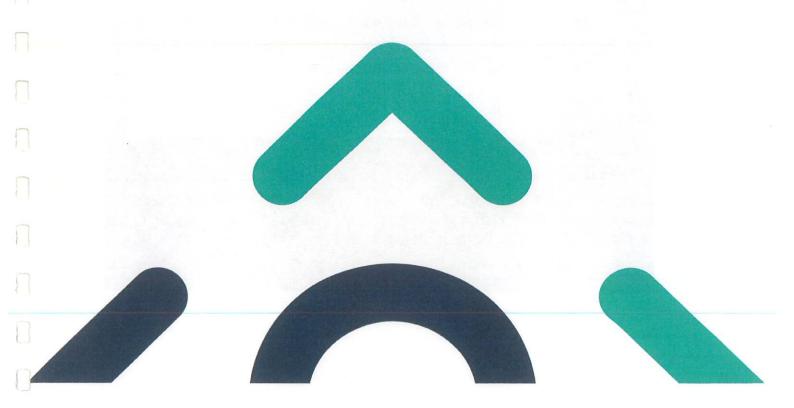


EirGrid CP0901 - Kilbarry-Knockraha No. 2 110 kV Line Renewal and Alteration

Section 5 Declaration Report





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1.

#### INTRODUCTION

MKO has been commissioned by EirGrid Plc., hereafter referred to EirGrid, to prepare this application for a Section 5 Declaration of Exempted Development, under the provisions of Section 5 of the Planning and Development Act, 2000 (as amended) ("the Act"), in relation to the renewal and altering of the Kilbarry-Knockraha No. 2 110 kV transmission line for the consideration of Cork City Council ("the Planning Authority"). It should be noted that the line to be renewed is located within the administrative boundaries of both Cork County Council and Cork City Council and works are proposed within both functional areas. As such, Section 5 Declarations will be submitted to both Planning Authorities for consideration in relation to the works within each of their functional areas.

EirGrid is requesting that the Planning Authority confirms whether the proposed renewing and altering of the existing Kilbarry - Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development as provided for by Section 5(1) of the Act:

"If any question arises as to what, in any particular case, is or is not development or is or is not exempted development within the meaning of this Act, any person may, on payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question, and that person shall provide to the planning authority any information necessary to enable the authority to make its decision on the matter."

This Section 5 Declaration concerns the renewal and altering of the existing overhead line (OHL), c. 7.1km in length, between End Mast 01 (Kilbarry 110 kV Substation located at the northern extent of Cork City) and Angle Mast 45 (Ballinglanna townland, Co. Cork) within the Cork City Council functional area.

EirGrid is the state-owned independent Transmission System Operator (TSO) and is responsible for ensuring that Ireland has a safe, secure and reliable supply of electricity now and in the future. EirGrid is constantly reviewing, monitoring and operating Ireland's national high voltage electricity grid ("Transmission System"). Specifically, the European Communities (Internal Market in Electricity) Regulations 2000 (SI 445 of 2000) sets out the role and responsibilities of the TSO; in particular, Article 8(1) (a) gives EirGrid, as TSO, the exclusive function:

"To operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical, and efficient electricity transmission system, and to explore and develop opportunities for interconnection of its system with other systems, in all cases with a view to ensuring that all reasonable demands for electricity are met having due regard for the development."

In 2015, the Transmission Asset Owner (TAO), ESB Networks, carried out a condition assessment of the Kilbarry - Knockraha No. 2 110 kV Transmission line in order to identify any potential safety and operational issues relating to the potential for mechanical failure of existing equipment, and subsequently, determine an overall programme of works. The proposed scope of work for the renewal and altering of the Kilbarry - Knockraha No. 2 110 kV line broadly comprises the following:

- 1. Paint / Corrosion Treatment of Steel Towers;
- 2. Replacement of Wooden Polesets;
- 3. Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets
- 4. Replacement of Insulators and Hardware;
- 5. Civil Works on Tower Shear Blocks; and
- 6. Ancillary Works

This Section 5 Declaration Report will provide an overview of the legislative provisions, in respect of the proposed works, in order to demonstrate that the subject works do not necessitate further permission/consent as the works, in the professional opinion of EirGrid and MKO, constitute exempted development under the provisions (Section 4(1)(g) and (h)) of the Act. However, EirGrid acknowledges that the Planning Authority in this instance will be the final arbitrators on this matter. As such, an Appropriate Assessment Screening Report (AASR) (Appendix 1) and Environmental Impact Assessment



(EIA) Screening Report (Appendix 2), having regard to the provisions of Section 4(4) of the Act and Schedule 5 of the Planning and Development Regulations 2001 (as amended), have been prepared and appended to this report to ensure that the Planning Authority has comprehensive details to inform its consideration of this matter in full.

The overall Kilbarry-Knockraha No. 2 110 kV transmission line is c. 12.5km in length and comprises 75 no. structures: 2 no. End Masts (EM), 11 no. Angle Mast (AM), 3 no. DC Angle Mast (AM), 2 no. DC Intermediate Mast (IM), 1 no. Intermediate Mast, 55 no. Intermediate Polesets (IMP) and 1 no. Strain INT Mast. The 110 kV OHL runs c. 7.1km from End Mast 01 (Kilbarry 110 kV Substation) to Angle Mast 45 (Ballinglanna townland, Co. Cork) within the functional area of Cork City Council before entering the Cork County Council functional area between Angle Mast 46 (Ballinglanna townland, Co. Cork) and End Mast 75 at Knockraha 110 kV Substation in the townland of Ballynanelagh, Co. Cork for 5.4km.



2.

#### BACKGROUND TO APPLICATION

The overall Kilbarry - Knockraha No. 2 110 kV transmission line comprises c. 12.5km of overhead electricity transmission line traversing the townlands of Kilbarry, Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenroe, Ballycurreen, Killeena, Ballynanelagh, Co. Cork. The geographical context of the existing 110 kV line is illustrated below in Figure 1.

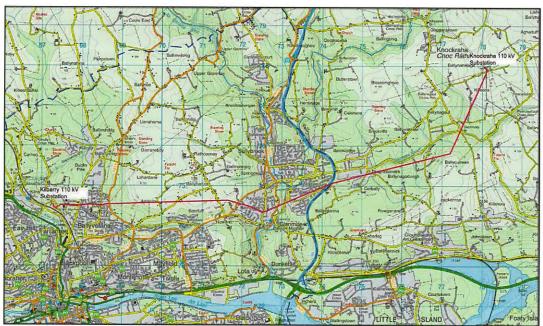


Figure 1. Site Location in Geographical Context - Knockraha No. 2 110 kV Transmission Line

The existing Kilbarry - Knockraha No. 2 110 kV overhead line (OHL) comprises 75 no. individual structures along its length; specifically, the 110 kV OHL is constructed of double wood polesets (55 no.) at intermediate locations, galvanised steel angle masts (18 no.) where the direction of the OHL changes and galvanised steel end masts (2 no.), as described below in Table 1 (overleaf), where the line terminates at Kilbarry and Knockraha 110 kV Substations.

