An Bord Pleanála

Inspector's Report 248796

Development	Substation in Cark. Underground electricity cabling from Lenalea windfarm to substation in Cark. 110kv cabling from substation in Cark to Clogher substation, Cullionboy, Cark, Co. Donegal.
Location	Townlands of Cark, Culiagh, Meenboy, Lettershanbo, Corlacky, Kinnaderry, Welchtown, Aghaveagh, Meenagrauv, Altnapaste, Balllykergan, Carrickmahon, Magheracloig, Loughsallagh, Cashelnaven, (adjoining Croaghonagh), Tawnawully Mountains, Friarsbush, Ardinawark, Keadew Lower, Keadew Upper and Cullionboy.
Planning Authority	Donegal County Council
Planning Authority Reg. Ref.	17/50543
Applicant	Cufgaze Ltd
Type of Application	Permission (10 year)
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant	Cufgaze Ltd
Observers	Joe Griffin & others Monica O'Donnell Carmel Martin Lesley Taylor

	St John’s Church of Ireland
	John McGlynn
	Noel McMenamin
Date of Site Inspection	22nd November 2017
Inspector	Dolores McCague

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1.0 Site Location and Description

1.1.1. The proposed development is intended to provide connection between two permitted wind farms in Donegal to an existing ESB Networks substation some 22km to the south.

1.1.2. It is proposed to connect the permitted Lenalea windfarm to a proposed110kV electricity substation adjacent to the site of the permitted Drumnahough wind farm via 33kV underground cabling. The cable will run from a ring main unit through an area of forestry and private wind farm access tracks and veer onto a third class public road continuing westwards in the townland of Cark.

1.1.3. The proposed 110kV electricity substation is located in the townland of Cark. The proposed substation will facilitate the connection of the authorised windfarms at Drumnahough and Lenalea to the national grid at Clogher substation c22km to the south in the townland of Cullionboy. The proposed electricity substation is located within commercial forestry. Most of the remainder of the development is underground cabling running generally north to south over c35.5km crossing 21 townlands.

1.1.4. The proposed 110kV cabling will connect the proposed substation to the existing substation at Clogher commencing at the proposed 110kV electricity substation located in the townland of Cark, exiting onto the public road and turning south from Drumnahough wind farm along a local access road continuing southwards through the townlands of Lettershanbo and Corlacky. The cable route will diverge off third class roads and onto the R252 regional public road at Corlacky continuing east along the R252 for 1.2km before turning in a southerly direction for 0.4km. The proposed cable route continues onto the R253 regional public road in the townland of Aghaveagh and runs west along the road for 1.6km through the townlands of Meenagrauv and Altnapaste to join a local access road at Altnapaste and continue in a southerly direction along this road for 7km through the townlands of Altnapaste, Ballykergan, Carrickmahon, Magheracloigh and Loughsallagh. It then runs for 5.7km along private forest tracks and for 150m through conifer forestry in the townlands of Loughnasallagh and Cashelnavean to join the N15. It runs south along the N15 for 5km turns onto the L-2595 and continues south in the townland of Cullionboy. The final section is located within agricultural land. There are two route options for the final section near the Cullionboy substation with regard to the direction of entry to the

substation, with the final selection to be agreed with ESB Networks/Eirgrid and local landowners: option 1 is to continue along the local road in the townland of Cullionboy and access the substation at its site entrance; option 2 is to diverge off this local road and traverse approximately 150m of private lands and access the substation at its northern boundary.

1.1.5. The cable route runs from Cark mountain which is c 10k south west of Letterkenny, southwards through uplands and across the Finn valley, continuing southwards and eastwards through uplands along the eastern foothills of the Bluestack Mountains and which includes a section through Coillte forestry, southwards following the course of the Lowerymore River through Barnesmore Gap, where it runs along the N15 before diverting eastwards off the N15 to the recently constructed Clogher substation at Cullionboy.

1.1.6. The permitted undeveloped windfarms to be served by the substation and cable connection are located in an area where there are other existing windfarms. On the southern side of the local road in Cark, which serves the windfarms and the subject development, there is a recently constructed substation.

1.1.7. The area within which the proposed development is located is relatively sparsely populated with pockets of rural housing at a number of locations along the route.

2.0 **Proposed Development**

2.1.1. The application if for a 10 year planning permission for development consisting of (1) a 110kv electricity substation which includes 2 no. control buildings, associated electrical plant and equipment, underground electricity cabling, fencing and ancillary works in the townland of Cark to replace two substations previously permitted as part of the Drumnahough wind farm (PL.ref.08/50687 and extended under PL. ref.13/51609) and the Lenalea wind farm (PL.ref.09/50116); (2) 33kv underground electricity cabling (3.4km) and ancillary works from the permitted Lenalea wind farm to the proposed substation in the townland of Cark; (3) 110kv underground electricity cabling and ancillary works from the proposed substation at Cark through the townlands of Culliagh, Meenbog (ED Cloghan), Lettershanbo, Corlacky, Kinnaderry, Welchtown, Aghaveagh, Meenagrauv, Altnapaste, Ballykergan, Carrickmahon, Magheracloigh, Loughsallagh, Cashelnavean, Croaghonagh, Tawnawully Mountains,

Keadew Upper, Friarbush, Ardinawark, Keadew Lower, to the existing Clogher substation in the townland of Cullionboy, (32.1km); (4) the demolition of an existing shed and its replacement with a new shed, both in the townland of Cullionboy, relocated to facilitate the proposed underground cabling works.

2.1.2. An environmental impact statement (EIS) and a natura impact statement (NIS) have been provided.

2.1.3. Letters consenting to the making of such a planning application from: the Senior Engineer Roads & Housing Capital, Roads Areas, Donegal County Council; Coillte; and 12 other landowners, accompany the application. The letter from Coillte is accompanied by maps of their lands in the area.

2.2. Natura Impact Statement

2.2.1. A natura impact statement (NIS) and appropriate assessment screening report accompany the application.

2.2.2. The appropriate assessment screening report considers the sites:

River Finn SAC

Lough Eske and Ardnamona Wood SAC

Croaghonagh Bog SAC

Meentygrannagh Bog SAC

Dunragh Loughs / Pettigo Plateau SAC

Donegal Bay (Murvagh) SAC

Leannan River SAC

Meenaguse / Ardbane Bog SA C

Cloghernagore Bog and Glenveagh National Park SAC

Meenaguse Scragh SAC

Tamur Bog SAC

Lough Nillan Bog (Carrickatlieve) SAC

Lough Swilly SAC

West of Ardara/Maas Road SAC

Pettigo Plateau Nature Reserve SPA

Donegal Bay SPA

Lough Derg (Donegal) SPA

Lough Nillan Bog SPA

Derryveagh and Glendowan Mountains SPA, and

Lough Swilly SPA.

and concludes that in the case of the sites River Finn SAC and Lough Eske and Ardnamona Wood SAC, that it cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant sites, that the proposed development, individually or in combination with other plans and projects, would have a significant effect on those sites and that appropriate assessment is required.

2.2.3. The NIS includes:

2.2.4. The underground cable route comprises an underground cable from Drumnahough and Lenalea Wind Farms to Clogher substation via the proposed substation. The 33kV cabling measures approx. 3.4 km and the 110kV cabling measures approx. 32.1 km. The proposed route will utilise approx. 35.45 km of existing roads and tracks, up to 0.6km of agricultural land and 0.45km of conifer forestry. Max length 35.5km.

2.2.5. Two alternative cable route options are proposed at the final section close to the Clogher substation. The one finally selected will be selected subject to agreements with Eirgrid/ESB Networks regarding their preferred connection location, and local landowners.

2.2.6. The methodology for construction of the electricity substation and control buildings is set out.

2.2.7. The methodology for construction of the new access road is set out.

2.2.8. The methodology for excavation and duct installation is set out, which includes:

- The area where excavations are planned will be surveyed and all existing services will be identified.
- All relevant bodies i.e. ESB, Bord Gais, Eircom, Donegal County Council etc, will be contacted and all drawings for all existing services sought.

- A traffic management plan will be set up prior to any works commencing.
- A road opening licence will be obtained where required.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- A 13 tonne rubber tracked 360 degree excavator will be used to excavate the trench to the dimensions specified in the ESB Networks 'Specification for the Installation of Ducts and Structures for Underground Power Cables and Communications Cables'.
- The trench depth is specified at 1250mm and trench support will be installed or the trench sides will be benched or battered back where appropriate.
- Any ingress of ground water will be removed from the trench using submersible pumps.
- A silt filtration will be used to prevent contamination of any watercourse.
- Trefoil ducts will be installed.
- The as-built location of the ducting will be surveyed using a total station/GPS.
- ESB marker board will be fitted above the trefoil ducting.
- The communications ducts will be fitted and kept to one side of the trench ensuring that the minimum cover is achieved.
- ESB red marker board will be installed and the remainder of the trench will be backfilled.
- Yellow marker tape will be installed, 300mm maximum below finished road/ground level.
- The finished surface will be reinstated as per original specification or to the requirements of the landowner/local authority as appropriate.
- Marker posts will denote all changes of direction, road crossings etc.

2.2.9. Existing underground services – will be surveyed for level and the ducting will pass over, provided adequate cover is available. A minimum clearance of 300mm will be

required between the bottom of the ducts and the service in question. If the clearance cannot be achieved the ducting will pass under the service and again 300mm clearance between the top of the communications duct and bottom of service will be achieved. If the required separation distances cannot be achieved then a number of alternative options are available.

2.2.10. Joint bays are pre-cast concrete underground chambers where lengths of cable will be joined to form one continuous cable, located approx. every 600-1200m depending on the cable type. It is proposed to install 47 joint bays along the cable route: 2.5m (wide) x 6m (long) x 1.56m (deep).

2.2.11. Where possible they will be located where there is a natural widening/wide grass margin on the road. During construction the joint bays will be fenced off and incorporated into the traffic management plan. They will be back filled temporarily until cables are being installed. Once the cables have been installed they will be reinstated as per original specification or to the requirements of the landowner / local authority as appropriate.

2.2.12. Watercourse / culvert crossings – the cable route crosses a large number of minor culverts and 9 bridge crossings. The construction methodology has been designed to eliminate the requirement for in-stream works. Various construction methods are described. Bridge crossings are listed and the proposed crossing method at each is set out. The crossing methodologies at the 166 culvert crossings will be selected from the suite of watercourse crossing options as appropriate, depending on culvert size, depth, and local ground conditions.

2.3. Construction Methods for watercourse / culvert crossings:

- Option 1 - where sufficient cover exists above the culvert the trench will be excavated above the culvert and the ducts will be installed in the trefoil arrangement passing over the sealed pipe where no contact will be made with the watercourse.
- Option 2 - where the culvert consists of a socketed concrete or sealed plastic pipe where sufficient cover over the culvert does not exist to accommodate the cable trench, a trench will be excavated beneath the culvert and cable ducts will be installed in the trefoil arrangement under the sealed pipe.

- Option 3 - Flatbed formation over culverts – where cable ducts are to be installed over an existing culvert/bridge, where sufficient cover cannot be achieved by installing the ducts in a trefoil arrangement, the ducts will be laid in a much shallower trench, the depth of which will be determined by the location of the top of the culvert or the depth that can be achieved in the deck of the bridge structure. The ducts will be installed in a flatbed formation over the existing culvert / bridge and will be incased in 6mm thick steel galvanized plate with a 35N concrete surround as per ESB Networks specification. After the crossing has been achieved the ducts will resume the trefoil arrangement within a standard trench.

  Where a bridge or culvert has insufficient deck cover to fully accommodate the required ducts, the ducts can be laid in a flatbed formation partially within the existing road make up. Where this option is to be employed, the ducts will also be encased in steel with a concrete surround as per Eirgrid and/or ESB Networks specifications. In order to achieve cover over these ducts and restore the carriageway of the road, it may be necessary to locally raise the pavement level to fully cover the ducts. The increased road level will be achieved by overlaying the existing pavement with a new wearing course as required. Any addition of a new pavement will be tied back in to the existing road pavement at grade. After the crossing has been achieved the ducts will resume the trefoil arrangement within a standard trench.

  The flatbed formation methodology will also be used at bridge structures where there is an existing footpath. The cables will be installed in the same flatbed arrangement where the existing footpath will be excavated to allow for the installation of the cables. The footpath will be reinstated after cable ducts have been installed. Where there is no existing footpath, it is proposed to install a footpath to encase the cable ducts after they have been laid in the flatbed formation.

- Option 4 - Directional drilling – in the event that none of the other methods are appropriate, directional drilling will be used. The launch and reception pits will be approx. 0.55m wide, 2.5m long and 1.5m deep. The drilling rig will be securely anchored to the ground by means of anchor pins which will be attached to the front of the machine. The drill head will be secured to the first

drill rod and drilling will commence into the launch pit at a suitable angle which will enable the depths and pitch required to the line and level of the required profile to be achieved. Drilling will continue with the addition of 3m long drill rods mechanically loaded and connected into position. During drilling an inert and biodegradable drilling fluid and water is pumped through the centre of the drill rods to the reamer head and is forced into the void and enables the annulus which has been created to support the surrounding subsoil and prevent collapse. It may be necessary to repeat the drilling process by incrementally increasing the size of the reamers. The use of natural, inert, biodegradable drilling fluid is intended to negate any adverse effects arising from the use of other, traditional polymer based drilling fluids. It will be used sparingly and appropriately stored and deployed in the required amounts to avoid surplus. Should any excess fluid accumulate in the reception or drilling pits, it will be contained and removed from the site in the same manner as other subsoil materials. Backfilling of launch and reception pit will be similar to backfilling trenches.

- Option 5 - horizontal drilling – the process is carried out by an auger boring machine. A launch and reception pit are required. The drilling pit is excavated to a base level at which the drilling will take place which will be a minimum of 3m below the bed of the watercourse. The drilling is carried out by an air driven auger cutting head which bores through the ground horizontally. The drilled bore is supported by a steel sleeve which is hammered through the opening by air compressors during drilling to avoid collapse. The spoil material passes back through the auger within the steel sleeve and out of the bored channel.

For the 9 bridges, Table 21 lists the description of the crossing, the selected method, and the extent of instream works required, (there being no case where instream work is required).

- Bridge crossing 1 - Corlacky Bridge – option 3 flatbed formation.
- Bridge crossing 2 – Glenmore Bridge – option 3 flatbed formation.
- Bridge crossing 3 – Meenagrauv Stream – option 3 – due to the lack of cover over the existing bridge the cable duct will be laid in a flatbed formation at the

existing road level. It is then proposed to raise the existing road level to provide the necessary cover over the cable ducts.

- Bridge crossing 4 - Meenagrauv River - option 3 flatbed formation.
- Bridge crossing 5 - Altnapaste River - option 3 - due to the lack of cover over the existing bridge the cable duct will be laid in a flatbed formation at the existing road level. It is then proposed to raise the existing road level to provide the necessary cover over the cable ducts.
- Bridge crossing 6 – Aghaveagh River – option 3 flatbed formation.
- Bridge crossing 7 - Lowerymore Bridge – option 4/5 – the existing bridge consists of a concrete deck which cannot be excavated for a cable trench, therefore the cable will be installed under the watercourse by means of directional or horizontal drilling.
- Bridge crossing 8 – Lower Keadew Bridge – option 4/5 – the existing bridge consists of a concrete deck which cannot be excavated for a cable trench, therefore the cable will be installed under the watercourse by means of directional or horizontal drilling.
- Bridge crossing 9 – Barnesmore Bridge – option 4/5 - the stone arch bridge cannot be excavated for a cable trench therefore the cable will be installed under the watercourse by means of directional or horizontal drilling.

A footnote to the table notes that <u>any</u> of the 5 no. crossing methodologies described may be used.

2.3.1. Control measures for the management of Invasive Species:

Invasive species, such as Japanese Knotweed, Himalayan Knotweed, Himalayan Balsam, Gunnera, and Giant Hogweed pose a serious threat to biodiversity and the health of native vegetation types.

Construction machinery can act as a vector.

Himalayan Knotweed propagates vegetatively forming a new plant from even very small plant fragments.

The UK Environment Agency's 'Japanese Knotweed Code of Practice' provides guidance on managing Japanese Knotweed and Himalayan Knotweed on development sites.

The following measures address potential effects associated with the construction phase of the project.

