



**Substation development in the townlands of
Gotoon, Coolscart, and Kilfrush in County
Limerick.**

East Limerick Substation Development

Planning and Environmental Report

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Executive Summary

This Planning and Environmental Report has been prepared by Gravis Planning on behalf of Harmony Solar East Limerick Limited in support of an application to An Coimisiún Pleanála under Section 182A of the Planning and Development Act 2000, as amended, for the East Limerick Substation Development. The application site extends to 17.02 hectares within the townlands of Gotoon, Coolscart and Kilfrush, County Limerick.

The Proposed Substation Development comprises a new 220kV Loop In Loop Out Gas Insulated Switchgear substation, including Transmission System Operator and Customer compounds, a Battery Energy Storage System and associated grid connection infrastructure. It will connect to the existing 220kV transmission line traversing the site and is required to facilitate connection of the proposed East Limerick Solar Farm to the national transmission network.

The site and layout have been developed through an iterative constraints-led design process having regard to access, residential receptors, flood risk, the River Camogue, archaeology, existing hedgerows and other environmental considerations. The Proposed Substation Development forms part of the wider East Limerick Overall Project together with the Proposed Solar Farm Development, which is the subject of a separate planning application to Limerick City and County Council.

A comprehensive suite of technical and environmental assessments accompanies the application, including assessments of biodiversity and Appropriate Assessment, water and flood risk, landscape and visual effects, archaeology, noise, traffic and transport, construction management and BESS safety. These assessments do not identify significant residual adverse environmental effects. A Natura Impact Statement also accompanies the application and concludes that the development will not adversely affect the integrity of the Lower River Shannon SAC, either alone or in combination with other plans or projects.

The Proposed Substation Development is supported by national, regional and local planning policy relating to renewable electricity, electricity transmission infrastructure and energy storage. Having regard to the established need for the development, its direct relationship with the existing 220kV transmission network, the site-specific design response and the findings of the supporting assessments, the development is considered consistent with the Limerick Development Plan 2022–2028 and with the proper planning and sustainable development of the area.

1.0. Introduction

1.1. Overview

- 1.1.1. This Planning and Environmental Report is submitted to An Coimisiún Pleanála by Gravis Planning¹ on behalf of Harmony Solar East Limerick Limited², in support of an application for approval under Section 182A of the Planning and Development Act 2000, as amended, for a proposed 220kV substation, Battery Energy Storage System ('BESS') and associated grid connection infrastructure within the townlands of Gotoon, Coolscart and Kilfrush in County Limerick (hereafter referred to as the 'Proposed Substation Development').
- 1.1.2. This Report provides details of the site, the nature and extent of the Proposed Substation Development, the statutory and planning context, relevant policy and the planning and environmental considerations arising from the development. It should be read in conjunction with the full suite of drawings, environmental assessments and other documents submitted as part of the application.
- 1.1.3. The Proposed Substation Development has been subject to a programme of technical and environmental assessment which has informed the design of the development. The supporting application documentation includes an Environmental Impact Assessment Screening Report and a Natura Impact Statement, together with the individual technical assessments referenced throughout this Report.
- 1.1.4. This Planning and Environmental Report is set out as follows:
- Section 1 - Introduction
 - Section 2 - Site Location and Description
 - Section 3 - Proposed Substation Development
 - Section 4 - Pre-Application Consultation
 - Section 5 - Planning Policy Context
 - Section 6 - Planning and Environmental Considerations
 - Section 7 - Planning Assessment
 - Section 8 - Conclusion

1.2. The Applicant

- 1.2.1. Harmony Solar East Limerick Limited is owned by Harmony Solar Ireland Ltd. and ESB Solar (Ireland) Ltd. Harmony Solar Ireland Ltd. is an independent renewable energy developer - the company has an extensive portfolio of projects throughout Ireland and has considerable knowledge in the development of solar energy projects. ESB Solar (Ireland) Ltd. is a member of the ESB group of companies.

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1.3. Statutory Route

- 1.3.1. Section 182A of the Planning and Development Act 2000, as amended, provides the approval route for development comprising or for the purposes of electricity transmission. Section 182E requires a prospective applicant for electricity transmission development to enter into pre-application consultation with An Coimisiún Pleanála before making the application.
- 1.3.2. The Applicant entered that process in July 2025. Following consultation and the submission of the final proposed scope, including the BESS, ACP determined under Ref. ACP-323201-25 that the Proposed Substation Development falls within the scope of Section 182A. The statutory consultation and determination are described in Section 4.
- 1.3.3. The substantive decision-making framework is contained in Section 182B. In deciding the application, ACP is required to consider the consequences of the development for the proper planning and sustainable development of the area and the relevant environmental and European site considerations, having regard to the applicable development plan and the other statutory matters identified in the Act. Section 7 of this Report is structured around that planning test.

1.4. Overview of the Proposed Substation Development

- 1.4.1. The Proposed Substation Development description, as contained on the statutory notices for the planning application, reads as follows:

The proposed development will consist of the construction of a 220kV Loop In Loop Out (LILO) Gas Insulated Switchgear (GIS) substation, Battery Energy Storage System (BESS) and associated works required for a solar farm development within a site of 17.02 hectares which will include the following:

- *Transmission System Operator (TSO) compound with an area of 14,158m², containing a two-storey 220kV GIS substation building with a footprint of 1,844m², a total floor area of 3,550.8m², and a height of 20.7m.*
- *Customer compound with an area of 4,576m², containing a customer building with a footprint of 346.2m², a total floor area of 311.8m² and a height of 7.62m.*
- *220kV customer transformer positioned within bunded enclosures, with a height of 9.5m above finished ground level.*
- *220kV electrical infrastructure including transformers, switchgear, gantries, insulators, conductors, protection and control equipment, and all associated electrical plant and apparatus.*
- *BESS located within a dedicated BESS compound and including:*
 - *55 no. containerised battery storage modules, each measuring 6.06m long, 2.44m wide and 2.9m high.*
 - *28 no. containerised transformer and power conversion / conditioning units, each measuring 6.06m long, 2.44m wide and 2.9m high.*
 - *Ancillary BESS infrastructure including inverters, transformers, switchgear, control equipment, thermal management systems, fire*

detection and suppression systems, acoustic screening, and associated electrical plant.

- *Removal of 1 no. existing 25m high steel lattice tower, and the installation of 2 no. steel lattice towers of 26.5m high, foundations and associated insulators, hardware and conductor.*
- *4no. lightning protection masts, with a height of 18m.*
- *1 no. telecommunications mast, with a height of 37.52m.*
- *140m of underground electrical cable and associated ducting, including joint bays, cable sealing end compounds, marker posts and associated infrastructure.*
- *Internal access tracks.*
- *A new access point from the L1509 public road.*
- *Removal of derelict farm building.*
- *Landscaping and biodiversity enhancement measures.*
- *Security gates, boundary fencing and all associated ancillary development, site works and services.*

A Natura Impact Statement will be submitted with the application.

1.4.2. The Proposed Substation Development forms part of a wider “Overall Project”. The Overall Project comprises the following components:

- The Proposed Substation Development, comprising the proposed 220kV substation development, BESS and associated grid infrastructure, for which approval is sought from ACP as Strategic Infrastructure Development under Section 182A of the Planning and Development Act 2000, as amended.
- A solar farm and associated cable route (the ‘Proposed Solar Farm Development’), for which planning permission has been sought from Limerick City and County Council (‘LCCC’) under Section 34 of the Planning and Development Act 2000, as amended. (Planning Reg. Ref. 2660918, lodged 10th August 2026)

1.4.3. The Red Line Boundary for the Proposed Substation Development overlaps with, and is located within, the Red Line Boundary for the Proposed Solar Farm Development. The Proposed Substation Development is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network.

1.4.4. Notwithstanding the separate statutory consent processes, the Proposed Substation Development and Proposed Solar Farm Development are functionally related components of the Overall Project. Relevant assessments supporting this application have therefore considered the potential environmental effects of the Overall Project, including the interaction between the Proposed Solar Farm Development, associated cabling infrastructure, proposed 220kV substation, BESS and grid connection works.

1.5. Need for the Development

- 1.5.1. The need for accelerated renewable energy development has been the focus of many European agreements, as well as national and regional policy documents, for many years as a necessary response to climate change.
- 1.5.2. Solar farm development is essential for Ireland to meet its legally binding climate and energy commitments under the Climate Action Plan 2025 ('CAP25'). CAP25 reaffirms and reinforces established targets to achieve 50% of overall electricity generation from renewable sources by 2025 and 80% by 2030³, including up to 5 GW of solar PV by 2025 and 8 GW by 2030. The plan lays out a roadmap to *"achieving a 51% reduction in emissions to 2030, and to achieving climate neutrality by no later than 2050"*⁴.
- 1.5.3. National planning policy also recognises the importance of renewable energy development and the infrastructure required to support it, including the reinforcement and development of the electricity transmission network to accommodate increasing levels of renewable generation.
- 1.5.4. The Proposed Substation Development forms an integral component of the wider Overall Project and is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network. The development will provide the necessary 220kV substation and loop-in/loop-out grid connection infrastructure to enable electricity generated by the Proposed Solar Farm Development to be exported to the national grid.
- 1.5.5. The BESS will provide electricity storage capacity as part of the Proposed Substation Development, allowing electricity to be stored when generation exceeds immediate demand and subsequently exported when required. This will support the efficient integration of renewable electricity into the national electricity system.
- 1.5.6. The need for increased solar generation capacity, together with the associated grid connection, transmission and storage infrastructure required to support that capacity, is clear. The need for the Proposed Substation Development and its compliance with relevant planning and energy policy are considered further in Sections 5 and 7 of this Report.

³ CAP25 - Page 87

⁴ CAP25 - Page 19

2.0. Site Location & Description

2.1. Site Location

- 2.1.1. The site of the Proposed Substation Development is situated in County Limerick, in the townlands of Gotoon, Coolscart and Kilfrush. The Proposed Substation Development comprises an area of 17.02 hectares and is located south-west of Hospital village and north-west of Knocklong village.
- 2.1.2. The principal development area lies within an established rural agricultural landscape. The R513 is located to the east, the R516 to the north and the L1509 forms the principal local road connection to the south. The red line boundary also includes those lands and sections of the road network required for the proposed access works and transformer delivery arrangements.



Figure 2-1: Proposed Substation Development

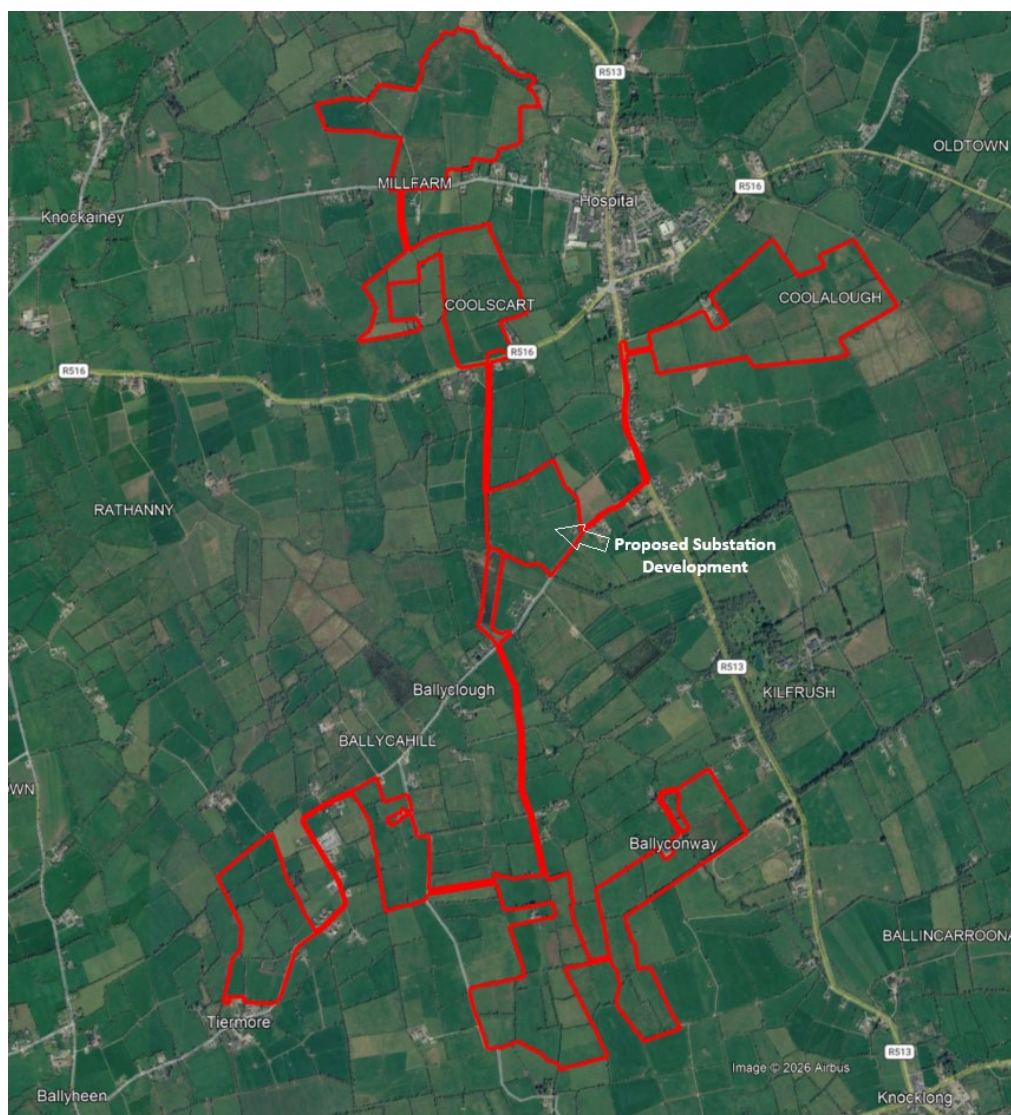


Figure 2-2: Overall Project

- 2.1.3. The red line boundary shown in Figure 2-1 illustrates the full extent of the Proposed Substation Development. Whereas Figure 2-2 shows the extent of the Overall Project, which includes the East Limerick Solar Farm Development.

2.2. Site Description

- 2.2.1. The principal lands associated with the Proposed Substation Development are situated in a predominantly rural, agricultural area and are of generally flat topography. The lands are currently in agricultural use and lie within the 'Agricultural Lowlands' Landscape Character Area identified in the Limerick Development Plan 2022–2028. The surrounding landscape is characterised by agricultural fields, established hedgerows and field boundaries, dispersed residential development and agricultural buildings.

- 2.2.2. There are no residential dwellings within the red line boundary for the Proposed Substation Development. There are, however, residential properties and farm holdings within the surrounding area, including properties along the L1509 public road to the south of the site and within the wider rural area between Hospital and Knocklong. These receptors have been considered in the noise, traffic, landscape and construction assessments.
- 2.2.3. An existing 220kV overhead electricity transmission line traverses the site. The Proposed Substation Development will connect to this existing transmission infrastructure by means of a loop-in/loop-out connection. The presence of this existing transmission infrastructure is an important characteristic of the site and has informed the location and design of the Proposed Substation Development.
- 2.2.4. The site comprises agricultural fields defined by existing hedgerows and field boundaries. An existing agricultural building is located within the south-eastern area of the site and a derelict farm building is located within the northern area. The derelict farm building will be removed as part of the Proposed Substation Development.
- 2.2.5. The principal site access will be from the L1509 public road. The application boundary also includes the areas required to facilitate the delivery of the 220kV customer transformer, including localised works along the L1509 and at its junction with the R513, together with the contingency transformer delivery route extending northwards towards the R516.
- 2.2.6. The site associated with the Proposed Substation Development is within four private landownerships. Agreements are in place between the landowners and the Applicant to facilitate the construction and operation of the Proposed Substation Development on these lands. Letters of consent from the landowners have been provided to the Applicant and are submitted with the SID application.