The intermediate wooden polesets are embedded in the soil typically to a depth of 2.3m whereas the steel angle masts have concrete foundations under each leg extending c. 2.5 x 2.5m and to a depth of 3m (please refer to **Appendix 3** for further information on the typical dimensions of these transmission structures).



2.1

Table 1. Transmission Infrastructure - Kilbarry - Knockraha No. 2 110 kV

Infrastructural Type	Physical Description	Height	Kilbarry – Knockraha No. 2 110 kV Structure No.
End Mast Tower	End masts are steel lattice towers. They are designed to take the tension of the line in only one direction and are therefore generally shorter and heavier in construction.	12.5m- 14m	1, 75
Double Current (DC) Intermediate Mast Tower	Double circuit intermediate towers are steel lattice suspension towers which are designed to ensure clearances are maintained on two circuits.	22.1m- 32.1m	4, 6
DC Angle Mast Tower	Double circuit angle masts are steel lattice tower constructions. They are designed to support directional change and also maintain the required clearances for two circuits. They are heavier duty than suspension towers.	22m- 27m	3, 5, 7
Angle Mast Tower	Single circuit angle masts are steel lattice tower constructions. They are designed to support directional change and are therefore heavier duty than suspension towers or intermediate polesets.	12.5m- 14m	2, 9, 10, 20, 28, 32, 34, 35, 45, 46, 63
Strain Intermediate (INT) Tower	A strain intermediate tower is a steel lattice tower. They are designed to take the tension of the line in only one direction and are therefore shorter and heavier in construction than suspension towers.	11m- 24m	37, 52
Portal Intermediate Poleset (IMP) (Wooden)	At 110 kV, these consist of two wooden poles (portal), treated with creosote, with a steel cross arm. The insulators and conductors are supported via this cross arm.	11m - 22m	8, 11-19, 21-27, 29- 31, 33, 36, 38-44, 47- 51, 53-62, 64-74

#### Site Location and Context

The existing Kilbarry – Knockraha No. 2 110 kV line, as shown in Figure 1, is located on the northern outskirts of Cork City. The transmission line traverses a range of semi-rural and rural agricultural greenfield and high density urban environments along its route between Kilbarry and Knockraha 110 kV substations. Table 2 below provides a high level contextual analysis of the 110 kV OHL within the Cork City Council functional area.

Table 2. Site Context - Kilbarry - Knockraha No. 2110 kV

Structures	Local Authority	Townland(s)	Plan Sheet Number(s) <sup>1</sup>	Site Context
1-4	Cork City Council	Cork City and suburbs	1	<ul> <li>Outer compound of Kilbarry 110 kV Substation</li> <li>110 kV OHL crosses public greenfield space within and adjacent to the Kilbarry Enterprise Centre</li> </ul>
5-12		Ballincolly	1, 2, 3	<ul> <li>DC Angle Mast 05 is located immediately adjacent to residential dwelling within the Thorndale Estate</li> <li>Crosses through greenfield spaces within high density residential estates: Thorndale, Kinvara and Mervue</li> <li>110 kV OHL route is immediately adjacent to St. Aidan's Community College and runs above Kilmorna Heights</li> </ul>



Structures	Local Authority	Townland(s)	Plan Sheet Number(s)	Site Context
				Starting at Portal IMP 11, 110 kV OHL crosses semi-rural undulating agricultural greenfield
13-18		Ballyvolane Arderrow	3, 4, 5	110 kV OHL crosses semi-rural undulating agricultural greenfield
19-26		Ballyharoon Banduff	5, 6	<ul> <li>110 kV OHL crosses semi-rural agricultural greenfield up to Portal IMP 19</li> <li>Angle Mast 20 is situated within the immediate vicinity of a cluster of 7 no. residential dwellings on Banduff Road</li> <li>Crosses semi-rural agricultural greenfield with low density residential housing in the vicinity of Portal IMP 26</li> </ul>
27-29		Poulacurry North	7	110 kV OHL crosses primarily semi-rural agricultural greenfield with low density residential housing / agricultural infrastructure
30-37		Poulacurry South	7, 8	110 kV OHL crosses through greenfield spaces within high density residential estates: Crawford, Castlejane and Glanmire Court
38-45		Ballinglanna	9, 10	<ul> <li>110 kV OHL crosses over football pitch on E Cliff Road</li> <li>110 kV OHL crosses through greenfield spaces and private back gardens within high density</li> <li>Glyntown residential estate</li> </ul>

Note: Please refer to Appendix 4 for Infrastructure Site Plans

Knockraha No. 2 OHL was constructed over three phases with structures 1-7 built in 1954, structures 62-75 built in 1964 and structures 7-62 built in 1974. In this regard, it is important to highlight that the 110 kV OHL predates the urban residential environment of north Cork City which has developed along the periphery of the transmission line over the last 50 no. years.

#### 2.2 Description of Proposed Works

In 2015, the Transmission Asset Owner (TAO), ESB Networks, carried out a Line Condition Assessment (LCA) of the Kilbarry - Knockraha No. 2 110 kV Transmission line in order to identify any potential operational and maintenance issues for existing equipment, and subsequently, determine an overall programme of works. A ground level condition survey was completed in addition to a thorough review of maintenance records compiled for the line. A full model of the Kilbarry - Knockraha No. 2 110 kV Transmission line in its current condition was created using:

- Light Detection & Ranging (LiDAR) information collected from site;
- > Information gathered from Kardex records;
- Site investigations & Site Surveys; and
- Standard established ESBI criteria for 110 kV overhead line design.

Corrective maintenance / renewal requirements identified in the above LiDAR data, maintenance record review and on-the-ground evaluation and site investigation can be broadly grouped under the following headings:

 Paint/Corrosion Treatment of Steel Towers: Painting and corrosion treatment of existing steel structures;



Replacement of Wooden Polesets: Removal of all hardware (including crossarm and insulators), installation of new poles and fittings / hardware, new or existing crossarm and new or existing insulators followed by the cutting and removal of old polesets;

Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets: Removal of existing structure, fittings and foundations, followed by installation of new

intermediate polesets and installation of fittings/hardware;

Replacement of Insulators and Hardware: Removal of existing hardware and insulators followed by the installation of new hardware and insulators;

Civil Works on Tower Shear Blocks: Reinforcement of shear blocks; and

Ancillary Works including the replacement and/or repair Anti-Climbing Guards

It is important to emphasise that the proposed works are intended to maintain, and ultimately safeguard, the operational functionality of the existing Kilbarry - Knockraha No. 2 110 kV line. The renewal and alteration of the 110 kV OHL will not result in any material changes to the appearance or functionality of the line which could be construed as 'inconsistent with the character of the structure or of neighbouring structures' (Section 4(1)(h) of the Act refers). Specifically, all works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV). The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.

