



An
Bord
Pleanála

Inspector's Report PL08.248216

Development	Uprate of a section of the existing Clashavoon to Tarbert 220kv overhead line alteration to 110 masts
Location	Shronebeirne, Dooneen, Glanlarehan and Knockaboul, Co. Kerry
Planning Authority	Kerry County Council
Planning Authority Reg. Ref.	16/1284
Applicant(s)	Eirgrid PLC
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	Third Party x 2
Appellant(s)	Denis Roche & Others James G. Keane
Observer(s)	None
Date of Site Inspection	25 th June 2017
Inspector	Mary Crowley
Appendix A	NPWS Conservation Objectives

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1.0 Site Location and Description

- 1.1. The applicant, EirGrid, the electricity Transmission System Operator for Ireland, has identified the need to uprate the existing 220kV Clashavoon to Tarbert overhead electricity transmission line, located in counties Cork and Kerry. The proposed line uprate works include alterations to structures and replacement of the existing overhead line conductor which involved re-stringing by pulling the new conductor between the angle structures. It is stated that the operation and maintenance activities for the uprated line will be no different from the operation and maintenance activities for the current line.
- 1.2. The existing Knockanure, Co Limerick (Structure 63 in Lacka East) to Ballyvouskill, Co Cork (Structure 233 in Cloughboola More) to 220kV line is approximately 60.4 km in length of which 39.2km is in Co Kerry and 21.2km is in Co Cork. The overhead line is supported by a series of galvanised steel lattice structures or intermediate structures on straight sections with galvanised steel lattice angle structures located where the line changes direction. There are 171 existing structures in total along this section of the line, 156 of which are intermediate structures and 15 of which are angle structures. Two new lattice structures will be installed as part of the project. One existing lattice steel intermediate structure will be removed.
- 1.3. The location of the line uprate works within Co Kerry is between Structures 63 (Lacka East) and Structure 172 (Ballynahulla). The River Backwater forms the Cork / Kerry county boundary between Ballynahulla, Co Kerry and Glencollins Upper in Co Cork.
- 1.4. The proposed development in Co. Kerry is located in the townlands of Lacka East, Foildarrig, Coolvackagh, Kilcarra More, Scrahan, Knockaderreen, Rylane, Meennahoma, Meenscovane, Ahane, Beheenagh, Knocknagashel East, Meenbannivane, Ballyduff, Lackbrooder, Meenleirim North, Meenleirim South, Knockachur, Lackanoneen, Knockardtry, Kilbannivane, Kilcusnaun, Ballyplimoth, Ballynahallia, Cordal West, Breahig, Mullen, Leaha, Derreen, Knockyeala, Tooreengarriv & Ballynahulla.
- 1.5. The proposed works will be facilitated in terms of storage of equipment and materials by six proposed temporary storage yard, four of which are located within Co Kerry at

Shronebeirne (existing yard), Dooneen (existing yard), Glanlarehan (currently used as a quarry) and Knocknaboul (existing yard).

- 1.6. A set of photographs of the site and its environs taken during the course of my site inspections is attached. I would also refer the Board to the photos available to view throughout the appeal file.

2.0 Proposed Development

- 2.1. Eirgrid applied to Kerry County Council in December 2016 for permission for the development associated with the uprate of a section of the existing Clashavoon to Tarbert 220kv overhead line.

- 2.2. The section of the proposed development in Co Kerry comprises the renewal and alteration to a total of 110 mast structures, between Structures 63 (Lacka East) and Structure 172 (Ballynahulla), including the following:

- foundation upgrade development
- removal of an existing lattice steel intermediate mast structure no. 107 in the townland of Lackbrooder and replacement with a new lattice steel angle mast structure up to 22m in elevation above the ground,
- installation of one new lattice steel angle mast structure up to 22m in elevation above the ground in the townland of Meenleirim North, and
- restringing of the existing overhead line with new conductor

- 2.3. The proposed development also includes all associated & ancillary works including comprising or relating to permanent & temporary construction & excavation as follows:

- construction of temporary guard poles
- construction & reinstatement of temporary access tracks
- improvement & reinstatement of new temporary entrances
- widening of existing entrances
- temporary silt fencing
- temporary silt traps
- temporary culverts

- temporary clear span bridging and
- the clearance of vegetation at various locations along the route to facilitate the proposed principal development.

2.4. The application was accompanied by the following:

- Letter of consent from ESB
- Planning & Environmental Considerations Report which includes an EIA Screening Report, an initial AA Screening Report, a Natura Impact Statement (NIS) and a Construction Methodology Report.

3.0 Planning Authority Decision

3.1. **Kerry County Council** issued notification of decision to grant permission subject to the following three conditions:

1. *The development shall be carried out in accordance with the plans and particulars received by the Planning Authority on 22/12/2016 except for any alterations or modifications specified in this decision.*

Reason: *To regulate and control the layout of the development.*

2. (a) *An on-site environmental manager/ecological clerk of works shall supervise compliance with mitigation measures recommended in the NIS, particularly in relation to water quality control and management and Hen Harrier mitigation. The ecological clerk-of-works shall be empowered to ensure compliance with mitigation measures and/or to halt construction works if they deem a pollution event is likely. Contact details for this individual shall be forwarded to the Planning Authority at the commencement notice stage of the development.*

(b) *Suitable measures shall be implemented in advance of any development works commencing on site to ensure that polluting matter (includes sedimentation) is not discharged to any watercourses. These measures shall be fully maintained thereafter.*

(c) *Should the identified measures not be adequate to control all sedimented water run-off, additional suitable measures shall be put in place to*

ensure that sedimented water does not discharge to any watercourses. Where fugitive emissions to water occur, works shall cease until effective controls have been put in place. The Planning Authority and Inland Fisheries Ireland shall be notified immediately when any emissions to water have occurred.

(d) Bunds shall be installed around all temporary oil containment facilities and the developer shall ensure that no oil, grease or other objectionable matter is discharged into any drain, sewer or watercourse.

(e) All non-hazardous waste generated on the site shall be taken directly to a suitably authorised waste facility or transfer to a suitably licenced waste collector.

(f) Prior to the commencement of any works on site, the applicant/developer shall retain the services of a competent person(s) to carry out a final evaluation and quantification of all demolition and excavation waste likely to arise during the proposed works and shall develop a waste management and disposal plan for all such wastes arising. A copy of this plan shall be submitted to the Planning Authority for agreement and approval prior to Commencement Notice stage. The agreed plan shall be fully implemented unless otherwise subsequently approved in writing by the Planning Authority. The standardised format for the plan in question is available directly from the Environment Department of Kerry County Council.

Reason: *In the interest of public health and to prevent pollution.*

- 3. Formation of any access points shall not cause surface water or seepage water to flow onto the road surface. No water from these access points shall be allowed to flow onto the public road. The developer shall institute appropriate measures to prevent material being drawn from the site or deposited onto the public road. The developer shall make good any damage caused to the public road as a result of their works to the satisfaction of the Area Engineer. Details of all works on the public road shall be agreed in advance with the Operations Department of the Tralee, Killarney or Listowel Municipal District Offices. All road openings are subject to a licence from*

Kerry County Council, Operations Department and are subject to the usual fees and conditions.

Reason: *To avoid a traffic hazard and protect public property.*

3.2. Planning Authority Reports

3.2.1. Planning Reports

3.2.2. The **Local Authority Case Planner** noted in their report that *the lands at the location of the proposed development are in part zoned Rural General and in part Secondary Special Amenity.* The report further states that *the application has been discussed with Cork County Council in relation to the requirement for EIA and that all objections have been noted.* The Planner recommended that *permission be granted subject to conditions.* The notification of decision issued by Kerry County Council reflects this recommendation.

3.2.3. Other Technical Reports

3.2.4. The **Kerry National Road Design Office (KNRDO)** recommended that the report be referred to Transport Infrastructure Ireland (TII) for comment.