2.3. Site Selection

- 2.3.1. The location of the Proposed Substation Development has been informed by the requirements of the wider Overall Project and the need to provide an appropriate connection between the Proposed Solar Farm Development and the existing national electricity transmission network.
- 2.3.2. The site is considered particularly suitable for the Proposed Substation Development as the existing 220kV overhead transmission line traverses the lands and the site is located within the wider Proposed Solar Farm Development area. This enables the Proposed Solar Farm Development to connect to the existing transmission network by means of a direct 220kV loop-in/loop-out connection.
- 2.3.3. The site selection and design process has also had regard to land availability, access and constructability, surrounding residential development, existing field boundaries and environmental constraints. The layout has been developed iteratively to respond to these considerations and to minimise potential effects where practicable. In

particular, the Proposed Substation Development makes use of existing electricity transmission infrastructure, while the location within the wider Overall Project lands provides a direct functional relationship with the Proposed Solar Farm Development and avoids the requirement for an extensive off-site grid connection.

- 2.3.4. Alternative land parcels and configurations were reviewed during the feasibility stage. Areas affected by identified constraints, including recorded archaeological features, residential properties, watercourses, flood risk areas and environmental sensitivities, were excluded from the developable area or removed from further consideration during the design process.
- 2.3.5. The final site extents and layout represent the outcome of an iterative constraints-led design process, balancing technical, environmental and planning considerations whilst maximising the use of available agricultural land in proximity to the existing transmission network.

2.4. Planning History

- 2.4.1. A review of the planning history associated with the Proposed Substation Development site and its immediate surrounding area has been undertaken.
- 2.4.2. The Proposed Substation Development site overlaps with the red line boundary of the Proposed Solar Farm Development (Limerick City and County Council Ref. 26/60918), for which a separate application for planning permission has been submitted to Limerick City and County Council under Section 34 of the Planning and Development Act 2000, as amended. The Proposed Solar Farm Development forms the other component of the Overall Project and is considered cumulatively with the Proposed Substation Development, insofar as reasonably practicable, throughout the supporting application documentation.
- 2.4.3. The planning history review has not identified any extant permission or other land-use commitment which would prevent or materially constrain the Proposed Substation Development. The Proposed Substation Development is assessed on its own merits under the Section 182A statutory process.

3.0. Proposed Substation Development

3.1. Overview of Development

3.1.1. The Proposed Substation Development will comprise the following elements:

- 220kV GIS Substation and Compounds
- Battery Energy Storage System (BESS)
- Overhead Line and Loop In Loop Out (LILo) Works
- Underground Cabling
- Lightning Protection
- Telecommunications Infrastructure
- Site Access
- Parking and Maintenance Access
- Lighting
- Fencing and Security Gate
- Close-Circuit Television (CCTV)
- Temporary Construction Compound
- Landscaping and Hedgerow
- Removal of Existing Structures
- Ancillary Development.

220kV GIS Substation and Compounds:

- 3.1.1. The Proposed Substation Development will comprise a new 220 kV LILo substation, including a Transmission System Operator (TSO) compound and a Customer compound.
- 3.1.2. The TSO compound will include a 220kV GIS substation building with a total floor area of 3,550.8m² and a height of 20.7m. It will also include 220kV electrical infrastructure, including switchgear, gantries, insulators, conductors, protection and control equipment, and all associated electrical plant and apparatus required to facilitate the loop-in/loop-out connection to the existing 220kV overhead line.
- 3.1.3. The Customer compound will include a customer building with a total floor area of 311.8m² and a height of 7.62m, accommodating a switchgear room, SCADA room, office, storeroom, hall, mess room and WC. The Customer compound will include a 220kV customer transformer positioned within a banded enclosure, with a height of 9.5m above finished ground level, together with associated electrical plant, switchgear, control equipment and cabling.
- 3.1.4. The compounds will include internal access tracks to the two buildings, areas of gravel and hardstanding, service and maintenance access, drainage infrastructure, security fencing and gates. Parking will also be provided within the compounds. Wastewater from the on-site washroom and toilet facilities will be collected in a sealed holding

tank and periodically removed by a licensed waste management contractor. Potable water will be delivered to the site as required.

Battery Energy Storage System (BESS)

- 3.1.5. The Proposed Substation Development will include a Battery Energy Storage System (BESS). The BESS will be located within a dedicated BESS compound forming part of the Proposed Substation Development.
- 3.1.6. The BESS compound will include 55 no. containerised battery storage modules, each measuring 6.06 m long, 2.44 m wide and 2.9 m high. It will also include 28 no. containerised transformer and power conversion / conditioning units, each measuring 6.06 m long, 2.44 m wide and 2.9 m high. The BESS units will generally be supported on concrete rails, with localised concrete slabs provided where required.
- 3.1.7. The BESS compound will include ancillary BESS infrastructure, including inverters, transformers, switchgear, control equipment, thermal management systems, fire detection and suppression systems, acoustic screening, cabling, ducting and associated electrical plant.
- 3.1.8. Each BESS unit will be equipped with a comprehensive fire detection and mitigation system, including in-cell temperature monitoring, unit-level off-gas detection, and smoke detection to provide early warning of abnormal battery conditions. Active fire suppression systems, such as aerosol or clean-agent suppression, will be included alongside off-gas ventilation and explosion relief measures designed in accordance with relevant National Fire Protection Association (NFPA) guidance. The selected BESS technology will have undergone testing to UL 9540A or CSA TS800 standards, recognised North American fire-safety testing standards for battery energy storage systems, demonstrating its capability to limit thermal runaway propagation and reduce the potential for fire spread beyond the affected unit. Water is not proposed to be used on site for fire suppression or boundary cooling as the testing completed on the BESS units has shown this not necessary to prevent fire propagation to other units.

Overhead Line and Loop In Loop Out (LILO) Works

- 3.1.9. A 220 kV overhead line currently traverses the Proposed Substation Development site. To facilitate the Proposed Substation Development, the existing overhead line will be reconfigured to provide a LILO connection to the proposed 220 kV substation.
- 3.1.10. Two new 220kV steel towers will be fitted onto the existing overhead line. These towers will deviate the overhead line for 52m onto two new steel gantries within the EirGrid TSO compound. Associated cable sealing ends and post insulators will transition the overhead line to two circuits of 220 kV underground cable, which will connect into the proposed 220 kV GIS Substation. There will be three associated power cables within a single circuit, this cable trench will enclose 2 no. communication ducts and a single earth continuity conductor (ECC) duct. A communication chamber

will be required beside the proposed gantry structures to transition the communications link between the overhead line and the underground cable.

Underground Cabling

- 3.1.11. From the cable sealing ends at the two new gantries, 69m of 220 kV underground cabling will continue to the proposed 220 kV GIS Substation. Associated infrastructure will include ducting, communications link, marker posts and other ancillary works.
- 3.1.12. Underground cabling and ducting will also be provided within the Proposed Substation Development site to connect the TSO compound, Customer compound, BESS compound, transformer infrastructure and associated electrical plant.
- 3.1.13. The Proposed Substation Development will be connected to the Proposed Solar Farm Development by way of underground electrical cabling routed across private lands and some sections of public road. This solar farm connection cabling is located within the Red Line Boundary for the Proposed Solar Farm Development and is subject to the separate planning application to Limerick City and County Council.

Lightning Protection

- 3.1.14. The Proposed Substation Development will include 4 no. lightning protection masts, with a height of 18m. Lightning protection will be provided to protect the substation compounds, BESS compound and associated electrical infrastructure.

Telecommunications Infrastructure

- 3.1.15. The Proposed Substation Development will include 1 no. telecommunications mast with a height of 37.52m. The telecommunications mast will support the operational, control and communications requirements of the Proposed Substation Development.

Site Access

- 3.1.16. A new access point will be provided from the L1509 public road to serve the Proposed Substation Development. The access will facilitate construction, operation, maintenance and emergency access to the substation and BESS compounds. Internal access tracks will be constructed within the site to provide access to the TSO compound, Customer compound, BESS compound and other operational areas.
- 3.1.17. The L1509 will also provide the principal route for delivery of the 220kV customer transformer. Localised widening of the L1509 within the public road boundary will be undertaken where required to accommodate the transformer delivery vehicle, together with localised works at its junction with the R513. Any temporary alterations required to the existing footpath, roadside signage or lighting at the junction will be reinstated following completion of the transformer delivery.

- 3.1.18. A contingency transformer delivery route is also included within the Red Line Boundary, extending northwards across agricultural lands to the R516. This follows the same corridor as the underground cable route associated with the Proposed Solar Farm Development and is included as an alternative delivery option should it be required. No additional hedgerow removal or ground disturbance is anticipated in association with this route, as any necessary works would be undertaken in conjunction with the cable installation. Any works required solely to facilitate the transformer delivery would be temporary.

Parking and Maintenance Access

- 3.1.19. Service and maintenance parking facilities will be provided within the Proposed Substation Development site. The site will not be open to the public and will be accessed only by authorised personnel for operational, maintenance, inspection and emergency purposes.

Lighting

- 3.1.20. Lighting will be provided within the Proposed Substation Development. Lighting will ordinarily remain switched off and will only be activated when required for operational, maintenance, switching or emergency purposes. Lighting will be manually activated at the entrance gate and is expected to be required only intermittently during the year.

Fencing and Security Gate

- 3.1.21. The Proposed Substation Development will include security gates, boundary fencing and all associated security infrastructure. The TSO compound, Customer compound and BESS compound will be secured by perimeter fencing, including palisade fencing, together with post and rail / stockproof fencing.

Closed-Circuit Television (CCTV)

- 3.1.22. CCTV cameras will be installed and will be directed internally within the development and will therefore not monitor lands outside of the boundary. The CCTV will operate using passive infra-red technology.

Temporary Construction Compound

- 3.1.23. The Proposed Substation Development will include a temporary construction compound located within the red line boundary (2,700 m²). Given the confined area and constraints within the Proposed Substation Development site, construction sequencing will need to be considered at the detailed design phase to facilitate the temporary construction compound, the construction of the cable route and the construction of the substation.

3.1.24. The temporary construction compound will include a 'portacabin' site office with employee parking, welfare facilities that comply with the Safety, Health and Welfare at Work (Construction) Regulations 2013 - Part 14 Construction Site Welfare Facilities (Construction Site Welfare Facilities), and shall be used for storage of all construction materials and machinery. The compound may also include:

- Bunded fuel storage area.
- Potable water supply.
- Contractor lock-up facility.
- Water tanker.
- Diesel generator.
- First aid facilities.

3.1.25. A layer of granular material will be spread and lightly compacted within the temporary construction compound to provide hardstanding for site offices and storage containers. Areas of the compound may be used as vehicle hardstanding.

3.1.26. The temporary construction compound will be removed on completion of the construction phase, and the area will be reinstated to its original condition.

Landscaping and Hedgerows

3.1.27. Existing hedgerows and field boundaries will be retained where possible. Some hedgerow and vegetation removal will be required to facilitate the substation compound which includes site access, internal access tracks, electrical infrastructure, cabling, drainage infrastructure and visibility splays.

3.1.28. Landscaping and biodiversity enhancement measures will be provided as part of the Proposed Substation Development. These measures will include new native hedgerow planting, reinforcement of retained existing field boundaries, grassland enhancement and other biodiversity measures as required.

Removal of Existing Structures

3.1.29. The Proposed Substation Development will include the removal of a derelict farm building within the site. The development will also include the removal of 1 no. existing 25m steel lattice tower and any associated redundant infrastructure required to facilitate the proposed 220kV loop-in/loop-out connection works.

Ancillary Development

3.1.30. The Proposed Substation Development will include all associated and ancillary development, site works and services, including earthworks, localised alterations to the landscape, underground services, ducting, cabling, drainage, signage, lighting, fencing, access infrastructure, landscaping and site reinstatement.

Proposed Solar Farm Development

- 3.1.31. The Proposed Solar Farm Development is the subject of a separate application to Limerick City and County Council and comprises ground-mounted solar photovoltaic panels and associated infrastructure, including electrical plant, internal access tracks, underground cabling, site access works, and landscaping and biodiversity measures. The Proposed Solar Farm Development lands extend to 210 hectares across eight land parcels in County Limerick.

4.0. Pre-Application Consultation

4.1. Section 182E Pre-Application Consultation

- 4.1.1. Section 182E(1) of the Planning and Development Act 2000, as amended, requires a prospective applicant proposing to make an application for approval in respect of electricity transmission development to enter into pre-application consultations with ACP before making the application. Under Section 182E(2), ACP may provide advice to a prospective applicant regarding the proposed application, including the procedures involved in making the application and the considerations relating to proper planning and sustainable development or the environment which may have a bearing on its decision.
- 4.1.2. Harmony Solar East Limerick Limited submitted a request to ACP on 25th July 2025 to enter into pre-application consultations under Section 182E. The request related to the proposed development of the 220kV substation and associated loop-in/loop-out connection to the existing 220kV overhead transmission network on lands to the west and south of Hospital and north-west of Knocklong, County Limerick.
- 4.1.3. At the time the consultation process commenced, two potential locations were under consideration for the proposed substation. One option was located to the south of Hospital, with access from the L1509 (the subject location), and the second was located north-west of Knocklong.
- 4.1.4. A pre-application consultation meeting was held with ACP on 14th October 2025. The purpose of the consultation was principally to establish whether the proposed substation and associated grid connection constituted Strategic Infrastructure Development for the purposes of Section 182A of the Planning and Development Act 2000, as amended. During the meeting, the proposed development and its relationship with the wider East Limerick Solar Farm project were discussed. ACP representatives advised that the proposed substation would constitute a new node on the 220kV transmission network, that the substation would constitute electrical plant and that the substation and loop-in/loop-out connection would form part of the transmission system when operational.
- 4.1.5. The two potential substation locations were also discussed. ACP advised that a single location would need to be identified before the pre-application consultation process could be concluded. The consultation process therefore remained open while the location and design of the Proposed Substation Development continued to develop.
- 4.1.6. Other matters discussed during the meeting included access and road requirements, flood risk, landscape and visual impact, hedgerow removal, Appropriate Assessment, cumulative consideration of the proposed solar farm and substation development, and engagement with the National Monuments Service in relation to archaeology.

4.2. SID Determination

- 4.2.1. Following the pre-application meeting, the design of the Proposed Substation Development continued to progress. The site accessed from the L1509, identified as Option 1 during the consultation process, was selected as the preferred location for the Proposed Substation Development. The Proposed Substation Development was also amended following the meeting to incorporate a BESS within the development. The BESS had not formed part of the proposal considered at the pre-application consultation meeting.
- 4.2.2. On 3rd July 2026, the Applicant submitted further information to ACP confirming the selected substation location and advising that the proposed development had been amended to include the BESS. The Applicant requested that the Section 182E pre-application consultation process be closed at that time.
- 4.2.3. Section 182A applies where an undertaker intends to carry out development comprising or for the purposes of electricity transmission. For the purposes of Section 182A, transmission includes the transport of electricity by means of a high-voltage line where the voltage is 110kV or more and is also construed in accordance with the definition of electricity transmission contained in the Electricity Regulation Act 1999, as amended. The ACP Inspector considered that the proposed 220kV substation and loop-in/loop-out grid connection constituted electricity transmission development for the purposes of Section 182A.
- 4.2.4. The Inspector also considered the status of the BESS, having regard to its relationship with the proposed 220kV substation and grid connection. In this regard, the Inspector concluded that, in the specific circumstances of the Proposed Substation Development, the 220kV substation, grid connection and BESS would form a single system used for the conveyance of electricity and that the BESS therefore fell within the scope of Section 182A as part of the wider Proposed Substation Development.
- 4.2.5. ACP considered the submissions on file and the Inspector's Report at its meeting on 17th July 2026. By Direction dated 20th July 2026 under Ref. ACP-323201-25, ACP determined that the Proposed Substation Development falls within the scope of Section 182A and that an application should therefore be made directly to ACP.