- All earthworks machinery will be thoroughly pressure-washed prior to arrival on site and prior to their further use elsewhere.
- Care will be taken not to disturb or cause the movement of invasive species fragments, either intentionally or accidentally.
- Stands of Himalayan Knotweed will be clearly demarcated by temporary fencing and tracking within them will be strictly avoided. A minimum buffer of 7m will be applied to avoid disturbance of lateral rhizomes.
- If any excavations must be carried out in areas of Himalayan Knotweed the excavated material will not be moved from the location. The machinery must be thoroughly pressure-washed in a designated area at least 25 m from any watercourse before moving on to an area that is not yet infected.
- All contractors and staff will be briefed about the presence, identification and significance of Himalayan Knotweed before commencement of works.
- Good construction site hygiene will be employed to prevent the spread of these species with vehicles thoroughly washed prior to leaving any site with the potential to have supported invasive species. All plant and equipment employed on the construction site (e.g. excavator, footwear, etc) will be thoroughly cleaned down using a power washer unit prior to arrival on site to prevent the spread of invasive plant species such as Himalayan Knotweed and Rhododendron. All washing must be undertaken in areas with no potential to result in the spread of invasive species.
- When working at locations in proximity to natural watercourses, a suitable barrier will be erected between the watercourse and the stand of invasive species. This will assist in preventing the spread of any invasive species into the watercourse during their removal.

- Any material that is imported onto any site will be verified by a suitably qualified ecologist to be free from any invasive species listed on the Third Schedule of Regulations 49 & 50 of the European Communities (Birds and Natural Habitats) Regulations 2011. (SI 477 of 2011). This will be carried out by searching for rhizomes and plant material.
- Any soils or subsoils contaminated with invasive species will be sent for disposal to an authorised waste facility.
- The treatment and control of invasive alien species will follow guidelines issued by the NRA – the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads (NRA 2010) and the Environment Agency (2013) – 'The Knotweed Code of Practice Managing Japanese Knotweed on Development Sites'.

2.3.2. Table 3.1 lists the bridge and watercourse crossings for rivers and large streams identified during field surveys deemed to be of ecological significance: locations within or in proximity to designated European sites. The crossings listed are those 9 identified in table 21 together with a single addition, Kinaderry Stream. Corlacky Bridge and Glenmore Bridge are noted as being within the River Finn SAC and Finn FWPMSA (Freshwater Pearl Mussel Sensitivity Area). Meenagrauv Stream is noted as being a tributary of the River Finn and within the Finn FWPMSA, as is Meenagrauv River, Altnapaste River, and Altnapaste/Ahgaveagh River. The Lowerymore Bridge is noted as crossing a tributary of Lough Eske and Ardnamona Wood SAC and within the Eske FWPMSA, as is the Barnesmore Bridge. Kinaderry Stream which occurs adjacent to the boundary of the River Finn SAC (west) is culverted beneath the public road.

2.3.3. The River Finn SAC, designated for otter and salmon, bounds on the downstream side of the crossing and bounds the crossing to the east. It is not designated for FWPM but the stream occurs within Finn River catchment within the Finn Freshwater Pearl Mussel Sensitivity Area which supports 'catchments of other extant populations'. The stream is considered suitable habitat to support populations of Otter and salmonid species including Atlantic Salmon. Evidence of otter was recorded at this location. Adjacent habitats to the bridge comprise wet grassland and

wet heath. Wet heath is listed as one of the main qualifying interests of the River Finn SAC.

2.3.4. Peatlands potentially impacted are River Finn SAC and Tullytresna Bog pHNA and Castlenavean Bog NHA. The proposed substation is 500m north of the River Finn SAC and Tullytresna Bog pHNA and the cable runs along the boundary for 0.7km; it is largely restricted to existing road infrastructure. The cable runs within the boundary of Castlenavean Bog NHA for 0.9km; it is restricted to existing road infrastructure.

2.3.5. Invasive species: two records of Japanese Knotweed and occasional occurrences of Rhododendron along roadside verges, watercourse crossings and areas of disturbed ground, were recorded on the cable route.

2.3.6. Freshwater Pearl Mussel – there are three locations where directional or horizontal drilling is required. These are in the Eske catchment and in the Eske FPMSA and in the catchment of the Lough Eske and Ardnamona Wood SAC, which is designated for the protection of FWPM among other species. A stage one and stage two survey for FWPM was undertaken in this area with none being recorded between the site and Lough Eske.

2.3.7. Only three sites will require directional drilling. The work will be limited in duration and extent and will be completed during daylight hours. It is unlikely that otter will be significantly affected.

2.3.8. At the three sites which will require directional or horizontal drilling, suitable salmon spawning habitat exists. Drilling will be avoided during salmon spawning period and will be undertaken during the period May-September.

2.4. River Finn SAC

2.4.1. Of the qualifying interests of the River Finn SAC only two have been identified as having potential to be affected by the proposed development: salmon and otter.

2.4.2. Salmon – no direct impacts have been identified as the development is located entirely outside the aquatic habitats and restricted to road infrastructure. Emissions to surface water is a potential indirect impact, a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and

operation have been identified. It can be concluded that the proposed development will not adversely affect Atlantic Salmon associated with the River Finn SAC.

2.4.3. Otter – no direct impacts have been identified as the development is located entirely outside the aquatic habitats and restricted to road infrastructure. Pathways for potential indirect impact have been considered and a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and operation have been identified. It can be concluded that the proposed development will not adversely affect Otter associated with the River Finn SAC.

2.5. Lough Eske and Ardnamona Wood SAC

2.5.1. Of the qualifying interests of the River Finn SAC only two have been identified as having potential to be affected by the proposed development: salmon, oligotrophic waters containing very few minerals of sandy plains, and Freshwater Pearl Mussel (margaritifera margaritifera).

2.5.2. Salmon – potential impacts are identified as pollution and disturbance to young salmon and eggs in potentially suitable habitat that exists outside the Lough Eske and Ardnamona Wood SAC. The potential impacts of pollution is responded to as previously. The potential for disturbance is responded to by avoiding directional drilling during salmon spawning period and undertaking drilling during the period May-September inclusive.

2.5.3. Oligotrophic waters containing very few minerals of sandy plains – no direct impacts have been identified as the development is located entirely outside the SAC. Emissions to surface water is a potential indirect impact, a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and operation have been identified. It can be concluded that the proposed development will not adversely affect oligotrophic waters containing very few minerals of sandy plains associated with the Lough Eske and Ardnamona Wood SAC.

2.5.4. Freshwater Pearl Mussel - in the absence of detailed conservation objectives for the Lough Eske and Ardnamona Wood SAC, attributes and related targets for the species FWPM taken from various SAC's, are set out.

2.5.5. No direct impacts have been identified as the development is located entirely outside the SAC and none were recorded at the crossing points of the rivers upstream in the catchment. Emissions to surface water is a potential indirect impact, a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and operation have been identified. It can be concluded that the proposed development will not adversely affect FWPM.

2.5.6. Atlantic Salmon associated with the Lough Eske and Ardnamona Wood SAC.

2.5.7. Potential cumulative impacts with Carrickaduff Wind farm, a commercial anaerobic digester, other wind energy developments, and dwellings are considered not to arise due to the proposed construction methodologies and control measures.

2.5.8. The conclusion is reached that the proposed development, by itself or in combination with other plans and projects, in light of best scientific knowledge in the field, will not, in view of the sites' conservation objectives, adversely affect the integrity of any European site and no reasonable scientific doubt remains as to the absence of such impacts.

2.6. **Environmental Impact Statement**

2.7. An EIS accompanies the application.

2.7.1. The description of the development includes:

Prior to any grid connection works commencing a dilapidation survey will be conducted of the entire route, photographing and noting any existing damage or defects to structure or road surfaces. A copy of this survey will be submitted to Donegal County Council prior to works commencing.

Every effort will be made to minimise the impact of works on local residences and traffic. Consideration will be given to the agricultural community and works will be organised and sequenced so as not to inconvenience any such activities.

The development will require the felling of a small amount of commercial forestry (c1.8ha), which will require replanting of a similar area elsewhere in the state. An area for replanting has been identified.

There will be no release of suspended solids to any watercourse as a direct or indirect result of the proposed works based on the development design and the following measures:

- No watercourse will be interfered with.
- During periods of heavy precipitation and run-off, works will be halted or working surfaces/pads will be provided to minimise soil disturbance.
- Any requirement for temporary fills or stockpiles will be covered with polyethylene sheeting to avoid sediment release associated with heavy rainfall.
- Silt fences will be used to prevent siltation of watercourses in or surrounding the study area.
- Control measures will ensure that invasive species are not spread.

The proposed substation and underground cabling will become a permanent part of the electricity transmission network and decommissioning is not foreseen.

2.7.2. Human Beings – the overall level of residential development in the area around the proposed substation and the underground cable route is low and comprises one-off houses. The proposed substation is located 4.3 km from the nearest dwelling. There are approx. 75 houses located within 100m of the proposed cable route in the Finn valley and south of the Barnesmore Gap.

A five km section of the route will run within the curtilage of the N15 and is accessible from the R252 and R253 which form part of the site. Where the site is located along local roads, these can be accessed from the regional roads.

Extremely low frequency (ELF) electric and magnetic fields (EMF) are expected to be associated with the operation of the proposed substation and underground cables, and fully comply with international guidelines.

2.7.3. Flora & Fauna – in addition to a desk study of the site, and fields surveys, a survey of the Lowerymore River in the vicinity of the proposed cable route for Freshwater Pearl Mussel was undertaken.

The proposed substation is located within conifer forestry. The majority of the cable route will be within the curtilage of existing roads and tracks. Options for the

southern section of the cable route are existing roads and tracks, improved agricultural grassland, and species poor wet grassland. Much of the cable is bordered by a generous verge which is dominated by Dry Meadows and Grassy Verges. Other habitats ie. hedgerows etc, are unlikely to be disturbed.

A tributary of the Elatagh River occurs approx. 200m south (downstream) of the substation location. There are 10 main water crossings and numerous drain/culvert crossings located along the cable route. All crossings are at locations where there is an existing road and therefore a culvert. All crossings will be either over or below the culvert. No instream work will be required.

The substation is 0.5km from the River Finn SAC and Tullytreasna Bog pNHA both to the south. The cable route traverses the River Finn SAC (townlands of Corlacky/Kinaderry and Welchtown), and is immediately adjacent to the eastern boundary of the Lough Eske and Ardnamona Wood SAC at Keadew Bridge. The SPA Derryveagh and Glendown Mountains is 9.7km northwest of the substation site and the Pettigo Plateau Nature Reserve SPA is 6.6km north of the cable route.

Best practice construction methodologies and control measures will ensure that sediment release and potential for pollution during the construction phase is minimised. Works will be carried out during daylight hours and no artificial lighting will be used to avoid disturbance to crepuscular or nocturnal species.

There is potential for earthworks associated with the construction phase of the proposed substation and the underground cabling to cause entrainment of suspended solids and nutrient release in surface watercourses (e.g. via storm water flows). There is also the potential for the release of pollutants (e.g. hydrocarbon fuels, hydraulic fluids, etc) into surface waters. Such events could lead to negative effects on aquatic fauna further downstream that supports salmonid species including brown/sea trout and Atlantic salmon. Freshwater Pearl Mussel are also known from the Fin and Eske Catchments (whilst not found during surveys upstream of Lough Eske). Potential pathways of effect by siltation include the smothering of fish eggs, eutrophication from nutrients carried into water in silt, encouragement of macrophyte growth and damage to salmonid populations. Drainage of storm water from the site could, in addition to carrying silt or spilt pollutants, carry nutrients washed from soil released from forestry brash. The absence of natural watercourses

present within the proposed substation development site minimises this impact to some degree.

2.7.4. Evidence of otter was identified at two locations along the proposed cable route. Disturbance is expected to be minimal.

It is possible that directional /horizontal drilling, at the three crossings where it is proposed, could lead to disturbance of vibration effects potentially impacting on spawning Salmonid species. Drilling will be undertaken outside spawning period; work will be undertaken May – September inclusive.

No significant impacts are anticipated on flora and fauna during the construction period.

No significant impacts are associated with the operational phase either from the proposed substation or the underground cable.

2.7.5. Soils & Geology – the substation site is dominated by blanket peat of depths between 0.9m and 1.9m and with the deeper peat located towards the southern side of the compound. Average depth of peat along the proposed access road is 1.2m and across the compound 1.3m. The 33kV cabling passes through blanket peats with pockets of gleys. The 110kV cabling - near the substation soils are dominated by blanket peat. The River Finn valley, in the mid route, is characterised by gleys / brown earths/ brown podzolics with pockets of bedrock outcrops and a strip of mineral alluvium close to the river. Blanket peat is dominant further south. Adjacent to the N15 mineral alluvium is the predominant soil. The route near the existing substation is comprised of peaty podzols and lithosols and gleys with bedrock outcrops. Along existing road sections soils will be absent except along verges.

Bedrock is composed of Precambrian quartzites Gneisses and Schists and a small area of Granties and other intrusive igneous rocks towards the southern end. The cable route passes through Barnesmore Gap National Heritage Area.

It is estimated that approx. 30,250m^3 of material will be excavated at the proposed substation and that approx. 13,880m^3 of stone will be required as fill. There will be an imperceptible permanent negative effect on soils. Operational effects are not anticipated. Decommissioning is not foreseen.

2.7.6. Hydrology & Hydrogeology – The proposed substation is located in forestry which has a forestry drainage network.

The majority of watercourses that will require crossing are watercourses that flow directly into the River Finn, Lowerymore River and Lough Mourne. The construction methodology for crossings is set out in Section 3 of the EIS.

No flooding has occurred in the substation site. Recurring incidences of flooding have occurred along the cable route on the River Finn in Welchtown at Glenmore Bridge and on the Lowerymore River at Barnesmore Gap.

EPA quality rating for the River Finn at Glenmore Bridge is Q3-4; for the Lowerymore River at Barnes Bridge is Q4 and at Keadew Bridge is Q4-5.

No significant interactions with the hydrogeological regime are anticipated during construction. Surface water is the main sensitive receptor. Primary risk would be from hydrocarbon and chemical spillage and leakages. Potential sources will be carefully managed and mitigation measures are proposed.

The worst case scenario is the temporary contamination of local surface water streams which is unlikely to significantly affect the ecology and water quality downstream.

General Pollution Prevention Measures will include:

- Protection of the riparian zone watercourses by implementing a constraints zone around stream crossings in which construction activity will be limited to the minimum (solely work in connection with duct laying at the instream crossing);
- No stock-piling of construction materials will take place within the constraints zone. No refuelling of machinery or overnight parking of machinery is permitted in this area;
- No concrete chute cleaning is permitted in this area;
- Works shall not take place at periods of high rainfall, and will be scaled back or suspended if heavy rain is forecast;
- Plant will travel slowly across bare ground at a maximum of 5km/hr. Bog mats will be employed to protect tracked areas as necessary. Machinery will be prohibited from entering the streams at these locations.

- Machinery deliveries will be arranged using existing structures along the public road;
- Any excess construction material will be immediately removed from the area and disposed of in a fully licensed facility;
- Spill kits will be available in each item of plant required to complete the stream crossing;
- Silt fencing will be erected on ground sloping towards watercourses at the stream crossing if required.

Mitigation will be in place to limit the use / handling of hydrocarbons.

Various other pollution control procedures are outlined, and the published construction standards that would be followed are specified.

Drainage measures will be implemented during construction, including the installation of silt traps and settlement ponds.

2.7.7. Air and Climate – mitigation measures to control dust are listed as: regular inspection of roads adjacent, transport of soils or other material in tarpaulin covered vehicles where necessary, and damping down and sweeping of sections of the site using a street cleaner where necessary.

The construction of the proposed underground cabling, electricity substation and the permitted Drumnahough, Lenalea and Straness wind farms and potentially the Carrickaduff wind farm will require plant items which consume fossil fuels and will lead to a minor level of air emissions cumulatively. The proposed wind farms will generate energy from a renewable source, and by providing an alternative to electricity derived from coal, oil or gas-fired power stations will result in emission savings of oxides of nitrogen (NOx), and sulphur dioxide (SO_2), which will have long term significant positive effect.

No negative impacts are anticipated.

2.7.8. Noise & Vibration – Construction works associated with the substation will be inaudible at sensitive receptors. For the cable route, work in the vicinity of sensitive receptors will take place for brief periods. The active construction area will generally be only a 300m stretch at any one time and will move along each day, once the

cables are laid. Any exceedence of threshold levels will be for short periods at a limited number of properties. Mitigation will be implemented.

2.7.9. Landscape – access to the substation site is restricted. The land use in the wider area is agriculture, forestry and wind energy. There are no designated scenic views or prospects near the substation site. There is one scenic view located close to the cable route along the road to the south of Barnesmore Gap. The proposed location of the substation isolated from potential visual receptors and within forestry, mitigates potential landscape and visual effects which are therefore considered imperceptible, negative. The impact of the cable is temporary imperceptible, negative. Loss of the forestry is considered imperceptible.

