regard to the fact that the facility will be monitored remotely and as such there will be no full-time staff on site, I consider the proposal to be acceptable and do not consider it to represent a risk to public health nor will it adversely impact the amenity of the area.

Temporary Construction Compound and Laydown Area

- 7.6.2. The Dunlea Appeal queries whether a temporary construction compound and laydown area is proposed to the east of the site. In response, the Applicant stated that such a compound would likely be required, but a location had not yet been identified. I note that the location of such facilities is generally identified in the detailed construction management plan that would be submitted and agreed with a Local Authority prior to the commencement of a development. I recommend same be conditioned to the proposed development, should the Board grant permission for the proposal.

Consultation

- 7.6.3. Public consultation prior to the lodgement of an application is not mandatory for a project of this size and nature. Furthermore, I note that observations were made to the Local Authority in respect to the proposed development during the relevant statutory consultation periods following the lodgement of the planning application. I note also that the Applicant has established a website providing details in relation to the project and confirmed that a community liaison team has been appointed.

8.0 Appropriate Assessment

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

- 8.1.1. 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.

8.2. Background on the Application

- 8.2.1. The Applicant submitted a report entitled 'Appropriate Assessment Screening Report', dated February 2022, which was prepared by their agent, Fehily Timoney as part of the subject planning application.
- 8.2.2. The applicant's AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development, the proposed construction methodology and undertakes a source-pathway-receptor assessment in order to identify the potential for significant effects on European Sites within a possible zone of influence of the development.
- 8.2.3. The Applicant's AA Screening Report states that there are no European Sites with a source-pathway receptor linkage to the proposed development site. The Report concludes "*As there is no hydrological linkage between the site and any protected European site, the nearest of which lies 4.7km to the south, there are no envisaged impacts and consequently no Natura Impact Statement (NIS) was required and / or conducted.*"
- 8.2.4. Having reviewed the documentation submitted with the application, 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.

8.3. Screening for Appropriate Assessment – Test of Likely Significant Effects

- 8.3.1. The proposed development 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 any European sites.
- 8.3.2. The proposed development is examined in relation to any possible interaction with European sites, i.e. designated Special Areas of Conservation (SAC) and Special

Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

8.3.3. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction phase impacts on surface water due to pollution or contamination with silt, chemicals, oils, hydrocarbons, etc.
- Habitat disturbance /species disturbance (construction and or operational).

8.4. **Submissions and Observations**

8.4.1. None of the submissions or observations received in connection with the application or the appeal have raised the issue of Appropriate Assessment.

8.5. **European Sites**

8.5.1. The development site is not located in or immediately adjacent to a European site. The Applicant's AA Screening Report considers European Sites within 15km of the proposed development. Having regard to the nature of the proposed development, the nature of the receiving environment and the source-pathway-receptor model, I consider this to be a reasonable zone of influence. I also note that within the Applicant's Screening Report their source pathway receptor assessment outlines three potential sources as follows: land take; resource requirements; and emissions (water and noise).

8.5.2. There are two European Sites within the zone; the Great Island Channel SAC (site code: 001058) and Cork Harbour SPA (site code 004030), both located approx. 4.7km from the subject site.

8.6. **Identification of likely significant effects**

8.6.1. As noted above, there is no pathway from the subject site to any of the European sites identified above. The proposed development relates to the construction of a synchronous compensator compound and ancillary works. Section 4.2 of the Applicant's Environmental Management Plan detailed the various best practice techniques that will be utilised in relation to drainage, including the provision of attenuation tanks, and bypass oil separators. The foul system will consist of an

underground pipe network, foul manholes and 18m³ full retention foul effluent storage tank. The tank will have an associated high-level alarm which will be connected to the GIS building. The foul holding tank would be maintained and emptied bi-annually by a licenced contractor to treat and dispose of the foul water in accordance with a valid waste collection permit.

8.6.2. Having regard to the nature and scale of the proposed development that is before the Board, the separation distance from the designated sites and the absence of any tangible pathways, I consider that there is no potential for likely significant effects on any designated site.

8.6.3. With regard to the potential for in-combination effects, given that no significant effects have been identified, there is no likelihood of in-combination effects.

8.7. Mitigation Measures

8.7.1. 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.

8.8. Screening Determination

8.8.1. The proposed development was considered in light of the requirements of Section 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 be likely to give rise to significant effects on any other European site, in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.

8.8.2. This determination is based on the nature and scale of the proposed development, the nature of the Conservation Objectives, Qualifying Interests and the separation distances and absence of pathways between the proposed development and the European site.

9.0 Recommendation

On the basis of the above assessment, I recommend that the Board Grant Permission for the proposed development for the Reasons and Considerations set out below.

10.0 Reasons and Considerations

In coming to its decision, the Board had regard to:

- (a) the nature, scale and extent of the proposed development,
- (b) the characteristics of the site and of the general vicinity,
- (c) national, regional and local policy support for developing renewable energy, in particular:
 - National Planning Framework, 2018,
 - Climate Action Plan, 2023,
 - Regional Spatial and Economic Strategy for the Southern Region,
 - Cork County Development Plan, 2022-2028,
- (d) the distance to dwellings or other sensitive receptors from the proposed development,
- (e) proximity to the Knockraha Substation,
- (f) the planning history of the immediate area,
- (g) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely effects of the proposed development on European Sites,
- (h) the report of the Inspector.

10.1. Appropriate Assessment Screening

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European Sites in view of the sites' Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to

have a significant effect on any other European site, in view of the site's Conservation Objectives.