4.3. Prescribed Bodies

- 4.3.1. Section 182A(4)(b) requires a copy of the application to be provided to the relevant local authority and prescribed authorities, together with notice of the period during which submissions or observations may be made to ACP. As part of its Direction on the Section 182E process, ACP identified the prescribed bodies considered relevant to the Proposed Substation Development. These comprise:
- The Minister for Housing, Local Government and Heritage.
 - The Minister for Environment, Climate and Communications.
 - The Commission for Regulation of Utilities.
 - Limerick City and County Council.

- Uisce Éireann.
- The Office of Public Works.
- The Health Service Executive.
- The Heritage Council.
- An Taisce.
- Inland Fisheries Ireland.
- The Health and Safety Authority.

4.3.2. The relevant bodies have therefore been notified of the application in accordance with the statutory requirements applying to the Proposed Substation Development.

4.4. Consultation with Limerick City and County Council

4.4.1. Separate pre-planning consultation was undertaken with Limerick City and County Council in relation to the wider Overall Project. Meetings were held on 4th September 2025 and 6th March 2026 to discuss the emerging development, relevant planning considerations and the scope of the technical and environmental information being prepared.

4.4.2. The Proposed Substation Development is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network and the two developments are functionally related components of the Overall Project. The consultation with Limerick City and County Council therefore considered both the Proposed Solar Farm Development and the associated substation and grid connection infrastructure.

4.4.3. Representatives from the Council's planning team provided feedback and guidance on key topics at both meetings. This is summarised below:

- **Principle of development** – Positive policy context exists for renewable energy developments, including the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region which strongly support renewable energy development. Objective CAF O27 of the Limerick Development Plan 2022-2028, 'Renewable Energy Production', seeks to facilitate the production of solar energy within the county. In light of the policy context the council was generally supportive and advised the proposal was considered acceptable in principle.
- **Siting and Design** – The Council representatives advised that a Landscape and Visual Impact Assessment (LVIA) should be submitted with the planning application. They advised that removal or disturbance of hedgerows should be avoided where possible. The Council representatives also requested that glint and glare is appropriately considered for the Proposed Solar Farm Development. The viewpoints contained in the submitted LVIA were subsequently reviewed and agreed by the Council's Conservation Officer.

- **Access and Traffic Safety** – The Council representatives requested that a Road Safety Audit be submitted with the application to cover the proposed new access points and any changes to the existing road layouts or surfacing. They also advised that a Construction Traffic Management Plan be provided with details on anticipated traffic levels.
- **Archaeology** – The Council referred to the archaeological sensitivity of parts of the Overall Project area, including recorded monuments in the vicinity of the Elton area, and advised that appropriate buffers should be maintained around archaeological monuments. It was confirmed that geophysical survey work was being undertaken to inform the design and that appropriate avoidance or mitigation measures would be incorporated where required.

4.4.4. The matters raised through the pre-planning process have informed the design and assessment of the Overall Project and the supporting documentation prepared for the respective planning applications. In particular, the Proposed Substation Development has been assessed having regard to its relationship with the Proposed Solar Farm Development and the potential combined effects of the Overall Project.

4.5. Public Consultation

4.5.1. Public consultation was undertaken during the development of the wider East Limerick Overall Project. Residents living within 500m of the Proposed Solar Farm Development lands were written to and further information was made available through a dedicated project website, eastlimericksolarfarm.ie.

4.5.2. Although the detailed design of the Proposed Substation Development had not been finalised at that stage, the need for a substation and grid connection was identified as part of the wider project from an early stage. The emerging substation location was shown indicatively within the project lands and the consultation material explained that the substation and associated grid connection would be progressed separately through the Strategic Infrastructure Development process. The Proposed Substation Development was therefore presented as an integral component of the wider project rather than as a separate or unrelated development.

4.5.3. The dedicated project website provided information on the emerging project, its location and design and the planning process. Members of the public were invited to provide comments or raise queries directly with the Applicant as the design progressed.

4.5.4. A newspaper notice was also published in the Limerick Leader on 24th May 2025 inviting comments on the emerging project. Fourteen responses were received. Matters raised included the location and extent of the development, access and construction traffic, flood risk, proximity to residential properties and requests for further information and mapping. The Applicant responded individually to the queries received and offered further engagement where requested. Three in-person meetings

were also held. Feedback received during the consultation process was considered as the design of the Overall Project progressed.

- 4.5.5. The Proposed Substation Development has subsequently been developed in greater detail and is now the subject of this separate application to ACP under Section 182A. The BESS did not form part of the project at the time of the earlier public consultation, as it was introduced later when the design evolved and the potential for battery storage to form part of the Proposed Substation Development was identified.

4.6. National Monuments Service Engagement

- 4.6.1. Early engagement was undertaken with the National Monuments Service ('NMS') in relation to the archaeological sensitivity of the Overall Project lands and the appropriate scope of archaeological investigation. This included a programme of geophysical survey followed by targeted archaeological test trenching, with the methodology and licensing coordinated by John Cronin & Associates.
- 4.6.2. The archaeological work was undertaken on the basis of the wider Overall Project rather than treating the Proposed Solar Farm Development and Proposed Substation Development in isolation. The indicative location of the Proposed Substation Development was within the lands assessed through the geophysical survey and was also included within the targeted test trenching programme undertaken as the project design developed.
- 4.6.3. A limited programme of archaeological test trenching was undertaken between March and April 2026 under excavation licence 25E1145 issued by the National Monuments Service, together with detection device licence 26R0082. The programme was informed by the results of the geophysical survey and targeted proposed infrastructure locations and anomalies of archaeological potential. The emerging layout of both the Proposed Solar Farm Development and the Proposed Substation Development had already been designed to avoid identified anomalies of archaeological potential where practicable. Where avoidance was not possible, targeted trenches were used to establish whether the anomalies were archaeological in nature and to inform the subsequent design response.
- 4.6.4. Within the Proposed Substation Development site, four probable archaeological features were identified through geophysical survey. Three were subsequently investigated through the targeted test trenching programme. The results have informed the design of the Proposed Substation Development, including the avoidance and preservation in situ of the identified enclosure where practicable.
- 4.6.5. A separate Archaeological Impact Assessment has now been prepared specifically for the Proposed Substation Development and accompanies this application. It builds on the archaeological assessment and fieldwork undertaken for the Overall Project and identifies the further investigation and mitigation required in relation to the Proposed Substation Development.

4.7. Statutory Public Notices

- 4.7.1. Section 182A(4) of the Planning and Development Act 2000, as amended, sets out the public notification requirements applying to an application for approval of electricity transmission development. Prior to making the application, the Applicant is required to publish notice of the proposed development in one or more newspapers circulating in the area in which the development is proposed and to notify the relevant planning authority and prescribed bodies.
- 4.7.2. In accordance with these requirements, notice of the Proposed Substation Development has been published locally in the Limerick Leader (county edition) on Saturday, 12th September 2026, and nationally in the Irish Examiner on Friday, 11th September 2026, and site notices have been erected at two appropriate locations on the application lands, as show on the Location Plan. The notices identify the nature and location of the Proposed Substation Development, confirm that approval is being sought from An Coimisiún Pleanála under Section 182A and provide details of where the application documentation may be inspected and how submissions or observations may be made to ACP.
- 4.7.3. The application documentation, including the Natura Impact Statement, has also been made available for public inspection in accordance with the statutory notice arrangements and on the dedicated application website.
- 4.7.4. Copies of the application and the accompanying documentation have been provided to Limerick City and County Council and to the prescribed bodies identified by ACP during the pre-application consultation process. Those bodies have been invited to make submissions or observations to ACP within the period specified in the statutory notices.
- 4.7.5. These statutory notification arrangements are separate from the earlier public consultation undertaken during the development of the Overall Project, as described above, and provide the formal opportunity for members of the public and prescribed bodies to make submissions or observations directly to ACP in relation to the Proposed Substation Development.

5.0. Planning Policy Context

5.1. Introduction

- 5.1.1. This section of the Report provides an overview of the European, national, regional and local planning and energy policy relevant to the Proposed Substation Development.
- 5.1.2. The Proposed Substation Development forms an integral component of the wider Overall Project and is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network. The relevant policy context therefore includes policy relating to renewable electricity generation, electricity transmission and grid infrastructure, and energy storage.
- 5.1.3. The compliance of the Proposed Substation Development with the relevant policy framework is considered further in Section 7 of this Report.

5.2. European Policy

Renewable Energy Directive

- 5.2.1. Directive (EU) 2023/2413 ('RED III'), which entered into force in November 2023, amended the Renewable Energy Directive and strengthened the European Union framework for the promotion of energy from renewable sources. RED III establishes a binding EU target for renewable energy to comprise at least 42.5% of gross final energy consumption by 2030, with Member States collectively endeavouring to achieve 45%.
- 5.2.2. RED III has been transposed into the Irish planning system through the European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. No. 274 of 2025). However, ACP has confirmed that applications for approval of electricity infrastructure made under Section 182A, following consultation under Section 182E, are not currently subject to the procedural provisions introduced by those Regulations⁵. The RED III completeness check therefore does not apply to this application.
- 5.2.3. Notwithstanding this, RED III remains relevant to the wider European energy policy context within which the Overall Project is being brought forward. The Proposed Substation Development is required to facilitate the connection of the Proposed Solar Farm Development to the national transmission network and incorporates battery storage infrastructure to support the integration of renewable electricity.

⁵[https://www.pleanala.ie/en-ie/renewable-energy-directive-iii-\(1\)/red-iii-information-guide-for-prospective-applicant](https://www.pleanala.ie/en-ie/renewable-energy-directive-iii-(1)/red-iii-information-guide-for-prospective-applicant)

REPowerEU

- 5.2.4. The European Commission launched the REPowerEU Plan in May 2022 in response to disruption in global energy markets and the need to reduce the European Union's dependence on Russian fossil fuels. The Plan seeks to diversify energy supplies, improve energy efficiency and accelerate the transition to renewable energy.
- 5.2.5. In May 2025, the Commission published a REPowerEU Roadmap setting out further measures to fully end the EU's dependence on Russian energy, while continuing to accelerate renewable energy deployment, investment in energy infrastructure and interconnection, and the wider transition to a clean energy system.
- 5.2.6. The implementation of REPowerEU has continued through subsequent legislative measures. In January 2026, the EU adopted the REPowerEU Gas Regulation, which entered into force on 3rd February 2026 and provides for the phased elimination of Russian gas imports. The Regulation represents a further step in implementing the wider REPowerEU objective of establishing a more secure, resilient and independent European energy system.
- 5.2.7. The Proposed Substation Development is consistent with this wider policy direction by providing transmission and electricity storage infrastructure required to facilitate additional renewable electricity generation as part of the Overall Project.

5.3. National Policy

Project Ireland 2040 – National Planning Framework

- 5.3.1. The National Planning Framework First Revision (NPF) (April 2025) sets out the high level, strategic planning, and development framework for the country over the next 20 years. The NPF guides the preparation of regional and local planning policy and provides a clear framework for sustainable development, including the transition to a low carbon economy.
- 5.3.2. The NPF recognises the critical role of renewable energy and electricity infrastructure in achieving national climate objectives and supporting the transition to a climate neutral economy by 2050. It supports the development of renewable energy infrastructure at appropriate locations, subject to environmental considerations.
- 5.3.3. The First Revision of the National Planning Framework introduces Regional Renewable Electricity Capacity Allocations, which set out the level of renewable energy generation to be delivered across each region to 2030. In this regard, the Southern Region has been assigned a significant allocation for solar photovoltaic development, comprising an additional 3,302MW of capacity, representing approximately 43% of the national solar target.
- 5.3.4. This allocation is the largest regional provision for solar energy nationally and reflects the Southern Region's capacity to accommodate large-scale solar development,

having regard to land availability, grid infrastructure and environmental capacity. It also highlights the critical role of the region in contributing towards Ireland's overall target of 8GW of installed solar capacity by 2030.

- 5.3.5. The revised NPF places increased emphasis on the delivery of renewable energy and the electricity infrastructure necessary to support the transition to a climate-neutral economy. Of particular relevance to the Proposed Substation Development are:

National Policy Objective 30: *'Facilitate the development of the rural economy, in a manner consistent with the national climate objective, through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting biodiversity and the natural landscape and built heritage which are vital to rural tourism.'*

National Policy Objective 69: *'Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.'*

National Policy Objective 70: *'Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050.'*

National Policy Objective 71: *'Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.'*

National Policy Objective 73: *'Support the co-location of renewable technologies with other supporting technologies and complementary land uses, including agriculture, amenity, forestry and opportunities to enhance biodiversity and promote heritage assets, at appropriate locations which are determined based upon the best available scientific evidence in line with EU and national legislative frameworks.'*

- 5.3.6. The Proposed Substation Development is consistent with these objectives. It provides the electricity transmission infrastructure required to facilitate the Proposed Solar Farm Development and incorporates battery storage as part of the wider renewable energy project.

National Development Plan (Updated to 2035)

- 5.3.7. The National Development Plan (NDP), as updated by the National Development Plan Review 2025, sets out the Government's strategic framework for capital investment and infrastructure delivery to 2035. The NDP provides for significant investment across key sectors including energy, water, transport and housing, and is aligned with

the objectives of the National Planning Framework in supporting sustainable economic growth and the transition to a low carbon economy.

- 5.3.8. The Review provides for total public investment of approximately €275.4 billion to 2035, including €102.4 billion in capital expenditure over the period 2026–2030. This represents a substantial increase in investment and reflects the scale of infrastructure delivery required to meet national climate, economic and societal objectives.
- 5.3.9. The NDP identifies energy infrastructure as a critical priority, recognising that the expansion of renewable electricity generation must be supported by a modernised and resilient electricity network. Significant investment is proposed in electricity infrastructure, including funding to support enhanced grid capacity and the integration of renewable energy sources.
- 5.3.10. The Plan recognises that the scale of renewable energy deployment required over the coming decade necessitates the timely delivery of new generation capacity alongside enabling infrastructure, including transmission networks and system services. This coordinated approach is essential to ensure that renewable generation can be effectively integrated into the national electricity system.
- 5.3.11. The Review also highlights the importance of accelerating the delivery of strategic infrastructure, noting that planning, regulatory and delivery constraints can act as barriers to timely project implementation. In this context, the planning system plays a key role in facilitating the delivery of renewable energy and enabling infrastructure projects in appropriate locations.
- 5.3.12. The Proposed Substation Development is consistent with this strategic direction, providing enabling transmission and storage infrastructure for renewable electricity generation as part of the Overall Project.

Programme for Government 2025 – ‘Securing Ireland’s Future’

- 5.3.13. The Programme for Government (PfG) ‘Securing Ireland’s Future’ was published in January 2025. It sets out the primary goals of the Irish Government for the period 2025 - 2030.
- 5.3.14. The PfG highlights that in 2023, Ireland achieved nearly 7% of a reduction in emissions, equating to almost one tonne less climate pollution per person. The government is committed to achieve a 51% reduction in emissions from 2018 to 2030 and net-zero emissions no later than 2050. The PfG section ‘Leading a Revolution in Renewables’ highlights that the Government is committed to achieving 80% of Ireland’s electricity generation from renewable sources by 2030.
- 5.3.15. The PfG includes commitments to deliver 9GW of onshore wind, 8GW of solar and at least 5GW of offshore wind by 2030. It also recognises the need for network upgrades and specifically commits to the managed development of solar energy and battery power through national planning guidance.