Landscape character areas within which the development site is located is shown in Figure 10.1 of the statement.

2.7.10. Cultural Heritage - There are 3 recorded monuments within 100m of the proposed cable route, 2 protected structures and 8 NIAH buildings /structures.

The cable route transects a small portion of the Gaeltacht at Maheracloigh townland.

The development will not result in any cumulative effects on the surrounding archaeological, architectural and cultural heritage landscape.

Cabling should not be located in close proximity to the megalithic structure within 100m of the N15.

Two structures on the RPS are located within 100m of the proposed route – none will be affected.

Eight NIAH structures are located within 100m of the proposed route. Three have potential to be affected: Milestone, Altnapaste Bridge and Keadew Bridge are all located along the route. Cables should not be attached to these structures. Excavation should not be located close to the Milestone (along the N15) and to avoid any impacts on the bridges. The Architectural Heritage Protection Guidelines for Planning Authorities best practice regarding bridges should be adhered to.

An engineer’s report should be undertaken to assess any potential impacts to the bridges.

Mitigation is proposed - measures include: archaeological monitoring of excavation of the substation site and where the cable route is to be excavated in the margins of

existing roads or across green areas, in particular at the southern end of the route, and a report submitted to the local authority and DAHG; physical barrier such as high visibility construction barriers to be provided around the megalithic structure and the milestone; adherence to guidelines re. work to bridges; and signage to be bilingual in the Gaeltacht area.

2.7.11. Material assets:

A Traffic Impact Assessment was carried out.

For completion of the project, 336 working days, 18 months, will be required.

Effects of construction of the cable on existing traffic will take the form of:

Time – due to delays at road works and time spent undertaking local diversions, and

Distance - travelled as a result of local diversions.

Excavation and cable laying, crossing water courses and traffic on side roads are each considered.

In relation to excavation and cable laying, and water course crossing as set out in section 12.1.3.2 of the EIS, Table 1 in appendix 12.1 gives an estimate of the delay and additional distance travelled by local traffic due to all works associated with ground excavation and cable laying.

Completion of the route will take approx. 336 working days or 18 months. On the majority of these days between 50 and 500 car trips will be impacted with up to 1,000 vehicles impacted on 33 days, the majority of trips impacted will experience between an additional 10 seconds to 144 seconds onto their trip. In terms of distance, the majority of trips impacted will experience between an additional 0 to 2km added to their trip.

During the 336 working days a total of 72,860 trips, assuming traffic on the N15 is not impacted, will experience an impact, resulting in a total of 1,677 additional vehicle hours spent travelling on the network and 79,217 km during the 18 months.

Delays to traffic on side roads will occur on days that trenches are excavated and the cable set across the side road, resulting in a one day closure at each location. It is estimated that there are 10 local roads that will be impacted, with delays and additional distance travelled as a result. It is assumed that an average detour of 2km will apply for all affected trips. The impact will occur on one side road per day for 10 days out of the 18 month construction period.

Each trip affected will incur an average detour of approx. 2km and an increased journey time of 144 seconds.

On the 10 days that the work will be undertaken on side roads, 4,200 trips will be affected resulting in a total of 168 additional vehicle hours and 8,400 kilometres.

Table 1 Appendix 12.1 gives further details of the route sections where traffic is impacted due to trench excavation and cable laying.

The details include a description of the section, the length of the section and the duration of the road closure:

- section 1, local road from the sub-station at Lenalea Wind Farm to the access to Drumnahough Wind farm, 2.6km of single track, 17.3 days closure.
- section 2, local road from the access to Drumnahough Wind Farm to Meenbog. 3.1 km of single track, 20.7 days closure.
- section 3, local road from Meenbog to the junction with the R252, 5.3km of single track, 35.3 days closure; R252 on the northern bank of the River Finn, 2 way, 1.3km, one way stop and go for 8.7 days; and R252 across the River Finn, 2 way, 0.4km, one way stop and go for 2.7 days.
- section 4 – R(~~325~~)253 between junction with local road and junction with the R252, 2 way, 1.6km, one way stop and go for 10.7 days; local road from the junction with the R253 to south of Garranebane Hill, 7.3km of single track, 48.7 days closure.
- section 5 – local road from south of Garranebane Hill to the junction with the N15 south of Lough Mourne, 5.8km of single track, 38.7 days closure.
- section 6 – N15 between Lough Mourne and Barnesmore, 2 way with hard shoulder, 6.5km, road will remain open.

Table 2a-2e of Appendix 12.1 details additional traffic impact due to watercourse crossings.

Table 3 of Appendix 12.1 details traffic impact due to trench excavation, cable laying watercourse crossings.

- section 1, 20.3 days closure.
- section 2, 24.4 days closure.

- section 3, a) 55.3 days closure, b) 12.7 days, one way stop and go; and c) 4.2 days, one way stop and go.
- section 4, a) 16.4 days one way stop and go; b) 60.2 days closure.
- section 5, 60.7 days closure.
- section 6, 82.1 days, when the road will remain open.

Table 4 of Appendix 12.1 details additional traffic impact due to side road closures:

- section 1, 1 days closure.
- section 2, 0 days closure.
- section 3, a) 3 days closure, b) 1 days closure; and c) 1 days closure.
- section 4, a) 2 days closure; b) 1 days closure.
- section 5, 0 days closure.
- section 6, 1 days closure.

Construction generated traffic – the trench will be excavated using 2 no. 13 tonne rubber tracked 360 degree excavators and dump trucks. A maximum of 10 staff will be involved. Additional traffic movements generated by the work will comprise: delivery and collection of the excavator by HGV on day one and the last day; up to 10 HGV / dumper movements daily; and passenger car vehicles for workers. The impact from construction traffic will be negligible and confined to short sections of the roadways where the works will be ongoing at any one time. All works will be accompanied by a road opening licence (ROI) and detailed traffic management plan submitted with the ROI. The overall traffic impact from construction – will be on very isolated sections of the route at any one time and will be slight in nature. In practice construction may commence simultaneously on more than one section, and the construction period will likely be reduced by up to a half.

Cumulative impacts – between the windfarms and substation/underground cable cumulative impacts are likely to be slight to imperceptible once mitigation measures have been implemented. There is no potential for cumulative impacts between the cable route development and the proposed replanting lands.

Services – any area where excavations are planned will be surveyed and all existing services will be identified prior to commencement. There will be liaison with local authority and area engineers to ensure all services are identified.

Construction mitigation for local networks and services include:

- Any area where excavations are planned will be surveyed and all existing services will be identified prior to commencement of any works.
- Liaison will be held with relevant sections of the local authority, including all the relevant area engineers, to ensure all services are identified.
- Excavation permits will be completed and all plant operators and general operatives will be inducted and informed as to the location of any services.

Construction impacts will be insignificant. There will be no operational impacts.

Construction traffic will adhere to designated haulage routes. Directional signage will be erected for the duration of the project. Flagmen will be used where appropriate to assist in the management of construction traffic at the site access and any on-site passing places. A community liaison officer will not be required for the construction of the substation, which is 4km from the nearest residential property.

Mitigation will eliminate any potential for cumulative construction impacts. There will be no cumulative operational impacts.

Telecommunications and Aviation – measures are incorporated into the CEMP to ensure that the construction of underground cable will not have an adverse effect on any service networks. There will be no cumulative operational effects in relation to telecommunications and other services.

2.7.12. Interactions are set out in a matrix in chapter 13 identifies potential positive or negative interactions. Where any potential interactive negative effects have been identified, a full suite of appropriate mitigation measures have already been included in the relevant sections.

2.7.13. Appendices

The full list of Appendices referred to in the text comprises:

Appendix 2.1 Planning History

Appendix 2.2 Scoping Responses

Appendix 3.1 Planning Drawings

Appendix 3.2 Construction and Environmental Management Plan with Appendix 1 Emergency Response Plan *not provided*

Appendix 3.3 Sample Traffic Management Plan

Appendix 3.4 Forestry Replanting Assessment including Appendix 1 Technical Approval Document.

Appendix 3.5 Invasive Species Management Plan including Appendix 1 – Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011.

Appendix 4.1 Electric Magnetic Field Information Booklet - Ergrid

Appendix 5.1 FWPM survey results

Appendix 1 FWPM Licenses.

Appendix 5.2 designated site maps

Appendix 5.3 NPWS site synopses

Appendix 9.1 Glossary of Acoustic Terms

Appendix 9.2 Modelling Calculation Parameters

Appendix 11.1 NIAH structures within 100m of the underground cable route

Appendix 12.1 Traffic Impact Assessment Tables.

2.7.14. Scoping response (appendix 2.2) which includes correspondence from:

DAHG – archaeology

Donegal County Council

OPW re flooding – 2 records: Welchmore and Lowerymore Barnesmore Gap.

Meteor.

Loughs Agency – some concern in relation to watercourse crossings.

GSI – County Geological Sites for Donegal have been carried out and in their final edit phase. The only site referred to in the letter is ‘Barnesmore Gap’ – due to the size and nature of the site, impact is unlikely. The County Geological Site Report for Barnesmore Gap is attached to the letter, which includes photographs and maps.

Dept. of Agriculture – Any damage to landscape features to be repaired, to retain ecological and functional value. Take appropriate account of existing ancillary features on farmland. The route should not impede impede/restrict possible future developments and an appropriate buffer zone should be observed from existing facilities and other areas with high potential for development. Interruption of land drainage systems is potentially an issue during/post construction, if not properly mitigated during the construction phase. Pipelines should be of sufficient depth that any future developments, such as opening of land drains, may be undertaken without any safety concerns.

DAHG – nature conservation – detailed advice (6 pages):

EIS guidance is provided under the headings:

- Ecological survey
- Baseline data
- Impact assessment
- Alien invasive species
- Hedgerows and protected species
- Bats
- Rivers and Wetlands
- Water quality
- Bridges and flora – masonry bridges are a valuable habitat for a myriad of saxicolous[1] vascular, bryophyte and lichen species. Many species have as their preferred habitat such structures, whilst a smaller, restricted number of rarer species are dependent solely on such structures (usually the mortar between the masonry). There are doubtless many other colonies of Red List species on walls and bridges, these are just a few. There is a very good chance that cleaning the mosses off bridges and walls could have a real impact on Irish biodiversity. Whilst there is no statutory protection for such

[1] Rock dwelling

species, the recommendations are made in the interests of maintaining this aspect of Ireland's biodiversity.

- Recommendations – only lime mortar should be used; the removal of vegetation from the bridge surface, parapets and embankments should be carried out judiciously, and only where their removal is deemed necessary for imperative reasons of engineering integrity.

- CPMP's

Appropriate Assessment guidance is provided under the headings:

- Guidance
- Conservation objectives
- Cumulative and ex situ impacts
- Water and wastewater
- Alien invasive species
- CMPs and
- Licenses

2.7.15. Appendix 3.1 comprises the planning drawings, which include:

Maps reduced from A3 size (to A4) where they would be at a scale of 1:60,000 and 1:2,500; substation site layout; elevations and sections through substation; building plans for the two substation buildings; site section for cut and fill at substation; typical excavated road section (site roads); typical private road trench detail; roadside cable trench cross section; typical joint bay detail; C2 comms chamber detail; cable trench over culvert – cross section and longitudinal section; cable trench under piped culvert – cross section and longitudinal section; cable trench flatbed formation over culvert – cross section and longitudinal section; cable trench flatbed at road surface level – cross section and longitudinal section; directional drilling; horizontal auger drilling; typical ring main unit; and plans and elevations of existing and proposed shed.

2.8. Appendix 3.2 Construction and Environmental Management Plan

The CEMP is set out in 9 sections: introduction; site and project, construction methodology; environmental controls; implementation plan for the environmental management of the project; emergency response procedure; summary of mitigation proposals; summary of monitoring; timing of works; and reviewing compliance. A traffic management plan, included in Appendix 3.4 of the EIS will be set up prior to any works commencing.

The construction methodology sets out the work required for the substation, access roads, and underground cabling. The underground cabling is described as parallel road excavation in road, in grass margin & road crossings. Joint bays are referred to – where possible joint bays will be located in areas where there is natural widening / wide grass margin on the road in order to accommodate easier construction, cable installation and create less traffic congestion. A joint bay has dimensions of 2.5m x 6m x 1.560m deep with 0.250m cover.

The demolition of the existing shed is explained at 2.3.5.1 of the CEMP – there is a small single storey building c8.5m x 8m, used by a participating landowner as a storage shed which will be demolished to facilitate the 110kV cabling works in the townland of Cullionboy. The location of the proposed new shed, relative to that of the existing shed, is shown on Drawing No. 0113-57. The dimensions will be similar to the existing shed.

Environmental Management is set out in section 3, mainly site drainage.

Section 4 deals with implementation – the appointment of an environmental engineer, environmental scientist or equivalent as environmental manager; the appointment of a project ecologist and project hydrologist and environmental awareness training for all staff.

Section 5 refers to emergency response measures. An Emergency Response Plan is referred to in this section and elsewhere in the document. No Emergency Response Plan has been provided in the documentation.

Section 6 lists mitigation:

> e.g. A constraints zone will be identified and implemented at each watercourse crossing location; the purpose to:

- Avoid physical damage to surface water channels;
- Provide a buffer against hydraulic loading by additional surface water run-off;
- Avoid the entry of suspended sediment and associated nutrients into surface waters from excavation and earthworks;
- Provide a buffer against direct pollution of surface waters by pollutants such as hydrocarbons; and
- Avoid storage of construction plant materials used during construction and chemicals or waste associated with temporary on-site sanitary facilities.

2.8.1. Appendix 5.1 FWPM survey results**.**

In accordance with protocol 500m sections of each 1km of the Lowerymore river was surveyed. Thirty four survey sections / transects were selected using OSI mapping and orthophotography. The survey was carried out from the 2nd to the 10th September 2015 using a bathyscope as snorkelling was deemed unnecessary given the depth of water.

Nine sections (4.5km) of the Lowerymore River were surveyed and are described in the report. No mussels or shells were observed although there was an appreciable amount of good potential pearl mussel habitat, notwithstanding some signs of poor water quality. It would be expected that such exhaustive survey work would have either detected live mussels or at least a few empty shells if there was anything other than either a very small population or no mussels present in the Lowerymore River.

3.0 **Planning Authority Decision**

3.1. **Decision**

Reasons

1 The proposed development (approximately 5km) of underground cabling along the N15, national primary road, would compromise the ability and increase the costs associated with the undertaking future realignment, widening, network

maintenance, management and safety issues. Similarly, the proposed development of underground cabling on and along local roads (approximately 30km) has significant potential to interfere with and destabilise existing roads infrastructure, including road drainage (drains/culverts), safety fences, bridge structures, directional signage, road embankments, subsurface drainage flow paths and with existing services such as water mains, telecommunications and storm drainage systems.

The proposed development is therefore considered premature and would materially contravene Policy T-P-1 (Strategic Road Network), Policy T-P-3, 'not to permit development that would prejudice the implementation of a transport scheme identified in the development plan', of the County Donegal Development Plan 2012-2018 (as varied) and therefore would not accord with the proper planning and sustainable development of the area.

2 The proposed development is located within the River Finn Special Area of Conservation at three separate locations and within 540m southeast of Croaghonagh Bog SAC and adjacent to Lough Eske and Ardnamona Wood SAC for a distance of 279m at Barnesmore. It is a policy of the Council as outlined in Policy NH-P-2 of the County Donegal Development Plan 2012-2018 (as varied) 'to ensure the protection of Natura 2000 sites in accordance with the EU Habitats Directive (92/43/EEC) and have regard to the relevant conservation objectives, qualifying interests and threats to the integrity of these Natura 2000 sites'. The proposed cable route corridor resides within the Cashelnavean Bog NHA for a distance of 1.16km. The proposed development would be contrary to policy NH-P-1 wherein. 'it is a policy of the Council to ensure development proposals do not damage or destroy any sites of international or national importance, designated for their wildlife/habitat significance'. Accordingly to permit the proposed development would be contrary to the aforementioned policies and to the proper planning and sustainable development of the area.

3 The proposed development is located within the Eske Freshwater Pearl Mussel Catchment, wherein policy NH-P-4 refers, 'it is a policy of the Council to require the consideration of Freshwater Pearl Mussel and any relevant Freshwater Pearl Mussel Sub-basin Plans in all development proposals that fall within their basin of catchment'. The Eske mussel population is in bad and declining condition. River crossings are proposed for the Lowermore River and at Barnesmore Bridge in the Eske Catchment. The Lowermore River flows into Lough Eske less than 1km from

the outflowing River Eske, where mussels are known to occur. Accordingly to permit the proposed development would be contrary to the aforementioned policy and to the proper planning and sustainable development of the area.