3.2.5. **Kerry County Council Operations Department** has no stated objections to the scheme subject to conditions relating to surface water, construction management, road opening license and the requirement to pay a Special Levy of €39,000 towards the maintenance of the public infrastructure (road surface) in the vicinity of the overhead lines based on the following:

Public Roads: *39.2km of overhead line x €1,000 per km = €39,200*

3.2.6. **Kerry County Council Environment Section** state that they had not visited the site and that their comments were based on a review of the planning documentation. It is recommended that a number of conditions be attached relating to the appointment of a full time environmental manager, mitigation measures, bunding, non-hazardous waste removal and waste management. Condition No 2 of the notification of decision to grant permission sets out these conditions.

3.2.7. **Kerry County Council Biodiversity Officer** concluded that the proposed development shall not adversely affect the integrity of a European Site and that adverse effects on Natura 2000 sites and the local environment are ruled out further

to the mitigation as proposed with the application. Recommended that the following conditions be attached:

- Mitigation as proposed in the application
- An on-site environmental manager/ecological clerk of works shall supervise compliance with mitigation measures recommended in the NIS, particularly in relation to water quality control and management and Hen Harrier mitigation. The ecological clerk-of-works shall be empowered to ensure compliance with mitigation measures and/or to halt construction works if they deem a pollution event is likely.

Condition No 2(a) of the notification of decision to grant permission sets out these conditions.

3.2.8. The **Killarney Municipal Area Planner** had no stated objection to the development.

3.3. **Prescribed Bodies**

3.3.1. **Transport Infrastructure Ireland (TII)** has no stated observations.

3.3.2. The **Commission for Energy Regulation (CER)** acknowledge receipt of the application.

3.3.3. The **Health Service Executive (HSE)** has no objection to the proposed development.

3.3.4. **Inland Fisheries (IFI)** states that this development traverses an extensive area from North Kerry through to County Cork and in the process crosses several major salmonid rivers and Special Areas of Conservation including the Rivers Feale, Brown Flesk and the Cork Blackwater; all requiring protection from physical interference from any aspect of the proposed development. IFI request that all mitigation measures identified at the preplanning stage are implemented during the course of development and that such measures should be reviewed throughout the development phase and amended where necessary.

3.4. **Third Party Observations**

3.4.1. There are 17 observations recorded on the planning file from (1) Maurice Luke Keane, (2) Denis Roche & Others, (3) Geoffrey Keane, (4) Laurence Murphy, (5)

John Joe Riordan, (6) Patrick Walsh, (7) John Gaire, (8) Margaret Scanlon Barrett, (9) Peggy Barrett, (10) Joseph Barrett, (11) John Joe Barrett, (12) Eamonn O'Callaghan, (13) Michael Mangan & Others, (14) Michael Mangan, (15) James G. Keane, (16) Brendan Cahill and (17) Michael Walsh.

- 3.4.2. The issues raised related to health and safety, potential damage to property, lack of community input, public safety, proximity of dwelling houses, possible adverse effects for health, noise, increase in electric and magnetic fields, objection to EirGrid accessing agricultural lands for upgrading works, loss of agricultural earnings, impact of maintenance measures on livestock, environmental hazard, devaluation of property, alternatives means should be used, visually obtrusive, infringement on property rights, disrupts farm business and the lines should be placed underground,

4.0 Planning History

- 4.1.1. The existing 220 kV overhead line forms part of several 220 kV overhead lines which connect Tarbert 220 kV substation in County Kerry with Clashavoon 220 kV substation in County Cork. It is stated that the line was permitted in 1973 under the Local Government (Planning and Development Act) 1963.
- 4.1.2. More recently, works associated with three new 220 kV substation on this exiting overhead line, Knockanure, Ballynahulla and Ballyvouskill were granted permission by An Bord Pleanála in November 2012 (VA0011 and VA0012) and June 2012 (VA0008) respectively. The connection of these three 220 kV substations into the existing 220 kV line has since been completed.
- 4.1.3. It is stated that previous planning applications were submitted in respect of this proposed development to Kerry and Cork County Councils. While these applications were withdrawn by the applicant in August 2016 they were the subject of preplanning consultation with the Planning Authorities and other statutory bodies.
- 4.2. It is noted that a planning application for the upgrade of the section of the line located in County Cork was made to Cork County Council concurrently with this planning application (Reg Ref 16/7216 refers). The development is described as follows:

Permission for the development associated with the uprate of a section of the existing Clashavoon to Tarbert 220kV overhead line. The proposed development pertains to the length of existing overhead line between mast structure number 63 (south-east of the Knockanure 220kV substation, Co. Kerry) and mast structure number 233 (north of the existing Ballyvouskill 220kV substation, Co. Cork). The overall length of this section of overhead line is approximately 60.4 km, of which 21.2 km is located in Co. Cork and 39.2 km is located in Co. Kerry. The proposed development in County Cork, between the Cork-Kerry county boundary north-west of mast structure number 173 and mast structure number 233, is located in the townlands of Glencollins Upper, Lackanastooka, Toorenglanahee, Meentyflugh, Knockeenadallane, Doonasleen North, Doonasleen South, Doonasleen East, Ummeraboy East, Glantane More, Knockduff Upper, Knockduff Lower, Mullaghroe North, Derragh, Knockane, Lislehane, Lissaniska, Ahane Beg, Coolykeerane, Shanaknock, Claraghatlea North, Claragh More, Inchileigh, Mountleader, Geararoe and Cloghboola More. The proposed development in Co. Cork comprises of the renewal and alteration of a total of 61 existing mast structures, including foundation upgrade works and restringing of the existing overhead line with new conductor. The proposed development also includes all associated and ancillary works including, comprising or relating to permanent and temporary construction and excavation, involving construction of temporary guard poles, the construction and reinstatement of temporary access tracks, improvement and reinstatement of new temporary entrances, widening of existing entrances, temporary silt fencing, temporary silt traps, temporary culverts, temporary clear span bridging, and the clearance of vegetation at various locations along the route to facilitate the proposed principle development. The proposed development will be facilitated by the storage of construction materials and associated and ancillary activities, at existing hard-standing yards. These 6 yards (2 in Co. Cork and 4 in Co. Kerry) are located in the vicinity of the overhead line, in the townlands of Lislehane and Liscahane. No works or change of use, are proposed in these existing yards and as such they do not form part of the proposed development. A Natura Impact Statement (NIS) accompanies this application.

- 4.3. Cork County Council granted permission subject to 16 generally standard conditions. No third party appeal was received by the Board in respect of that portion of the proposed development within the Cork County Council administrative area.
- 4.4. **Ref No 08.VC0080** - It is further noted that there was a SID Pre Application Consultation with An Bord Pleanála in 2014 / 2015 in relation to the uprating of the existing overhead line 220kV electricity circuit between Knockanure substation in Co Kerry and Ballyvoushill substation in Co Cork. The Board decided that the proposed development did not come within the scope of Section 182A of the Planning and Development Act and was therefore not a SID.

5.0 Policy Context

5.1. Strategic / National Policy

- 5.1.1. The Strategic / National Policy documents most relevant to this development are:
- The Government White Paper on Irelands Transition to a low Carbon Energy Future 2015 – 2030
 - Climate Action and Low Carbon Development Act 2015
 - The Governments White Paper “Delivering a Sustainable Energy Future for Ireland 207 – 2020
 - The Government Policy Statement “Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure
 - The Infrastructure and Capital Investment Plan 2012 – 2016
 - Building on Recovery: Infrastructure and Capital Investment 2016 – 2021
 - The National Spatial Strategy 2002 – 2020
 - The National Renewable Energy Action Plan 2020
 - The National Climate Change Strategy

5.2. Development Plan

- 5.2.1. The County Development Plans and Local Area Plans most relevant to this development are:
- Kerry County Development 2015 – 2021

- Castleisland Local Area Plan 2009 – 2015

5.2.2. **Kerry County Development 2015 – 2021**

5.2.3. Objective EP-1 states that it is an objective of the Council to *support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources whilst seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity.*

5.2.4. **Castleisland Local Area Plan 2009 – 2015**

5.2.5. The Castleisland LAP identifies a functional area that includes the towns of Knocknagashel, Cordal and Scartaglin. One of the objectives for principal towns in functional areas of County Kerry is to “provide the necessary infrastructure to promote industry and employment opportunities.”