- 5.3.16. The Proposed Substation Development directly supports these objectives by providing the transmission infrastructure required for the Proposed Solar Farm Development and incorporating battery storage as an integral component of the development.

Climate Action and Low Carbon Development (Amendment) Act 2021

- 5.3.17. The Climate Action and Low Carbon Development (Amendment) Act 2021 provides the statutory framework for climate action in Ireland. The Act establishes a legally binding objective of achieving a climate neutral economy by no later than 2050.
- 5.3.18. The Act introduces a system of five-year carbon budgets and sectoral emissions ceilings, which are implemented through successive Climate Action Plans. It places a legal obligation on public bodies to perform their functions in a manner consistent with the national climate objective and approved climate policies.
- 5.3.19. In this context, the expansion of renewable electricity generation and the infrastructure necessary to connect and integrate that generation into the electricity system form an important part of the measures required to achieve these statutory climate objectives.

Climate Action Plan 2025

- 5.3.20. The Irish Government formally approved its Climate Action Plan 2025 (CAP 25) on 15th April 2025. This Plan represents the third statutory update under the Climate Action and Low Carbon Development (Amendment) Act 2021 and is part of Ireland's series of annual climate strategies. It also serves as the final Plan in the first five-year carbon budget period, marking a critical midpoint in the broader climate action trajectory through 2030.
- 5.3.21. The Programme for Government sets a target for 80% of electricity to be generated from renewable sources by 2030. The Climate Action Plan 2025 ('CAP25') increases this target to 80% renewable electricity by 2030. In 2023, renewable generation accounted for 40.7% of electricity, which was an increase from 38.6% in 2022. While progress is being made, the figures remain well short of where we need to be.
- 5.3.22. It reiterates the targets of up to 5 GW of solar PV by 2025, and 8 GW by 2030. These remain unchanged from previous Plans. These targets will require not only the delivery of additional solar generation but also the grid connection, transmission and electricity storage infrastructure necessary to accommodate that generation.
- 5.3.23. The Proposed Substation Development responds directly to these requirements, facilitating the connection of the Proposed Solar Farm Development to the national transmission network and incorporating BESS infrastructure within the Overall Project.

- 5.3.24. At the time of preparing this report, the next update to the Climate Action Plan had not yet been published, with public consultation on climate priorities for the next update commenced in June 2026; accordingly, CAP25 remains the most recent published Climate Action Plan for the purposes of this assessment.

National Energy and Climate Plan 2021-2030

- 5.3.25. Ireland's updated National Energy and Climate Plan ('NECP') was submitted to the European Commission in July 2024. The NECP brings together the principal policies and measures relating to decarbonisation, renewable energy, energy efficiency, energy security and the internal energy market for the period to 2030, with an outlook to 2050.
- 5.3.26. The NECP recognises the importance of continued renewable electricity deployment alongside the supporting electricity infrastructure required to facilitate the transition to a secure, low-carbon energy system.
- 5.3.27. The Proposed Substation Development is consistent with this direction by providing the transmission and storage infrastructure required to facilitate renewable electricity generation from the Proposed Solar Farm Development.

EirGrid – Shaping Our Electricity Future

- 5.3.28. EirGrid's *Shaping Our Electricity Future* roadmap sets out the measures required across the electricity network, markets, system operations and engagement to facilitate increasing levels of renewable electricity while maintaining a secure and reliable electricity system. The roadmap recognises that significant changes to the electricity system are required to accommodate increasing levels of renewable generation and electricity demand.
- 5.3.29. The Roadmap recognises that the all-island electricity system will undergo significant transformation over the period to 2035, including increasing levels of solar generation, energy storage, additional interconnection and other new technologies. It identifies the continued evolution of system operational policies as necessary to facilitate these changes and achieve national decarbonisation targets.
- 5.3.30. This strategic direction has been further developed through the EirGrid and SONI *Operational Policy Roadmap 2025–2035*, which updates the previous operational policy programme to reflect current implementation, new initiatives and revised targets to 2035.
- 5.3.31. The Proposed Substation Development is consistent with this strategic direction. It will provide the 220kV transmission infrastructure required to connect the Proposed Solar Farm Development to the national electricity system and incorporates BESS infrastructure capable of supporting the integration of renewable electricity as part of the wider Overall Project.

5.4. Regional Planning Policy

Regional Spatial and Economic Strategy for Southern Region 2020-2032

- 5.4.1. The Regional Spatial and Economic Strategy for the Southern Region (RSES) provides a framework through which the National Planning Framework's vision and the related government policies will be delivered throughout the region.
- 5.4.2. The RSES supports the Climate Action Plan and confirms the intention to work towards and achieve a low carbon economy and the delivery of renewable energy and associated infrastructure. Section 5 of the RSES focuses on creating a clean environment for a healthy society and region. The following policy objectives are of note:

RPO 87 Low Carbon Energy Future: *'The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-2030 and Climate Action Plan 2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emission in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture.'*

RPO 95 Sustainable Renewable Energy Generation: *'It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation'.*

RPO 96 Integrating Renewable Energy Sources: *'It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows'.*

RPO 100 Indigenous Renewable Energy Production and Grid Injection: *'It is an objective to support the integration of indigenous renewable energy production and grid injection'.*

RPO 104 Energy Storage and Carbon Capture: *'It is an objective to support investment in initiatives to develop innovation, advances in technology and pilot projects for the sustainable development of energy storage and carbon capture within the Region and to work with key stakeholders in developing sustainable forestry, including initiatives for native tree planting and better management of peatland and soil management to support carbon sequestration and enhancement of biodiversity.'*

RPO 219 New Energy Infrastructure: *'It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers'*

(subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs’.

RPO 221 Renewable Energy Generation and Transmission Network: *‘The RSES supports strengthened and sustainable local/community renewable energy networks, micro renewable generation, climate smart countryside projects and connections from such initiatives to the grid. The potential for sustainable local/community energy projects and micro generation to both mitigate climate change and to reduce fuel poverty is also supported’.*

RPO 222 Electricity Infrastructure: *‘It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid’s (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity’.*

5.4.3. Taken together, these objectives establish strong regional support for renewable electricity generation and the transmission and storage infrastructure required to integrate that generation into the electricity system. The Proposed Substation Development, including the 220kV LILLO connection and BESS, is consistent with this regional policy direction.

5.4.4. The Southern Regional Assembly commenced a formal review of the RSES in 2026. The pre-draft Issues Paper consultation has concluded and the Director’s Report on submissions was presented to the Assembly in July 2026. The existing RSES remains the applicable regional strategy while that review progresses. The review identifies energy independence and climate action among the strategic issues to be addressed in the new RSES.

5.5. Local Planning Policy

Limerick Development Plan (2022-2028)

5.5.1. The Limerick Development Plan (2022-2028) is the current Development Plan for the area. The Limerick Development Plan was adopted in June 2022 and came into effect in July 2022. The Proposed Substation Development is situated on unzoned lands within a rural agricultural area.

5.5.2. The County Development Plan promotes renewable energy development in the County and is positive towards facilitating renewable energy infrastructure provision including the development of renewable energy sources at suitable locations.

- 5.5.3. Policies and Objectives specific to electricity infrastructure and renewable energy development in the Development Plan are principally set out in 'Chapter 8 – Infrastructure' and 'Chapter 9 - Climate Action, Flood Risk and Transition to Low Carbon Economy'. Some of the relevant policies/objectives are shown below:

Policy/ Objective	Description
Chapter 8: IN 013	Energy and Gas Networks IN 013 is an objective which supports the sustainable reinforcement and provision of new energy infrastructure, subject to appropriate environmental assessment and the planning process. It also requires energy transmission infrastructure to follow best practice in relation to siting, design and minimising environmental effects.
Chapter 8: IN 015	Electricity Grid Development IN 015 is an objective which supports the development of the electricity grid to serve the future needs of Limerick, including the delivery, integration and connection of renewable energy proposals to the grid in a sustainable and timely manner. The objective is identified in the adopted Development Plan as one of the principal policies relevant to electricity infrastructure.
Chapter 9: CAF 08	Renewable Energy Objective CAF 08 is an objective to promote and support development of renewable energy sources, which will achieve low carbon outputs including on-land and offshore renewable energy production, which support tidal turbine, PV, community energy companies and battery technology, subject to adequate environmental and ecological protection.
Chapter 9: CAF 014	Energy Generation CAF 014 an objective of the Council to support the local production of renewable energy and connection to gas network. Where electricity is being generated locally, the Council will support the provision of infrastructure for its transmission to the grid, subject to it fulfilling technical and environmental requirements.
Chapter 9: CAF 027	Renewable Energy Production CAF 027 is an objective of the Council to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, solar, hydro, tidal, geothermal and wind energy, subject to appropriate levels of environmental assessment and planning considerations.
Chapter 9: CAF 038	Emerging Technologies CAF 038 is an objective to facilitate and encourage future renewable energy technologies, such as hydrogen electrolysis, pumped storage and small-scale anaerobic digestion and any other source of renewable energy technologies, that are viable as a means of energy security, subject to compliance with all relevant planning criteria.
Chapter 9: CAF 040	Energy Storage

	CAF040 is an objective of the Council to promote the use of efficient energy storage systems and infrastructure that regulates energy supply and helps even out the variable nature of some renewable energy supply sources.
Chapter 9: CAF P1	Climate Action Policy CAF P1 is a policy that requires the Council to implement international and national objectives, to support Limerick's transition to a low carbon economy and support the climate action policies included in the Plan.
Chapter 9: CAF P2	Transition to a Low Carbon Economy CAF P2 is a policy to support the transition to a low carbon climate resilient economy, by way of reducing greenhouse gases, increasing renewable energy and improving energy efficiency and will future proof policies and objectives to deliver on this approach, in so far as possible.
Chapter 9: CAF P6	Renewable Energy CAF P6 is a policy of the Council to support renewable energy commitments outlined in national and regional policy, by facilitating the development and exploitation of a range of renewable energy sources at suitable locations throughout Limerick, where such development does not have a negative impact on the surrounding environment landscape, biodiversity, water quality or local amenities, to ensure the long-term sustainable growth of Limerick.
Chapter 9: CAF P9	Renewable Energy Technologies CAF P9 is a policy of the Council to consider all emerging renewable energy technologies, such as hydrogen electrolysis, pumped storage and small scale anaerobic digestion and any other source of renewable energy technologies that are viable as a means of energy security, subject to the relevant level of necessary environmental and ecological assessments.

5.5.4. These provisions are particularly relevant to the Overall Project. The Proposed Solar Farm Development will provide renewable electricity generation, while the Proposed Substation Development provides the transmission infrastructure necessary to connect that electricity to the grid and includes BESS infrastructure to provide electricity storage.

5.5.5. The proposed site is situated within the 'Agricultural Lowlands' Landscape Character Area (LCA) which is set out in Volume 1 of the Limerick Development Plan 2022-2028. The Agricultural Lowlands are described as below:

'This is the largest of the Landscape Character Areas in Limerick and comprises almost the entire central plain. This landscape is a farming landscape and is defined by a series of regular field boundaries, often allowed to grow to maturity. This well-developed hedgerow system is one of its main characteristics. In terms of topography, the

landscape is generally rather flat with some locally prominent hills and ridges. The pastoral nature of the landscape is reinforced by the presence of farmyards.'

- 5.5.6. A number of Specific Objectives are outlined relating to the Agricultural Lowlands Landscape Character Area these are detailed below:

- a) Encourage, where housing is permitted, design that reflects existing housing stock, such as the two storey farmhouses which are a feature in the area.*
- b) Encourage retention of existing landscape features such as hedgerows and trees and their incorporation into landscaping for new developments.*
- c) Discourage development of locally prominent sites.*
- d) Encourage the regular arrangement of turbines with equal spacing in proposed wind farm developments, which take field boundaries into account.*
- e) Encourage development within existing settlements*

- 5.5.7. The siting and design of the Proposed Substation Development, together with the proposed landscape mitigation measures, are considered further in Section 6 of this Report, and the supporting technical documentation submitted with this application.

- 5.5.8. The Development Plan also contains policies and objectives relating to biodiversity, archaeology and cultural heritage, flood risk and surface water management, traffic and road safety, noise, lighting and other environmental considerations relevant to the Proposed Substation Development. These matters have informed the design and assessment of the development and are considered in the relevant sections of this Report and the supporting technical documentation.

- 5.5.9. Overall, the Development Plan provides clear policy support for renewable electricity generation, electricity transmission infrastructure and energy storage, subject to appropriate siting, design and environmental assessment. The compliance of the Proposed Substation Development with these requirements is considered further in Section 7.

6.0. Planning and Environmental Considerations

6.1. Introduction

- 6.1.1. An Environmental Impact Assessment (EIA) Screening Report has been prepared having regard to the relevant requirements of the Planning and Development Act 2000, as amended, and the Planning and Development Regulations 2001, as amended, including the classes of development set out in Schedule 5 and the relevant screening criteria set out in Schedule 7. The Screening Report concludes that the Proposed Substation Development does not fall within any classes of development listed under Part 1 and Part 2 of Schedule 5 and therefore a mandatory Environmental Impact Assessment is not required. Furthermore, the Proposed Substation Development does not constitute a sub-threshold development with likely significant effects on the environment. Please refer to the EIA Screening Report included as part of the supporting documentation for this planning application.
- 6.1.2. While the Proposed Substation Development does not require an EIA, a range of technical assessments have been undertaken to inform the design of the Proposed Substation Development and to identify and address potential environmental effects.
- 6.1.3. The Proposed Substation Development forms part of the wider Overall Project and is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network. The supporting assessments have therefore considered the relationship between the two developments and, where relevant, their potential cumulative and in-combination effects.
- 6.1.4. The following sections summarise the findings of these assessments, including potential impacts during construction and operation, proposed mitigation measures and likely residual effects. This section should be read alongside the following supporting technical reports submitted with the application:

Ecology and Appropriate Assessment

- Ecological Impact Assessment (prepared by JBA Consulting)
- Appropriate Assessment Screening Report (prepared by JBA Consulting)
- Natura Impact Statement (prepared by JBA Consulting)

Noise

- Noise Assessment (prepared by AWN Consulting)

Archaeology and Cultural Heritage

- Archaeological Impact Assessment (prepared by John Cronin & Associates)

Flood Risk and Water

- Flood Risk Assessment (prepared by JBA Consulting)
- Hydrology and Hydrogeology Assessment (prepared by JBA Consulting)
- Drainage Management Plan (prepared by JBA Consulting)

Landscape and Visual

- Landscape Mitigation Plans (prepared by MacroWorks)
- Landscape and Visual Impact Assessment including Photomontages (prepared by MacroWorks)

Traffic and Transport

- Outline Construction Traffic Management Plan (prepared by MPA)
- Traffic and Transport Assessment (prepared by MPA)

Construction and Safety

- Outline Construction Methodology (prepared by TLI, input from Enertis)
- Construction Environmental Management Plan (prepared by JBA)
- Outline Battery Safety Management Plan (prepared by Enertis)

6.2. Population and Human Health

Introduction

- 6.2.1. This section considers the potential effects of the Proposed Substation Development on population and human health.
- 6.2.2. Potential effects principally relate to noise, visual amenity, traffic and transport, construction activity and the safe operation of the proposed electrical and battery storage infrastructure. These matters have been assessed through the technical reports submitted with the application and are considered in further detail in the relevant sections of this Report.
- 6.2.3. The EIA Screening Report also considers potential effects on population and human health and concludes that no likely significant effects are anticipated during construction or operation, either alone or cumulatively as part of the Overall Project.