The proposed works to the 110 kV OHL will require access for equipment such as tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms etc. As a number of structures are located on agricultural lands and in close proximity to residential dwellings, gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions. It should also be noted that the undertaking of the proposed works is dependent on outage availability. Cork County Council and Cork City Council would be notified in advance of any work commencing on the line.

Overviews of the proposed renewal and alteration works, subject to this Section 5 Declaration of Exempted Development, are outlined below in the following sections.

#### Paint / Corrosion Treatment of Steel Towers 2.2.1

The site investigations and surveys undertaken as part of the LCA inspected all steel towers comprising the Kilbarry - Knockraha No. 2 110 kV line to assess existing conditions of galvanising/paint and to identify any damage to the structures. Paint damage and corrosion were recorded at several towers during the assessment.

Corrosion is treated by specialist contractors who climb the tower using safe tower climbing methods, treat the corrosion and paint the tower. The painting and corrosion treatment of the identified steel towers (01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 28, 45) will be undertaken in line with ESB's work practice as outlined below, to comply with technical requirements:

> An impervious sheet will be laid on the existing ground under the mast base to prevent paint from dripping to the soil;

> A cleaning agent will first be applied to the towers and then cleaned by means of wire brushing or sanding. When dry, a primer and top coat of paint will be applied; and

> The paint specification will provide protection to the steel for a minimum of 15 no. years.

The top coat of matt grey will remain the same and there will be no deviation to the visual appearance of these structures.

#### Replacement of Wooden Polesets 2.2.2

All wood polesets comprising the Kilbarry - Knockraha No. 2 110 kV line were inspected during the LCA to check for pole rot or significant structural damage. The assessment identified 14 no. wooden pole-sets within the Cork City functional area which will need to be replaced as part of the proposed renewal and alteration works.



The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation. However, any minor height increase of a wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. A typical wooden poleset (Portal IMP) for a 110 kV line is shown in Figure 2 below. Typical 110 kV wooden polesets range in height from 16m to 22m as described above in Table 1.

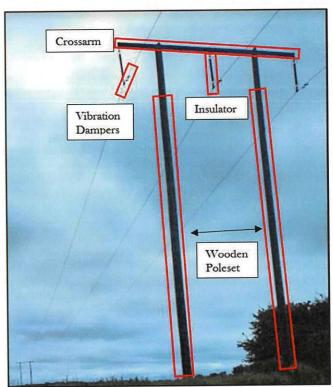


Figure 2. Typical 110 kV Intermediate Wooden Poleset Structure (Portal IMP)

Where a wooden poleset is being replaced, the crossarm, insulators and hardware will either be reused, or alternatively, new crossarms and equipment will be installed. The final appearance of the newly installed wooden polesets will be consistent with the existing structures. Please refer to **Appendix 3** for typical plans of the proposed 110 kV 'Lines Suspension Portal Wood Pole Set' transmission structures.

The installation of replacement polesets will be undertaken in line with established best practice as outlined below:

- > Transportation of two wooden poles, crossarm (where required) and insulators and hardware (where required) to the area immediately adjacent to the poleset due to be replaced;
- The replacement poles will be installed to a minimum depth below ground of 2.3m. The estimated working area for construction of a wooden poleset is 10m² around the base of the poleset. The excavation for each hole will be carried out using a wheeled or tracked excavator;
- Each of the two poles are lined up with the excavated holes and the machine operator will then drive forward pushing the pole up until the pole is in an almost vertical position. If the crossarm is to be replaced as part of the identified works, the new crossarm is attached to one pole;
- The pole is supported at all times and the holes manually backfilled initially to a minimum depth of 1.0m to ensure temporary stability prior to installing the sleepers. Should the ground conditions be poor, additional stability will be provided by installing stay wires. Following the initial backfilling, a strip approximately 2.7m long is excavated to a depth of 0.8m parallel to the line. This is necessary to install the rectangular wooden sleepers which add additional stability to the poleset and are attached to the poles using U-bolts; and



The two installed poles are connected near the top by a steel crossarm from which insulators are attached. The existing conductor is then attached to these insulators. Where the existing crossarm is to be retained, the crossarm is detached from the decommissioned poles and lifted into place and attached to the newly installed poles

Once the new wooden poleset is installed, the decommissioned poleset will be cut at the base 1m below ground level and removed from the site for recycling by licensed waste contractors and hauliers.

## Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets

Following the completion of the LCA, it was recommended that Intermediate Mast 08 and Strain INT Mast 33 be replaced with wooden polesets due to their age and/or condition. Prior to commencing any works to the structures, it will be necessary to detach the conductor and fibre wrap from the towers. The detached conductor and fibre wrap will be disconnected from the mast and connected to temporary poles erected adjacent to the location. The temporary poles will be erected in the same manner as the replacement of wooden polesets, as discussed below. Once the conductors have been diverted to the temporary poleset, the body of the tower will be dismantled. Sections of the tower will be unbolted and lifted down to ground level. The final section, which includes the tower legs will be cut at ground level and removed. All steelwork will be removed from site for recycling by licensed waste carriers. An excavator will be used to excavate around the existing foundations to facilitate their removal. New wooden polesets will then be installed, subject to the requirements of the detailed design.

The installation of the replacement wooden polesets will follow the same methodology as set out above under Section 2.2.

### 2.2.4 Replacement of Insulators and Hardware

All insulators and hardware apparatus were inspected for damage, corrosion, wear and fatigue. Conductors were also visually inspected along the entire length of the 110 kV OHL to check for any signs of damaged/broken conductor strands. The majority of insulators were found to be in good condition with associated hardware also in good condition at these sites. There were a number of glass anti-fog type insulators exhibiting corrosion in addition to several cases of corrosion and wear to associated hardware. Vibration dampers were also found to be fatigued or missing at a number of sites. One poleset requires the replacement of insulators and hardware only (18).

The insulators and hardware holding the conductor are attached to steel crossarms linking the wooden poles. The replacement of the insulators and hardware will require the disconnection of the conductor from existing insulators and hardware. The weight of the conductors can be supported by a strap attached to the crossarm. The insulators and hardware are then accessed by a Mobile Elevated Work Platforms (MEWP) where the insulator is supported by straps as it is unbolted and removed. New insulators and hardware are fitted, conductors are re-attached and decommissioned insulators and hardware / equipment are removed. Replacement crossarms, if required, will be lifted into position with a lifting device such as a pulley system or telescopic handler. A typical Transmission Tower Structure for a 110 kV line is shown in Figure 3 (overleaf) and included within **Appendix 3** of this report.

The decommissioned equipment will be stored under appropriate conditions until it can be recycled or disposed of through licensed waste contractors and hauliers.