5.3. **Natural Heritage Designations**

5.3.1. A section of the line between Ballyvouskill, Co Cork and Knockanure, Co Kerry is located within or adjacent to or linked hydrologically to three Natura sites as follows:

- Lower River Shannon Special Area of Conservation (Site Code 002165)
- Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161)
- Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170)

6.0 **The Appeal**

6.1. **Grounds of Appeal**

6.1.1. There are two third party appeals recorded on the file from (1) Denis Roche & Others and (2) James G. Keane. The issues raised by both parties may be summarised as follows:

6.1.2. **Denis Roche & Others**

- When the line was finished in the early 1970's the only concern was closeness of the line to their dwelling house between pylon 129 and 130 which is stated as just 14 metres from the nearest cable. The appellants have lived their lives with the fear of what may happen if a cable were to come to ground.
- In recent times, the appellant has become aware of the magnetic fields created by these high powered cables and the possible adverse effects for health. Noted that to the best of their knowledge the strength of these magnetic fields (where it passes their house) has never been measured. In addition, the noise from the overhead lines can be heard in the garden of their house which is very upsetting.
- Two years ago while fitting a fluorescent tube the appellant found that while walking across their lawn the tube lit up suggesting that they are living in a magnetic field which is considered far from normal. New advances in technology will allow the ESB to increase the power going through these cables by around 20% thus increasing the magnetic field by the same amount. Future advances in technology cannot be ruled out further increasing the power going through these cables.
- Submitted that the appellant has suffered huge loss in building potential of land close to the power lines and that they worry all the time about the ill effects these power lines have on their health and way of living. Requested that power line be moved as far away from their house as possible and that there be compensation for losses and the hardship.

6.1.3. **James G. Keane**

- The appeal was accompanied by a copy of the original submission to Kerry County Council prepared by Ger O'Keeffe Consulting Engineers Ltd, maps, journal extracts on (1) Health Hazards of Electromagnetic Radiation, (2) the Study of the Influence High Voltage Power Lines on Environment and Human Health (Case Study: The Electromagnetic Pollution of Tebassa City, Algeria) and (3) Living Close to Power Lines.

- Structure 97 is incorporated in the lands of James G. Keane in Meenbannivane.
- Kerry County Council did not take into consideration the submissions made to the Planning Authority and in particular issues arising with Electro Magnetic Fields
- The objections by landowners to the North/South Interconnector have been on the basis of the impact on Ireland's clean and green image, to temporary loss of land, to risk of animal diseases and disruption arising from use of access routes for construction and that they would like to have the routes placed underground. Noted that EirGrid's position on the matter is that it would be cost prohibitive.
- It is considered reasonable to suggest that this current proposed development by EirGrid from Clashavoon to Tarbert could also be incorporated underground. However there does not appear to have been any cost analysis carried out to suggest why this cannot be done. Clearly the positioning of pylons on people's lands and the renovation of pylons have a negative impact on a landowner's land and in that regard it would appear that the underground proposal should be assessed not alone from an environmental point of view but also from the point of view of the effects of EMFs and the effects that overhead lines have on the community.

6.1.4. The original submission to Kerry County Council prepared by Ger O'Keeffe Consulting Engineers Ltd on behalf of James G. Keane may be summarised as follows:

- Mr. Keane's property is in the townland of Meenbannivane over which the line goes and which townland for the uprating of the 220kV line is referred to in the application. It is on an elevated portion of land and is clearly obtrusive on the skyline. The appellant has an issue with the obtrusive nature of the structure and the effect of the overhead lines over his property.
- Appears that in many areas along this particular line that safety distances are less than adequate from the EMF source which is a concern to residents, families and parents of children and other users.

- Consideration should be given to placing the 220kV underground as it would negate the possibility of EMFs going forward and would be seen that EirGrid and its stakeholders are executing plans to minimise the effect of these types of developments on human and animal health.

6.2. Applicant Response

- 6.2.1. The response by EirGrid to the appeal may be summarised as follows.
- 6.2.2. As set out in the comprehensive plans and particulars accompanying the planning application, EirGrid is currently undertaking the upgrading of the existing transmission circuit between Clashavoon Substation (County Cork) and Tarbert Substation (County Kerry). It is accepted that the need for such upgrading is due in part to the age of this long-existing overhead line circuit, which was constructed in the mid-1970s, and which has been in operation since. It has been deemed preferable to reuse and upgrade the existing circuit, as opposed to constructing a new circuit.
- 6.2.3. If it were not for the identified need for Appropriate Assessment of the planned, development, such upgrading as planned by EirGrid would comprise exempted development. It is submitted that the principle of the development, the need for the development, and the general nature of the development, including the long-established approach to construction and upgrading are not in question.
- 6.2.4. **Specific Response to Appeal Submission of James G. Keane**
- 6.2.5. The submission makes considerable reference to an entirely separate project – the North-South Interconnector Development. It is unclear for what reason the appellant is interweaving the proposed upgrading of a long-existing 220kV circuit with construction for an entirely new 400kV circuit. The proposed development includes replacing an old set of conductors (the wires which actually carry the electricity), with modern conductors. The nature of modern transmission conductors are such that a greater capacity can occur using conductors of a similar diameter to that currently existing. Whilst these conductors have a higher carrying capacity, this does not alter the voltage of the circuit.
- 6.2.6. The suggestion that an entirely new underground cable circuit should have been considered as an alternative to refurbishment and upgrading of an overhead circuit

that has been in existence for some 40 years is unreasonable, both in terms of cost comparison, but also in technical and environmental terms. Furthermore, the approach and methodology set out in the application plans and particulars for such “renovation” clearly demonstrates that there will be no further impact on a landholding beyond any that has existed, and which was originally the subject of a statutory wayleaving process.

6.2.7. The appellant refers to “the effect of EMFs and the effects that overhead lines have on the community”. The National Grid, including this existing transmission circuit, operates in strict accordance with current “Guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP)”. This is the independent standard-setting body for EMF which is recognised by the World Health Organisation (WHO) and the EU, and which provides scientifically based guidance and recommendations, including limits of exposure. In establishing the Guidelines, ICNIRP’s main objective was ‘to establish guidelines for limiting exposure to electric and magnetic fields that will provide protection against all established adverse health effects’. The WHO and ICNIRP reviewed all research, determined what evidence there was for adverse effects, and then proposed Guidelines for occupational and public exposure.

6.2.8. **Specific Response to Appeal Submission of Denis Roche**

6.2.9. The submission correctly notes that the existing overhead circuit was constructed in the 1970s. The appellant raises concern regarding matters of physical safety in respect of the existing overhead conductors. However, it is confirmed that this circuit, and the electricity network in Ireland in general, is subject to regular monitoring by ESB Networks.

6.2.10. The appellant also raises the issue of EMF – or specifically, the magnetic fields created – and the “possible adverse effects for health”. This is stated as understandably worrying for the appellant, who may not be aware of the provisions of the ICNIRP Guidelines, as discussed previously, and that fact that the Irish network is operated in strict compliance with these Guidelines.

6.2.11. The appellant also notes that noise from the existing overhead line can be heard in the garden. It is the case that this noise (known as “corona noise”) occurs during wet weather. Corona noise typically increases with the age of the existing line

apparatus, and is caused by the existence of impurities or damage to older apparatus, such as dirt, cracks or chips to the glass insulators etc. The proposed upgrading of the circuit, including the replacement of the existing insulators with modern silicone compound insulators, will therefore reduce the effects of corona noise for the appellants.

6.2.12. The appellant returns to the issue of EMF, and notes an experience with a fluorescent tube “lighting up” under the circuit. Submitted that the appellant associates this phenomenon with the existence of the magnetic fields under the circuit, rather than the electric field, which causes this to happen. As noted, the electric field arising from a power line is dependent upon its voltage. The voltage of this long-existing overhead line will not alter with the proposed upgrading of the existing circuit.