Existing Environment

- 6.2.4. The Proposed Substation Development is located within a rural agricultural area south-west of Hospital and north-west of Knocklong. The surrounding area is characterised by agricultural land, established hedgerows and field boundaries, dispersed residential development and agricultural buildings. An existing 220kV overhead transmission line traverses the site and is an established infrastructure feature within the local landscape.
- 6.2.5. There are no residential dwellings within the Red Line Boundary. Residential properties and farm holdings are, however, located within the surrounding area, including along the L1509 and R513, and these receptors have been considered in the noise, traffic, landscape and construction assessments.

- 6.2.6. The existing noise environment is rural in character and is influenced principally by traffic on the surrounding road network and agricultural activity. The environmental noise survey undertaken by AWN Consulting identified low evening and night-time background noise levels, which have informed the operational noise criteria applied to the Proposed Substation Development.

Potential Impacts

Noise:

- 6.2.7. A Noise Assessment has been prepared by AWN Consulting to consider noise and vibration effects during construction and operation, including the cumulative operation of the Overall Project. Construction will result in temporary noise from plant, vehicle movements and construction activity. Having regard to the predicted levels, the duration of the works and the progressive nature of construction across the site, the assessment concludes that construction noise effects will not be significant.
- 6.2.8. During operation, the principal noise sources associated with the Proposed Substation Development will be the substation transformer and BESS equipment. At the closest noise-sensitive location, predicted noise levels are 37 dB LAeq,T during the daytime period and 35 dB LAeq,T during the evening and night-time periods. These levels are within the applicable assessment criteria and no significant operational noise or vibration effects are predicted. Noise is considered further in Section 6.5.

Visual Impact:

- 6.2.9. A LVIA prepared by MacroWorks has assessed the potential effects of the Proposed Substation Development on the surrounding landscape and on visual amenity experienced by receptors, including nearby residents, road users, settlements and sensitive landscape and heritage receptors. The assessment also considers the Proposed Solar Farm Development cumulatively as part of the Overall Project.
- 6.2.10. The LVIA identifies the effects as being principally localised around the Proposed Substation Development. Across the 11 representative viewpoints assessed, visual effects range from Moderate to Imperceptible prior to mitigation and reduce further following establishment of the proposed landscape planting. At the closest representative viewpoint on the L1509, the effect reduces from Moderate to Slight following establishment of mitigation. At Lough Gur, the Proposed Substation Development and wider Overall Project are barely discernible and the visual effect is assessed as Imperceptible.
- 6.2.11. The LVIA concludes that no significant visual effects will arise from the Proposed Substation Development.

Traffic and Transport:

- 6.2.12. Construction of the Proposed Substation Development will result in a temporary increase in traffic on the surrounding road network. The Traffic and Transport Assessment considers the development both independently and cumulatively with the Proposed Solar Farm Development, including construction traffic on the L1509, R513 and wider road network.
- 6.2.13. The greatest proportional increases occur on the lower-volume local roads, reflecting the low existing traffic flows on those routes. Notwithstanding these increases, the TTA demonstrates that the affected roads will remain within their assessed capacities and concludes that the Proposed Substation Development and Overall Project can be accommodated without creating capacity or safety issues. Operational traffic will be limited to one to two trips per week and will not materially affect the surrounding road network.
- 6.2.14. Construction traffic will be managed in accordance with the Outline Construction Traffic Management Plan, including measures relating to delivery scheduling, management of HGV movements, construction signage, vehicle speeds, road cleanliness and liaison with Limerick City and County Council and the local community. Traffic and transport are considered further in Section 6.8..

BESS Safety:

- 6.2.15. The potential risks associated with operation of the BESS have been considered in the Outline Battery Safety Management Plan. The BESS will incorporate monitoring, detection, isolation and fire protection systems appropriate to the proposed battery storage infrastructure, with detailed emergency arrangements to be developed at detailed design stage. Having regard to these measures, no significant effects on population or human health are anticipated. The BESS safety arrangements are considered further in Section 6.9.

Construction Impacts:

- 6.2.16. The construction phase has the potential to give rise to temporary and localised effects on nearby residents and other receptors, principally through construction traffic, noise, dust and general site activity.
- 6.2.17. These effects will be managed through the Construction Environmental Management Plan, Outline Construction Traffic Management Plan and the mitigation and management measures contained in the supporting technical assessments. Controls will apply to construction noise and dust, traffic movements, working practices and the management of potential pollution incidents. Having regard to the temporary nature of the works and the measures proposed, no significant adverse effects on population and human health are anticipated during construction.

- 6.2.18. Construction environmental management is considered further in Section 6.10 of this Report.

Population and Human Health Summary

- 6.2.19. The principal potential effects on population and human health arise from temporary construction activity and from the potential operational effects of noise, visual change, traffic and the BESS. The supporting assessments demonstrate that construction noise and traffic effects will be temporary and can be appropriately managed, while operational traffic will be minimal and operational noise will remain within the applicable criteria.
- 6.2.20. The BESS will incorporate dedicated safety, monitoring and protection measures appropriate to the proposed battery storage infrastructure. No significant adverse effects on population and human health are anticipated. This is consistent with the findings of the EIA Screening Report.

6.3. Biodiversity

Introduction

- 6.3.1. An Ecological Impact Assessment (EcIA), Appropriate Assessment (AA) Screening Report and Natura Impact Statement (NIS) have been prepared by JBA Consulting and are submitted in support of the application. These reports assess the potential effects of the Proposed Substation Development on European sites, habitats and species of conservation value within the site and its wider Zone of Influence.
- 6.3.2. The EcIA assesses the ecological features present within the site and surrounding area, identifies potential effects arising from the Proposed Substation Development and sets out the mitigation and enhancement measures to be implemented. The AA Screening Report and NIS separately consider the potential for effects on European sites, having regard to the relevant source-pathway-receptor linkages.
- 6.3.3. The assessments are informed by a programme of ecological surveys undertaken between December 2024 and October 2025, including habitat, bird, mammal and bat surveys. These surveys have informed the assessment of the Proposed Substation Development and the mitigation measures proposed.

Designated Sites and Appropriate Assessment

- 6.3.4. The Appropriate Assessment Screening Report considered eight European sites within the initial Zone of Influence of the Proposed Substation Development. Following further examination using a source-pathway-receptor approach, three sites were considered in greater detail: the Lower River Shannon SAC, River Shannon and River Fergus Estuaries SPA and Glen Bog SAC. Further assessment found no viable pathway by which the Proposed Substation Development could give rise to likely significant effects on Glen Bog SAC or the River Shannon and River Fergus Estuaries SPA.

- 6.3.5. The Lower River Shannon SAC was retained due to the hydrological connection between the Proposed Substation Development, the River Camogue and the downstream river network. Applying the precautionary principle, the Appropriate Assessment Screening Report concluded that likely significant effects on the Lower River Shannon SAC could not be excluded at screening stage. A Natura Impact Statement was therefore prepared.
- 6.3.6. The NIS considers the potential effects of the Proposed Substation Development on the relevant qualifying interests of the Lower River Shannon SAC, including aquatic habitats and species and Otter. The principal potential pathway relates to deterioration in water quality during construction, together with the potential for disturbance of Otter and riparian habitat. The NIS identifies specific mitigation measures for the protection of water quality, aquatic habitat and the riparian corridor.
- 6.3.7. The NIS concludes that, provided the mitigation measures set out therein are implemented, it can be ascertained beyond reasonable scientific doubt that no adverse effects on the integrity of the Lower River Shannon SAC will arise, either alone or in combination with other plans or projects. An Coimisiún Pleanála, as competent authority for the Proposed Substation Development, will undertake the Appropriate Assessment as part of its consideration of the application.

Existing Ecological Environment

- 6.3.8. The Proposed Substation Development site extends to 17.02 hectares and is in agricultural use. Improved agricultural grassland is the dominant habitat, with hedgerows, treelines and drainage ditches forming the principal field boundaries. The River Camogue runs along the south-western boundary of the site.
- 6.3.9. The EclA records 145,000m² of improved agricultural grassland within the site, together with smaller areas of wet grassland and dry meadow and grassy verge habitat. The improved agricultural grassland is assessed as being of lower local ecological value. Hedgerows and treelines provide more important habitat and ecological connectivity through the site, while the River Camogue and associated drainage network provide aquatic and riparian habitat and a connection to downstream ecological receptors.
- 6.3.10. The Proposed Substation Development will result in the permanent loss of 36,000m² of improved agricultural grassland. The EclA identifies this habitat as being of lower ecological value and does not identify its loss as giving rise to a significant ecological effect. The areas of wet grassland and dry meadow identified within the site will remain unaffected by the development.

Otter

- 6.3.11. The River Camogue provides suitable habitat for Otter, although no evidence of the species was recorded along the section adjoining the Proposed Substation Development during the surveys. No in-stream or riverbank works are proposed and a minimum 20m buffer will be maintained from the river. Fencing will be designed so as not to obstruct movement along the riparian corridor.
- 6.3.12. Potential effects on Otter during construction include disturbance, entrapment and deterioration in water quality. Prior to construction, a further survey of the River Camogue will be undertaken to confirm whether there has been any change in Otter activity. Where a couch or resting holt is identified, a 20m exclusion buffer will be maintained, increasing to 150m in the case of a maternity holt. Lighting will be directed away from the river, excavations will not be left open when unattended and night-time working along the Camogue will be avoided.
- 6.3.13. With the implementation of these measures, together with the water quality controls set out in the EclA, NIS and CEMP, the EclA concludes that the residual effect on Otter will be long-term and neutral.

Badger

- 6.3.14. Badger activity was recorded within the Proposed Substation Development site, principally along the northern and eastern field boundaries. A number of setts were identified, although no evidence of a breeding sett was recorded. The existing hedgerows and field boundaries provide movement and foraging habitat for the species.
- 6.3.15. One sett within the central part of the site overlaps with the proposed infrastructure and will require permanent closure. The EclA notes that very little evidence of activity was recorded at this sett during the survey period and it was considered unlikely to be in active use. Setts located along the eastern boundary are outside the direct infrastructure footprint but may require temporary soft closure during construction where underground tunnels could extend beneath the works area.
- 6.3.16. Prior to construction, further survey and monitoring will be undertaken to confirm the status of the known setts and identify any new activity. Any sett closure will be undertaken in consultation with the NPWS and in accordance with the procedures set out in the EclA, including the relevant seasonal restrictions and licensing requirements. Mammal passages will also be incorporated within the site fencing to maintain movement through the site. With these measures in place, the EclA concludes that the residual effect on Badger will be long-term and neutral.

Bats

- 6.3.17. Bat surveys confirmed use of the site by at least five species, including Common Pipistrelle, Soprano Pipistrelle, Leisler's Bat, Brown Long-eared Bat and Myotis

species. Activity was concentrated along the hedgerows, treelines and the River Camogue, which provide the principal commuting and foraging features within the site. The derelict building proposed for removal and the hedgerow to be removed were assessed as having negligible bat roosting value.

- 6.3.18. The Proposed Substation Development will require the removal of approximately 300m of hedgerow, resulting in the loss of linear foraging habitat. This will be addressed through the planting of approximately 690m of new hedgerow, together with the reinforcement of existing linear features. The EclA confirms that there will be no net loss of hedgerow habitat, although the replacement planting will take time to establish.
- 6.3.19. Mitigation measures include pre-felling checks of trees for roosting potential, soft-felling techniques where required, a pre-demolition survey of the derelict building and controls on artificial lighting. Operational lighting will remain off unless required, with timers and motion controls used to minimise unnecessary illumination, and lighting will be designed to avoid spill onto hedgerows, treelines and other bat habitat. With these measures in place, and allowing for the establishment of replacement planting, the EclA concludes that long-term neutral effects on bats may be achieved.

Birds

- 6.3.20. The bird surveys recorded the expected assemblage of countryside and farmland species within the Overall Project area, including red and amber-listed species. Thirty-nine species were recorded during the wintering bird surveys and 46 species during the breeding bird surveys. The EclA notes that no large-scale or extensive use of the Proposed Substation Development site by wintering birds was recorded and that comparable agricultural habitat is widely available in the surrounding area.
- 6.3.21. Potential effects arise principally during the construction phase through vegetation clearance, loss of grassland habitat and disturbance from construction activity. Vegetation clearance will not be undertaken during the statutory bird breeding season from 1st March to 31st August inclusive and, where practicable, clearance of fruit-bearing hedgerows will be delayed to retain a winter food source for birds. Bird flight diverters will be fitted to the overhead line infrastructure.
- 6.3.22. With the implementation of the mitigation measures and allowing for the establishment of replacement habitat, the EclA concludes that residual effects on birds will be long-term and neutral.

Amphibians and Invertebrates

- 6.3.23. No reptiles or amphibians were recorded during the ecological surveys. The drainage ditches and areas of standing water within the site may, however, provide suitable habitat for amphibians, particularly Common Frog. These areas will be checked prior to works where appropriate, including where temporary drainage measures may result in water being retained for longer periods.

- 6.3.24. A range of common terrestrial invertebrates was recorded during the ecological surveys. The EclA does not identify a requirement for specific mitigation beyond the protection and enhancement of the habitats on which these species depend. Retained grassland will be managed to encourage natural recolonisation and greater species diversity, without the use of commercial wildflower seed mixes.
- 6.3.25. The EclA concludes that, with the proposed mitigation measures in place, long-term neutral effects on amphibians and reptiles may be achieved. The proposed changes to grassland and habitat management also provide opportunities for biodiversity enhancement over time.

Hedgerows, Treelines and Habitat Connectivity

- 6.3.26. Hedgerows and treelines form the principal linear habitat network within the site and provide cover, foraging and commuting habitat for birds, bats, Badger and other fauna. The Proposed Substation Development has been designed to retain these features where practicable.
- 6.3.27. Approximately 300m of existing hedgerow will be removed to facilitate the development. This will be replaced by approximately 690m of new hedgerow planting, including planting along the proposed access and around the development where compatible with the operational requirements of the overhead transmission infrastructure. Existing hedgerows will also be reinforced where appropriate.
- 6.3.28. Treelines are not expected to be removed, although individual trees may require pruning, coppicing or removal where necessary to facilitate the access and other works. Retained hedgerows and treelines will be protected during construction and any individual trees requiring works will be assessed by an arborist. New planting will comprise native species appropriate to the locality.
- 6.3.29. Allowing for the time required for replacement planting to establish, the EclA identifies the potential for slight long-term positive effects on hedgerows and treelines as a result of the additional planting and enhancement proposed.

Watercourses

- 6.3.30. The River Camogue runs along the south-western boundary of the site and represents the principal aquatic ecological feature adjoining the Proposed Substation Development. No in-stream or riverbank works are proposed. The principal potential effect during construction relates to water quality through the mobilisation of sediment or accidental release of hydrocarbons or other pollutants. In the absence of mitigation, the EclA identifies the potential for significant medium-term negative effects on the river and the sensitive species that it supports.
- 6.3.31. A minimum 20m buffer will be maintained from the River Camogue within which construction activity will not take place. The EclA also requires sediment and pollution

control measures, prohibits direct discharge or pumping to the river and requires appropriate biosecurity controls. These measures are consistent with the more detailed water quality mitigation contained in the NIS and CEMP.

- 6.3.32. Approximately 300m of existing drainage ditch will be closed to facilitate the development and replaced by 250m of new ditch, located broadly parallel to and approximately 70m west of the existing drain and connected to the existing drainage network. The EclA assesses the effect of this alteration on drainage ditch habitat as neutral.
- 6.3.33. With the implementation of the proposed mitigation measures, no residual adverse effects are anticipated on the River Camogue or drainage ditches. The EclA also identifies the potential for a slight long-term improvement in water quality as agricultural intensity within the site reduces.