4 The proposed development is located within an area of Especially High Scenic Amenity and within the immediate vicinity of 2 No. Protected Structures (Ref. 40907702 & 40907703), 3 No. buildings on the National Inventory of Architectural Heritage (Ref. 40907702, 40809424 & 40907718) and a Recorded Monument (ref DG085-005) wherein Policies NH-P-10 Policies BH-P-1 and AH-P-1 of the County Donegal Development Plan 2012-2018 (as varied) refer, which seek to protect the scenic amenity and built heritage of these assets. It is considered that the proposed development is premature in the absence of detailed architectural and archaeological assessments of potential impacts arising from the proposed development on the listed sites. Accordingly to permit the proposed development would be contrary to the aforementioned policies and to the proper planning and sustainable development of the area.

3.2. **Planning Authority Reports**

3.2.1. Planning Report

3.2.2. The general principal of the proposed development to provide a substation (110kv) which would replace two previously permitted substations as part of the Drumnahough Wind Farm (Ref. 08/50687, extended under Ref. 13/516090), and the Lenalea Wind Farm (Ref. 09/50116), is acceptable at this location.

3.2.3. The location, siting and design of the two no. control buildings is considered appropriate within the context of this area.

3.2.4. The first section of (3.4km) 38kv line undergrounded cable connecting the Lenelea Wind Farm with the proposed substation is acceptable and would not impact upon protected habitats, residential amenities or public roads. Technical standard 10.6.4 of the CDP states that all grid cable connections within the site should be undergrounded.

3.2.5. The proposed 110kv underground cable from the proposed Cark substation to the existing Clogher substation has potential for greater impact, and has generated much negative feedback in the submissions received on the basis of: concerns about

EMF, impact of road closures during construction, concerns of ability of land/roads to accommodate such infrastructure as there are no proper road foundations to such roads which reside over bogland; and impact upon natural habitats.

3.2.6. The proposed cable route is located within 3 no. areas of especially high scenic amenity for an approximate distance of 13.37km, as defined within the CDP: 4.03km at Tullytresna / Culliagh; 5.77km at Altnapaste/Carrickmahon; 3.57km at Barnesmore. In addition views and prospects have also been identified of and through Barnesmore Gap.

3.2.7. Traffic Safety – the access road to the proposed substation will be approximately 145m in length, accessed from local road L-10142.

3.2.8. Public health – wastewater will be collected into a sealed, alarmed underground storage tank for tankering off site by a permitted waste collector to a wastewater treatment plant.

3.2.9. Surface water – swales along with check dams have been identified around the perimeter of the proposed compound; and swales and interceptor drains with berms have been identified alongside the access road; and two number level spreaders; to reduce the velocity of storm water runoff and allow for ground seepage. The EIS states the majority of the site area is not liable to flooding, however flood events have been recorded at the River Finn in Welchtown, at Glenmore Bridge, and on the River Lowerymore at the Barnsmore Gap.

3.2.10. Water Supply – water demand will be low. It is proposed to harvest rainwater from the buildings roof and, if necessary, bottled water will be supplied for drinking. A single toilet will be installed in each building with a low flush cistern and low flow wash basin.

3.2.11. Record of protected structures:

Reference /RPS	Rating	Location
40907702 St Johns Church	Regional Interest – architectural, artistic, social	Along roadside
40907703 Donaldson Memorial Hall	Regional Interest - architectural, social	Along roadside

40909423 granite milestone at Cillianboy	Regional Interest – historical, social	
40809424 double arched bridge at Keadew Upper	Regional Interest – technical	On route
40908501 former railway embankment Keadew Upper	Regional Interest – social, technical	250m to east of route
40907716 Outbuilding Altnapaste	Local Interest – architectural	51m to northwest of route
40907717 house Altnapaste	Regional Interest – architectural	23m south of route
40907717 bridge Altnapaste	Regional Interest – architectural, technical	On route

3.2.12. Recorded monuments SMR

Reference	Location
DG085-005 megalithic structure (Tawnawully Mountains)	On route
DG077-025 megalithic structure	320m east of route
DG077-002 ringfort	137m north of route
DG077-004 Ritual site / holy well	103m south of route
DG068-002 megalithic tomb/court tomb	80m west of route

3.2.13. Natura 2000 sites and Natural Heritage Areas

3.2.14. SAC

- River Finn SAC, site code 002301 – the proposed route adjoins the River Finn SAC site code 002301 at Tullytresna for 775m, at Kinnaderry for 141m, at Milltown for 103m and at the Glenmore Bridge for 40m.
- Croaghonagh Bog SAC, site code 000129 – the proposed route is located within 540m southeast of the SAC.
- Lough Eske and Ardnamona Wood SAC, site code 000163 – the proposed route is located alongside the SAC for a distance of 279m at Barnesmore.

3.2.15. PNHA

- Cashelnavean Bog NHA, site code 000122 – the proposed cable route is within the NHA for a distance of 1.16km.
- Barnesmore Bog NHA, site code 002375 - the proposed cable route is within 110m (west) of the NHA for a distance of 1.16km.

3.2.16. SPA

- There are no SPAs within or in the vicinity of the proposed development site and cable route.

3.2.17. Potential pathways for impact on the River Finn SAC and Lough Eske and Ardnamona Woods SAC in the form of emissions to surface water were identified. In addition, the potential for impacts on Atlantic Salmon within the Eske catchment but outside the Lough Eske and Ardnamona Woods SAC, resulting from vibration, were identified. It cannot therefore be concluded that the proposed development will not contribute to likely significant impacts the two European Sites mentioned when considered in combination with other developments in the area. The planning authority considers that insufficient information has been provided to conclude that there would be no impact on the EU designated habitats given the nature and scale of the proposed development.

3.2.18. Freshwater Pearl Mussels – the applicant has advised that a Schedule 1 & 2 survey was undertaken by ecologists for FWPM in the Lowerymore River (Eske Catchment). Approximately 4.5km of the Lowerymore River was surveyed (over 9 stations). No sign of mussels, living or dead, were recorded during the survey, in September 2015.

The report further states that FWPM are known to be present downstream of Lough Eske towards Donegal Town and the surveyors assessed much of the lower part of the river, however no signs, living or dead, of pearl mussels were recorded. Surveying cannot prove a negative but it would be expected that such exhaustive survey work would have detected if there was anything other than a small population in the Lowerymore River. It is considered that further assessment would be required within the overall Lough Eske FWPM catchment including tributaries, as Lough Eske is a known habitat for FWPM.

3.2.19. Assessment – Elements: 1 - electricity substation, 2 - 33kv cabling and ancillary works from Lenelea wind farm to the proposed substation at Cark, and 4 - demolition and replacement of a shed at Cullionboy, are considered acceptable in principal.

Element 3: the proposed underground 110kv electricity cabling would traverse 21 townlands and would measure 32.1km. The majority of cable network would run predominantly along the public road and within forestry tracks. Proposed joint bays are pre-cast concrete, underground chambers, where lengths of cable would be joined to form one continuous cable. They would be located at various points along the ducting route, approximately every 600-1,200 metres, depending upon cable type. The proposal would cross 166 culverts and 9 bridges and would require tree felling (1.8ha). the proposed route may represent a significant threat to protected habitats and could result in habitat severance. The proposed development would also impact on protected built and archaeological features.

3.2.20. The Roads Department have advised that many local roads have poor foundations (overlaying bogs), do not have the capacity to accommodate such significant structural works, and that said works would create significant disturbance to existing services. The proposed structural works to a high number of culverts and bridges, some of which are protected structures, would require proper structural assessment prior to the submission of an application. The majority of trenching would be alongside roads and tracks and on soft verges. The applicants have not demonstrated sufficiently whether proposed trench excavations will give rise to risks of soil erosion, sediment pollution or hydrological changes, particularly with vulnerable habitats such as the Eske Freshwater Pearl Mussel Catchment.

3.2.21. Other Technical Reports

Chief Fire Officer – conditions.

Roads:

The application includes the laying of HV cabling along the N15.

Much of the N15 in which the HV cabling is proposed to be laid is legacy network and is not in compliance with modern road alignment standards. It is likely that significant realignment works will be needed in the future, and the presence of HV cabling within the road curtilage would represent a major constraint to such works.

The presence of HV cabling would also represent a major constraint in the context of road maintenance. Relatively straightforward works such as pavement overlays, erection of safety barriers, installation or maintenance of road drainage, installation of road signage, and maintenance of bridges would all become much more complex and costly.

The presence of HV cabling could become a significant factor limiting the Roads Authority's ability to undertake essential maintenance and would introduce a significant H&S risk.

The scale of construction works required to install the HV cabling has significant potential to interfere with and destabilise existing roads infrastructure, including road drainage (French drains/culverts), safety fences, bridge structures, major directional signage, road embankments, subsurface drainage flow paths (capping layer to French drain) etc.

There is also likely to be conflicts with existing services already in place.

Local Roads

The presence of HV cabling would also represent a major constraint in the context of road maintenance. Relatively straightforward works such as culvert replacement (many culverts are legacy stone culverts), installation or maintenance of road drainage, installation of road signage and maintenance of bridges would all become much more complex and costly. The presence of HV cabling could become a significant factor limiting the Roads Authority's ability to undertake essential maintenance and would likely require road closures. The presence of HV cabling could also introduce a significant H&S risk.

It is also considered that the scale of construction works required to install the HV cabling has significant potential to interfere with and destabilise existing roads infrastructure, including road drainage /culverts, safety fences, bridge structures, road embankments and bog ramparts. Such construction works could not be undertaken without the use of extensive road closures resulting in large scale disruption of road users. Damage to existing local roads arising from the passage of large volumes of heavy construction traffic and from construction activities would also be likely.

The local road network is essential infrastructure for use of residents of rural areas and the presence of HV cabling within the road will introduce a significant obstacle to local development accessing existing underground services (water, telecommunications). Future upgrades to such services will also be limited by the presence of the HV cabling.

The presence of HV cabling within public roads would have significant unacceptable impacts on the road network and road users, both during and after construction. There appears to have been no consideration of alternative route options for connection to the substation and should be refused.

3.2.22. Prescribed Bodies

TII – proposals indicate the laying of approx. 5km of cabling along the N15, national primary road, there are therefore network maintenance, management and safety issues that need to be addressed prior to any decision being made to grant planning permission.

Assessment of alternatives – it is unclear that the applicant has assessed any alternatives to the provision of the cabling along the N15, such as the laying of cabling in private lands adjoining. In the interests of safeguarding the investment in, and the potential for, future upgrade works to the national road network, the Authority is of the opinion that alternatives should be considered prior to any decision being made.

The cable routing should avoid all impacts to existing TII infrastructure such as traffic counters, weather stations, etc and works required to such infrastructure shall only be undertaken in consultation with and subject to the agreement of TII and any costs attributable shall be borne by the applicant/developer.

Works to national road network – pending resolution of the foregoing, any works to the national road network shall comply with TII publications and shall be subject to Road Safety Audit as appropriate. Works should ensure the ongoing safety for all road users.

A licence may be required from the road authority for any trenching or cabling proposals on the road network. The authority requests referral of all proposals agreed and licensed between the road authority and the applicant which affect the national road network.

3.2.23. Third Party Observations

3.2.24. Third party observations were received by the planning authority from:

St John's Church of Ireland

Kenneth Griffin

John Kee/Patricia Kee

Hugh Bonner

Brian Barron

Trevor Patton (Corlacky)

Una Tourish & Shane Bell (Lettershanbo)

Susan Tourish & Francie Tourish (Lettershanbo)

Noel & Monical O'Donnell (Lettershanbo)

Norman Kee (Meenagrave)

Ellen Alcorn (Corlecky)

Thomas Patton (Kiltyfergal)

Joseph & Florence Blackburn (Corlecky)

Martin & Mariea Browne (Lettershanbo)

Deborah Maxwell (Corlecky)

John and Bridie Griffith (Altnapaste)

Andrew McCreary (Altnapaste)

Robert McCreary (Altnapaste)

John Griffith Jnr (Altnapaste)

Georgina Bustard

Andrew Griffith (Altnapaste)

James McGinty (Cullionboy)

Dermot McGinty (Cullionboy)

Patricia McGinty (Cullionboy)

John & Mary McGlynn

Ellen & Michael Tourish

Colin Tourish

Anne & Joe Griffin

Frank & Diane McGlynn

Comhairle Ceantar Gleann Fhinn / Glenfinn Area Council

Finn Valley Wind Action

Michael McGinty

Lesley Taylor and

Peter Sweetman & Associates.

3.3. Issues raised include:

Inadequacy of EIS

Habitats Directive - ECJ judgement case – C258/11 – prove beyond reasonable doubt. The applicant has not established by way of appropriate assessment a reasonable level of proof that the proposed development will not have adverse effects.

Judgement of the High Court in the matter of Section 50 of the Planning and Development Act 2000 as amended – paragraph 142.

Screening conclusion that it cannot be excluded that the proposed development would have a significant effect on the River Finn SAC and Lough Eske and Ardnamona Wood SAC; by virtue of the size and scale of the works.

None of the relevant statutory bodies or interested NGO's were included in any scoping exercise.

No hydrological report in the NIS.

Project splitting – O'Grianna cited.

High Court halted a grid connection for a Sligo windfarm Kilronan WindFarm Ltd and Derrysallagh WindFarm Ltd to connect Derrysallagh to an ESB substation at Garvagh Glebe, Co Leitrim.

When doing an EIA, the Board must address the cumulative effect of the entire development. O'Grianna has clarified the law. The issue of project splitting is relevant. Even if there is a permission which cannot now be challenged in judicial review, the issue of project splitting remains relevant.

Right of way and tenancy issues also arose. The farmer who took the action owned the land and the soil underneath to the centre of the road and had not given consent for the development. Before this development can proceed, or before the Council issues road opening licences, the developer must, in advance, seek consent from each and every property owner along the route.

No site notices were posted along: the N15 Ballybofey to Donegal, R252 Ballybofey to Fintown; R253 Glenmore to Glenties.

Lettershanbo – the road is built on bog and is incapable of accommodating the development. A group water scheme runs along the road.

There is 15m of bog under the road.

How will water pipes which cross the road be facilitated.

There is a private well within 2m of the road and concern about contamination.

The route is within a known floodplain: Welchtown / Corlahy. The area between Corlecky Bridge and Welchtown has previously been flooded with damage to the bridge.

The River Finn is prone to flooding and it is proposed to take the cable along the top. A few years ago there were animals being washed down river and cars floating above the bridge.

Corlacky bridge was nearly washed away 4-5 years ago.

Timeframe and duration of road closures is unknown. The impact on road users: farmers, people attending health appointments, emergency vehicles, etc.

It is likely to require the sustained closure of the only viable access route to the townland of Altnapaste – concerns re. movement of livestock, medical assistance, vets, etc.

How can an exclusion zone be set up for people within a radius of an excavation, considering some roads are narrow single lane, and residents including elderly, require access to their property at all times. Disruption to the school bus.

Digging up roads the width of one car, with 15m of bog underneath, residents and other traffic using them everyday. Damage, especially to the Cark road which has 70 ton cranes and lorries. The road has mats underneath.

Reinstatement - the roads could be left dug up for months – the company could go bust as happened in Ballygawley, Tyrone.

Foundations of roads are bog – concerns re. subsidence or collapse due to long effects of work or adverse weather conditions.

Potential impact on implantable medical devices: pacemakers and implantable cardioverter defibrillators (ICDs).

Health & Safety – EMFs, especially to children and more particularly at night.

Medium/long term effect of high voltage cable is unproven.

Loss of hedges.

Rockbreaking damaging houses and walls.

St John’s Church of Ireland Church - underground cabling is to run underneath the roadway directly outside the gates of St John’s Church and Donaldson Memorial Hall. For the past number of years the Select Vestry have had an agreement with the Council that if road realignment of this junction is to take place, the slip road, underneath which it is proposed to place electricity cabling, will be closed and

become the property of Kilteevogue Parish. The route should be placed around the perimeter; as shown on a map provided.

Estimated cost of this grid connection cable is €10 million. The grid will not be at full capacity with just 24 windmills. It is obvious that there are future plans to erect more windmills in the area.

4.0 **Planning History**

05.VC0097 Pre application consultation in relation to proposed substation and associated underground cabling from permitted Drumahough wind farm and permitted Lenalea wind farm to Clogher substation. The Board decided that the development does not constitute strategic infrastructure development.