6.2.13. The appellant makes an unsubstantiated allegation that they *“have suffered huge loss in building potential of land close to the power lines. Forestry and quarrying as underneath the top soil there is a blanket of high quality stone”*. There is no record that permission has been refused for development along the alignment of the existing circuit in this area, or its vicinity, or indeed that any planning permission for such activity has been curtailed or limited by the existing circuit.

6.2.14. The appellant requests the power line “be moved as far away from the house as possible”. However, give that (a) this is an upgrading of a long-existing line, (b) that such upgrading will improve certain alleged environment impact – noise in particular, (c) that such upgrading, as with the existing circuit, will have no impact on human health arising from EMFs, and that (d) there is no substantiated impact in terms of loss of development potential, there is no reasonable imperative to alter the long-existing alignment of this circuit to facilitate its planned refurbishment.

6.2.15. The appellant also seeks compensation for alleged “losses and the hardship which EirGrid insists we suffer”. Reiterated that the issue of compensation is not a matter governed by the planning and development code.

6.2.16. **Conclusion**

6.2.17. The proposed development is entirely in accordance with the principles of proper planning and sustainable development. Requested that An Bord Pleanála confirm the decision of Kerry County Council to grant permission for the proposed

development. This will thereby ensure consistency with the decision of Cork County Council to grant permission for that part of the proposed development within its jurisdiction, and will facilitate the upgrading of the overall Clashavoon – Tarbert 220kV circuit.

6.3. Planning Authority Response

6.3.1. There is no response from Kerry County Council recorded on the appeal file.

6.4. Observations

6.4.1. There is one observation recorded on the appeal file from Denis Roche & Others. The issues raised relate to electromagnetic radiation, unknown higher voltage, “uprating”, health and safety, archaeological impact, proximity of Ballyplymouth Tower house to pylons, traffic access and impact and a request that lines are placed underground.

7.0 Assessment

7.1.1. The application submitted to Kerry County Council on 22nd December 2016 sought permission for development associated with the uprate of a section of the existing Clashavoon to Tarbert 220kv overhead line. The development pertains to the length of existing overhead line between mast structure no. 63 (south-east of the existing Knocknacurra 220kv substation, Co Kerry) and mast structure no. 233 (north of the existing Ballyvouskill 220kv substation, Co Cork). The overall length of this section of overhead line is approx. 60.4km, of which 39.2km is located in Co Kerry & 21.2km is located in Co Cork. Refurbishment works are proposed which also include the removal of one existing structure and its replacement with two structures and ancillary works which include temporary access track, the laying of temporary bog mats and temporary storage yards, foundation strengthening works including the installation of stays and weights required for stability of towers during foundation works, insulators and hardware replacement.

7.1.2. Planning applications for the proposed development were submitted to both Kerry and Cork County Councils. Both applications were the subject of a decision to grant permission by these Councils. No third party appeal was received by the Board in

respect of that portion of the proposed development within the Cork County Council administrative area. The appeal now before the Board relates only to that portion of the proposed development within the Kerry County Council administrative area.

7.1.3. Having regard to the information presented by the parties in the course of the planning appeal and my inspection of the appeal site, I consider the key planning issues relating to the assessment of this application can be considered under the following general headings:

- Principle / Policy Considerations
- Electro Magnetic Field
- Visual Impact
- Appropriate Assessment
- Construction Impact and Management
- Flood Risk
- Archaeology
- Screening for EIA

7.2. Principle / Policy Considerations

7.2.1. This development lies within the administrative area of Kerry County Council. The current statutory development plan for the area is the Kerry County Development 2015 – 2021.

7.2.2. The 220 kV network in County Kerry and County Cork forms an important path for wind generation to flow out of the south west towards the east coast via the Moneypoint 400 kV substation or Knockraha 220 kV substation. Analysis by the applicant has indicated that the section of 220 kV circuit between Knockanure 220 kV substation and Ballyvoughill 220 kV substation will need to be uprated to prevent thermal overloads driven by new wind generation in the area. It is submitted that the refurbishment and uprate of the existing infrastructure is a routine and long established function of EirGrid and ESB in its function as the Transmission Asset Owner. The need for such upgrading is due in part to the age of this long-existing overhead line circuit, which was constructed in the mid-1970s, and which has been in operation since. It has been deemed preferable to reuse and upgrade the existing

circuit, as opposed to constructing a new circuit. It is stated that a new feasible route corridor would be challenging to identify due to

- Ecological constraints i.e. Natura 2000 sites
- Sensitive nature of the landscape of the area and scenic route constraints
- Existing transmission infrastructure
- Other infrastructure in the area including wind farms

7.2.3. Therefore, the purpose of the uprate is to increase the capacity rating of the existing sections of 220kV line between Ballyvouskill and Knocknacurra 220 kV stations. This uprate will be done by replacing the existing conductors with a different conductor of similar dimensions that can carry more electric current, along with the refurbishment of associated existing mast structures. The development relates to a long-established existing transmission circuit and does not involve the construction of any new circuit, nor of any associated substations. It is stated that the proposed uprate will not alter the nature, extent, general overall alignment, character or voltage of the existing infrastructure.

7.2.4. It is worth noting that the line uprate works such as the proposed development would normally be considered to be exempted development under Section 4(1)(g) of the Planning and Development Act 2000 (as amended). This comprises: “*development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose*”. However, notwithstanding this normal exemption, Section 4(4) of the same Act, “de-exempts” normally exempted development where EIA or AA is required. The project is located within or adjacent to three Natura 2000 sites. The applicant has carried out screening for Appropriate Assessment for the development. The report concluded that in the absence of mitigation measures, the proposed project has the potential to cause significant effects on the conservation objectives of Natura 2000 sites. Therefore, a Stage 2 Appropriate Assessment was required. The applicant submits that if it were not for the identified need for Appropriate Assessment of the planned, development, such upgrading as planned by EirGrid would comprise exempted development.

- 7.2.5. Having regard to the information on file I agree with the applicant that the development of the transmission system is essential when future changes to generation and demand would otherwise jeopardize the safety and integrity of the system. Accordingly, the proposed works are considered a necessary development of the existing infrastructures. Therefore, the principle of the development, the need for the development, and the general nature of the development, including the long-established approach to construction and upgrading is accepted.
- 7.2.6. With regard to undergrounding I agree with the applicant in this instance that the nature and purpose of the proposed development, is to carry out certain refurbishment works to the structures and apparatus along the circuit, in order to ensure that the long-existing overhead line is fit-for-purpose. It is considered unreasonable, both in terms of cost comparison, but also in technical and environmental terms to request the applicant to consider the entire development from first principles particularly where the development related to an uprate of an existing line only and where it has been demonstrated that that there will be no further impact on a landholding beyond any that has existed, and which was originally the subject of a statutory wayleaving process.
- 7.2.7. As set out previously the proposed development comprises the refurbishment and upgrading of a long-existing transmission circuit. As noted in the application plans and particulars, this will facilitate the transmission of renewable generation from the South-West region onto the national transmission network, to assist in meeting Ireland's national renewable targets. As such, the proposed development is in direct response to the provisions of the White Paper on Energy, published in December 2015, and associated National Policy to facilitate renewable generation. Overall, I consider that the proposal is acceptable in principle subject to the acceptance or otherwise of site specifics / other policies within the development plan and government guidance.

7.3. **Electro Magnetic Fields**

- 7.3.1. I note the specific concerns raised by the appellants regarding the issue of Electro Magnetic Fields (EMF) and the possible adverse effects for health, and the effects that overhead lines have on the community.