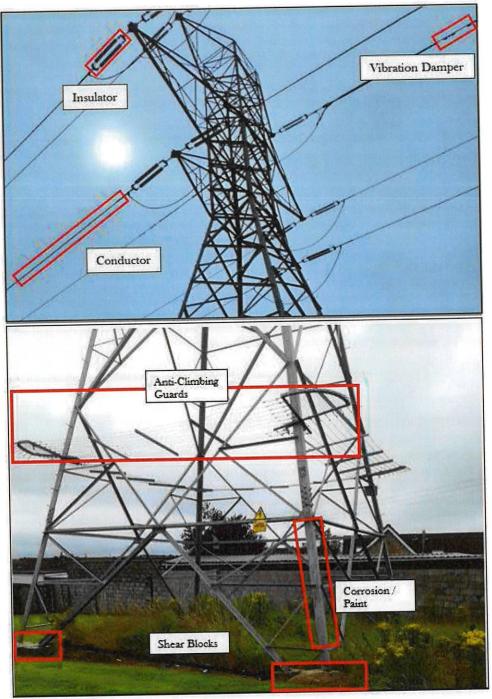


Figure 3. Typical 110 kV Transmission Tower Structure

## 2.2.5 Civil Works on Tower Shear Blocks

Site investigation works of the existing tower foundations were undertaken as part of the LCA to determine the foundation dimensions and conditions along with the ground conditions of the tower sites. In line with ESB specification, the tower foundations were assessed to determine whether they were of sufficient size to cater for the overall weight of the OHL. Concrete cores were also retrieved to determine the compressive strength of the concrete within the existing foundations. The following information was gathered from the site investigations:

- > Foundation size;
- Foundation concrete strength and condition; and



#### Soil Characteristics and bearing capacity

Typical steel angle masts have four legs each with their own individual and independent foundation block; specifically, 2 no. of the legs will be in compression with the remaining 2 no. legs being in tension. In order to assess the stability of the steel angle mast, one compression leg foundation was exposed at each tower for investigation. The investigation methodology was as follows:

- Concrete cores were extracted and in-situ measurements recorded;
- Dynamic probing was carried out on all sites to establish the soil bearing capacity at the site; and
- Concrete cores were tested and the compression strength recorded.

The concrete shear blocks of all tower foundations were also visually examined during this survey. The shear blocks are used to form a watershed between the tower foundation and the tower legs. Part of the shear block will be visible above ground and work to it is considered maintenance to the tower. The following civil works were identified and are included as part of the subject programme of works as set out below in Table 3.

Table 3. Proposed Civil Works to Kilbarry - Knockraha No. 2 110 kV Line Tower Structures

Kilbarry - Knockraha No. 2 110 kV Structure No.	Physical Description		
03	Raise shear blocks		
04	Raise shear blocks		
05	Raise shear blocks		
06	Raise shear block		
07	Clear base & raise shear blocks		
09	Raise shear blocks		
10	Raise shear blocks		
20	Clear tower base & raise shear blocks		
28	Clear base & raise shear blocks		
32	Clear shear blocks		
34	Clear shear blocks		
35	Clear base & raise shear blocks		
45	Clear tower base & raise shear blocks		

Raising shear blocks consists of pouring concrete around the bottom of the tower leg. Concrete trucks are brought as close as possible to the exposed shear blocks to pour directly around the bottom of the tower leg. In the event of this not being possible, concrete is transported in dumpers.

#### 2.2.6 Ancillary Works

Anti-Climbing Guards (ACGs) installed on the steel tower structures comprising the 110 kV OHL were inspected to determine whether or not they complied with existing TAO standards and to note any repair/renewal works necessary. A number of existing anti-climbing guards were recorded as requiring replacement or repair and addition of locks in some cases as identified below in Table 4.

Table 4. Proposed Anti-Climbing Guards (ACGs) Refurbishment Works

Kilbarry - Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works		
01	Replace ACG		
02	Re-wire ACG		
03	Replace ACG		
04	Replace ACG		
05	Replace ACG		
06	Replace ACG		
07	Replace ACG		
09	Rewire ACG & fit locks		
10	Rewire ACG & fit locks		



Kilbarry – Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works			
20	Replace barb wire ACG			
32	Re-wire ACG & fit lock			
33	Re-tension barb wire ACG			
34	Re-tension barb wire ACG			
35	Re-tension barb wire ACG			
45	Re-wire ACG			

## 2.2.7 Summary of Proposed Works

Table 5 (overleaf) provides an itemised overview of the proposed works subject to this Section Declaration for each transmission structure comprising the Kilbarry – Knockraha No. 2 110 kV line within the Cork City Council functional area.



Structure	Local Authority	Townland	Plan Sheet Number(s) <sup>1</sup>	Proposed Works
01	Cork City Council	Cork City and	1	Treat corrosion & paint
		suburbs		Replace Anti-Climbing Guards
02	Cork City Council	Cork City and	1	Treat corrosion & paint
		suburbs		Demlaration & paint
				Replace single circuit insulators and hardware
				Replace vibration dampers
03	Cork City Council	Cork City and	1	Replace Anti-Climbing Guards
		suburbs	1	Treat corrosion & paint
		Jupul ps		Replace double circuit insulators and hardware
				Replace vibration dampers
				Civil works (reinforcement / reparation) to foundations
04	Cork City Council	Cork City and		Replace Anti-Climbing Guards
	Cork City Council		1	> Paint
		suburbs		Replace double circuit insulators and hardware
				Replace U bolts
				Replace vibration dampers
				Civil works (reinforcement / reparation) to foundations
0.5	0.10:0			Replace Anti-Climbing Guards
03	Cork City Council	Ballincolly	1	> Paint
				Replace double circuit insulators and hardware
				Civil works (reinforcement / reparation) to foundations
				Replace Anti-Climbing Guards
06	Cork City Council	Ballincolly	2	Paint
				Replace double circuit insulators and hardware Replace U bolts
				Replace vibration dampers
				Civil works (rainforcement /
				Civil works (reinforcement / reparation) to foundations
7	Cork City Council	Ballincolly	2	Replace Anti-Climbing Guards
				Paint
				Replace double circuit insulators and hardware
				Civil works (reinforcement / reparation) to foundations
)8	Cork City Council	Ballincolly	2	Replace Anti-Climbing Guards
		Danifficony	Z	Replace tower with 110 kV wooden poleset