05. RL3500 - a Section 5 referral in respect of S5 16/21, a development similar to the subject development, on which the planning authority did not make a declaration, and the applicant referred the matter to the Board. The referral was withdrawn.

17/50618 – a ten year planning permission sought for the construction of a 110kv electricity substation at Cark, intended to replace two substations previously permitted as part of the Drumahough wind farm (PL. ref. 08/50687 and extended under PL. ref. 13/51609) and the Lenalea wind farm (PL. ref. 09/50116). The proposed substation includes 2 no. control buildings, associated electrical plant and equipment, underground electricity cabling, fencing and all ancillary works; the planning application was accompanied by an EIS; and was withdrawn 31/08/2017.

Reg. Ref. 08/50687 – the planning authority granted permission for a windfarm of 15 turbines at Drumnahough, in February 2009. The period for implementation of this permission was extended under ref. 13/1609.

Reg. ref. 09/50116 – the planning authority granted permission for a windfarm of 9 turbines at Lenalea in December 2009. The period for implementation of this permission was extended under ref. 12/40091.

Reg. Ref. 11/20064 – the planning authority granted permission 14/04/2011 to Power & Energy Holdings (ROI) Ltd for a gas insulated switchgear (gis) 110kv

electrical switching substation measuring approximately 25m x 20m, a compound area measuring approximately 41m x 40m surrounded by a 2.6m high palisade fence, four end masts, a landscaped earth berm with approximate dimensions of 11m at the base and 7m at the highest point, domestic effluent treatment facility, associated site roads and site works; for a substation on the national grid at Clogher Cullionbuoy townland.

5.0 **Policy Context**

5.1. **Development Plan**

County Donegal Development Plan 2012-2018 (adopted June 2012) is the relevant plan.

There is support in principal to enhancing grid infrastructure, and to the protection of man-made features of value and the protection of designated natural habitats and species.

E-O-2 Objective - To facilitate the strengthening of the electricity grid to enable the harnessing and distribution of energy. The Council will support transboundary and trans-national interconnectors to enable the exporting of energy outside of the County.

E-P-1 It is policy of the Council to facilitate the development of grid reinforcements including grid connections and transboundary energy network (Electricity and gas) into and through the County and between all adjacent counties and to support the development of cross border grid connections.

E-P-16 It is a policy of the Council to support the clustering of wind farms within the vicinity of existing or proposed grid connections and existing operational and approved windfarms to achieve economies of scale and to minimise the spatial extent of environmental impacts.

E-P-17 It is a policy of the Council to strengthen and enhance the capacity and critical mass of existing wind farms, within the local environmental capacity including the sustainable upgrade/replacement of older turbines with newer and more efficient models.

E-P-20 It is a policy of the Council that potential impacts on natural, built and cultural heritage including impacts on archaeological monuments and watercourses are assessed as part of Windfarm development proposals. Where such impacts are identified, mitigation measures such as buffer zones, separation distances and access arrangements should be employed as appropriate.

NH-O-2 Objective - To comply with Article 6 of the Habitats Directive (92/43/EEC) and have regard to the relevant conservation objectives, management plans, qualifying interests and threats to the integrity of Natura 2000 sites.

NH-O-3 Objective - To maintain the conservation value of all existing and/or proposed SAC's, SPA's and NHA's and RAMSAR sites including those plant and animal species that have been identified for protection.

NH-O-4 Objective - To protect and improve the integrity and quality of Designated Shellfish Waters, and Freshwater Pearl Mussel Basins and to take account of any relevant Shellfish Reduction Program or Fresh Water Pearl Mussel Sub-Basin Plan.

NH-O-6 Objective - To ensure where appropriate the protection and conservation of hedgerows, stone walls and traditional field boundaries as natural heritage corridors and migration routes for wildlife where they are shown to play a significant heritage role.

NH-P-1 It is a policy of the Council to ensure development proposals do not damage or destroy any sites of international or national importance, designated for their wildlife/habitat significance.

NH-P-2 It is a policy of the Council to ensure the protection of Natura 2000 sites in accordance with the EU Habitats Directive (92/43/EEC) and have regard to the relevant conservation objectives, qualifying interests and threats to the integrity of these Natura 2000 sites.

NH-P-4 It is a policy of the Council to require the consideration of Freshwater Pearl Mussel and any relevant Freshwater Pearl Mussel Sub-basin Plans in all development proposals that fall within their basin of catchment.

NH-P-5 It is a policy of the Council to require consideration of the impact of potential development on habitats of natural value that are key features of the County's ecological network and to incorporate appropriate mitigating biodiversity measures into development proposals.

5.2. **Legal**

5.2.1. Cases referred to by observers:

O'Grianna judgements.

C258/11 ECJ judgement.

High Court 2014 No. 320 JR - Rossmore Properties Limited and Kilross Properties Limited v An Bord Pleanála, the State and Eirgrid PLC, preliminary judgment.

People over Winds & anor v Coillte Teoranta (2017), High Court 2016 No. 785 JR.

Kelly V ABP High Court 2013, No 802 JR.

Connolly v ABP 2014 No 488 JR.

5.3. **Natural Heritage Designations**

The proposed works would occur within or immediately adjacent to two Natura 2000 sites and one Natural Heritage Area –

- The Special Area of Conservation for the River Finn, site code 002301. The proposed cable would cross two watercourses that are part of this SAC along the existing regional road R232, including the River Finn itself. Elsewhere the cable would be laid in a road that forms the boundary of that SAC in two stretches, one c770m long and one c315m long.
- The Lough Eske and Ardnamona Wood SAC, site code 000163. Part of the proposed cable would be laid in the N15 national primary road where is runs along the boundary of this SAC.
- Cashelnavean Bog Natural Heritage Area. Part of the proposed cable would be laid in an access track that runs through this NHA for a distance of c1.1km.
- Croughanagh Bog SAC – 540m distance
- Barnesmore Bog (NHA site code 002375).

5.3.1. River Finn, site code 002301:

Features of interest:

- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]

- Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]
- Northern Atlantic wet heaths with Erica tetralix [4010]
- Blanket bogs (* if active bog) [7130]
- Transition mires and quaking bogs [7140]

To restore the favourable conservation condition of Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) in River Finn SAC.

To restore the favourable conservation condition of Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) in River Finn SAC.

To restore the favourable conservation condition of Blanket bogs (*if active bog) in River Finn SAC.

To restore the favourable conservation condition of Transition mires and quaking bogs in River Finn SAC.

To restore the favourable conservation condition of Northern Atlantic wet heaths with Erica tetralix in River Finn SAC.

To restore the favourable conservation condition of Blanket bogs (*if active bog) in River Finn SAC.

To restore the favourable conservation condition of Transition mires and quaking bogs in River Finn SAC.

To maintain the favourable conservation condition of Atlantic Salmon in River Finn SAC.

To maintain the favourable conservation condition of Otter in River Finn SAC.

The list of attributes and targets by which each habitat and species are defined is set out in the conservation objectives.

5.4. Lough Eske and Ardnamona Wood SAC, site code 000163

Generic Conservation objectives are to maintain or restore the favourable conservation status of habitats and species of community interest.

Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]

Petrifying springs with tufa formation (Cratoneurion) [7220]

Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]

Salmo salar (Salmon) [1106]

Trichomanes speciosum (Killarney Fern) [1421]

5.5. Croughanagh Bog SAC 000129

Blanket bogs (* if active bog) [7130]

To restore the favourable conservation condition of Blanket bogs (* if active bog) in Croaghonagh Bog SAC, defined by the list of attributes and targets which are set out in conservation objectives.

5.6. Cashelnavean Bog Natural Heritage Area

Features of interest - peatlands [4]

5.7. Barnesmore Bog (NHA site code 002375)

Features of interest - peatlands [4]

6.0 The Appeal

6.1.1. Grounds of Appeal

McCarthy Keville O'Sullivan Ltd., Planning & Environmental Consultants, have submitted the appeal against the decision to refuse permission, on behalf of the first party, Cufgaze Ltd. The grounds includes:

- The laying of utilities in the public road corridor is acceptable in principal, is the preferred and least environmentally sensitive approach and in accordance with national and local policy. The construction methods along the N15 and

local road network will not give rise to significant adverse impacts and will demonstrate that the proposed development does not materially contravene policy T-P-1. There is no transport scheme identified in the development plan whose implementation would be prejudiced by the proposed development. An overview of extensive alternative cabling routes considered will demonstrate that the selected underground cabling route represents the optimal route with minimal environmental impacts.

- The cabling will not result in any significant adverse impacts on any sites of international or national ecological importance. The incorporation of best practice control measures incorporated into the design phase and the elimination of any requirement for instream works, will ensure that there are no adverse impacts. The location within existing road infrastructure (with small sections in agricultural land and forestry) will not result in any impacts to ecologically sensitive habitats. The development does not materially contravene policy NH-P-1 or NH-P-2.
- Comprehensive analysis for the presence of FWPM recorded none present and the incorporation of best practice control measures into the design phase will ensure that there will be no impact.
- The proposed development will not impact any area of Especially High Scenic Amenity.

The application was the subject of a referral to An Bord Pleanála under ABP Ref. RL 05E.RL3500 by the applicant in August 2016 for Declaration of Exempted Development Status under the provisions of Section 5 of the Planning and Development Act 2000, as amended, in respect of the vast majority of the underground electricity cabling which is the subject of the current planning application before the Board on appeal. The Section 5 application was submitted to the Planning Authority in June 2016 under Pl. Ref. S5 16/21, and was accompanied by an Environmental Impact Screening Report, Ecological Assessment and Article 6(3) Appropriate Assessment Screening Report and an Environmental Report which provided an assessment of the potential environmental effects and impacts which may arise from the subject grid connection proposal.

In January 2017 Cufgaze Ltd. applied to Donegal Co. Council for planning permission for the construction of a 110kV electricity substation located in the townland of Cark, Co. Donegal and adjacent to the permitted Drumnahough Wind Farm site (under Pl. Ref. 17/50018). This application was accompanied by an Environmental Impact Statement (EIS) which considered the potential cumulative impacts of the proposed underground electricity cabling route which was the subject of the Section 5 referral under ABP Ref. RL 05E.RL3500. An Ecological Assessment and Article 6(3) Appropriate Assessment Screening Report also accompanied this planning application. This application is to provide for the substation to facilitate the connection of the permitted Drumnahough and Lenalea Wind Farm developments in the event that the Board considers the underground cabling development, that is the subject of the Section 5 referral under ABP Ref. RL 05E.RL3500, to be exempted development. A decision on this planning application is due from the Planning Authority in September 2017. The planning application for the 110kV substation under Pl. Ref. 17/50018 received a submission from the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) which queried why the proposed underground cabling was not included with the planning application but was included within the application EIS and Article 6(3) Appropriate Assessment Screening Report. In light of the submission from the DAHRRGA, the current application in relation to the proposed 110kV substation and associated underground electricity cabling was lodged with the Planning Authority in April 2017 (under Pl. Ref. 17/50543) and was accompanied by an EIS and Natura Impact Statement. As stated previously, no submission on the current application has been made by the National Parks & Wildlife Service via the DAHRRGA.

In relation to the comment in the Planner's Report that the bridges structures would require structural assessment in advance of the submission of the application, it should be noted that the crossing methodologies developed for each of these bridge structures has been informed by detailed exploratory structural surveys and reports, conducted by Wind Prospect Ltd on behalf of the applicant.

Responding to reason No 1

Prematurity of proposed development – there have been ongoing consultations between the applicant and DCC's Roads Department and the National Roads Design Office (NRDO) concerning prospective ROL. Although concerns regarding the acceptability in principal regarding the installation of utilities in roads was expressed by the Roads Department, the consultations centred on the various underground cable routing options, and included discussion of preparatory works such as structural investigations, prospective watercourse crossing methodologies, cable laying construction methodologies, cable trench specifications and reinstatement methodologies and road safety audit requirements.

Information was provided DCC's Roads Department and the NRDO including detailed design drawings of the prospective underground cabling route, reports on exploratory investigations in relation to various bridge structures, trial hole inspections and reinstatement, to confirm the available cover above each structure.

The discussion included the merits of providing grid connection cabling through greenfield private lands that are under agricultural use. The DCC's Roads Department were informed of ESB Networks/Eirgrid's preference for cable laying along public roads.

The consultations informed the preparation of a total of five separate ROL applications. The applications were accompanied by detailed mapping and drawings; comprehensive method statements and traffic management plans; detailed bridge crossing method statements and comprehensive geophysical investigation in relation to the two bridges on the N15; an ecological assessment; and Article 6(3) AA screening report.

The DCC's Roads Department requested an application for a declaration of exempted development which was submitted, which no decision being forthcoming it was appealed.

Overview of Alternative Routes – this part reason appears to arise from the Roads Department report, despite the considerable consultations that took place where alternative routes and methodologies were discussed. The TII report does not raise any significant issues. An overview of the alternative routes considered is given and shown on map (Fig 5.1).

The applicant's original proposal issued by email to Donegal County Council on the 24th April 2015 featured a provision for a grid connection cable to facilitate the proposed Carrickaduff wind Farm as well as the permitted Drumnahough and Lenalea Wind Farms and proposed that both cables would run side by side on one side of the road, which would greatly reduce any perceived constraint in relation to the potential future realignment or upgrade of the N15.

Previous consultations between the applicant and the Roads Department in relation to the ROL applications discussed the merits of providing grid connection cabling through greenfield private lands that are under agricultural use. Aside from the obvious complexities of dealing with multiple landowners and uncertainty in the availability to develop on such private lands, there is a heightened potential for significant environmental impacts associated with such an approach. In addition, as further discussed below, the proposed grid connection cabling, once completed, will be taken over and operated by ESB Networks/Eirgrid, as part of the overall transmission network, and become part of the ESB Network regulated assets. Accordingly, the preference of ESB Networks is to have infrastructure accommodated within public roads for future maintenance purposes. As discussed in the application EIS, the selected grid connection cable route represents the shortest, most accessible route between the Drumnahough and Lenalea Wind Farms to the Clogher 110kV substation in the townland of Cullionboy using the public road corridor. The grid connection runs predominantly along the public road network and within forestry tracks and, accordingly, its route is not sensitive in ecological or environmental terms. Alternative routes considered along the public road network are longer, and therefore have an increased potential for environmental effects from ground disturbance. Alternative shorter routes would involve crossing open fields or forestry, i.e. not using established road corridors, and would therefore also have the potential for greater effects to arise.

Underground Cabling Construction Methodology

A principle issue expressed by the Roads Department in its report, and reiterated in the Planner's Report, concerned "the scale of construction works required to install the HV cabling has significant potential to interfere with and destabilise existing roads infrastructure".

A key feature of the proposed underground cabling works, and conveyed to the Roads Department and NRDO during previous consultations relating to the ROL applications, is that all works must comply with strict ESB Networks/Eirgrid requirements and specifications. In this regard, the applicant will qualify under the relevant provisions as "an undertaker authorised to provide an electricity service" within the meaning of Section 2(1) of the Planning and Development Act 2000, as amended, which defines 'Statutory Undertaker' as follows: "'Statutory undertaker', means a person, for the time being, authorised by or under any enactment or instrument under an enactment to – (a) Construct or operate a railway, canal, inland navigation, dock, harbour or airport, (b) Provide, or carry out works for the provision of, gas, electricity or telecommunications services, or (c) Provide services connected with, or carry out works for the purposed of the carrying on of the activities of, any public undertaking." The grid connection offer obtained by the applicant from Eirgrid prescribes that the grid connection is to be constructed contestably, and therefore the applicant is bound to construct the grid connection cabling to ESB Networks/ Eirgrid's specification and requirements to connect the permitted wind farm developments. Accordingly, the connection works will be subject to design and installation review by and will ultimately be commissioned by ESB Networks/EirGrid. Once completed, the connection will be taken over and operated by ESB Networks/ EirGrid as part of the overall transmission network and become part of the ESB Network regulated assets. In this regard, the construction methodologies outlined in Section 3.3 of the application EIS for the proposed underground cabling are in accordance with the stringent design specifications and standards required by ESB Networks/ Eirgrid in respect of all facets of the proposed underground cabling such as trench layout, management of existing utilities and services, joint bay design specifications, link and communications chamber specifications, trench reinstatement and also road opening and reinstatement methods in line with the TII publication, 'Design Manual for Roads and Bridges'. In addition, the submitted construction methodologies are in full compliance with the Department of Transport, Tourism and Sport publication, 'Guidelines for Managing Openings in Public Roads' (the "Purple Book"). The purpose of these guidelines is to ensure that roads are reinstated satisfactorily after a utility is installed, to ensure the longevity and integrity

of the road. Furthermore, comprehensive details relating to the method of installation for the proposed underground cabling, in the form of a detailed method statement and specification drawings, have been furnished to the Roads Authority with each of the five Road Opening Licence applications submitted previously in relation to the proposed underground electricity cabling. Again, the proposed construction methodologies as outlined in the submitted documentation for each of the Road Opening Licence applications are in accordance with the strict design specifications and standards required by ESB Networks/ Eirgrid and in line with the provisions contained within the 'Guidelines for Managing Openings in Public Roads' (the "Purple Book"). In addition the Board will note the preferred approach to the issue of grid connection for wind farm developments, recently disclosed by the Department of Housing, Planning, Community and Local Government, in conjunction with the Department of Communications, Climate Action and Environment, is as follows:

"It is proposed, from a visual amenity aspect, that connections from wind farms to the national electricity grid will, except where ground conditions prevent it, in the future be underground". Accordingly, the proposed development is in accordance with this preferred approach in respect of grid connection for wind farm developments.