- 7.3.2. The applicant in their submission states that the National Grid, including this existing transmission circuit, operates in strict accordance with current “Guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP)”. This is the independent standard-setting body for EMF which is recognised by the World Health Organisation (WHO) and the EU, and which provides scientifically based guidance and recommendations, including limits of exposure. In establishing the Guidelines, ICNIRP’s main objective was *‘to establish guidelines for limiting exposure to electric and magnetic fields that will provide protection against all established adverse health effects’*. The WHO and ICNIRP reviewed all research, determined what evidence there was for adverse effects, and then proposed Guidelines for occupational and public exposure. Based on the information available on file I am satisfied that the proposed development will be designed and operated to comply with international exposure limit guidelines for EMF as established by ICNIRP.
- 7.3.3. The appellant also notes that noise from the existing overhead line can be heard in the garden. It is submitted that this noise (known as “corona noise”) occurs during wet weather. Corona noise typically increases with the age of the existing line apparatus, and is caused by the existence of impurities or damage to older apparatus, such as dirt, cracks or chips to the glass insulators etc. According to the applicant the proposed upgrading of the circuit, including the replacement of the existing insulators with modern silicone compound insulators, will reduce the effects of corona noise.
- 7.3.4. The appellants experience with a fluorescent tube “lighting up” under the circuit is noted. The applicant submits that the appellant associates this phenomenon with the existing the magnetic fields under the circuit, rather than the electric field, which causes this to happen. The electric field arising from a power line is however dependent upon its voltage. The applicant submits that the voltage of this long-existing overhead line will not alter with the proposed upgrading of the existing circuit.
- 7.3.5. The appellant also seeks compensation for alleged losses and hardship. In this regard I agree with the applicant that the issue of compensation is not a matter governed by the planning and development code.

7.3.6. Overall I agree with the applicant that the proposed development will have no greater impact beyond that which has occurred to date in respect of the existing circuit and that in all likelihood it will improve the long-established environmental baseline, as modern equipment and apparatus will reduce the potential corona noise impact deriving from older cracked or chipped apparatus. Further the applicant states that the EMF levels predicted with the proposed development will be well within the strict and conservative guidelines published by the International Commission on Non-Ionising Radiation Protection (ICNIRP).

7.4. **Visual Impact**

7.4.1. I note the concerns raised regarding visual impact and in particular Tower 97. The existing 220 kV overhead line constitutes a part of the existing landscape and has done so for 40 years. This is predominately a rural and agricultural landscape with pastoral farming, commercial forestry and dispersed residential dwellings. It is submitted that following completion of the works the appearance of the overhead line will be similar to the existing line and there will be no change to the height of the line.

7.4.2. The overhead line traverses the eastern part of Kerry where the landscape is predominantly rural. However, there are areas classified as secondary special amenity areas and the line goes through one of these areas close to Castleisland. There is a further area of secondary special amenity near Listowel towards the start of the works. The rest of the landscape through which the line passes is undesignated. Landscape character defined as secondary special amenity is considered "generally sensitive to development". It is noted that there are also a number of views and prospects in the vicinity of the transmission line.

7.4.3. The construction works will have short term visual impacts on the landscape. Protected views and prospects are likely to be temporarily affected by the intrusion on the landscape of construction plant and machinery. None of the works take place in areas of high value landscape and therefore the impacts are not considered significant. I agree with the applicant that there will be no significant residual impact as a result of the proposed works.

7.4.4. A possible exception to this overall predication would be a slight change in the visual appearance in localised area where intermediate structure 107 will be replaced with

two angle structures (107 and 107A). However, I am satisfied that the distinction between the aspects of these structures is negligible and it is likely that no significant difference will be perceived.

7.5. Appropriate Assessment

- 7.5.1. EirGrid carried out a Stage 1 Screening for Appropriate Assessment of the proposed uprate works between Knockanure, Co Kerry and Ballyvoushill, Co Cork. The AA screening exercise determined that a Stage 2 Appropriate Assessment of the Ballyvoushill to Knockanure 220 kV line uprate project was required. A Natura Impact Statement (NIS) has been prepared and submitted with the application.
- 7.5.2. The existing line between Ballyvouskill and Knockanure is partly located within two areas listed under the Habitats Directive as Special Areas of Conservation (SAC) and in one Special Protection Area (SPA) designated for the presence of breeding Hen Harriers. The existing line is also located in areas that are outside of the SACs but are hydrologically linked to them. Both the Lower River Shannon SAC and the Blackwater River SAC are noted for the occurrence of Otter, Salmon, Freshwater Pearl Mussel and Lamprey species.
- 7.5.3. Given the location of the proposed development within, adjacent to, or in an area hydrologically linked to a Natura 2000 site and the potential for adverse impacts, it is considered that in the absence of mitigation measure, the proposed project has the potential to cause significant effects on the conservation objectives of three European sites as follows:
- Lower River Shannon Special Area of Conservation (Site Code 002165)
 - Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161)
 - Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170)
- 7.5.4. The proposed project will include works to 20 structures that are either within or adjacent to or hydrologically connected to the Lower River Shannon SAC (63, 65, 69, 70, 71, 73, 77, 78, 82, 83, 84, 85, 90, 97, 102, 106, 107, 107A and 108). All of these structures are located in Co Kerry. In addition to works at these structure locations, there are six locations where temporary guard posts will be erected either

adjacent to this SAC (65 – 66; 96 – 97 and at 108) or within it (90 – 91; 97 – 98 and 10 – 102).

7.5.5. The proposed project will include works to 20 structures that are located within and 5 adjacent to the Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (110, 113, 114, 116, 117, 120, 123 and 165 within) (106, 107, 108, 109, 112 adjacent). This SPA is located in both Co Kerry and Co Cork, however all of the 25 structures referred to are located in Co Kerry. Depending on the timing of the works there is potential to cause disturbance to the SPA qualifying species, Hen Harrier. In addition to the works to these structure locations, there are three locations where temporary guard posts (GP) or intermediate stringing posts (IP) will be erected either adjacent to this SPA (112 – 113 IP) or within it (156 – 157 IP and 160 – 161 GP).

7.5.6. The proposed project also includes works to 12 structures that are either within or adjacent to or hydrologically connected to the Blackwater River (Cork/Waterford) SAC. Only one of these structures (172) is located in Co Kerry. In addition to the works to this structure location there will be an intermediate stringing post will be erected adjacent to the SAC at structure 172.

7.5.7. The qualifying interests for the Natura sites as published by the NPWS are as follows:

1) Lower River Shannon Special Area of Conservation (Site Code 002165)

- Sandbanks which are slightly covered by sea water all the time [1110]
- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Coastal lagoons [1150]
- Large shallow inlets and bays [1160]
- Reefs [1170]
- Perennial vegetation of stony banks [1220]
- Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]

- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]
- *Petromyzon marinus* (Sea Lamprey) [1095]
- *Lampetra planeri* (Brook Lamprey) [1096]
- *Lampetra fluviatilis* (River Lamprey) [1099]
- *Salmo salar* (Salmon) [1106]
- *Tursiops truncatus* (Common Bottlenose Dolphin) [1349]
- *Lutra lutra* (Otter) [1355]

2) *Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161)*

- Hen Harrier (*Circus cyaneus*) [A082]

3) *Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170)*

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Perennial vegetation of stony banks [1220]
- *Salicornia* and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) [1330]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]

- *Austropotamobius pallipes* (White-clawed Crayfish) [1092]
- *Petromyzon marinus* (Sea Lamprey) [1095]
- *Lampetra planeri* (Brook Lamprey) [1096]
- *Lampetra fluviatilis* (River Lamprey) [1099]
- *Alosa fallax fallax* (Twaite Shad) [1103]
- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]
- *Trichomanes speciosum* (Killarney Fern) [1421]

7.5.8. **Conservation Objectives**

7.5.9. The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directive. Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. The site specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site. The detailed conservation objectives are available from the NPWS. Copies of the conservation objectives (Source: NPWS) are provided in Appendix A of this report.