Qtt.ma	Local Authority	Townland	Plan Sheet Number(s) <sup>1</sup>	Proposed Works
Structure	Cork City Council	Ballincolly	2	Paint 1 1
9	Cork City Council			Replace single circuit hardware
				Civil works (reinforcement / reparation) to foundations
				Rewire Anti-Climbing Guards and fit locks
0	Cork City Council	Ballincolly	2	Paint land hardware
10	Cork City Council			Replace single circuit insulators and hardware
				Rewire Anti-Climbing Guards and fit locks
12	Cork City Council	Ballincolly	3	> Replace wooden poleset
	Cork City Council	Ballyvolane	3	Replace wooden poleset
13	Cork City Council			> Replace hardware
1.4	Cork City Council	Arderrow	4	Replace wooden poleset
14	COIR City Council			> Replace hardware
1.5	Cork City Council	Arderrow	4	> Replace wooden poleset
15	Cork City Council			> Replace hardware
1.0	Cork City Council	Arderrow	4	Replace wooden poleset
16	Cork City Council			> Replace hardware
1.5	Cork City Council	Arderrow	4	Replace wooden poleset
17	Cork City Council			> Replace hardware
1.0	Cork City Council	Arderrow	5	Replace hardware
18	Cork City Council	Banduff	5	Replace J bolts
20	Cork City Council			Civil works (reinforcement / reparation) to foundations
				Replace barbwire Anti-Climbing Guards
21	Cork City Council	Banduff	5	Replace wooden poleset
22	Cork City Council	Banduff	5	> Replace wooden poleset
24	Cork City Council	Banduff	6	Replace wooden poleset
24	Cork City Council			Replace hardware
25	Cork City Council	Banduff	6	Replace wooden poleset
26	Cork City Council	Banduff	6	Replace wooden poleset
20	COIR Oily Council			> Replace hardware
00	Cork City Council	Poulacurry North	7	Paint Civil works (reinforcement / reparation) to foundations
28	Cork City Council			
29	Cork City Council	Poulacurry North	7	Replace wooden poleset
	Cork City Council	Poulacurry South	7	Replace wooden poleset
30	Cork City Council	Poulacurry South	7	Replace wooden poleset



Structure	Local Authority	Townland	Plan Sheet Number(s)	Proposed Wash
2	Cork City Council	Poulacurry South	8	Proposed Works Civil works (reinforcement / reparation) to foundations
				Rewire Anti-Climbing Guards and fit locks
3	Cork City Council	Poulacurry South	8	Replace tower with 110 kV wooden poleset
4	Cork City Council	Poulacurry South	8	Replace vibration dampers
				Civil works (reinforcement / reparation) to foundations
				Re-tension barbwire Anti-Climbing Guards
5	Cork City Council	Poulacurry South	8	Replace vibration dampers
				Civil works (reinforcement / reparation) to foundations
~	0 1 01			Re-tension barbwire Anti-Climbing Guards
5	Cork City Council	Ballinglanna	10	Paint Paint
				Replace single circuit insulators and hardware
				Civil works (reinforcement / reparation) to foundations
tur Planca reference A	ppendix 4 for Infrastructure Sit			Re-wire Anti-Climbing Guards



# LEGISLATIVE CONTEXT: EXEMPTED DEVELOPMENT

## 3.1 Defining Development

As noted in Section 1, the first aim of this Section 5 Declaration Report is to determine whether the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line constitutes work / development. The Act defines the differences between 'development', 'works' and 'use' as set out below:

**Development:** "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

**Works:** includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure

> Use: In relation to land, does not include the use of the land by the carrying out of any works thereon

In the context of the above statutory definitions, the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line would, in MKO's opinion, amount to works, and furthermore, be regarded as development as part of the overall maintenance and operation of the line. "Works" differ from a "use" in that they result in a level of physical alteration to the land whereas a use in itself may not necessarily interact with the existing physical characteristics of the land. The proposed renewal and altering of the 110 kV OHL will not intensify the use of the 110 kV OHL nor will it materially change the functionality of the transmission asset (e.g. no increase in the voltage of the line from the existing 110 kV); therefore, the works do not constitute a 'material change of use', i.e. a change in the definable character of the use.

## 3.2 Exempted Development Provisions

As the proposed renewal and alteration of the Kilbarry - Knockraha No. 2 110 kV line is considered to constitute development/works, the second aim of this report is to determine whether the proposal qualifies as exempted development as provided for by the Act.

The planning and development of the electricity transmission system includes the up-rating and maintenance of existing transmission line infrastructure, as well as what may be considered to comprise "minor works". The current planning legislation makes provision for certain works of this kind to be exempted / permitted development (i.e. development which does not require a prior grant of development consent). As such, there is a statutory onus on the Applicant to demonstrate to the relevant Authority that the proposed transmission line works meet certain site-specific tests (restrictions, exceptions, conditions and limits as set out in relevant legislation).

## 3.2.1 Section 4 (1)(g) and (h) of the Act

The Act sets out several broad exemption classes under Section 4, which are considered relevant to the subject works to the Kilbarry – Knockraha No. 2 110 kV line. Section 4(1)(g) states the following shall be exempted developments for the purposes of the Act:

"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose".



As stated in Section 1, EirGrid is a statutory undertaker as per Section 2 of the Act, which defines a statutory undertaker as "a person, for the time being, authorised by or under any enactment or instrument under an enactment to (b) provide, or carry out works for the provision of, gas, electricity or telecommunications services". Accordingly, the requirement that the subject works must be carried out by a statutory undertaker to qualify as exempted development is satisfied in this instance.

The proposed works comprise the 'repairing', 'renewing' and 'altering' of transmission structures and associated apparatus in order to maintain the operational functionality of the existing line, including the necessary construction works (e.g. excavation and all associated works set out previously above) to facilitate same. As described in Section 2, the proposed works do not extend to the provision of new infrastructure as the works consist of the renewing of tower structures and intermediate wooden polesets. Where wooden polesets are identified to be replaced, new wooden polesets of similar design will be sited at an immediately adjacent location on the same alignment (e.g. paint / corrosion treatment, raising of shear blocks and replacement of wooden polesets, apparatuses and hardware).

In addition, Section 4(1)(h) of the Act, states the following shall be exempted development for the purposes of the Act:

"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures"

The proposed works are all within the development envelope of the existing 110 kV OHL (maintained by the TAO) and do not include for the extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL. Furthermore, the replacement of wooden polesets and apparatuses/hardware and the repairing of transmission assets (paint/corrosion and shear blocks) relate to the statutory undertaker's routine function associated with transmission infrastructure maintenance and improvement.

The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation as shown in Figure 4 below in terms of the established character of the line. However, any minor height increase of an intermediate structure as a consequence of the proposed works will still be in proportion relative to other structures along the alignment.



Figure 4. Knockraha No. 2 110 kV Transmission Line in the Context of the Surrounding Environment



It is important to emphasise that this Section of the Act provides for altering and improvement of existing transmission infrastructure where its appearance would not become 'inconsistent with the character of the structure or of neighbouring structures' which does not necessarily equate to an exact replication of infrastructure. Given the minor scale of these potential variations in height, if applicable, the overall visual character of the Kilbarry – Knockraha No. 2 110 kV line within the receiving environment will remain consistent to what is currently in-situ. Furthermore, the minor increase in height, if and where applicable, will largely be indiscernible to receptors given the scale and established nature of the development.