Re. Roads Stability - The use of a suitable geotextile material such as Tensar TX160 or similar will be incorporated in cabling trench locations where existing road foundations are suspected on weak or variable soils. Interaction with aggregate causes it to form a stabilised layer with the geogrid and will reduce any potential compaction and ensure the structural integrity of the road. It should be noted that the applicant has recently completed the installation of a similar underground cabling development to that proposed in this current application with the installation of identical 110kV underground electricity cabling along a route measuring approximately 32 kilometres in County Clare and comprising of national primary roads, dual carriageway, motorway bridge structures, and County roads, with much of the cable route traversing similar rock and peat ground conditions. This similar development was completed to the satisfaction of Clare County Council and TII, where construction methodologies such as those provided in the application EIS were utilised. The crossing of 166 no. culvert and 9 no. bridge crossings as well as

details on the construction methodologies to be employed to eliminate the requirement for in-stream works without impacting on the existing road drainage scheme in place was part of the preparatory work methodologies developed for each of these bridge structures and has been informed by detailed exploratory structural surveys, conducted by Wind Prospect on behalf of the applicant. In addition, detailed investigation of identified bridge structures, involving trial hole inspections and associated reinstatement procedures under the charge of Donegal County Council, were carried out to confirm the available cover above each structure to accommodate the proposed underground cabling and to inform the relevant bridge crossing construction methodologies. The details of these structural surveys and investigations have also informed the Road Opening Licence applications and associated method statements, previously submitted to the Roads Authority in respect of the proposed underground cabling route.

Health and Safety – the proposed underground cabling will be taken over and operated by ESB Networks/ EirGrid and become part of the ESB Network regulated assets. Future health and safety assessments will be carried out in line with their protocols. Health and Safety measures during construction are set out in the EIS.

Other road infrastructure – any works required to such infrastructure will only be undertaken in consultation with and subject to the agreement of TII and DCC.

Local residents and road users – active construction will generally only be along a 150m – 300m stretch. Where separate crews are installing ducting along the route they will generally be located two to three km apart. Consultation and communication with affected parties is set out. Works will be organised and sequenced to minimise inconvenience to the agricultural community. Emergency services using local roads will be made priority and areas where the works are being carried out will be covered immediately with road plates to allow access. Alternative access routes will be provided at all times and emergency services advised of them.

Health – EMF cabling fully complies with the international guidelines set by the International Commission on Non-Ionizing Radiation Protection (details are provided in an appendix to the submission, Appendix 3) and EU guidelines.

Policy Consideration – the proposed development will not unduly impact on the future development of the road network in Donegal and does not materially contravene policy T-P-1.

There is no transport scheme identified in the current development plan (section 10.14) whose implementation would be prejudiced by the proposed development. Re. future development of the N15, described as legacy network, a section of 8.3km through Barnesmore Gap, was opened in June 2001.

Barnesmore Gap, by virtue of its physical form as a mountain pass gap within the Bluestack Mountains, poses a connectivity challenge for Donegal and all its infrastructure be it road, telecoms or electricity. Delivering such infrastructure through this area by way of an alternative route provides obvious significant difficulties from engineering, construction and environmental perspectives. The applicant has worked closely with DCC to achieve coordinated, least intrusive accommodation.

Further Design Considerations:

The potential for future realignment of the N15 has been considered.

A feature of the Road Opening Licence application for this section of the N15, concerned the provision for an underground grid connection cabling between the proposed Carrickaduff Wind Farm and the Clogher substation. In the consultations with the Roads Department that prefaced the submission of the Road Opening Licence application, the Roads Department advised the applicant to locate one cable on each hard shoulder (i.e. on either side of the N15 road). It should be noted that the applicant's first detailed drawings, submitted to the Donegal County Council on the 24th April 2015 depicted both cables on one side of the road. Donegal County Council then advised the applicant to run one cable on each side of the road, thereby giving increased scope and consideration to engineering issues in relation to future road realignment considerations.

Given the proximity of the Lowerymore River at the south-eastern side of the N15 route, the project team are conscious of the development and environmental constraints which will undoubtedly influence the design of any future alignment of the N15 in this area, with the assumption that any such prospective re-alignment would move in a north-western direction, away from its present proximity to the Lowerymore River. The applicant and design team have considered such a scenario, particularly in light of the report from the Roads Department on the proposed development, and its concerns in respect of any future alignment of the N15. In an effort to assuage the concerns of the Roads Department on this matter, the applicant is willing to consider the repositioning of the proposed underground cabling to the south-eastern side of the N15 carriageway, should this lessen the impact of the proposed development on any future re-alignment of the N15, in the view of the Roads Department and subject to the consent of the Board. In this regard, the Board will note that the planning application boundary for the proposed development encompasses the full width of the N15 carriageway, therefore providing sufficient scope within the parameters of the application site to allow for the Board to permit such a measure if it so wished.

The second cable, envisaged to facilitate the grid connection for the proposed Carrickaduff Wind Farm development, could also run alongside the cable, facilitating the grid connection for the permitted Drumnahough and Lenalea Wind Farms (with a two metre separation in accordance with ESB Networks/Eirgrid requirements) on the same side of the road.

This demonstrates the willingness of the applicant to ameliorate the concerns of the Roads Department and Planning Authority, and find a solution that satisfies all parties in relation to the proposed development.

Responding to reason no. 2 - This refusal reason is entirely invalid in that it claims that to permit the proposed development would be contrary to the quoted policies of the County Development Plan with regard to both Natura 2000 and nationally designated sites. The proposed works consist of a substation that is located over 500 metres from any designated site and the installation of an electricity cable of 35.5 km in total length that is primarily located within the existing road network and

subject to tried and tested best practice measures to prevent any pollution of adjacent habitats or watercourses.

Responding to reason no. 3 – the potential for impact on FWPM as a result of the works has been considered and fully assessed and documented and it has been concluded that there will be no impact (NIS section4.2 and EIS section 5.4.2.3.2).

Responding to reason no. 4 – impact on an area of Especially High Scenic Amenity – it is difficult to reconcile the assessment in the Planner's report and the reason. Chapter 10 of the EIS refers to the construction being short term localised and transient and having a temporary imperceptible negative impact. It will have no visual impact during the operational phase.

Archaeology and built heritage – the planner's report intimates that no architectural or archaeological assessments were undertaken. The response refers to relevant sections of the EIS where such assessment is included. Where impacts were identified, such as the bridges at Altnapaste and Keadew, mitigation measures were recommended thus minimising or eliminating the impacts.

The proposed underground cabling should be considered as having the same status in the public road corridor as other utilities and services such as telecoms, water, gas and the existing underground cable within the N15, as once completed it will be taken over and operated by ESB Networks/EirGrid.

The grounds of appeal has demonstrated that the planning application and supporting documentation is comprehensive in scope and has given full consideration to all necessary planning and environmental matters.

6.2. **Planning Authority Response**

6.3. The planning authority have responded to the grounds of appeal stating that they are satisfied to rely on the contents of the planner's report and recommendation.

6.4. **Observations**

6.5. A total of 7 observations were received on the appeal.

6.5.1. Noel McMenamin, his concerns can be summarised as:

- Risk of pollution of FWPM in the Eske catchment area;
- Vibration effect on spawning salmon and on juvenile salmon;
- Sedimentation. The proposed route crosses the River Finn SAC in 3 separate locations. There is insufficient evidence in the EIS or NIS that these sites could not be adversely affected.

6.5.2. Joe Griffith, Ann Griffith and Carmel Martin, their concerns can be summarised as:

- They live at Corlecky Bridge. On 7th July 2007 an unprecedented and devastating flash floor occurred on Corlecky river, destroying the river, lands all around in Kinnaderry / Corlecky and Meenaharna. Boulders were taken from the river bed and washed onto land. The water flowed over the bridge walls and moved back the walls on the upper side by approx 0.7m. Three houses were completely destroyed, and a car swept down river. It took 4-5 years with the help of OPW to reconstruct the river. They feel that if such an event recurred with an electric cable in place it would end in human tragedy.

  Because of the windmills in Cark and Culliagh there was nothing to withhold the bog and soil so it came away and caused this devastation in the lower areas.
- The cable would prohibit remedial road works and water mains, electricity or broadband for residents.
- They have not had a proper opportunity to prepare their response as details have been delayed in the DCC offices.

6.5.3. Residents of Lettershanbo c/o Monica O'Donnell, their concerns can be summarised as:

- Impact on Health of EMFs: implantable medical devices pacemakers and implantable cardioverter defibrillators (ICDs) and autism. Undergrounding of cables is fairly new and it is impossible to say that there will be no risks to

public health in 20-30 years. A lot of young children live within 10m of the proposed cable.

- Impact on Infrastructure – Roads Engineers comments are to be noted. Corlecky to Lettershanbo Road was built on bog and as a cart road. The construction traffic and trenches would undoubtedly lead to it sinking as it has in places with domestic traffic. Corlecky is a rocky granite area. The installation of watermains in the road proved difficult and they had to zig zag in places. Rock breaking is inevitable and will cause damage to private property. Future upgrading and maintenance of the road will be more difficult. The construction would cause severe disruption.
- Visual Impact: loss of hedgerows, stone ditches and trees. The stone ditches, if subjected to vibration, will collapse. Junction boxes will cause visual impact.
- Flawed NIS, Impact on Environment – consultation with the Council, ongoing from May 2015, alternative routes was glaringly missing from the application document. There is no evidence that the approved method of preparing a NIS was followed, informing the DAU/NPWS. There is no evidence that the relevant statutory bodies or interested NGO's were included in any scoping exercise or of the publication of notice of intention to carry out a NIS.
- The massive Carrickaduff wind farm is never mentioned, save for a passing inaccurate reference. The principals behind the refused Carrickaduff Planree project and the Lenalea / Cufgaze project are the same developers. There is undoubtedly an issue of project splitting.
- There are well over 100 turbines in the general area of Cark, Meentycat and Meenboy. Most are connected to ESB substations in the Letterkenny area. In the past 18 months a new 110kV line was built from Binbane in West Donegal to Letterkenny. The route follows a circuitous route through the mountains of west Donegal via existing wind farm (Corkermore) and was deliberately also routed through Cark, the unstated reason being as a conduit for wind energy transmission. The Board have two refusals on record for wind farms proposed in the last few years along the new 110kV route: Straboy, Glenties and Altnagcapall, Ardara. What was the commercial sense in building a new 35km

grid for these additions to the Cark area when a 110kV overhead route has been completed to nearby Letterkenny?

- The proposed route crosses the River Finn SAC in 3 locations, is located within 540m southeast of Croaghanagh Bog SAC and runs alongside the Lough Eske and Ardnamona Wood SAC for a distance of 279m. It is located within Cashelnavean Bog NHA and Barnesmore Bog NHA. There is insufficient evidence in the EIS of NIS that these sites would not be adversely affected.
- There is insufficient evidence in the EIS or NIR that the 5 protected structures (RPS and NIAH) and 1 recorded monument would not be adversely affected.
- The absence of reports from IFI, NPWS and the Loughs Agency should not be taken as them having no objection.
- An assessment cannot be regarded as appropriate if it contains gaps or lacunae, lacks complete, precise, definitive conclusions capable of removing all reasonable scientific doubt as to the effects of the proposal on European sites (judgement of Kelly J, in Kelly v An Bord Pleanála 2013 No 802 JR).
- The developer relies on methodologies in construction, and proposed though non-disclosed mitigation measures, as being together that which will ensure no significant impacts on Natura 2000 sites.
- Using design or mitigation to screen out is flawed (HC People over Winds & anor v Coillte Teoranta (2017), IEHC 171 March 2017. The question of whether mitigation measures can be considered at screening stage has been referred to Europe. That case was in relation to grid connection.
- They request the Board to ignore references to Carrickaduff. It seems apparent that the developer intends to use the cable for the 49 turbine project. That is irrelevant to this appeal.
- Re. the suggestion that the Council should have sought further information, for the Board the FI route is certainly ruled out in light of Connolly v An Bord Pleanala 2014 488 JR. In his ruling Mr Justice Barrett pointed out that the purpose of the FI process was not merely to plug such gaps as it had identified during its assessment of a project.

- Pre application public awareness consultations were inadequate / non-existent.
- There can be no good commercial or common sense reason to build a 35km grid route to Barnesmore. It is now evidently tied with a much greater project already refused and purportedly about to be repackaged and reinvented.

6.5.4. Glenfin Cable Action Group c/o Carmel Martin - their concerns can be summarised as:

- Previous consultation with ABP: VC 0097.
- Section 5 request RL3500 live.
- No meaningful consideration of the concerns of the 35 observers.
- Appear to be pre-empting the outcome of future consideration of new application at Carrickaduff.
- It could be argued that a review of the environmental impact of the two windfarms should have been included as part of the consideration of this application and the question of cumulative impact could be properly addressed.
- Alternatives were not considered in the EIS. They should have been presented in a transparent manner such that the public and other interested parties could have been afforded an opportunity to consider them as part of the overall assessment.
- The public have only one week to consider significant new information. They have never had meaningful consultation with the applicants.
- They should be required to readvertise.
- The Roads Department report should have been the basis of a refusal that straightforward works would likely become more complex and costly and that this will limit their ability to undertake essential maintenance in a timely and cost effective manner resulting in a significant health and safety risk. The Roads Department also express their concerns relating to the scale of construction works and the significant potential to interfere with and destabilise existing road infrastructure including road drainage, safety fences,

bridge structures etc. Despite the detail of the appeal they have not adequately addressed these concerns which are raised by qualified personnel with a duty of care to the public. The Local Roads Section raises concerns regarding future maintenance and costs and the introduction of significant health and safety concerns and would be a significant obstacle to local development accessing existing underground services for water telecommunications etc.

- The observers have concerns that the proposed development will have the unintended consequence of placing restriction on future development of the area. No consideration has been given to the reality of HV cabling and the necessary restrictions that are required to prevent interfering with it.
- Risk to water quality – FWPM. The EPA river quality monitoring point which corresponds with the proposed cable route is located on the Lowerymore River at Barnes Bridge. Most recent data rate quality as Good status Q4. Downstream of Keadue Bridge is Q4-5 High status. Given that the majority of the trenching is alongside roads and tracks on soft verges and the high level of rainfall which is often experienced in this region, the applicant has not demonstrated sufficiently how the proposed trench excavations will not give rise to risks of soil erosion, sediment pollution of hydro-logical changes which could be brought about by sudden flash flooding and surface runoff, impacting on vulnerable habitats. They ask the Board to give consideration to this technical and specialised area as part of their assessment.
- The lack of consideration of alternatives was grounds for refusal in its own right. They request the Board to put the further information submitted out to public consultation.
- They have only now acquired the appeal information well short of the 28 days allowed. The parallel process of S5 and this appeal is questionable in its ethics.

6.5.5. St John's Church of Ireland Church, their concerns can be summarised as:

- Underground cabling is to run underneath the roadway directly outside the gates of St John's Church and Donaldson Memorial Hall, both protected structures. For the past number of years the Select Vestry have had a verbal

agreement with the Council that if in the future road realignment of this junction is to take place, the slip road underneath which it is proposed to place electricity cabling will be closed and become the property of Kilteevogue Church of Ireland Parish which will be private property. The placement of the cable is not agreed with by them nor is it acceptable to them to have a cable on their property.