7.5.10. **Potential likely and significant effects (direct or indirect)**

7.5.11. ***Lower River Shannon Special Area of Conservation (Site Code 002165)***

7.5.12. There will be no direct impacts on the qualifying habitats as these habitat types were not recorded under the footprint of the proposed works. Indirect impacts from inadvertent pollution of water courses leading to the River Feale in Co Kerry and the River Blackwater in Co Cork could be significant if the event was large enough to cause mortality of aquatic species, loss of habitat and / or food availability in these river systems. The primary receptors in this case are those qualifying aquatic species dependent on good status water quality including otter, salmon, freshwater pearl mussel and lamprey. According to the NIS in the absence of mitigation, the likelihood of adverse impacts on the aquatic environment occurring is considered unlikely (>5 and <50%) for most structures and access tracks given the lack of hydrological connectivity with water courses. The likelihood of adverse impacts is probable (>50 and <95%) due to proximity and / or hydrological connectivity in the

case of access River Feale, Structure 90 on the Glena River and access tracks and Structures 102, 106, 107 (new), 108, 109 and 110 on the Owveg River in Co Kerry. It is stated that in the absence of mitigation measures, a significant cement spill at either Structures 65 or 107A could have an adverse effect for the upper reaches of the Owveg River with medium term impact duration (7 – 15 years). A detailed analysis of impacts in the absence of mitigation arising from works at structures and associated access routes with hydrological connectivity to the River Feale and tributaries in Co Kerry and therefore the Lower River Shannon SAC are presented in Table 6.3 of the NIS.

7.5.13. *Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170)*

7.5.14. There will be no direct impacts on the qualifying habitats as these habitat types were not recorded under the footprint of the proposed works. Indirect impacts from inadvertent pollution of water courses leading to the River Blackwater in Co Cork could be significant if the event was large enough to cause mortality, loss of habitat and / or food availability in these river systems. The primary receptors in this case are those qualifying aquatic species dependent on good status water quality including otter, salmon, freshwater pearl mussel, white clawed crayfish and lamprey. Structure 172, the only structure located in Co Kerry, is located uphill at a distance of approximately 100m from the River Blackwater. Two tower bases are located adjacent to a dry drainage ditch leading from recently planted conifer plantation. The likelihood of surface water contamination is considered to be extremely unlikely to occur (<5% chance). A detailed analysis of impacts in the absence of mitigation arising from works at Structure 172 is presented in Table 6.4 of the NIS

7.5.15. *Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161)*

7.5.16. The SPA is designated for breeding Hen Harrier. Direct impacts would include disturbance to breeding birds. Disturbance to breeding hen harrier would also include reducing habitat available to breeding birds due to human activity and construction noise and access requirements. Such disturbance could result in a direct temporary impact on breeding hen harrier if the works take place during the breeding season in areas traditionally used for breeding. If works are carried out

during the hen harrier breeding season, there would be disturbance issues equivalent to temporary direct impacts at 14 locations where nesting has been recorded or identified within or adjacent to the SPA area structures 106, 107, 107 New, 108, 109, 112, 112 – 113 IP, 113, 114, 116, 117, 156 – 157 IP, 159, 160, 160 – 161 IP. Direct impacts at Structures 104 and 110 have been ruled out due to change in land practise and the reduced stability of these locations for Hen Harrier foraging or nesting.

7.5.17. The indirect impact of disturbance to foraging Hen Harriers away from a nest is considered very low. According to the NIS levels of disturbance from the proposed operations will not be greater than for those arising from e.g. agricultural activities. After completion of the proposed operations, the habitat in the immediate area of operations is predicated to recover over time, and will still be available for foraging Hen Harriers.

7.5.18. There is no predicted adverse impact from collision with towers or cables as Hen Harriers are very adept at flying and are highly unlikely to collide with static objects such as towers. In addition, the proposed work involves uprating the existing power line, with the existing infrastructure have in been in place for 40 years. A detailed analysis of impacts in in the absence of mitigation on the Stacks to Mullaghareirk Mountain West Limerick Hills and Mount Eagle SPA is presented in Table 6.5 of the EIS.

7.5.19. The key mitigation measure to avoid disturbance to breeding Hen Harriers during the proposed works is to schedule works outside the main breeding season (April to July) at tower structures within likely breeding areas. By restricting works in breeding season, any disturbance to breeding Hen Harriers will be avoided.

7.5.20. **Assessment of in-Combination & Cumulative Effects**

7.5.21. The NIS states that in-combination effects between different elements of the project were considered during site assessment in terms of proposed access routes and structure locations. Alternative access routes were further considered after site visits and ground trothing presented more environmentally friendly options with consideration given to land ownership, rights of way, cultural heritage and ecology. As part of the NIS, in addition to the proposed works, other relevant projects and plans in the region are also considered in order to identify any possible in-

combination or cumulative effects / impacts of the proposed development with other plans and projects that may result in adverse effects on the integrity of Natura 2000 sites as follows:

- 7.5.22. **Lower River Shannon Special Area of Conservation (Site Code 002165)**
- 7.5.23. **Coollegrean Wind Farm** – Permission granted with conditions for 6 wind turbines. An EIS was submitted as part of the application. Submitted that that with mitigation measures, there would be no significant impacts on European Sites considered in the assessment, thus there would be no in-combination impacts with the subject project. Concluded that given the proposed mitigation measures for the wind farm project and the appeal project, there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.
- 7.5.24. **Forestry** – In general, conifer plantations have matured over the lifetime of the existence of the subject powerline. It is standard practise to maintain clear areas underneath the line route and the line is freely accessible in most forestry areas. There are ongoing felling operations in the vicinity of Structures 77 and 78 and between Structures 162 and 167. The rough grassland between Structures 170 and 172 has been recently planted with new first rotation trees. Given the proposed mitigation measures for forestry operations (Coillte through statutory consultation with NPWS) and the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.
- 7.5.25. **Agriculture** – Agriculture, mostly cattle grazing and to a lesser extent sheep, is practised widely in the vicinity of the uprate project location. The spreading of slurry and fertiliser poses a threat to the water quality of rivers in all catchments. Salmonid fish are host to the larval of the freshwater pearl mussel and, thus they are essential to the completion of the life cycle. It was concluded that farming operations pose a threat to the conservation objectives of the Lower River Shannon SAC. Given the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.
- 7.5.26. **Substation Works** – The construction of the offline substation at Knockanure and Ballynahulla are substantially complete. Stated that they are yet to be energised / commissioned but that this will not require heavy machinery. Given the proposed

mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.27. **Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161)**

7.5.28. **Coollegrean Wind Farm** - Permission granted with conditions for 6 wind turbines. An EIS was submitted as part of the application. Submitted that the NIS found that with mitigation measures, there would be no significant impacts on European Sites considered in the assessment, thus there would be no in-combination impacts with the subject project. Given the proposed mitigation measures for the wind farm project and the appeal project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.29. **Forestry** – The main threat to the long term survival of Hen Harriers within the site is further afforestation, which would reduce and fragment the area of foraging habitat, resulting in possible reductions in breeding density and productivity. Given the proposed mitigation measures for forestry operations and the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.30. **Agriculture** - Agriculture, mostly cattle grazing and to a lesser extent sheep, grazing is practised widely in the vicinity of the uprate project location. In combination threats relate more so to the conservation objectives of the Lower River Shannon SAC and the Blackwater River (Cork / Waterford) SAC than to Hen Harriers. Given the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.31. **Substation** – Submitted that the construction of the offline substation at Knockanure and Ballynahulla are substantially complete. These are yet to be energised / commissioned, this will not require heavy machinery. Given the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.32. **Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170)**

7.5.33. **Gneeves Wind Farms** – Only one application in the last few years in the area through which the existing powerlines passes in Co Cork and none in Co Kerry.

Given the location of the scheme and the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.34. **Forestry** – There is no forestry in the area of SAC in Co Kerry. Given the location of the scheme and the proposed mitigation measures for the subject project, submitted there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.35. **Agriculture** – Agriculture, mostly cattle grazing and to a lesser extent sheep, is practised widely in the vicinity of the uprate project location. The spreading of slurry and fertiliser poses a threat to the water quality of rivers in all catchments. Salmonid fish are host to the larval of the freshwater pearl mussel and, thus they are essential to the completion of the life cycle. Concluded that farming operations pose a threat to the conservation objectives of the Blackwater River (Cork / Waterford) SAC. Given the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.36. **Substation Works** – The construction of the offline substation at Knockanure and Ballynahulla are substantially complete. Submitted that these are yet to be energised / commissioned and that this will not require heavy machinery. Given the proposed mitigation measures for the subject project, submitted that there will be no adverse effects on site integrity of the SAC in terms of cumulative effects.