In the context of the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 towers with wooden polesets, this is not considered a 'material change' to the overall 110 kV OHL as the wooden polesets will be sited immediately adjacent to the locations of the extant towers, and furthermore, the OHL already includes 55 no. double wooden polesets, which is over half of the transmission structures comprising the line. It is important to emphasise that this specific consideration has been assessed by An Bord Pleanála under Ref. RL3328 (Arva-Shankill 110 kV Line, Co. Cavan) in which they determined that the replacement of steel intermediate towers with wooden polesets is within the scope of section 4(1)(g) of the Act which facilitates, inter alia, the altering and renewing of apparatus by a statutory undertaker. Please refer to Section 4.2 for further discussion on this precedent case.

As such, the proposed works would not materially affect the external appearance of the Kilbarry – Knockraha No. 2 110 kV line nor render its appearance inconsistent with current character of the existing line, e.g. the 110 kV OHL will still look like an OHL upon completion of the proposed works.

## De-Exemption Considerations: Section 4(4) of the Act

Section 4(4) of the Act clarifies that works which are normally exempted development under Section 4(1) (such as 4(1) (g) and 4(1)(h) as set out above) <u>can only be</u> de-exempted if an Environmental Impact Assessment (EIA) or Appropriate Assessment (AA) is required. In this regard, Section 4 (4) of the Act, states the following:

"Notwithstanding paragraphs (a), (i), (ia) and (l) of subsection (1) and any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required"

As such, if the Stage 1 Screening for Appropriate Assessment concludes that Stage 2 Appropriate Assessment (Natura Impact Statement) is required, then the works automatically lose their exemption from the requirement to obtain statutory consent. Similarly, if it is the conclusion of a Screening for Environmental Impact Assessment that EIA is required, the works lose their exemption from the requirement to obtain statutory consent. Sections 3.3.1.1 and 3.3.1.2 sets out the AA and EIA considerations, respectively, in relation to the proposed works.

### 3.2.2.1 Appropriate Assessment

A comprehensive Appropriate Assessment Screening Report (AASR) has been prepared in respect of the subject works to the Kilbarry - Knockraha No. 2 110 kV line and is included as **Appendix 1**. An AASR is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then it shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site; consequently, the proposed works have been subject to the Appropriate Assessment Screening process.

The assessment set out in the AASR is based on a desk study and field survey undertaken in August 2020. It specifically assesses the potential for the proposed development to result in significant effects on

As the applicable exemptions in this instance relate to those specified under Section 4 of the Act, and do not arise from the exempted development provisions of the Planning and Development Regulations 2001 (as amended) the restrictions on exemptions arising from Article 9 and 6 of the Regulations do not apply.



European sites in the absence of any best practice, mitigation or preventative measures. In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Nature Standard Forms and Conservation Objectives for the European Sites.
- Review of OS maps and aerial photographs of the site of the proposed project.
- Site visit conducted on the 19th August 2020 Olivia O'Gorman (B.Sc., M.Sc.).

The AASR has concluded that the proposed works will not have an impact on any designated sites as summarised below:

## Great Island Channel Special Area of Conservation (SAC) (001058), c. 2.4km south-east;

- The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. The proposed project works are located within the Butlerstown\_030 sub basin. This basin discharges to the Glashaboy River which subsequently discharges into the transitional waters between the River Lee and Lough Mahon. As such, there is no direct hydrological connectivity between the proposed works and the SAC. Consequently, no potential for significant effect via any hydrological pathway exists;
- No source-impact-pathway exists in relation to the habitats listed as QI's of this European site. As such, there is no potential for impacts to occur on these habitats; and
- There is no likelihood for significant effects and no further assessment is required

### > Blackwater River (Cork/Waterford) SAC (002170), c. 9.1km north; and

- The proposed development and the SAC are located within different hydrological catchments and no pathway for direct or indirect effect exists; and
- There is no likelihood for significant effects and no further assessment is required.

### Cork Harbour Special Protection Area (SPA) (004030), c. 433m south

- The proposed project works are located within the same hydrological catchment as this European site. However, the works are terrestrially based and there is no direct surface water connectivity between the proposed works areas and the European site;
- The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. Consequently, no potential for significant effect on supporting wetland habitat for SCI species, via any hydrological pathway, exists;
- The proposed works are associated with the refurbishment of existing infrastructure. There will be no loss of supporting habitat for SCI species within or outside the SPA. Based on the nature and scale of the works, the nature of the habitats at the works areas and the intervening buffer between the existing line and the SPA; no potential for significant effect as a result of disturbance/displacement of any SCI species exists; and
- There is no likelihood for significant effects and no further assessment is required.

The AASR concludes, it can be excluded on the basis of objective evidence, that there will be likely significant effects on European sites from the project alone, or in combination with other plans or projects.

## 3.2.2.2 Environmental Impact Assessment Screening

The requirement for Environmental Impact Assessment (EIA) has its origins in Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. This Directive has been amended three times and was codified by Directive 2011/92/EU in 2011. Directive 2011/92/EU was then subsequently amended by Directive 2014/52/EU in 2014.



The primary objective of the EIA Directive (Directive 2011/92/EU), as amended by Directive 2014/52/EU, is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for EIA, prior to development consent being awarded, of public and private developments that are likely to have significant effects on the environment. Section 172 of the Act provides the legislative basis for mandatory EIA:

"An environmental impact assessment shall be carried out by a Planning Authority or the Board, as the case may be, in respect of an application for consent for:

(a) proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which exceeds a quantity, area or other limit specified in that Schedule, and

(b) proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which does not exceed a quantity, area or other limit specified in that Schedule but which the planning authority or the Board determines would be likely to have significant effects on the environment."

Further to the above, Schedule 5 of the Planning and Development Regulations 2001 (as amended) ('the Regulations') differentiates between the projects that always require EIA and those for which an EIA may be required. These projects are listed in Schedule 5 Part 1 and Part 2 of the Regulations.

#### Schedule 5, Part 1 Projects

These are projects which are considered as having significant effects on the environment and require a mandatory EIA. The most relevant project type is identified in paragraph (19) which refers:

"Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres."

The proposed works do not involve the construction of any new overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres. The subject works do not exhibit any characteristics associated with the projects identified in Part 1, and therefore, an EIA is not automatically required.

#### Schedule 5, Part 2 Projects

These are projects where national authorities have to decide whether an EIA is needed. This is done by the "screening procedure", which determines the effects of projects on the basis of thresholds/criteria or a case by case examination. In general, the projects listed in Part 2 are those not included in Part 1 and which may be considered to have a lesser environmental impact.

In the context of Part 2 projects, the most relevant project type is identified in paragraph (3)(b) which refers:

"Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more."