Invasive Non-Native Species

- 6.3.34. No invasive non-native plant species were recorded within the Proposed Substation Development site. Such species are, however, known to occur within the wider area and precautionary biosecurity measures will therefore be implemented during construction to prevent their introduction or spread. These measures are set out in the EclA and CEMP, as well as the Proposed Solar Farm Development's Invasive Species Management Plan, and include controls on plant, equipment and materials entering and leaving the site.

Biodiversity Enhancement

- 6.3.35. In addition to mitigation of the identified effects, the EclA includes a number of measures intended to enhance the ecological value and connectivity of the site. These include the new and reinforced hedgerow planting described above, riparian planting along the River Camogue, habitat creation associated with the attenuation pond, changes to grassland management and additional nesting opportunities for birds.
- 6.3.36. Riparian planting will be provided along a minimum 10m-wide strip adjoining the River Camogue, comprising native riparian trees, shrubs and herbaceous vegetation, while maintaining the clearances required beneath the existing overhead transmission line. The attenuation pond will also be planted with native wetland species to provide additional habitat for amphibians, birds and invertebrates.
- 6.3.37. Retained grassland outside the principal development footprint will be subject to a less intensive management regime, principally through changes to cutting and grazing. The EclA favours natural recolonisation from the existing seedbank rather than the introduction of commercial wildflower mixes. An Ecological Clerk of Works will oversee implementation of the ecological mitigation measures during construction, including pre-construction survey requirements, protection of sensitive habitats and species and compliance with the measures contained in the EclA, NIS and CEMP.

Cumulative Effects

- 6.3.38. The EclA considers the potential for cumulative effects with the Proposed Solar Farm Development, which may be constructed during a similar period. The principal potential interactions relate to construction disturbance, particularly in respect of breeding birds and Badger, together with the potential for sediment or pollutants to enter the surface water network.
- 6.3.39. The assessment notes the availability of comparable habitat within the surrounding agricultural landscape and the separation between the principal construction areas. With implementation of the respective mitigation measures, appropriate phasing of works and good construction practice, the EclA concludes that no cumulative ecological effects are anticipated.
- 6.3.40. The NIS separately considers the Proposed Substation Development in combination with the Proposed Solar Farm Development and other relevant plans and projects. It concludes that, with implementation of the mitigation measures identified, no adverse effect on the integrity of the Lower River Shannon SAC will arise either alone or in combination.

Biodiversity Summary

- 6.3.41. The Proposed Substation Development will result in localised habitat loss and disturbance, principally through the loss of improved agricultural grassland and sections of existing hedgerow and through alteration of part of the field drainage network. The higher-value ecological features within and adjoining the site, including the River Camogue and principal treelines, will otherwise be retained and protected. The loss of hedgerow will be more than replaced by new native planting and the EclA includes further measures to enhance the ecological value and connectivity of the site.
- 6.3.42. In the absence of mitigation, the EclA identifies the potential for adverse effects on a number of ecological receptors, including Badger, bats, birds and the River Camogue. The development therefore incorporates project-specific measures for the protection of habitats, water quality and protected species, supported by pre-construction survey requirements and ecological supervision. Following implementation of the mitigation and enhancement measures, the EclA concludes that the Proposed Substation Development is not likely to result in significant negative ecological effects.
- 6.3.43. The Appropriate Assessment Screening Report concluded that likely significant effects on the Lower River Shannon SAC could not be excluded at screening stage and a Natura Impact Statement was therefore prepared. The NIS concludes that, with the strict implementation of the mitigation measures set out therein, no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of the Lower River Shannon SAC, either alone or in combination with other plans or projects.

- 6.3.44. Having regard to the findings of the EclA and NIS, the nature and ecological value of the habitats affected, the retention and protection of the River Camogue and other sensitive ecological features, and the mitigation and enhancement measures incorporated into the Proposed Substation Development, no significant residual adverse effects on biodiversity are anticipated.

6.4. Water and Flood Risk

Introduction

- 6.4.1. A Hydrology and Hydrogeology Assessment, Site-Specific Flood Risk Assessment (FRA) and Drainage Management Plan have been prepared by JBA Consulting in support of the Proposed Substation Development. These reports assess the existing surface water and groundwater environment, the potential effects arising during construction and operation, flood risk at the site and the proposed surface water drainage strategy.

Hydrology and Hydrogeology Assessment

- 6.4.2. A Hydrology and Hydrogeology Assessment has been prepared by JBA Consulting to assess the potential effects of the Proposed Substation Development on the surface water and groundwater environment during construction and operation. The assessment has been undertaken having regard to the Water Framework Directive and the relevant national legislation and guidance.
- 6.4.3. The Proposed Substation Development is located within the River Camogue catchment. A tributary of the River Camogue follows the southern boundary of the site and field drains within the site convey surface water southwards towards the receiving watercourse. The River Mahore is located to the north and joins the River Camogue further downstream. The Camogue, Mahore and Morningstar Rivers also form part of the OPW arterial drainage network.
- 6.4.4. The site lies within the DRUMCOMOGE_010 river waterbody, which has Poor Water Framework Directive status and is identified as At Risk of failing to meet its environmental objectives. The downstream MAHORE_020 waterbody has Moderate status and is also At Risk, while the MORNINGSTAR_040 waterbody has Good status and is Not at Risk. Existing pressures within the wider catchment include agriculture, hydromorphology and urban wastewater.
- 6.4.5. The Proposed Substation Development is underlain by the Hospital groundwater body, which has Good WFD status and is Not at Risk. Groundwater vulnerability ranges from Moderate in the southern part of the site to High in the northern part. The site is not located within a drinking water source protection area.
- 6.4.6. The principal potential effects on the water environment arise during the construction phase. Excavation, earthworks, construction traffic, temporary soil storage and the use and storage of fuels, oils and concrete products have the potential to result in sediment or pollutants entering the local drainage network or receiving watercourses.

Construction activities may also temporarily alter existing surface water flow paths. In the absence of mitigation, the Hydrology and Hydrogeology Assessment identifies the potential for moderate, short-term negative effects on surface water quality and the local hydrological regime, with slight, temporary negative effects on groundwater.

- 6.4.7. Construction-phase mitigation is set out in the Hydrology and Hydrogeology Assessment and the Construction Environmental Management Plan. The measures include separation of clean and potentially contaminated runoff, use of settlement and silt-control measures, protection of drains and watercourses, appropriate storage of fuels and chemicals, management of excavated material and spill-response procedures. No untreated construction water will be discharged directly to a watercourse.
- 6.4.8. With implementation of the identified mitigation measures, the Hydrology and Hydrogeology Assessment concludes that construction of the Proposed Substation Development will not result in significant negative effects on surface water or groundwater. The residual construction effects are assessed as short-term, neutral and not significant. During operation, the assessment similarly concludes that there will be no deterioration in the status of surface water or groundwater bodies and that the Proposed Substation Development will not jeopardise future improvements in WFD status. Long-term operational effects are assessed as neutral and not significant.

Flood Risk Assessment

- 6.4.9. A Site-Specific Flood Risk Assessment has been prepared in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities. The assessment identifies fluvial flooding associated with the River Camogue system as the principal source of flood risk to the site. The mapping within the Flood Risk Assessment shows that low-lying land along the southern boundary extends into Flood Zones A and B.
- 6.4.10. All critical electrical infrastructure, including the 220kV substation and BESS, is located on higher ground within Flood Zone C. Ground levels rise from 81–82mOD within the lower southern part of the site to 86–87mOD at the location of the substation and BESS. The proposed finished floor level of the 220kV substation is 86.99mOD. Critical infrastructure will also be raised by at least 100mm above the surrounding ground level in accordance with ESB requirements.
- 6.4.11. The Flood Risk Assessment also considers the potential effects of climate change. The mapped future flood extents remain within the lower-lying southern part of the site and do not extend to the proposed critical infrastructure. The proposed access track is also located outside Flood Zones A and B and will not result in a loss of floodplain storage or an impediment to flood flows.
- 6.4.12. The Flood Risk Assessment concludes that the Proposed Substation Development is at low risk of fluvial flooding, will not increase flood risk elsewhere and is consistent with the core principles of the Flood Risk Management Guidelines.

Drainage Management Plan

- 6.4.13. A Drainage Management Plan has been prepared to establish the surface water drainage strategy for the Proposed Substation Development. The strategy has been developed in accordance with Sustainable Drainage Systems principles and seeks to maintain existing overland flow paths, manage the additional runoff generated by the proposed development and avoid increasing flood risk to downstream or third-party receptors.
- 6.4.14. The drainage strategy comprises two complementary systems. Outside the formal hardstanding drainage catchment, shallow interception trenches, trackside drains, check dams, cross-underdrains and diffusers will maintain existing overland flow paths across the access tracks. Within the developed area, runoff from buildings, compounds and hardstanding will be collected by surface grading, gullies and vegetated swales and conveyed to an attenuation pond before controlled discharge to the diverted field drain.
- 6.4.15. The maximum discharge from the attenuation system will be restricted to 5.1 litres per second. The proposed attenuation pond has a capacity of 600m³ and will operate as a detention basin, providing attenuation and treatment as part of the SuDS management train. Runoff from the transformer area will pass through an oil separator before entering the wider surface water drainage system and no untreated drainage from the transformer area will discharge directly to the downstream drainage network.
- 6.4.16. The hydraulic assessment incorporates climate change and urban creep allowances and does not rely on infiltration to demonstrate the performance of the system. No flooding is predicted from the modelled drainage network for rainfall events up to and including the 100-year event. The proposed SuDS measures also provide sufficient treatment for routine runoff from roofs, hardstanding areas and internal access infrastructure.
- 6.4.17. The Proposed Substation Development also requires the permanent diversion of an existing field drain. The replacement drain will maintain the existing drainage function and conveyance towards the receiving watercourse. The Flood Risk Assessment and Drainage Management Plan conclude that the diversion will not increase flood risk and will improve local surface water attenuation by reducing flow velocities.

Cumulative Effects

- 6.4.18. The Hydrology and Hydrogeology Assessment considers the potential for cumulative effects with the Proposed Solar Farm Development. The principal potential interaction relates to construction-phase sediment and pollution risk within the shared downstream catchment. Subject to implementation of the mitigation measures applicable to each development, no significant cumulative effects on the water environment are anticipated.

Water and Flood Risk Summary

- 6.4.19. The Proposed Substation Development has been designed having regard to the existing hydrological regime and flood characteristics of the site. The critical electrical infrastructure has been located away from the lower-lying lands adjoining the River Camogue system and is situated within Flood Zone C and outside the mapped climate-change flood extents.
- 6.4.20. Surface water will be managed through a combination of retention of existing overland flow pathways and a formal SuDS network serving the developed areas. The proposed drainage system provides for attenuation, controlled discharge and treatment of surface water runoff and has been demonstrated to accommodate the required design events without increasing flood risk.
- 6.4.21. The Hydrology and Hydrogeology Assessment concludes that, with implementation of the identified mitigation measures, the Proposed Substation Development will not give rise to significant residual effects on the surface water or groundwater environment and will not result in deterioration of WFD status. The Flood Risk Assessment similarly concludes that the development can be accommodated without increasing flood risk within or beyond the site.

6.5. Noise

- 6.5.1. A Noise Assessment has been prepared by AWN Consulting in support of the Proposed Substation Development. The assessment considers noise and vibration effects during the construction and operational phases and includes the Proposed Solar Farm Development in the assessment of the Overall Project.
- 6.5.2. The receiving environment is rural and agricultural in character. Existing noise sources include traffic on the R513, R516 and local road network, including the L1509, together with agricultural activity. An environmental noise survey was undertaken in March 2026 at a location selected as representative of the noise environment experienced at nearby noise-sensitive locations. The survey recorded daytime background noise levels of 38–42 dB LA90, an evening level of 31 dB LA90 and a night-time level of 25 dB LA90. Having regard to the evening and night-time results, AWN considers the location to be within an area of low background noise for the purposes of the EPA NG4 guidance.
- 6.5.3. On this basis, operational noise criteria of 45 dB LAr,T during the daytime period, 40 dB LAr,T during the evening period and 35 dB LAeq,T during the night-time period have been adopted at noise-sensitive locations. These criteria represent the lower limits applicable to areas of low background noise under NG4 and provide the basis for the operational assessment.
- 6.5.4. Construction noise has been assessed with reference to BS 5228-1. A daytime construction noise threshold of 65 dB LAeq,T has been adopted. The assessment considers a conservative scenario in which three items of construction plant operate

simultaneously close to the works boundary. At a distance of 50m, the predicted construction noise level is 65 dB LAeq,1hr and reduces with increasing distance. The closest residential noise-sensitive location is 45m from the nearest construction works; however, construction activity will progress through the site and works will not remain at the closest point to an individual receptor for an extended period. Taking account of the magnitude and duration of the predicted noise levels, the assessment concludes that construction noise effects will not be significant and that specific acoustic mitigation is not required.

- 6.5.5. The localised road widening works along the L1509 and at its junction with the R513 have also been considered. These works will be of short duration and the period during which construction plant will be located close to an individual noise-sensitive location will be limited. AWN therefore concludes that the associated construction noise effects will not be significant. No vibration effects are anticipated at sensitive locations during construction, although construction activities will be required to operate within the vibration criteria identified in the assessment.
- 6.5.6. Construction traffic has been considered separately. AWN notes that, based on the DMRB methodology, an increase in traffic volume of the order of 25% would be required to produce a 1 dB increase in traffic noise. Having regard to the construction traffic associated with the development, the assessment concludes that additional traffic on the local road network will not result in a significant noise impact.
- 6.5.7. During operation, the principal noise sources associated with the Proposed Substation Development are the substation transformer and the BESS equipment, including the battery units, BESS transformer and Power Conversion System units. The substation transformer will be enclosed on three sides by an 8.5m-high concrete wall, with the open side facing away from the closest noise-sensitive dwellings. Unlike elements of the Proposed Solar Farm Development, the substation will operate continuously over a 24-hour period with consistent noise emissions.
- 6.5.8. Operational noise has been modelled using the proposed layout and the sound power levels provided for the relevant plant. The model also includes the inverter and transformer sources associated with the Proposed Solar Farm Development in order to assess the Overall Project cumulatively. The assessment assumes that noise from the development will not exhibit tonal or impulsive characteristics at noise-sensitive locations.
- 6.5.9. The modelling demonstrates that there are no noise-sensitive locations within the 45 dB LAeq daytime contour and no noise-sensitive locations are predicted to exceed 35 dB LAeq during the evening and night-time periods. At the closest identified noise-sensitive location to the substation, the predicted noise level from the substation and the remainder of the Overall Project is 37 dB LAeq,T during the daytime and 35 dB LAeq,T during the evening and night-time periods. These levels are within the adopted criteria for all periods and no operational noise mitigation is required.

- 6.5.10. There is no significant source of operational vibration associated with either the Proposed Substation Development or the Overall Project. The Noise Assessment concludes that there will be no significant environmental noise or vibration effects associated with the operation of the Proposed Substation Development or the Overall Project.