7.5.37. **Mitigation**

7.5.38. Key mitigation measures which will be implemented at works locations located within, adjacent to or having connectivity with European site are outlined in Tables 7.1, 7.2 and 7.3 of the NIS. Activities which have been identified as generators of predicted impacts requiring mitigation are outlined thereafter and more specific information on mitigation measures is provided in each section. Mitigation measures used at various works across the site include silt curtains, silt traps, bunding, manual digging, works to be carried out in dry weather, works will be supervised, a dam comprising of wither sand bags with heavy duty plastic / straw / silt fence, temporary drainage ditch, site fencing, no vegetation cutting in bird nesting season, avoidance during Hen Harrier breeding season and provision of bog mats.

7.5.39. These mitigation measures are reiterated in the Construction Methodology Report. Monitoring and supervision will be provided by an Ecological Clerk of Works to ensure the measures are employed and are successful. The supervising ecologist will report to the Local Authority on an agreed timeframe with regard to works progress.

7.5.40. **Evaluation of effects on the Conservation Objectives taking account of mitigation**

7.5.41. **Mitigation with regard to Hen Harriers** – The key mitigation measure to avoid disturbance to breeding Hen Harriers during the proposed works is to schedule works at tower structure and access tracks within likely breeding areas so that operations are conducted outside the main breeding season (April to July). By avoiding works in the breeding season, any disturbance to breeding Hen Harriers will be minimised. Submitted that where any work is required in the breeding season for any of the structures, a survey for Hen Harrier nests within 500m of planned operations, all such operations will be stopped until the pair have raised their young. This is an acceptable form of avoidance mitigation.

7.5.42. **Access Routes to existing structures** – In all cases, access routes are available either from the main road adjacent to structure locations or from existing farm tracks. In one location (102) an alternative access route (and associated specific mitigation measures) was selected on the basis of minimising potential impacts on sensitive habitats and watercourses. This is an acceptable form of mitigation.

7.5.43. **Management of excavations** – Submitted that where excavations are being undertaken the following procedures will be employed:

- Vegetated surface turves will be cut and removed and placed on geotextile membrane alongside the excavations for temporary storage
- No stock piling of excavated materials will be permitted directly on the vegetation surface
- Excavations will be carefully backfilled with excavated material
- Surface turves will be replaced (vegetated side up) and firmed into place with the back of the excavator bucket

This is an acceptable form of mitigation.

- 7.5.44. **Water Quality Protection** – Submitted that the uprating of the line will require a number of water course crossings along access tracks and the construction of structure bases will temporarily change the groundwater regime should excavations extend below the water table and considering the requirement for pumping to enable the pouring of concrete a number of mitigation measures will be required as set out in Section 7.4 of the NIS. This an acceptable form of mitigation.
- 7.5.45. **Silt Control Measures** – Silt control measures are used to control silt generated from construction activities on site and prevent it gaining access to surface drainage which could convey silt to larger streams and water courses. The objective is to prevent silt from disturbed and damaged ground entering drains, streams and rivers causing damage to the ecology and protected species. Silt control measures consist of silt traps which can be located in small drains where flow is small, silt fences where runoff from large areas needs to be controlled and check dams which can be used in larger drains to slow down water movement and create small ponded area where silt can settle out. This is an acceptable form of mitigation.
- 7.5.46. **General pollution control measures** – Refueling will not be carried out near watercourses or drains. All concrete will be brought on site by truck and piped directly into the foundations. During the construction phase, work will be scheduled, and machinery managed, to ensure that access is limited to the minimum required per construction location. Submitted that the proposed development will not require any work to be carried out in river or streams. This is an acceptable form of mitigation.
- 7.5.47. **Control of Alien / Invasive Species** - Stated that the contractor will adhere to the requirements of Inland Fisheries Ireland with respect to the protocols developed for the control of the spread of alien species to the aquatic environment together with a number of mitigation measures as set out in Section 7.7 of the NIS that will be incorporated into the Construction Methodology Report. This is an acceptable form of mitigation.
- 7.5.48. **Ecologist Supervision & Monitoring** – If the works are carried out outside the Hen Harrier breeding season as proposed, then there is no requirement for monitoring or supervision. Locations where supervision and monitoring are required relate to those works areas where potential impacts in the absence of mitigation are likely due

to the proximity of e.g. designated areas or water courses leading to designated areas. Works at structures 102, 106, 107 and 108 will be supervised and monitored by a suitably qualified ecologist. This is an acceptable form of mitigation.

7.5.49. **Residual Impact** – An analysis table of predicted impacts and proposed mitigation measures is presented in Appendix 3 of the NIS. Residual impacts are those that occur after mitigation measure have taken effect. It is stated that the mitigation measures that are listed are employed during the proposed works, then there will be no residual impacts on habitats and species in the European sites considered in this assessment.

7.5.50. **Conclusion**

7.5.51. As set out, in order to facilitate the development proposed that the applicant will need to access the masts which are located in various habitat types and that the applicant has outlined a range of mitigation measures to prevent any impacts on surface waters. I am satisfied that an examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. Significant effects on Natura 2000 sites were identified. Where potential adverse effects were identified, mitigation measures are prescribed to remove risks to the integrity of the European sites. The hierarchy of mitigation was followed with avoidance measures the primary mitigation tool employed. I am satisfied based on the information available that if the mitigation measures are undertaken, maintained and monitored as detailed, adverse effects on the integrity of Natura 2000 sites will be avoided.

7.5.52. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Lower River Shannon Special Area of Conservation (Site Code 002165), Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161), and Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170) or any other European site, in view of the site's Conservation Objectives.

7.6. Construction Impact and Management

- 7.6.1. The proposed development also includes all associated and ancillary works comprising or relating to permanent and temporary construction and excavation, including clearance of vegetation at various locations along the route to facilitate the proposed principal development and environmental mitigation works.
- 7.6.2. Temporary access to the key locations along the overhead line will be required, to undertake the works. It is submitted that these routes, where possible, will be from public roads or existing farm tracks to minimise impacts and that once works are complete, these areas will be fully reinstated. Further temporary storage yards will facilitate the proposed development. These are located along the alignment and in the vicinity of the existing line. It is submitted that once works are completed, the contractor will remove all equipment and materials and the area will be fully reinstated.
- 7.6.3. I have noted the construction methodology for carrying out the associated works as described in detail in the Construction Methodology Report together with recommendations therein including the requirement that all works will be supervised by an onsite ecologist and that a Construction Management Plan be prepared in consultation with the Local Roads Authority.
- 7.6.4. I am satisfied that the negative impact from the construction phase would be temporary in nature. Having regard to the information available on file I am satisfied that the potential impacts of the proposed development in terms construction impact have been established. It is recommended that should the Board be minded to grant permission that a suitably worded condition be attached requiring the developer to agree the details of the construction management plan with the planning authority prior to commencement of work on site.

7.7. Flood Risk

- 7.7.1. It is noted from the Flood Risk Assessment Report that a number of areas along the route have been identified as being at risk of fluvial and groundwater flooding. It is submitted that the following Flood Risk Management Measures are to be implemented to ensure that this risk is managed appropriately:

- During the uprate construction works, contractors will be kept well informed of flood and weather forecasts for the area on an on-going basis.
- In the event of a significant flood being forecast, a flood emergency response plane will be implemented. This will ensure that no construction workers remain at any of the sites for the duration of the flood event and also ensure that any construction vehicles and materials are not left in any area at risk of flooding.