As described in Section 2 of this report, the voltage rate of the Kilbarry - Knockraha No. 2 110 kV line is less than 200 kV. It is also important to highlight Class 13(a) which relates to extensions, changes development and testing:

"Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in part 1) which would:

(i) Result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and

(ii) Result in an increase in size greater than -



- An amount equal to 50% of the appropriate threshold,

Whichever is greater"

The proposed works will not result in an increase in size, capacity or threshold; specifically, the proposed works do not include for the extension of the line or movement of any individual transmission structures nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system. As such, the provisions of Class 13(a) are not applicable.

As the proposed works are not a type of project identified in Schedule 5 Part 1 or Part 2 of the Regulations, there is no automatic requirement under the EIA Directive for it to be subject to EIA. Notwithstanding, Section 172 of the Act also sets out the basis for EIA for developments which may not be of a scale included in Schedule 5 of the Regulations. This allows a consenting authority [Cork City Council] to require EIA where it is of the opinion that the proposed development (although sub-threshold) is likely to have significant effects on the environment, and therefore should be subject to EIA. In this context, the consideration of 'significant effect' as per Schedule 7 of the Regulations ('Criteria for Determining Whether Development Listed on Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment'). Class 15, Part 2 of Schedule 5 provides for EIA for developments under the relevant threshold, where the works would be likely to have significant effects on the environment:

"Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7."

Notwithstanding the fact that, as set out above, none of the statutory thresholds in Schedule 5 of the Regulations are applicable to the subject works, a sub-threshold EIA Screening Report (Appendix 2) concludes that impacts associated with the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line are not significant in the context of Schedule 7 of the Regulations. This conclusion is based on the findings of the analysis relating to the following:

- Characteristics of Project;
- Location of Project; and
- Type and Characteristics of Potential Impact

As part of this analysis, a broad range of environmental media have been assessed. No potential impacts of significance were identified during either the construction or operational phase of the proposed development's lifetime. Although the recommendation of the EIA Screening Report is that an EIA is not required, it is acknowledged that Cork City Council, as the competent authority, will decide on the necessity or otherwise on an EIA in this instance.

## 3.2.3 De-Exemption Considerations: Part IV and Part XIII of the Act

Part IV of the Act (Architectural Heritage) states that a planning authority, if it considers that all or part of an architectural conservation area (ACA) is of special importance to, or as respects, the civic life or the architectural, historical, cultural or social character of a city or town in which it is situated, may prepare a scheme setting out development objectives for the preservation and enhancement of that area, or part of that area, and providing for matters connected therewith. In this regard, a planning authority under subsection (7) of the Act can apply the designation of 'area of special planning control' to an ACA, or part of an ACA, to which a scheme is approved.

Special Planning Control Orders (S.84) may include provisions to limit or exclude certain types of development, such as transmission network infrastructure. Specifically, paragraph 87 states that 'any development within an area of special planning control shall not be exempted development where it contravenes an approved scheme applying to that area'. It is important to note that the renewal and altering of the 110 kV OHL within the Cork City Council functional area, between End Mast 01 (Kilbarry 110 kV Substation located at the northern extent of Cork City) and Angle Mast 45 (Ballinglanna townland, Co. Cork), is not situated within an ACA thus no limitations are applicable.



Part XIII of the Act (Amenities) sets out provisions for the preservation, improvement, extension of amenities, and the protection of the landscape. Specifically, Section 204 (1) states that a planning authority may, by order, for the purposes of the preservation of the landscape, designate any area or place within the functional area of the authority as a landscape conservation area (LCA) which under paragraph (2) the Minister may prescribe development normally exempted / permitted development as no longer exempt, including transmission network infrastructure. The renewal and altering of the 110 kV OHL within the Cork City Council functional area, is not situated within a LCA thus no de-exemptions on this basis are applicable.



#### PRECEDENT CASES

In order to assist the Planning Authority in their assessment of whether the proposal constitutes exempted development as per the provisions of the Act described in Section 3, a summary of applicable precedent cases is set out below . The objective of this analysis is to highlight that a certain degree of flexibility has historically been applied by relevant Authorities and An Bord Pleanála ('the Board') when determining whether development is or is not exempt / permitted development.

# Maynooth-Ryebrook 110 kV line, Co. Kildare - An Bord Pleanála (Ref: RL3080)

Rossmore Properties Ltd. ('the Referrer') submitted a Section 5 Referral to the Board on the  $6^{\text{th}}$  March 2013 on the following question:

"Whether the proposed renewing and altering of existing Maynooth - Ryebrook 110kv overhead line, is or is not development or is or is not exempted development"

Similar to the subject proposal, the renewal and alteration of the existing Maynooth - Ryebrook 110 kV overhead line comprised two distinct sub-types of work, including the following:

- Renewal of existing conductors (wires) along the entire length of the line which would be uprated to facilitate greater capacity while remaining at voltage rate of 110 kV. Similar to the proposed replacement of insulators, hardware and equipment and the renewal of shear blocks and painting / treatment of corrosion for the Kilbarry-Knockraha 110 kV line, the replacement of these new conductors would be 'visually identical' to what was already in-situ.
- Replacement of tower structures along the alignment of the line with new stronger and larger pylon structures, located immediately adjacent to the existing structures, c. 0.5 to 1.0 metres higher than the existing pylons. This again is similar to the proposed replacement of wooden polesets along the alignment of the Kilbarry-Knockraha 110 kV line.

EirGrid, the applicant of the Section 5 Declaration Request referred to the Board, concluded that the above development is exempted both under Section 4(1)(g) and Section 4(1)(h) which the Referrer refuted; specifically, the development does not come within the scope of either sections of the Act.

In considering the case, the Board's Inspector sets out several conclusions which are considered relevant in establishing a common basis for assessing the proposed works to the Kilbarry-Knockraha 110 kV line.

"The works in this case - the construction of new steel pylon structures/removal of existing structures, all involve "works" which include "any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal" as defined in Section 2(1) of the Act, and therefore constitute development."

"I am fully satisfied that EirGrid meets the definition of "statutory undertaker" and "electricity undertaking" under the provisions of the Planning and Development Act, and the Planning and Development Regulations"

In the context of the above conclusions, we are confident that the Planning Authority will similarly agree that the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line is indeed development and that EirGrid, as the "statutory undertaker" is responsible for operating and ensuring the maintenance of an efficient electricity transmission system. As such, these matters will consequently not be raised again in this section in the interest of brevity.

The Board considered that the proposed works (e.g. the renewing of intermediate pylons and their replacement with towers of similar design, in an immediately adjacent location on the same alignment) comprises,



"A single renewal project being undertaken as part of the statutory undertaker's routine function associated with transmission infrastructure maintenance in which there will be no increase in the voltage of the line from the existing 110 kV and where the alterations would not differ materially from the existing infrastructure being renewed"

The Board's conclusion that the proposed works come within the scope of Section 4 (1)(g) of the Act is a critical consideration for the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line due to the significant similarity between the projects, particularly with regard to the removal and replacement of transmission structures (e.g. wooden polesets).