This screening determination is based on the assessment of the nature and scale of the proposed development, the nature of the European Sites identified, the Qualifying Interests/Special Conservation Interests and the substantial separation distance and absence of pathways between the European Sites and the proposed development.

10.2. **Proper Planning and Sustainable Development**

It is considered that subject to compliance with the conditions set out below the proposed development would accord with national, regional and local planning and related policy, it would not have an unacceptable impact on the landscape, it would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on 30th March 2022, 10th June 2022 and 8th September 2022, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. All of the environmental, construction and ecological mitigation and monitoring measures set out in the Planning and Environmental Report, and other particulars submitted with the application shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order.

Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

3. The period during which the development may be carried out shall be 10 years from the date of this Order.

Reason: In the interest of clarity and having regard to the scale and nature of the proposed development.

4. Details of the materials, colours and textures of the external finishes of the proposed structures and enclosing fencing shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interests of the visual amenities of the area.

5. The site shall be landscaped in accordance with a comprehensive scheme of hard and soft landscaping, full details of which shall be submitted to and agreed in writing with the Planning Authority before any development commences, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing. The said scheme shall include, inter alia, a programme for the implementation and maintenance of the scheme and shall specifically address the viability of the proposed planting.

Reason: In the interests of visual amenity.

6. (a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:

- (i) An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive [The T value shall be one hour]

- (ii) An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.

At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.

(b) All sound measurement shall be carried out in accordance with ISO Recommendation R 199 "Assessment of Noise with respect to Community

Response” as amended by ISO Recommendations R 1996 1,2 or 3 “Description and Measurement of Environmental Noise”, as applicable.

(c) within one month of the commissioning into use of the proposed development a noise survey and assessment, including a tonal assessment and any mitigation measures required shall be submitted to the planning authority for written agreement.

Reason: To protect the amenities of property in the vicinity.

7. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works in respect of both the construction and operation phases of the proposed development. Prior to the operation of the proposed development, the Applicant shall submit details of the licenced contractor, including a copy of valid waste collection permit for the treatment and disposal of the foul water, to the Local Authority.

Reason: In the interest of environmental protection and public health.

8. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the planning authority. The CEMP shall incorporate the following:

(a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site noise liaison officer, and the management, transport and disposal of construction waste;

(b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;

(c) an emergency response plan; and

(d) proposals in relation to public information and communication.

A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of environmental protection and orderly development.

9. The developer shall comply with the transportation requirements of the planning authority and other relevant bodies for such works and services as appropriate.

Reason: In the interest of traffic and pedestrian safety.

10. Prior to commencement of development, a traffic management plan for the construction phase shall be submitted to, and agreed in writing with the planning authority. The traffic plan shall incorporate the following:

- i. Details of the road network/haulage routes and the vehicle type to be used to transport materials to and from the site and a schedule of control measures for exceptionally wide and heavy delivery loads.
- ii. A condition survey of the roads and bridges along the haul routes shall be carried out at the developer's expense by a suitably qualified person both before and after the construction of the proposed development. This survey shall include a schedule of required works to cater for constructed related traffic. The extent and scope of the survey and the schedule of works shall be agreed with the planning authority prior to commencement of development.
- iii. Detailed arrangements whereby the rectification of any construction damage which arises shall be completed to the satisfaction of the planning authority.
- iv. Details of construction related directional and road safety signage.
- v. Measures to obviate queuing of construction traffic on the adjoining road network.
- vi. All works arising from the aforementioned arrangements shall be completed at the developer's expense.

Reason: To protect the public road network.

11. The site development and construction works shall be carried out such a manner as to ensure that the adjoining roads are kept clear of debris, soil and other material and cleaning works shall be carried on the adjoining public roads by the developer and at the developer's expense on a daily basis.

Reason: To protect the residential amenities of property in the vicinity.

12. Construction works shall be confined to between 08.00 and 18.00 hours Monday to Friday inclusive and between 08.00 hours and 16.00 hours on Saturdays and not at all on Sundays or Bank Holidays.

Reason: To safeguard the amenities of property in the vicinity.

13. The developer shall retain the services of a suitably qualified and experienced bat specialist to survey the site for the presence of bat roosts, prior to commencement of development. In the event that any roosts are identified, the National Parks and Wildlife Service shall be consulted regarding how best to deal with such roosts. The removal of any roosts identified shall be carried out only under licence from the National Parks and Wildlife Service.

Reason: In the interest of protecting ecology and wildlife in the area.

14. The developer shall retain the services of a suitably qualified and experienced ecologist to survey the site for the presence of badger, prior to commencement of development. In the event that any setts are identified, the National Parks and Wildlife Service shall be consulted regarding how best to deal with such setts. The removal of any setts identified shall be carried out only under licence from the National Parks and Wildlife Service.

Reason: In the interests of protecting ecology and wildlife in the area.

15. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist on the site. In this regard, the developer shall-

- a. notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) in relation to the development,
- b. employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works.
- c. provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

16. All lighting within the site shall be cowled to prevent overspill outside the site.

Reason: To reduce impacts on local biodiversity.

17. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to planning authority, to secure the reinstatement of public roads which may be damaged during the transport of materials to the site, coupled with an agreement empowering the planning authorities to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authorities and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory reinstatement of the delivery routes.

18. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the Scheme.

Reason: It is a requirement of the Planning and Development Act, 2000, as amended, that a condition requiring a contribution in accordance with

Development Contribution Scheme made under Section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Susan Clarke

Senior Planning Inspector

20th April 2023