6.6. Landscape and Visual

- 6.6.1. An LVIA has been prepared by MacroWorks Ltd and is submitted in support of the application. The LVIA assesses the landscape and visual effects of the Proposed Substation Development and also considers the Proposed Solar Farm Development cumulatively as part of the Overall Project. The assessment focuses on a 5km study area, with particular consideration given to receptors in the nearer landscape and to the more sensitive landscape and heritage setting at Lough Gur.
- 6.6.2. The Proposed Substation Development is located within the Agricultural Lowlands Landscape Character Area identified in the Limerick Development Plan 2022–2028. The receiving landscape is characterised by agricultural fields, established hedgerows and treelines, dispersed settlement and existing infrastructure, including the 220kV overhead transmission line which traverses the site. The LVIA assesses the landscape of the site and wider study area as generally having a Medium-low sensitivity to the Proposed Substation Development, with localised areas of higher sensitivity.
- 6.6.3. Landscape and visual mitigation has been incorporated into the design. Existing hedgerows and field boundaries will be retained and reinforced where practicable, together with new native hedgerow and thicket planting around the development. The substation buildings also incorporate a graduated green colour treatment intended to reduce their perceived massing and assist their integration with the surrounding vegetation and agricultural landscape. These measures will strengthen the existing landscape framework and progressively reduce the visual prominence of the development.
- 6.6.4. During construction, landscape effects will arise from site preparation, earthworks, construction activity and the introduction of the proposed infrastructure. The magnitude of landscape change is assessed as Medium within the immediate vicinity and reduces quickly with distance. The resulting landscape effect is Moderate and negative within a very localised area. Construction-stage visual effects are similarly assessed as no greater than Moderate in the immediate vicinity and reduce considerably beyond the site due to intervening vegetation. These effects are not considered significant.
- 6.6.5. During operation, landscape effects will remain concentrated within the site and immediate surrounding area. The LVIA identifies a Medium magnitude of landscape change within 200–300m of the Proposed Substation Development, reducing to Low and Negligible across the wider study area. The resulting landscape effect is no greater than Moderate-slight locally, with Slight or Imperceptible effects across the remainder of the study area.

- 6.6.6. The visual assessment is informed by photomontages prepared from 11 representative viewpoints. Prior to establishment of mitigation, visual effects range from Moderate to Imperceptible. Following establishment of the proposed landscape planting, effects reduce further across the majority of viewpoints. The closest viewpoint on the L1509 reduces from Moderate to Slight, while views from the more sensitive Lough Gur landscape are assessed as Imperceptible. The assessment also considers winter conditions and concludes that seasonal reduction in vegetation screening would not result in significant visual effects.
- 6.6.7. The LVIA has also considered the Proposed Substation Development cumulatively with the Proposed Solar Farm Development. It concludes that the combined landscape and visual effects of the Overall Project will remain localised and contained and that no notable cumulative landscape or visual effects will arise.
- 6.6.8. Overall, the LVIA concludes that the Proposed Substation Development will not result in significant landscape or visual effects.

6.7. Archaeology and Cultural Heritage

- 6.7.1. An Archaeological Impact Assessment has been prepared by John Cronin & Associates and is submitted in support of the application. The assessment considers the known and potential archaeological resource within and immediately adjoining the Proposed Substation Development and is informed by desktop research, site inspection, geophysical survey and archaeological test trenching.
- 6.7.2. There are no recorded archaeological sites within the Proposed Substation Development area and the AIA therefore identifies no direct impact on the recorded archaeological resource. The Zone of Notification associated with recorded barrow LI040-200 extends partially into the red line boundary; however, no development is proposed within that area. The historic mapping reviewed as part of the assessment similarly identified no features within the site indicative of previously recorded archaeological remains.
- 6.7.3. A programme of geophysical survey was undertaken by Target Archaeological Geophysics Ltd. under Detection Device Licence 25R0032 as part of the wider survey of the Overall Project lands. Four probable archaeological features were identified within the main area of the Proposed Substation Development, together with a number of anomalies of uncertain origin. The findings of that survey informed the subsequent programme of targeted archaeological testing.
- 6.7.4. Archaeological test trenching was undertaken in March and April 2026 under Excavation Licence 25E1145, with six trenches located within the Proposed Substation Development area. Three of the probable archaeological features identified by the geophysical survey were investigated. The testing confirmed an enclosure, potentially an early medieval ringfort, and a ring-ditch as archaeological features. A further ring-ditch identified by the geophysical survey was only partially identified during testing

and was found to be particularly ephemeral. No archaeological artefacts were recovered from the features investigated.

- 6.7.5. The archaeological investigations have informed the design of the Proposed Substation Development. The enclosure and one of the identified ring-ditch features have been avoided and will be preserved in situ. These areas will be fenced off in advance of construction to protect them from construction activity and traffic.
- 6.7.6. Two ring-ditch features are located within areas where avoidance has not been possible. The AIA recommends that these features are archaeologically excavated in advance of construction and preserved by record. The works will be undertaken under licence from the National Monuments Service, with the required method statement submitted as part of the licence application.
- 6.7.7. Notwithstanding the geophysical survey and targeted testing undertaken to date, the AIA identifies the potential for further archaeological material to survive within areas that will be disturbed by the Proposed Substation Development. A further programme of archaeological test trenching is therefore recommended in advance of construction. This will be focused on the areas to be disturbed and will include targeted investigation of anomalies of archaeological potential identified through the geophysical survey. Should further archaeological material be identified, the appropriate response will comprise preservation in situ where practicable or preservation by record where avoidance is not possible.
- 6.7.8. A separate ring-ditch type feature, with a diameter of c.10m, was identified by the geophysical survey within the small area of Coolscart included as part of the contingency transformer delivery route. No other archaeological features were identified along the remainder of that route. Should use of the contingency route be required, the AIA recommends consultation with the project designers and the National Monuments Service to agree appropriate mitigation in respect of the identified feature.
- 6.7.9. The AIA therefore establishes an avoidance-led approach to the archaeological resource. Known features have been incorporated into the design and preserved in situ where this can be achieved, while preservation by record is proposed for the two ring-ditch features that cannot be avoided. Further pre-construction testing will address the potential for previously unidentified archaeology within areas subject to ground disturbance. The recommendations of the AIA are subject to the approval of the National Monuments Service and An Coimisiún Pleanála.

6.8. Traffic and Transport

- 6.8.1. A Traffic and Transport Assessment (TTA) and Construction Traffic Management Plan (CTMP) have been prepared by MPA Consulting Engineers in support of the Proposed Substation Development. The TTA assesses the traffic generated by the development and its effect on the surrounding road network and also considers the Proposed Solar Farm Development cumulatively as part of the Overall Project.

- 6.8.2. The Proposed Substation Development will be accessed from the L1509, which connects to the R513 to the east. The proposed access has been assessed in respect of sightlines, geometry and the requirements of construction vehicles, and localised widening works are proposed along the L1509 where required. Construction traffic may approach the area from either the M7/N24 to the north or the M8 to the south, with the R513 forming the principal route to the local road network. A temporary access from the R516 has also been assessed as a contingency route for transformer delivery.
- 6.8.3. Construction of the Proposed Substation Development is expected to take up to 18 months. The TTA predicts 63 two-way vehicle trips on an average construction day, increasing to 145 two-way trips during peak activity. These peak periods will be short-term and will arise principally during earthworks and periods of more intensive material delivery.
- 6.8.4. The traffic assessment also considers the potential for construction of the Proposed Solar Farm Development to overlap with the Substation Development. The cumulative assessment adopts a conservative scenario in which several parts of the Overall Project are under construction at the same time. The greatest proportional increases arise on the local roads, where existing traffic volumes are low. In the peak cumulative scenario, the L1509 is assessed as operating at 25.1% of its theoretical capacity. The TTA concludes that the temporary construction traffic can be accommodated on the surrounding road network without giving rise to material capacity or operational issues.
- 6.8.5. Construction traffic will be managed in accordance with the oCTMP. A Construction Traffic Manager will coordinate vehicle movements and deliveries, including measures to avoid conflicting HGV movements on the secondary access routes and, where practicable, local peak periods and school drop-off and collection times. The oCTMP also provides for construction signage, banksmen at site accesses, control of vehicle speeds, wheel washing and road cleaning where required, on-site parking and monitoring of the condition of the local road network.
- 6.8.6. One abnormal load is anticipated for delivery of the transformer. The primary route will use the R513 and L1509, with the R516 route retained as a contingency. Swept path assessment has been undertaken for the transformer delivery and any temporary traffic management or road closure required will be coordinated with Limerick City and County Council and the relevant road authorities.
- 6.8.7. Operational traffic will be limited to maintenance and inspection visits, estimated at one to two visits per week. The TTA concludes that this level of activity will have a negligible effect on the surrounding road network.
- 6.8.8. Having regard to the temporary nature of the construction traffic, the capacity available on the surrounding road network and the traffic management measures proposed, the TTA concludes that the Proposed Substation Development and the

Overall Project can be accommodated without creating capacity or safety issues and are acceptable in traffic and transport terms

6.9. BESS Safety and Emergency Planning

- 6.9.1. An Outline Battery Safety Management Plan (OBSMP) has been prepared by Enertis in support of the Proposed Substation Development. The document identifies the principal safety considerations associated with the proposed Battery Energy Storage System and the measures to reduce the likelihood and consequences of a system failure.
- 6.9.2. The proposed battery technology is Lithium Iron Phosphate (LFP) technology, which the report identifies as having a lower risk of thermal runaway than other lithium-ion chemistries. Any alternative technology selected at detailed design stage will be required to be fully tested and certified to the applicable BESS safety standards.
- 6.9.3. The principal battery-related hazard identified in the OBSMP is thermal runaway, which may arise from manufacturing defects, electrical abuse or physical damage to a battery cell. In the unlikely event that thermal runaway occurs, associated hazards may include fire, explosion, electrical risk and the release of gases. The safety strategy is therefore directed first towards preventing an event occurring and, where an event does occur, limiting its consequences and preventing propagation beyond the affected equipment.
- 6.9.4. The BESS will be procured from a suitably experienced and certified integrator and will incorporate tested active and passive protection systems. The OBSMP requires compliance with the relevant UL, IEC, IEEE and NFPA standards, including testing of the selected BESS design to UL 9540A at unit or installation level. The proposed layout also provides separation between groups of BESS equipment and other infrastructure. A minimum separation of 3m is maintained between BESS groupings and other equipment, while the reduced separation between units within the same grouping is dependent upon large-scale fire testing demonstrating that an event can be contained within a single unit.
- 6.9.5. The safety systems will include thermal monitoring, smoke, fire and gas detection, automatic shutdown and electrical isolation, emergency stop facilities and independent liquid cooling. The battery enclosures will also incorporate ventilation and explosion protection measures and will have a minimum one-hour internal fire resistance rating. The final failure detection design will be validated by an independent assessor prior to construction.
- 6.9.6. Once operational, the BESS will be designed to operate unmanned, with access required for maintenance. A dedicated control room will provide 24-hour remote monitoring and control, supported by an automated Battery Management System capable of detecting abnormal operating conditions and isolating affected equipment. Routine maintenance of the BESS and associated safety systems will generally be

undertaken every six to twelve months, depending on the risk profile of the equipment selected.

- 6.9.7. The OBSMP also addresses emergency access and first-responder requirements. Two separate access points will be provided to the BESS compound to facilitate emergency access under differing wind conditions. Site signage will identify the presence and type of BESS, relevant hazards, suppression systems and 24-hour emergency contact information. Detailed site information, including emergency access routes, shutdown points, hazardous materials, drainage and pollution-control features, will be provided to Limerick City and County Fire and Emergency Service at detailed design stage.
- 6.9.8. A detailed Emergency Response Plan and Risk Management Plan will be prepared following consent in consultation with Limerick City and County Fire and Emergency Service. These will reflect the final equipment selected and will address access, communication, incident response, evacuation, firefighting roles, post-incident monitoring and other matters relevant to emergency response. The OBSMP states that the selected BESS technology will be required to undergo UL 9540A or equivalent large-scale testing to demonstrate its ability to limit thermal runaway propagation. On the basis of that testing approach, water is not proposed for on-site fire suppression or boundary cooling where it is demonstrated to be unnecessary to prevent propagation to adjacent units.
- 6.9.9. The OBSMP concludes that the safety of the BESS will be addressed through the design and procurement of appropriately tested equipment, separation and containment, automated detection and control, operational monitoring and detailed emergency planning. These measures are intended to minimise the likelihood of a BESS failure event and to limit the consequences should such an event occur.

6.10. Construction Environmental Management and Methodology

- 6.10.1. A Construction Environmental Management Plan (CEMP) has been prepared by JBA Consulting, and an Outline Construction Methodology (OCM) has been prepared by TLI Group, with Enertis input regarding the BESS. Together, these documents set out the environmental controls and principal construction methods that will apply to the Proposed Substation Development.
- 6.10.2. The CEMP establishes the project-specific environmental measures to be implemented during construction and provides the framework within which the appointed contractor will prepare the Construction-Phase CEMP. The contractor's document will incorporate, as a minimum, the measures contained in the planning-stage CEMP together with any additional requirements arising from detailed design, the construction methodology, relevant consents and conditions attaching to the development.
- 6.10.3. The CEMP addresses the principal environmental risks associated with construction, including surface water runoff and sediment, pollution and spill prevention, ecology, dust, noise and vibration, traffic, archaeology, excavation and soil management,

waste, biosecurity and emergency response. It also identifies the roles and responsibilities for implementation, including the Site Manager and Ecological Clerk of Works, and requires environmental induction, monitoring and record keeping throughout the construction period.

- 6.10.4. Particular emphasis is placed on protection of the River Camogue and the local drainage network. The CEMP provides for separation of clean and potentially sediment-laden water, use of silt fencing and settlement measures, early implementation of elements of the permanent drainage system and controls on fuel, concrete and other potentially polluting materials. The ecological buffers and pre-construction survey requirements identified in the EcIA and NIS are also carried through into the CEMP.
- 6.10.5. The OCM describes the construction approach for the 220kV loop-in works, substation and BESS. The overhead line works will include construction of two new Type 269E towers, removal of existing Tower 69 and connection of the new towers to the proposed gantries and GIS substation. Temporary access tracks, crane pads and laydown areas will be provided where required and reinstated following completion of the works.
- 6.10.6. Construction of the substation will involve formation of the TSO and Customer compounds, installation of drainage and earthing infrastructure, construction of the GIS and customer buildings, gantry structures and transformer compound, followed by installation, wiring and commissioning of the electrical equipment. The BESS construction methodology provides for site preparation, drainage, foundations and buried services, followed by delivery and installation of the battery units, power conversion equipment, switchgear and associated infrastructure. Major BESS equipment is expected to be installed substantially on delivery, limiting the requirement for temporary storage on site.
- 6.10.7. Detailed construction Method Statements will be prepared by the appointed contractor before the relevant works commence. These will be informed by the OCM, the CEMP and the mitigation measures contained in the supporting technical assessments. The OCM also provides for reinstatement of temporary working areas, waste management, invasive species controls, emergency response and the archaeological requirements identified in the AIA.
- 6.10.8. Construction of the Proposed Substation Development is expected to extend over a total period of 18 months, with a number of activities taking place concurrently. Standard working hours will be 07:00 to 19:00 Monday to Friday and 08:00 to 14:00 on Saturdays, subject to the exceptions and prior agreement provisions set out in the CEMP for low-noise activities, planned overhead line outage works and emergency works.
- 6.10.9. The CEMP and OCM therefore provide a coordinated framework for construction of the Proposed Substation Development. The detailed construction arrangements will be developed following appointment of the contractor, while the environmental

mitigation and protection measures established through the planning application will be carried forward into the Construction-Phase CEMP and task-specific Method Statements..

7.0. Planning Assessment

7.1. Statutory Planning Test

7.1.1. The Proposed Substation Development is the subject of an application for approval under Section 182A of the Planning and Development Act 2000, as amended. An Coimisiún Pleanála has already determined, following the pre-application consultation process under Section 182E, that the proposed 220kV substation, grid connection and BESS fall within the scope of Section 182A. By Direction dated 20 July 2026 under Ref. ACP-323201-25, ACP directed that the application should be made directly to An Coimisiún Pleanála.

7.1.2. Section 182B provides the statutory framework for determination of that application. Under Section 182B(1), ACP is required to consider the information before it relating to:

“the likely consequences for proper planning and sustainable development”

in the area in which the development is proposed, and:

“the likely effects on the environment or adverse effects on the integrity of a European site”.