It is important to highlight that the Board's decision on this case was judicially reviewed in the High Court in the case of *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors* [2014] IEHC 557. The High Court upheld the decision of Board in that the 'construction of new steel electricity pylons in new locations along the route of the Maynooth-Ryebrook 110 kV electricity line, at a height of 0.5 to 1.0 metre higher than the existing pylons, is exempted development.

# Arva-Shankill 110 kV Line, Co. Cavan - An Bord Pleanála (Ref: RL3328)

EirGrid ('the Referrer') submitted a Section 5 Referral to the Board on the 3<sup>rd</sup> June 2015 on the following question,

"Whether a change in existing structure types (steel intermediate towers being replaced with wooden intermediate polesets) on the Arva-Shankill 110 kV circuit no.1 is or is not exempted development"

This specific query is considered particularly relevant in the context of the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 (steel intermediate towers) with wooden polesets as part of the renewal and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line.

EirGrid concluded that the above development is exempted under Section 4(1)(g) on the basis that 'renewing', 'altering' and 'removing' implies a physical change to the existing structure, which in this case, includes for the replacement of steel transmission structures with wooden polesets. Having regard to RL3080 (Section 4.1 - Maynooth-Ryebrook 110 kV electricity line) and the direct comparability between the two projects, EirGrid set out a clear analysis demonstrating that a precedent has been established for this type of work, maintenance and improvement of transmission infrastructure.

The Board's Inspector, in their assessment of the proposed works in the context of Section 4(1)(g), provides an in-depth analysis of terminology of 'alter' and 'renewal' with regard to the cited provision:

"Altering' can be viewed as affecting, and applying to, apparatus in a manner that changes the apparatus or makes it different. Therefore, the purpose of altering apparatus, i.e. altering the steel intermediate towers to wooden polesets, could reasonably mean making such alterations to the established apparatus"

"In the context of the proposed development, the understanding of the purpose of 'renewing' could only be construed in this instance as 'replacement' of the existing polesets. One would not be giving fresh life to or restoring the established steel towers"

Against this backdrop, the Inspector states that it is reasonable to conclude that replacing steel intermediate towers with wooden polesets by the statutory undertaker (EirGrid) would fall within the scope of Section 4(1)(g). However, the Inspector also draws attention to Section 4(1)(h) and the proposed replacement of one type of support structure, i.e. steel intermediate towers, by an entirely different type of support structure, i.e. wooden polesets. Specifically, where the replacement of transmission structures reasonably falls within the scope of 'altering / renewal', the physical change from steel towers to wooden polesets constitutes a material change, a substantial change in materials, form, appearance and structure, which renders 'the appearance of the replacement apparatus inconsistent with the character of the structures being replaced'. As such, the Inspector concludes that,



"One cannot reasonably conclude that the purpose of "altering" in accordance with section 4(1)(h), by the removal of steel towers and their replacement by materially different structures, i.e. wooden polesets, could be construed as exempted development"

The Board did not adopt the Inspector's recommendation that the proposed works to the Arva-Shankill 110 kV circuit No.1 line did not constitute exempted development for the following reasons:

- ➤ The proposed works form one part of the renewing and altering operations on the wider general uprate works on the existing Arva-Shankill 110kV Circuit Number 1 and are being undertaken as part of the statutory undertaker's routine function associated with transmission infrastructure;
- The proposed wooden polesets are, in this case, considered to be of less visual significance than the steel towers being replaced and do not give rise to any material adverse planning considerations; and
- The replacement of steel intermediate towers with wooden polesets is considered, in this case, to come within the scope of section 4(1)(g) of the Act which facilitates, inter alia, the altering and renewing of apparatus by a statutory undertaker

It is important to re-emphasise that the exempted development query posed to the Board under RL3328 related to the replacement of 54 no. steel towers with wooden polesets whereas there are only 2 no. steel towers in the current section 5 submission subject to replacement. Although at significantly reduced scale than the precedent case cited, we are confident that the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets will result in lower visual impact and will not give rise to any material adverse planning considerations (please refer to the EIA Screening Report – **Appendix 2** for further information). Furthermore, the OHL already includes 55 no. double wooden polesets, which is over half of the transmission structures comprising the line and as such the works are consistent with the established visual character.

The Board's decision on this case, including the Inspector's important analysis of 'alter' and 'renewal' within the context of Section 4(1) of the Act, further establishes the precedent initially set by *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors* [2014] IEHC 557 judgement which indicates that the intended spirit, intent and letter of Section 4(1)(g) is to provide flexibility to statutory undertakers in carrying out their statutory functions.



#### Conclusion

This Section 5 Declaration Report has been prepared to assist Cork City Council in their determination of whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development in the context of the overall line as provided for by Section 5(1) of the Act.

The Report has set out the legislative basis of the proposal and has comprehensively examined the two principal considerations of the Section 5 Declaration process:

- Does the proposal constitute work / development?
- Does the proposal qualify as exempted development?

As demonstrated within the Report, proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line in our professional opinion, comes within the scope of the definition of development contained in Section 3 of the Planning and Development Act 2000 (as amended) ('the Act'). Secondly, the proposal is considered to fall under Section 4(1)(g) and (h) of the Act which states that the following is exempted development

"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose".

"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures".

The legislative analysis (Section 3) and corresponding overview of precedent cases sets out the following conclusions in respect to the applicability of the above Sections of the Act to the proposed renewal and altering of the existing Kilbarry - Knockraha No. 2 110 kV overheard transmission line:

- EirGrid is a statutory undertaker as per Section 2 of the Act. The proposed renewal and altering of the existing Kilbarry Knockraha No. 2 110 kV line relates to the statutory undertaker's routine function associated with transmission infrastructure maintenance and improvement.
- The proposed works do not extend the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV).
- The proposed works are all within the development envelope of the existing 110 kV OHL (maintained by the TAO). The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.
- > The Board's decisions on cases RL3080 and RL3328 and the High Court's judgement set out in *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors [2014] IEHC 557* establishes a strong precedent that the intended spirit, intent and letter of Section 4(1)(g) is to provide flexibility to statutory undertakers in carrying out their statutory functions.

The proposed works have been screened against the statutory requirements for both Appropriate Assessment and Environmental Impact Assessment which, as demonstrated within the appended Appropriate Assessment Screening Report (Appendix 1) and EIA Screening Report (Appendix 2), neither are required in the context of the works.

Accordingly, we request that Cork City Council confirm that, while the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line constitutes development, these works are in fact exempted development under the provisions (Section 4(1)(g) and (h)) of the Act.