- St John's Church (40907702) and Donaldson Memorial Hall (40907703) are protected structures. St John's Church was refurbished in 2012. The windows are 18th Century hand blown. The original lime plaster ceiling is as perfect as when finished in 1879. The work has potential to damage these structures.
- The roof space of Donaldson Memorial Hall hosts a colony of bats and a nursery roost. The nearby Glenmore Bridge is also inhabited. The construction work will disturb this colony.
- The few remaining walls of the County Donegal Railway at Glenmore Halt are on the perimeters of the property. The construction work will disturb these irreplaceable and historic walls which are now the property of the parish.
- It is not in their interest or in the interest of the wider community that the project takes place.

6.5.6. Concerned local farmers c/o John McGlynn - their concerns can be summarised as:

- They refer to the submission from Finn Valley Wind Action Group and the submission from Peter Sweetman and Associates to Donegal Co Co; the strict criteria laid down in CJEU 258/11 for appropriate assessment; Patrick Daly v Kilronan windfarm which they see as where their greatest protection lies in relation to project splitting and to their ownership of the land and soil underneath to the centre of the road.
- They believe that the Board has no option but to refuse the application.

6.5.7. Residents opposed to the proposed cable route c/o Lesley Taylor – their concerns can be summarised as:

- EMF's disruption caused. While it is generally accepted that overhead high voltage lines cause serious illnesses, no one knows that underground cables do not cause the same illnesses. Their water supply will run side by side, the

whole length of the cable. Planning permission was granted for these wind turbines on the basis that the electricity would be taken by the current network to the Letterkenny grid connection approx. 8km away. It now appears that the grid connection is at capacity and while an upgrade is being considered it will be sometime in the future. The grid in Barnesmore currently has capacity.

- They are 62 local families with generations behind them and to come but none can look to a future if this HGV cable is driven through their road and by their homes.
- The observation includes photographs.

6.6. **Prescribed Bodies**

6.7. Department of Culture, Heritage and the Gaeltacht –

- The Department concurs that archaeological monitoring by a suitably qualified archaeologist be carried out on all ground disturbance associated with these proposed works.
- The applicant is required to engage the services of a suitably qualified archaeologist to monitor all topsoil stripping associated with the development.
- Should archaeological material be found during the course of monitoring, the archaeologist may have work on the site stopped pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Department of Culture, Heritage and the Gaeltacht with regard to any necessary mitigation action (e.g. preservation in situ, and/or excavation). The applicant shall facilitate the archaeologist in recording any material found.
- The Department of Culture, Heritage and the Gaeltacht shall be furnished with a report describing the results of the monitoring.
- Reason: to ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.

7.0 **Assessment**

7.1.1. I have examined and read the documents on file, inspected the location and environs and considered relevant planning policy. I consider that the issues which arise can be dealt with under the headings: principle of the development, appropriate assessment, environmental impact assessment; impact on the public road and its use, natural heritage, built heritage, project splitting, ownership, human health, consideration of alternatives, flood risk, proposed revision and other issue. The assessment which follows is set out under those headings.

7.2. **Principle of the Development**

The proposed development is the provision of an underground cable to facilitate the connection of two permitted windfarms to the national grid and the substitution of a substation at a revised location in lieu of two permitted substations. There is no objection in principle to providing one substation in lieu of two.

The provision of the cabling is provided for in development plan policy E-P-1 which includes facilitating the development of grid reinforcements including grid connections. The provision of cabling underground is stated in the grounds of appeal to be the preferred approach to the issue of grid connection for wind farm developments; using a quote, sourced in a press release by the Minister for Housing Planning and Local Government (dated Tuesday 13th June 2017), which announced as part of the review of the 2006 Wind Energy Development Guidelines, that, from a visual amenity aspect, ‘connections from wind farms to the national electricity grid will, except where ground conditions prevent it, in the future be underground’.

In my opinion there is no objection in principle to the proposed development.

7.3. **Appropriate Assessment**

7.3.1. The application is accompanied by a natura impact statement and an appropriate assessment screening report, which are contained in a bound volume, and have been referred to earlier in this report. I am satisfied that the appropriate assessment screening report considers all the Natura sites with potential for impact and that except in the case of River Finn SAC and Lough Eske and Ardnamona Wood SAC,

which require appropriate assessment, no pathways for impact exist to other Natura sites.

7.3.2. The River Finn SAC site code 002301

Site-specific conservation objectives have been developed for the site, which can be described generally as seeking to maintain or restore the favourable conservation status of the habitats and species of community interest. The Annex I habitat(s) and the Annex II species for which the SAC has been selected are:

Habitats:

Oligotrophic waters containing very few minerals of sandy plains,

Northern Atlantic wet heaths with Erica tetralix,

Blanket bogs (* if active bog),

Transition mires and quaking bogs, and

Species:

Salmon, and

Otter.

7.3.3. Of the qualifying interests of the River Finn SAC two have been identified in the NIS as having potential to be affected by the proposed development: salmon and otter. Pathways via silt laden water or other pollutants resulting from the proposed works have been identified as pathways for potential impact.

7.3.4. The focus of the NIS is on the watercourse / culvert crossings and detailed construction methods for five optional crossings is set out, with an indication of which method will be used at each of the crossing sites. For the 9 bridges, and one culvert to be crossed, there is a description of the method of crossing, which demonstrates that no instream works will be required in any case. Another focus of the NIS is on the laying of the cable, for the most part in existing roadways.

7.3.5. Sections of the site drain to and are close to the River Finn SAC.

7.3.6. The proposed substation is located 500m from and uphill of the River Finn SAC where the SAC boundary is formed by the Elatagh River, a tributary of the River Finn. Historic OS mapping shows a stream in the vicinity of the substation site flowing to the Elatagh River. The EIS states that the substation soils are dominated by blanket peat and that peat depth ranges from 0.9m to 1.9m, with the deeper peat

located towards the southern side of the compound area. The average depth of peat of the access road is 1.2m and the average depth of peat across the substation compound is 1.3m.

7.3.7. The drawing 'site section for cut and fill' at the proposed substation shows the sloping nature of the site. It is estimated that approx. 30,250m^3 of material will be excavated at the proposed substation site.

7.3.8. The conservation objectives state that the habitats 'blanket bogs' and 'transition mires and quaking bogs' occur at Tullytresna, which is the townland within the SAC nearest the substation site, across the Elatagh River. The Elatagh River to which the site drains is part of the SAC and is nearest to the substation site and provides a pathway for impact on the water dependent conservation species Salmon, and Otter.

Having regard to the depth of peat, the sloping nature of the site, the extent of the excavation involved, and the proximity to the SAC, in the absence of a peat stability risk assessment, it is considered that the conclusion cannot be reached that there will be no impact on the qualifying interests of the River Finn SAC, blanket bogs (* if active bog), transition mires and quaking bogs, salmon, and otter, arising from peat slippage.

Drainage of the substation site – while the proposed construction methodology and proposals for surface water management appear to adequately mitigate the potential impact on water quality from runoff, in the absence of a detailed topographical survey of the site, the Board cannot appropriately assess this aspect of the development.

7.3.9. Sections of the cable route runs along the River Finn SAC.

7.3.10. Pathways via silt laden water or other pollutants resulting from the proposed works have been identified as pathways for potential impact.

7.3.11. As previously stated the treatment of the watercourse / culvert crossings and a general methodology for the laying of the cable in existing roadway are relied on significantly in the NIS, as reasons why the conclusion is reached that there will be no impact on the SAC. In this regard it should be noted that no detailed survey of the site, along which the cable will run, has been provided.

7.3.12. The soils and subsoils are referred to in section 6.3.2 of the EIS and described in a single paragraph. The 33kV cable passes through an area of Blanket peats with

pockets of surface and groundwater gleys; with peaty podzols and lithosols present; where the cable leaves the substation is blanket peat. The mid section in the River Finn valley is characterised by surface and groundwater gleys, acid brown earths/brown podzolics and a strip of mineral alluvium close to the River Finn; pockets of lithosols and peaty podzols are also present. Blanket peat dominates before the N15 and at the Lowerympore River mineral alluvium soils are predominant. The cable route section to Clogher substation comprises peaty podzols and lithosols and surface and groundwater gleys. This is not presented on a map or shown to represent a detailed survey on which the Board can base an assessment. The nature of the road structure or the road verge is not described and no variation in the construction methodology is proposed in the variety of contexts likely to be encountered.

7.3.13. The subsoil geology is similarly summarised and is represented on a map, scale 1: 100.000.

7.3.14. The route of the proposed cable is shown at a scale of 1:2,500 running between roadside boundaries and the location of the cable is shown as a line which, in some cases runs along the middle of the route, and in other cases towards one or other side. It appears therefore that some detailed consideration has been given to the routing of the cable but no explanation has been provided with the application or appeal, and no detailed topographical survey of the route has been presented.

7.3.15. A photographic representation of typical cable trenches is given in plates 3.1 to 3.3 of the EIS. It should be noted that drawing no. 0113-52, a road cross section, is of the proposed access road to the substation.

7.3.16. The River Finn SAC bounds some sections of the cable route: along the public road in the vicinity of the substation at Cark / Culliagh / Tullytreasna, at Lettershanbo, and at Corlecky and Glenmore bridges.

7.3.17. The documentation refers at section 2.3.2 of the NIS to a construction methodology.

7.3.18. In my opinion, in the absence of detailed survey information, the Board is not in a position to evaluate the proposal, such as would be required to carry out appropriate assessment.

7.3.19. Lough Eske and Ardnamona Wood SAC site code 000163

Site-specific conservation objectives have not been developed for the site.

The generic conservation objective is to maintain or restore the favourable conservation status of habitats and species of community interest. The Annex I habitat(s) and the Annex II species for which the SAC has been selected are:

Habitats:

Oligotrophic waters containing very few minerals of sandy plains

Petrifying springs with tufa formation

Old sessile oak woods with Ilex and Blechnum in the British Isles, and

Species:

Freshwater Pearl Mussel

Salmon and

Killarney Fern.

7.3.20. The only place where the cable route adjoins the SAC is a small section at Keadew, south of Keadew Bridge on the N15, where the SAC runs alongside the national secondary road. The Lowerymore River which flows along the N15 for several kilometres, in places flowing close to the road, and including crossings at Lowerymore Bridge, Keadew Bridge and Barnesmore Bridge, is a direct pathway to the SAC.

7.3.21. Most of this section of the underground cable route is within the N15, part is within the local road in the vicinity of Clogher substation.

7.3.22. Of the qualifying interests of the Lough Eske and Ardnamona Wood SAC three have been identified in the NIS as having potential to be affected by the proposed development: freshwater pearl mussel, oligotrophic waters containing very few minerals of sandy plains, and salmon. Pathways via silt laden water or other pollutants resulting from the proposed works have been identified as pathways for potential impact.

7.3.23. A Freshwater Pearl Mussel survey was carried out of the Lowerymore River in the vicinity of the proposed cable route; approximately from where the cable route joins the N15 to Lough Eske. The survey report states that Freshwater Pearl Mussel are known to be present downstream of Lough Eske. The results of the survey were

submitted in a report accompanying the application, and although conditions for Freshwater Pearl Mussel were found to range from acceptable to ideal, no sign of mussels living or dead was recorded.

7.3.24. The NIS notes that directional drilling is required under watercourses at three locations in the catchment: Lowerymore Bridge, Lower Keadew Bridge and Barnesmore Bridge.

7.3.25. In relation to salmon the NIS states that emissions to surface water is a potential impact, a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and operation have been identified. Potential for disturbance to young salmon and eggs has been identified in potentially suitable habitat that exists outside the Lough Eske and Ardnamona Wood SAC. The potential for disturbance is responded to by avoiding directional drilling during salmon spawning period and undertaking drilling during the period May-September inclusive. The NIS concludes that the proposed development will not adversely affect salmon.

7.3.26. In relation to oligotrophic waters containing very few minerals of sandy plains, the NIS states that no direct impacts have been identified as the development is located entirely outside the SAC. Emissions to surface water is a potential indirect impact, a range of measures to avoid, reduce and remedy potential impacts on surface water quality during construction and operation have been identified. The NIS concludes that the proposed development will not adversely affect oligotrophic waters containing very few minerals of sandy plains associated with the Lough Eske and Ardnamona Wood SAC.

7.3.27. In relation to freshwater pearl mussel the NIS states that no direct impacts have been identified as the development is located entirely outside the SAC and none were recorded at the crossing points of the rivers upstream in the catchment. Emissions to surface water is a potential indirect impact, a range of measures to avoid reduce and remedy potential impacts on surface water quality during construction and operation have been identified. The NIS concludes that the proposed development will not adversely affect FWPM.

7.3.28. The focus of the NIS is on the watercourse / culvert crossings and detailed construction methods for the crossings. In the case of these crossings, options 4 or 5

are proposed i.e. directional drilling or horizontal drilling. Another focus of the NIS is on the laying of the cable, for the most part in existing roadway.

7.3.29. Regarding mitigation by the management of surface water, the laying of a cable along the N15 is to be carried out in an area where the road runs along the river and no site specific proposals have been provided to satisfy the Board that the conclusion can be reached that surface water discharge can be suitably controlled and that no pollution of the Lowerymore River will occur.

7.3.30. Potential Cumulative Impacts

7.3.31. The NIS considers a number of projects in relation to the potential for cumulative impacts: the Carrickaduff wind farm PA0040, refused by the Board, and they consider having regard to surface water management, that no cumulative impacts are envisaged; a commercial centralised anaerobic digester Pl Ref numbers 13/50869 and 14/ 51399 at Aghaveagh, Altnapaste, and they consider having regard to no increase in surface water discharge to the River Finn, that no cumulative impacts are envisaged. Other wind energy developments (PL Ref. 95/914, 02/8010, 11/60106, 08/60410, 08/50687, 09/60312, 04/9275) in the townlands of Meenagrauv, Keadew Upper, Lettershanbo, Meenbog, Culliagh and Cark; they consider no cumulative impacts are envisaged, based on the proposed construction methodologies and appropriate control measures that will be employed during the construction phase and the absence of impacts foreseen during the operational phases.

Windfarms associated with the subject development:

7.3.32. Lenalea wind farm is the subject of Pl. Ref number 09/50116. It is located a considerable distance from both the River Finn SAC and Lough Eske and Ardnamona Wood SAC. There is no surface water connection to either site, and therefore no potential for cumulative impact, with the subject development, on the protected sites.

7.3.33. Drumnahough wind farm is the subject of Pl. Ref number 08/50687. The entire site drains to the SAC. Part of the SAC site and the wind farm site overlap and the development site and the protected site adjoin over a significant extent of the wind farm site boundary. The absence of information in relation to the risk of peat slippage

has been referred to earlier in this report. Similarly the shortfall in detailed topographical information including slope, soil and drainage, in relation to the subject development is matched by a similar shortfall of information in relation to the wind farm. Therefore it cannot be determined, on the basis of the information available, that is no potential for cumulative impact exists between the windfarm development and the subject development, on the protected site River Finn SAC.

7.3.34. Conclusion - I consider the information available on this file insufficient to enable the Board to assess the potential for impact on the Natura sites or to evaluate the mitigation proposed in relation to potential impacts on the protected sites River Finn SAC and Lough Eske and Ardnamona Wood SAC and in the absence of such information the Board is precluded from granting permission.

7.4. **EIA**

7.4.1. The application was submitted on the 27th April 2017 and is therefore not subject to the 2014 EU Directive, amending the EIA Directive (2011), which came into force on the 16th May 2017.

7.4.2. An Environmental Impact Statement accompanied the application, set out in 13 chapters together with appendices. Headings covered include: human beings, flora and fauna; soils and geology, hydrology and hydrogeology, air and climate, noise and vibration, landscape and visual, archaeology and cultural heritage, material assets and interactions.

These headings cover the areas required to be considered by the Board in their Environmental Impact Assessment: human beings, flora and fauna; soil, water, air, climate and the landscape; material assets and the cultural heritage; and interactions between those factors.

7.4.3. As previously stated, the baseline information provided in relation to the site, including ground conditions, slope, peat risk assessment, drainage, and road structure and in relation to the proposed works, including drawings of the site layout (at a scale to enable evaluation of the project), sections and cross sections, and in relation to other information which will be discussed under separate headings below, is insufficient to enable the Board to assess the merits of the proposal or the mitigation proposed in relation to environmental impacts.

7.5. **Impact on the Public Road and its use**

7.5.1. There is no objection in principle to the use of the public road for the placement of a cable. Public roads are used for the placement of many services both along the length of a road and as crossings of a road and some of the types of service which have been placed within the subject roads, such as group water scheme pipelines, telecommunications lines, etc have been referred to in the observations and application documentation. In many cases the provision of such infrastructure within the roadway is dealt with only by means of a road opening licence. In the present case a number of road opening licence applications are stated to have been made but not determined. The documentation made available as part of that process has not been included in the planning application. This may partly account for the shortfall in information supplied with this application.