7.7.2. With regard to the permanent works it is noted that the existing structures have been in place for circa 40 years without any significant impacts as a result of flooding. The upgraded foundations will be designed to accommodate any potential flooding effects. I agree with the applicant that the project will not contribute to the flood risk events as the impermeable surface area will not be increased.

7.7.3. Having regard to the information available on file I am satisfied that the potential impacts of the proposed development in terms of flooding have been established and I do not consider that the proposed development would exacerbate the risk of flooding in the area.

7.8. **Archaeology**

7.8.1. The Archaeological, Architectural and Cultural Heritage Report submitted with the application did not identify any significant areas of archaeological potential along the route that require geophysical surveys or pre-development testing. It is stated that there will however be groundworks in areas close to the zones of archaeological potential for a number of recorded monuments and cultural heritage sites that will requires specific mitigation as recommended in the report.

7.8.2. Along the route from north to south there are 15 structures that are located in areas of archaeological potential that will require monitoring by a licensed archaeologist. The report recommends specific mitigation measures including avoidance, demarcation, use of geotextile / bog mats and monitoring for access tracks and compounds where groundworks are required.

7.8.3. I have considered the Archaeological, Architectural and Cultural Heritage Report and in my view I am satisfied that this matter can be dealt with by suitable worded condition whereby the applicant employ a suitably qualified archaeologist in advance

of development and that any material found is notified to the Department and that recording of any such material found shall be facilitated

7.9. Screening for EIA

7.9.1. The current requirements for EIA are outlined in Part X of the Planning and Development Act, 2000, as amended and Part 10 of the Planning and Development Regulation 2001, as amended. The prescribed classes of development and thresholds that trigger a mandatory EIS are set out in Schedule 5 of the Planning and Development Regulations 2001, as amended. The classes under Schedule 5 that are relevant to this project are as follows:

- **Part 1, Class 20** - *Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres.* The Board will note that the proposed development consists of an uprate to an existing 220kV power line rather than the “construction” of a power line. The proposed uprate will not alter the nature, extent, general overall alignment, height, length, character of voltage of the existing line. I am satisfied that the proposal would not require mandatory EIA under this class.

7.9.2. In respect of sub-threshold criteria, the applicant has carried out an examination of whether the proposed development would or would not, individually and in combination with other developments, be likely to have significant effects on the environment having regard to the criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended). Appendix D EIA Screening Report, Volume 2 of the Planning and Environmental Considerations Report refers. The report concluded that the proposed development is not likely to have significant effects on the environment having regard to the criteria set out in Schedule 7 of the of the Planning and Development Regulations 2001 (as amended). Having considered the information put forward by the first party agree, I with these findings. Therefore, I am satisfied that an EIA is not required for the proposed development in respect of the sub-threshold criteria.

7.9.3. I am satisfied that the proposed development does not come within the scope of the classes of development requiring the submission of a mandatory EIS as set out in Schedule 5 of the Planning and Development Regulations 2001, as amended nor is

it likely to have significant effects on the environment having regard to the criteria set out in Schedule 7 of the of the Planning and Development Regulations 2001 (as amended). I am satisfied that the proposed development would not be likely to have significant effects on the environment such that an Environmental Impact Assessment is required.

8.0 Recommendation

8.1. I recommend that permission be **GRANTED** subject to conditions for the reasons and considerations set out below.

9.0 Reasons and Considerations

9.1. Having regard to:

(b) the provisions of the National Spatial Strategy for Ireland 2002-2020, which seeks to strengthen energy networks in the regions,

(c) the provisions of the Government White Paper 'Delivering a Sustainable Energy Future for Ireland - the Energy Policy Framework, 2007-2020',

(d) the National Renewable Energy Action Plan 2020,

(e) the Strategy for Renewable Energy 2012-2020 (Department of Communications, Energy and Natural Resources) which refers to the requirement for modernisation and expansion of the grid through investment in the transmission system and the necessity to adapt the grid to enable integration of high volumes of electricity from renewable resources into the system,

(f) the provisions of GRID 25, EirGrid's transmission network development policy,

(g) the provisions of the Government White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030',

(h) the provisions of the 'Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure' (2012),

(i) the provisions of EirGrid's grid development strategy 'Your Grid, Your Views, Your Tomorrow' (2015),

(j) the provisions of the Kerry County Development 2015 – 2021, Kanturk Local Area Plan 2015 – 2021 and the Castleisland Local Area Plan 2009 – 2015 which seeks to actively facilitate development of transmission network upgrades,

(k) the regional importance of and demonstrated need for the proposed development,

(l) the planning history of the area and the pattern of development in the area, including the existing substation and existing and permitted wind farm developments, and

(m) the documentation submitted with the application, including the environmental report and natura impact statement, and

It is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the amenities of the area or of property in the vicinity, would be acceptable in terms of visual impact and in terms of traffic safety and convenience, would not be prejudicial to public health or safety, and would not have significant adverse effects on the environment. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars, including the mitigation measures specified in the environmental report, lodged with An Bord Pleanála on the 22nd December 2016, 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 undertaker shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) An suitably qualified on-site environmental manager/ecological clerk of works shall supervise compliance with mitigation measures

recommended in the NIS, particularly in relation to water quality control and management and Hen Harrier mitigation. The ecological clerk-of-works shall be empowered to ensure compliance with mitigation measures and/or to halt construction works if they deem a pollution event is likely. Contact details for this individual shall be forwarded to the Planning Authority at the commencement notice stage of the development.

(b) Suitable measures shall be implemented in advance of any development works commencing on site to ensure that polluting matter (includes sedimentation) is not discharged to any watercourses. These measures shall be fully maintained thereafter. These measure shall be agreed in writing with the Planning Authority prior to commencement of works on site.

(c) Should the identified measures not be adequate to control all sedimented water run-off, additional suitable measures shall be put in place to ensure that sedimented water does not discharge to any watercourses. These measure shall be agreed in writing with the Planning Authority prior to commencement of works on site. Where fugitive emissions to water occur, works shall cease until effective controls have been put in place. The Planning Authority and Inland Fisheries Ireland shall be notified immediately when any emissions to water have occurred.

(d) Bunds shall be installed around all temporary oil containment facilities and the developer shall ensure that no oil, grease or other objectionable matter is discharged into any drain, sewer or watercourse.

(e) All non-hazardous waste generated on the site shall be taken directly to a suitably authorised waste facility or transferred to a suitably licenced waste collector.

(f) Prior to the commencement of any works on site, the applicant/developer shall retain the services of a suitably qualified person(s) to carry out a final evaluation and quantification of all demolition and excavation waste likely to arise during the proposed works and shall develop a waste management and disposal plan for all such wastes arising. A copy of this plan shall be submitted to the Planning Authority for

agreement and written approval prior to Commencement Notice stage. The agreed plan shall be fully implemented unless otherwise subsequently approved in writing by the Planning Authority.

3. Formation of any access points shall not cause surface water or seepage water to flow onto the road surface. No water from these access points shall be allowed to flow onto the public road. The developer shall institute appropriate measures to prevent material being drawn from the site or deposited onto the public road. The developer shall make good any damage caused to the public road as a result of their works to the satisfaction of the Planning Authority. Details of all works on the public road shall be agreed in writing with the Planning Authority prior to commencement of work on site.

Reason: To avoid a traffic hazard and protect public property.

4. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within 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) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - (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.

5. Prior to commencement of development, the undertaker shall lodge with the planning authority a cash deposit, a bond of an insurance company, or

other security to secure the satisfactory reinstatement of all public roads damaged as a result of activities related to construction of the proposed development, coupled with an agreement empowering the planning authority to apply such security or part thereof to the reinstatement of such roads. The form and amount of the security shall be as agreed between the planning authority and the undertaker or, in default of agreement; the details shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory reinstatement of the road network.

Mary Crowley

Senior Planning Inspector

1st September 2017

11.0 **Appendix A**

11.1. The detailed conservation objectives, available from the NPWS, are set out for the Lower River Shannon Special Area of Conservation (Site Code 002165), Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site code 004161) and the Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code 002170). Copies of the conservation objectives are attached.