7.5.2. In relation to the impact of the construction work on the roadways, the information provided is scant and general rather than site specific. It does not include sufficiently scaled drawings with topographical survey data in relation to the works affecting public roads. The details of cable crossing are generic and provide insufficient detail to show the existing condition of bridges or to demonstrate capacity to accommodate the excavation and placement of the cables, and to accommodate the additional weight, where the depth of material is to be increased for raised road or footpath levels. Neither has any aspect of the proposal been subjected to a road safety audit.

7.5.3. The main function of a public road is conveyance above ground and the responsibility for maintaining this important public infrastructure is vested in the roads authority[2] in this case Donegal County Council and the National Roads Authority[3].

7.5.4. Reason 1 of the decision refers to the development compromising the undertaking of future realignment, widening, network maintenance, on the national primary road N15, increasing the costs associated with such work, and safety issues, over the c5km affecting this road. It also refers to the significant potential to interfere with and destabilise existing roads infrastructure, including road drainage (drains/culverts),

[2] Section 13 of the Roads Act 1993.
[3] Section 17 of the Roads Act 1993.

safety fences, bridge structures, directional signage, road embankments, subsurface drainage flow paths and existing services such as water mains, telecommunications and storm drainage systems on local roads, over the c30km affecting these roads.

The reason also refers to Policies T-P-1, Strategic Road Network; and T-P-3, prejudicing the implementation of a transport scheme identified in the development plan.

7.5.5. The report of the Roads Section of the Council, dated 31st May 2017 expressed serious concerns with the proposed development, in the terms used in the refusal reason.

7.5.6. The TII in their submission of 15th May 2017 stated their concerns that the laying of approx. 5km of cabling along the N15, national primary road, poses network maintenance, management and safety issues that need to be addressed prior to any decision being made to grant planning permission.

7.5.7. In my opinion in the absence of detailed information, which is not available on this file, it is not possible dismiss the roads authority's concerns regarding local and regional roads, that to install the 'HV cabling has significant potential to interfere with and destabilise existing roads infrastructure, including road drainage /culverts, safety fences, bridge structures, road embankments and bog ramparts'.

7.5.8. I cannot disagree with the roads authority, that 'HV cabling would also represent a major constraint in the context of road maintenance on local roads; that relatively straightforward works such as culvert replacement, installation or maintenance of road drainage, installation of road signage and maintenance of bridges would all become much more complex and costly; or that the presence of HV cabling could become a significant factor limiting the Roads Authority's ability to undertake essential maintenance, would likely require road closures and could also introduce a significant H&S risk,' in the absence of a detailed rebuttal, supported by evidence, including detailed survey information.

7.5.9. In my opinion in the absence of detailed information, not available on this file, it is not possible to dismiss the roads authority's concerns or those of TII regarding the national road, that the presence of HV cabling would represent a major constraint in the context of road maintenance. The roads authority states that 'relatively straightforward works such as pavement overlays, erection of safety barriers,

installation or maintenance of road drainage, installation of road signage and maintenance of bridges would all become much more complex and costly'. In relation to their claim that the presence of HV cabling within the road curtilage would represent a major constraint to likely significant realignment works needed in the future, the information available on this file would indicate that the major infrastructure which the cable would represent, would be likely to prejudice road realignment or road improvement schemes.

7.5.10. Although the placement of the cable within the public road might be seen by some as the path of least resistance, its presence within the roadway would present a major constraint on the Roads Authority's functions of maintenance and construction of roads and could involve the Roads Authority's and TII in significant additional cost, delay, risk or barrier to carrying out their functions.

7.5.11. I accept the argument made by TII and the roads section of Donegal County Council that it is unclear that the applicant has appropriately assessed alternatives.

7.5.12. Impact on other uses of the road - observers have raised concerns that their use of the road for group water scheme pipelines etc, could be prejudiced by the proposed development. I do not consider that such arguments have merit as all other uses of the roadway are secondary to its primary function. In my opinion no use, whether by a group water scheme or by those providing grid connections, has rights which override those of the roads authority and no such user is entitled to regard the road bed as available for their use.

7.5.13. In my opinion the potential impact on the continuing use of the route as a public road is a reason to refuse permission.

7.6. **Visual Amenity**

7.6.1. The issue of Visual Amenity has been raised by observers, that the proposed development would interfere with hedges and detract from the amenity of local roads. Over part of the route the cable runs through an area of especially high scenic amenity and reason No. 4 of the planning authority's decision refers to the protection of scenic amenity.

7.6.2. The proposed substation is within a forested area and will not have any significant visibility. The cables and joint bays will be underground and will not have any

significant visibility. There may be some interference with hedgerows but the impact will be local and is likely to be temporary. The undergrounding of cables, mentioned in the Minister's press release as a means of dealing with the issue of visual amenity with regard to overhead lines has been cited earlier in this report. The proposed underground cables will have very little visual impact and visual amenity should not be a reason to refuse permission.

7.7. Impact of the construction works on road users

7.7.1. The impact of the construction works on road users, this has given rise to considerable concern from observers. The information provided includes, in section 12.1 of the EIS, that, for excavation and cable laying, and water course crossing, the majority of trips impacted will experience between 10 seconds to 144 seconds added time onto their trip. In terms of distance it states that the majority of trips impacted will experience between 0 to 2km added to their trip. In addition there will be delays to traffic on side roads on days that trenches are excavated and the cable set across the side road, resulting in a one day closure at each location. It is estimated that there are 10 local roads that will be impacted, with delays and additional distance travelled as a result. It is assumed that an average detour of 2km will apply for all affected trips. The impact will occur on one side road per day for 10 days out of the 18 month construction period.

7.7.2. Tables 1-4 of appendix 12.1 sets out the information on which the foregoing assessment is based. It appears to me that the use of average figures in the assessment, masks much greater delays and detours to residents in some impacted locations and, should the Board be mindful to grant permission it may be considered necessary to obtain more information/mitigation in this regard.

7.8. Natural Heritage

7.8.1. Observers have raised issues which fall under this heading, in relation to impacts on protected sites and species. The protected sites referred to include the River Finn SAC, Croaghanagh Bog SAC, Lough Eske and Ardnamona Wood SAC, Cashelnavean Bog NHA and Barnesmore Bog NHA. The site is stated to be located

within both NHAs. It is stated that there is insufficient evidence in the EIS or NIS that these sites would not be adversely affected.

7.8.2. The potential impact on the SACs has been addressed earlier in this report under the heading Appropriate Assessment. The route of the cable runs close to and within Cashelnavean Bog NHA and close to Barnesmore Bog NHA and similar issues regarding the shortfall of survey information arises in relation to these sites as previously discussed in relation to Natura sites.

7.8.3. It is stated by observers that Donaldson Memorial Hall hosts a colony of bats and a nursery roost and that the nearby Glenmore Bridge is also inhabited by bats. The observers are concerned that the construction work will disturb this colony. I am satisfied that this issue is amenable to being addressed by condition.

7.9. **Built Heritage**

7.9.1. Concerns have been raised by observers in relation to potential impact on protected structures and monuments, including St John's Church, Donaldson Memorial Hall, and the remnant of the County Donegal Railway at Glenmore Halt. Potential impact on built heritage is referred to in reason No. 4 of the planning authority's decision.

7.9.2. The EIS states that there are eight NIAH (national inventory of architectural heritage) structures located within 100m of proposed route and that three have potential to be affected: Milestone, Altnapaste Bridge and Keadew Bridge, which are located along the route. In mitigation they state that cables should not be attached to these structures; excavation should not be located close to the Milestone (along the N15) and to avoid any impacts on the bridges the Architectural Heritage Protection Guidelines for Planning Authorities, best practice regarding bridges should be adhered to.

7.9.3. The Department of Culture, Heritage and the Gaeltacht have submitted an observation requesting a condition in relation to archaeological monitoring of all ground disturbance.

7.9.4. I am satisfied that impact on built heritage is capable of being mitigated by condition and should not be a reason to refuse permission.

7.10. **Project splitting**

7.10.1. The issue of project splitting has been raised by observers.

7.10.2. EIA was previously carried out in relation to the two permitted developments. An EIS has been submitted with the subject application and the Board must carry out EIA in relation to the proposed development and must consider the proposal in a context which includes other plans and projects, including the two permitted developments; therefore project splitting, i.e. to avoid the requirement to carry out EIA, does not arise.

7.11. **Ownership**

7.11.1. Two issues have been raised by observers in relation to ownership.

7.11.2. St John's Church of Ireland have concerns in relation to the placement of the cable in the existing road that runs alongside their property at St John's Church and Donaldson Memorial Hall. They have the expectation of owning this section of the road, as the road has been re-routed, at some time in the future, and have been in discussions with the County Council in this regard.

7.11.3. In my opinion undocumented discussions such as those referred to would not constitute a reason for refusal. This section of road is currently a public road.

7.11.4. Ownership of the land and soil underneath to the centre of the road, is stated to have arisen as an issue in a recent legal case: Patrick Daly v Kilronan windfarm, and has been raised as an issue by observers. They state that the Board has no option but to refuse the application.

7.11.5. It is my understanding that this issue was raised but not resolved in the legal proceedings. In my opinion, based on the legal position as it currently stands, the Board is entitled to proceed on the basis that there is no ownership issue which precludes the granting of planning permission.

7.12. **Human health**

7.12.1. Observers are concerned about the potential for impact on human health from electric magnetic fields, disruption to the implantable medical devices, pacemakers and implantable cardioverter defibrillators (ICDs). They are concerned that

undergrounding of cables is new technology and it is impossible to say that there will be no risks to public health in 20-30 years. They raise autism as a concern and refer to the fact that a lot of young children live within 10m of the proposed cable.

7.12.2. They are also concerned at health implications for their water supply which would run side by side with the cable.

7.12.3. The Board will note that appendix 4.1 to the EIS is a document titled ‘EMF and You’ which is an information booklet with information about electric magnetic fields and the electricity transmission system, prepared by Ergrid. It points to the low frequency of electromagnetic field associated with the DC electrical system and compares it with electromagnetic fields associated other familiar every-day items, and points out that there is no likelihood of impact on human health.

7.12.4. I am satisfied that impact on human health should not be a reason to refuse permission.

7.13. Consideration of alternatives

7.13.1. The lack of consideration of alternatives has been raised by observers.

7.13.2. It is stated that planning permission was granted for these wind turbines on the basis that the electricity would be taken by the current network to the Letterkenny grid connection approx. 8km away.

7.13.3. It is stated as a concern that there is no good commercial or common sense reason to build a 35km grid route to Barnesmore; and that it is now evidently tied with a much greater project. The Board is requested by some observers to ignore references to Carrickaduff wind farm. The Board is requested by other observers to consider this development and Carrickaduff wind farm as project splitting.

TII also raise the issue of alternatives, stating that it is unclear that the applicant has assessed any alternatives to the provision of the cabling along the N15, such as the laying of cabling in private lands adjoining. In the interests of safeguarding the investment in, and the potential for, future upgrade works to the national road network, the Authority is of the opinion that alternatives should be considered prior to any decision being made. Donegal County Council Roads Section similarly questions the consideration of alterations to use of public roads.

7.13.4. In the grounds of appeal the applicant states that they have established a grid connection offer for the permitted Drunmahough and Lenelea windarms which will be connected to the Clogher substation. The connection method for these wind farm developments is prescribed in the Eirgrid Connection Offer (Eirgrid Ref. P258-KP-OL) which states: The method of connection will be into Clogher 110kV station via approximately 1000m^2 Alluminium Cross Linked Polyethylene (XPE) cable.

7.13.5. Eirgrid is not a party to the application or appeal. No information of grid capacity is available to the Board which would help to inform an assessment of alternatives.

7.13.6. The grounds of appeal refers to consideration of alternatives but also to the preference of ESB Networks/ Eirgrid for placement of cables in public roads.

7.13.7. The information available on this file, in relation to the assessment of alternatives is not sufficient to demonstrate that the proposal represents the best available point of connection to the existing network or that the best route to that point of connection has been selected.

7.14. Flood Risk

7.14.1. The issue of flood risk has been raised by observers.

7.14.2. They refer to a serious flood which took place at Welchtown on the River Finn which caused damage to the bridge. They are concerned that the presence of the cable would increase risk if such an event recurred.

7.14.3. The cable route follows river valleys and crosses river bridges. In two locations along the route flooding is know to occur: on the River Finn at Welchtown and the surrounding area and on the Lowerymore River in the vicinity of Barnesmore Gap.

7.14.4. It is evident that sections of the Lowerymore river at Barnesmore Gap erodes the banks and remedial measures have been carried out. The information provided by observers of the flooding of the River Finn and its impact on the bridge has not been contested.

7.14.5. It is therefore a matter of some concern that part of the road or a bridge within which the cable would run could be damaged by fluvial flooding. The observers' concerns are considered reasonable and this is an issue which has not been addressed in the documentation presented with the application or appeal.

7.15. **Revision Proposed**

7.15.1. The grounds of appeal includes a revised proposal for the Board's consideration in relation to the placement of the cable.

7.15.2. They state that in consultations in relation to Carrickaduff wind farm concerning underground cabling between that windfarm and Clogher substation, the consultations with the Roads Department that prefaced the submission of the Road Opening Licence application, the Roads Department advised the applicant to locate one cable on each hard shoulder (i.e. on either side of the N15 road). They wish it to be noted that the applicant's first detailed drawings, submitted to the Donegal County Council on the 24th April 2015 depicted both cables on one side of the road. Donegal County Council then advised the applicant to run one cable on each side of the road, thereby giving increased scope and consideration to engineering issues in relation to future road realignment considerations.

7.15.3. Given the proximity of the Lowerymore River at the south-eastern side of the N15 route, the project team are conscious of the development and environmental constraints which will undoubtedly influence the design of any future alignment of the N15 in this area, with the assumption that any such prospective re-alignment would move in a north-western direction, away from its present proximity to the Lowerymore River. The applicant and design team have considered such a scenario, particularly in light of the report from the Roads Department on the proposed development and its concerns in respect of any future alignment of the N15. In an effort to assuage the concerns of the Roads Department on this matter, the applicant is willing to consider the repositioning of the proposed underground cabling to the south-eastern side of the N15 carriageway, should this lessen the impact of the proposed development on any future re-alignment of the N15, in the view of the Roads Department and subject to the consent of the Board. In this regard, the Board will note that the planning application boundary for the proposed development encompasses the full width of the N15 carriageway, therefore providing sufficient scope within the parameters of the application site to allow for the Board to permit such a measure if it so wished. The second cable, envisaged to facilitate the grid connection for the proposed Carrickaduff Wind Farm development, could also run alongside the cable facilitating the grid connection for the permitted Drumnahough

and Lenalea Wind Farms (with a two metre separation in accordance with ESB Networks/Eirgrid requirements) on the same side of the road.

7.15.4. This they state demonstrates the willingness of the applicant to ameliorate the concerns of the Roads Department and Planning Authority and find a solution that satisfies all parties in relation to the proposed development.

7.15.5. In my opinion the proposed revisions should not be considered by the Board since this would not afford other parties an opportunity to comment. Nor is there sufficient information before the Board regarding the need for two independent cables as put forward in the submission. The shortfall of detailed survey information, referred to under previous headings, also applies to the submitted revision.

7.16. **Other Issue**

7.16.1. The proposed development includes the removal of a shed and its replacement. No use is specified for the shed. This is a farming area and should the Board be minded to grant permission a condition restricting use of the proposed shed to agricultural use should be included.

8.0 Recommendation

8.1. In light of the foregoing assessment it is recommend that planning permission be refused for the following reasons and considerations.

9.0 Reasons and Considerations

1 On the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, the Board is not satisfied that the proposed development individually, or in combination with other plans or projects would not adversely affect the integrity of European sites No. 002301 (River Finn SAC) and 000163 (Lough Eske and Ardnamona Wood SAC) in view of the sites' Conservation Objectives. In such circumstances the Board is precluded from granting permission.

2 The proposed cable route extends along public roads comprising local roads, regional roads and a national secondary road where ground conditions, the condition of the roads and the condition of the bridges have not been adequately documented, and the Board is not satisfied that the proposed development would not adversely impact to a significant extent on the future development and maintenance of these roads for their use as roads and the proposed development would therefore be contrary to the proper planning and sustainable development of the area.

Planning Inspector

22 May 2018

Appendices

1 Photographs

2 Extracts from Donegal County Development Plan 2012-2018

3 Site Synopsis for River Finn SAC (site code 002301)

4 Site Synopsis for Lough Eske and Ardnamona Wood SAC (site code 000163)

5 Extract from OPW National Flood Hazard Mapping