These are the principal statutory considerations against which the planning merits of the Proposed Substation Development are assessed below.

7.1.3. Section 182B(10) further provides that, in considering the consequences for proper planning and sustainable development, regard is to be had to the Development Plan for the area; whether the area is, or the development would affect, a European site; the matters referred to in Section 143; and the relevant provisions of the Act and Regulations.

7.1.4. Sections 5 and 6 of this Report set out the relevant policy framework and the site-specific planning and environmental evidence. The assessment below does not repeat that material. It considers what that evidence means when the Proposed Substation Development is assessed against the statutory considerations in Section 182B.

7.2. Section 182B(1)(a)(i) – Likely Consequences for Proper Planning and Sustainable Development

Principle and Function of the Development

7.2.1. The Proposed Substation Development has a clear and identified electricity transmission function. It will provide the 220kV connection required between the Proposed Solar Farm Development and the existing national transmission network. The BESS will provide electricity storage as part of the same proposed electricity system. The relationship between these elements has already been considered

through the Section 182E process. The Inspector concluded that, in the particular circumstances of this development, the 220kV substation, grid connection and BESS would form a single system used for the conveyance of electricity, and ACP subsequently determined that the development falls within Section 182A.

- 7.2.2. The need for development of this nature is supported at each level of the planning policy framework. National policy supports the reinforcement and development of the electricity transmission network required to accommodate increasing renewable generation. The RSES supports enhanced electricity networks and new transmission infrastructure, while the Limerick Development Plan provides specific support for reinforcement of energy networks, development of the electricity grid and the connection of renewable energy proposals. The principle of electricity transmission and storage infrastructure is therefore well established. The planning issue in this case is principally one of location and environmental acceptability, rather than whether infrastructure of this type should be provided.

Locational Justification

- 7.2.3. There is a strong site-specific planning and technical rationale for locating the development on these lands. The existing 220kV transmission line crosses the site and is the transmission asset to which the proposed LILLO connection will be made. The site also lies within the wider lands associated with the Proposed Solar Farm Development. The selected location therefore allows the proposed renewable generation project, the required substation and the existing national transmission network to be brought together at a single location, avoiding the need for a materially more extensive off-site grid connection.
- 7.2.4. The location was nevertheless not selected solely by reference to the existing overhead line. Two potential substation locations were considered during the Section 182E process, and ACP advised that a single location would need to be selected before consultation could conclude. Following that process, the L1509 site was selected as the preferred location having regard to the combined planning, technical and environmental requirements of the Proposed Substation Development.
- 7.2.5. The selected site provides direct access to the existing 220kV transmission line while also allowing the principal electrical infrastructure to be accommodated within the wider Overall Project lands. It provides a suitable permanent access from the L1509 and sufficient land to accommodate the substation, BESS and associated infrastructure while responding to surrounding residential properties, the existing field pattern and the environmental constraints identified through the project assessments.
- 7.2.6. The subsequent design process has further demonstrated the suitability of the location. Critical electrical infrastructure is positioned on higher ground within Flood Zone C; development is set back from the River Camogue and its riparian corridor; identified archaeological features have been avoided and preserved in situ where

practicable; and the layout has been developed to retain existing hedgerows, treelines and ecological corridors where compatible with the infrastructure requirements.

- 7.2.7. The selected location therefore represents a balance between the fixed technical requirement to connect to the existing 220kV transmission network and the planning and environmental objective of locating the necessary infrastructure where its effects can be appropriately avoided, reduced and managed.

Land Use and Residential Amenity

- 7.2.8. The development will result in a permanent change in the use and character of part of the existing agricultural lands. The GIS building, BESS compound, transformer, electrical plant, new towers and other infrastructure will introduce substantial new development into a rural area.
- 7.2.9. There is, however, no Development Plan designation or existing land-use commitment which precludes electricity infrastructure at this location. The existing 220kV line is already a significant infrastructural feature of the site, and electricity transmission development necessarily has locational requirements which distinguish it from development that can readily be directed towards zoned urban land.
- 7.2.10. There are no residential dwellings within the Red Line Boundary. The amenity of nearby residents remains relevant, particularly in relation to construction activity, operational noise, traffic and visual effects.
- 7.2.11. The Noise Assessment confirms that operational noise will remain within the applicable criteria at the assessed noise-sensitive locations. Operational traffic will be very limited. Construction effects will be temporary and subject to the measures contained in the CEMP and oCTMP. On the completed technical evidence, no residential amenity effect has been identified which would render the proposed use unacceptable.

Access and Infrastructure

- 7.2.12. The permanent site access will be provided from the L1509. The TTA assesses both the Proposed Substation Development and the potential overlap with construction of the Proposed Solar Farm Development. Although the proportional change on the lower-volume local roads will be noticeable during peak construction, the assessment confirms that the affected routes remain capable of accommodating the forecast traffic and that no capacity or safety issue arises.
- 7.2.13. Operational traffic will be limited to occasional inspection and maintenance activity. The transport consequences of the development therefore weigh principally on the temporary construction phase and can be appropriately managed.

Landscape and Visual Amenity

- 7.2.14. The site lies within the Agricultural Lowlands Landscape Character Area. The GIS building, electrical compounds, BESS, towers and telecommunications mast will result in a visible change to the local landscape, and the permanent character of the transmission infrastructure means that the assessment cannot rely upon eventual removal of the development as the basis for acceptability.
- 7.2.15. That permanent change has been assessed on its own terms through the LVIA. The site forms part of a working agricultural landscape of generally Medium-low sensitivity, with an established framework of mature hedgerows and vegetation and an existing 220kV transmission line already forming part of the landscape context.
- 7.2.16. The design response seeks to limit the prominence of the development through its siting, retention and reinforcement of existing hedgerows, new native planting and the graduated green treatment of the principal built form. The LVIA concludes that operational landscape effects will be no greater than Moderate-slight within the immediate vicinity and will reduce to Slight or Imperceptible across the wider study area.
- 7.2.17. Visual effects are also localised. No significant effect is identified at any of the representative viewpoints, including the more sensitive Lough Gur landscape. The combined effects of the Proposed Substation Development and Proposed Solar Farm Development have also been assessed and are considered to remain localised and contained, without notable cumulative landscape or visual effects.
- 7.2.18. The development will therefore result in a permanent but localised change to landscape character and visual amenity. Having regard to the existing landscape context, the locational requirement for the transmission infrastructure, the mitigation incorporated into the design and the findings of the LVIA, those effects are considered acceptable and do not give rise to a conflict with the landscape policies and objectives of the Limerick Development Plan.

7.3. Section 182B(10)(a) – Regard to the Development Plan

- 7.3.1. Section 182B(10)(a) expressly requires regard to the Development Plan for the area. The relevant statutory plan is the Limerick Development Plan 2022–2028, as varied.
- 7.3.2. As set out in Section 5, the Development Plan supports the reinforcement and development of energy networks and the electricity grid. Objectives IN O13 and IN O15 are particularly relevant to the Proposed Substation Development, including the provision of energy infrastructure and the connection and integration of renewable energy proposals into the grid.
- 7.3.3. The Plan also contains wider support for renewable generation and energy storage. This is relevant to the BESS and to the relationship between the Proposed Substation Development and Proposed Solar Farm Development.

- 7.3.4. That policy support is qualified by the requirement to protect landscape, biodiversity, water quality, cultural heritage, residential amenity and other environmental interests. The Proposed Substation Development must therefore satisfy both limbs of the Development Plan position, 1) there must be a planning justification for the infrastructure, and 2) the proposed location must be environmentally acceptable.
- 7.3.5. The first limb is clearly satisfied. The development provides a direct connection between a proposed renewable generation project and the existing 220kV transmission network and is of the type expressly contemplated by the energy and grid objectives of the Plan.
- 7.3.6. The second has been considered through the constraints-led design process and the technical assessments submitted with the application. No conflict has been identified with a Development Plan objective relating to water, ecology, landscape, archaeology, traffic, noise or residential amenity that would warrant refusal of the development.
- 7.3.7. The Proposed Substation Development is considered consistent with the Limerick Development Plan.

7.4. Sections 182B(1)(a)(ii) and 182B(10)(c)–(d) – Environmental Effects and European Sites

- 7.4.1. Section 182B requires consideration of the likely environmental effects of the development and, where applicable, adverse effects on the integrity of a European site. Section 182B(10) separately requires regard to the fact that an area is a European site or that the development would have an effect upon such a site.

Environmental Effects

- 7.4.2. An EIA Screening Report has been prepared for the Proposed Substation Development. It considers the characteristics and location of the development and the nature of the potential effects against the Schedule 7 criteria, including cumulative effects with the Proposed Solar Farm Development. The Screening Report concludes that the Proposed Substation Development does not require mandatory EIA and that likely significant environmental effects are not anticipated. The statutory screening determination remains a matter for ACP.
- 7.4.3. The absence of an EIAR does not mean that the environmental implications of the proposal have been considered only at a general level. Detailed assessments accompany the application in relation to ecology, hydrology and flood risk, noise, archaeology, traffic and transport, construction management and BESS safety.
- 7.4.4. The technical evidence has also informed the design. In particular, the development has responded to the River Camogue, floodplain, identified archaeological features, ecological corridors and nearby receptors rather than relying solely on mitigation after the layout had been established.

- 7.4.5. Construction will result in temporary effects through traffic, plant, noise, earthworks and disturbance. Those effects are real but limited in duration. The CEMP and supporting assessments identify specific controls relevant to the site and the sensitive receptors present.
- 7.4.6. Operational effects are different in character because the principal transmission infrastructure will remain permanently. On the completed assessments, however, no significant adverse effect has been identified in relation to water quality, flood risk, noise, Landscape and visual amenity, biodiversity, archaeology, traffic or population and human health which would make the proposed location unacceptable.

Appropriate Assessment

- 7.4.7. The AA Screening Report identified a hydrological pathway between the Proposed Substation Development and the Lower River Shannon SAC. Applying the precautionary test at Stage 1, likely significant effects could not be excluded and a Natura Impact Statement has therefore been prepared.
- 7.4.8. The NIS examines that pathway in detail and identifies the measures required to protect the qualifying interests of the SAC. It concludes that, with implementation of the identified mitigation, the Proposed Substation Development will not adversely affect the integrity of the Lower River Shannon SAC, either alone or in combination with other plans or projects.
- 7.4.9. That conclusion is presented as the Applicant's technical assessment. The statutory Appropriate Assessment and final conclusion under the Habitats Directive are matters for An Coimisiún Pleanála.

7.5. Section 182B(10)(e) – Matters Referred to in Section 143

- 7.5.1. Section 182B(10)(e) expressly directs ACP to the matters in Section 143. Those matters are particularly relevant to an application for strategic electricity transmission infrastructure. Section 143 requires regard to three broad matters:

(a) the policies and objectives for the time being of the Government, a State authority, the Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural,

(b) the national interest and any effect the performance of the Board's functions may have on issues of strategic economic or social importance to the State, and

(c) the National Planning Framework and any regional spatial and economic strategy for the time being in force.

Section 143(1)(a) - Government and Public Authority Policy

- 7.5.2. Section 5 of this report demonstrates a consistent direction of policy across climate, renewable energy and electricity infrastructure. National energy and climate policy requires a substantial increase in renewable electricity generation and recognises that the electricity system and transmission network must develop alongside that generation.
- 7.5.3. The Proposed Substation Development gives practical effect to that policy. It is not itself the renewable generation project, but it is the infrastructure through which the Proposed Solar Farm Development is intended to connect to and participate in the national electricity system.
- 7.5.4. The inclusion of storage is also relevant. The BESS allows electricity to be stored and exported as part of the wider system, supporting the integration of variable renewable generation. It therefore performs a supporting grid function rather than constituting an unrelated use introduced to the site.

Section 143(1)(b) – National Interest and Strategic Importance

- 7.5.5. Section 143 requires specific regard to the national interest and to issues of strategic economic or social importance. The development of a secure electricity network capable of accommodating increasing renewable generation is plainly a matter extending beyond the immediate application site. This means the benefits of the development must be weighed at their appropriate scale.
- 7.5.6. The Proposed Substation Development provides new 220kV transmission infrastructure required to connect renewable generation to the national network. It also incorporates electricity storage. Those functions are relevant to the State's wider objectives for renewable generation, decarbonisation, security of supply and development of electricity infrastructure.
- 7.5.7. These considerations are reinforced by the national climate and energy policy framework, which seeks a substantial increase in renewable electricity generation by 2030. Delivery of that generation requires not only new renewable generating capacity but also the transmission, grid connection and storage infrastructure necessary to accommodate and integrate it within the national electricity system. The Proposed Substation Development performs that enabling function in respect of the Proposed Solar Farm Development and therefore contributes directly to the implementation of those wider national objectives. These carry substantial weight in the planning balance.

Section 143(1)(c) – National Planning Framework and RSES

- 7.5.8. The NPF provides direct policy support for development and upgrading of the national electricity grid, including the infrastructure necessary to facilitate renewable

electricity generation. It also supports co-location of renewable and supporting technologies at appropriate locations.

- 7.5.9. The RSES similarly supports enhanced electricity networks, new transmission infrastructure and the effective connection of renewable generation to the grid.
- 7.5.10. The Proposed Substation Development accords with that spatial policy direction. Its purpose is directly related to renewable generation; its location is dictated in substantial part by the existing 220kV transmission network; and its environmental acceptability has been assessed through the planning process envisaged by those policies.

7.6. Section 182B(10)(f) – Other Relevant Provisions of the Act and Regulations

- 7.6.1. Section 182B(10)(f) requires regard to the relevant provisions of the Act and Regulations. The application has been progressed through the specific statutory process applicable to electricity transmission development.
- 7.6.2. Pre-application consultation was undertaken under Section 182E. ACP determined that the development falls within Section 182A. The application is accompanied by the statutory notices, landowner consents, EIA Screening Report, Natura Impact Statement and the planning and technical documentation required to enable ACP to assess the development.
- 7.6.3. The Proposed Solar Farm Development remains the subject of a separate Section 34 application to Limerick City and County Council. This application does not seek approval of that development. The relationship between the two applications has nevertheless been addressed where relevant to the Section 182B assessment, including in relation to the need and location of the substation and cumulative or in-combination environmental effects. This enables the SID application to be determined on its own merits while recognising the proper project context in which it arises.

7.7. Overall Planning Balance

- 7.7.1. The Proposed Substation Development will result in a permanent change to part of the application lands. Agricultural land will be occupied by a substantial GIS substation, BESS compound and associated electrical infrastructure. The development also requires localised hedgerow removal, changes to the existing 220kV overhead line and a temporary period of intensive construction activity. These are material considerations that form part of the assessment.
- 7.7.2. They must be considered alongside the particular reason for developing the site. The existing 220kV transmission line traverses the lands and provides the connection point required by the Proposed Solar Farm Development. The selected location therefore has a direct functional relationship with both the renewable generation project and the national transmission system. It avoids the requirement for an extensive separate grid connection to a more remote point on the network.

- 7.7.3. The site-specific environmental work does not identify a constraint which outweighs that locational case. The final design has responded to flood risk, surface water, ecological features, archaeology, landscape, residential receptors and access requirements. The completed assessments do not identify unacceptable effects in relation to noise, traffic, landscape and visual amenity, biodiversity, water, flood risk, archaeology or population and human health.
- 7.7.4. Considerable weight must also be given to the policy and strategic context which Section 182B expressly requires ACP to consider. The proposal is supported by the electricity infrastructure and renewable energy provisions of the Limerick Development Plan and by the corresponding regional and national policy framework. Under Section 143, the national interest and the strategic importance of the issue are also material considerations.
- 7.7.5. The Proposed Substation Development directly responds to those considerations by providing the transmission and storage infrastructure required to connect renewable electricity generation to the national system.
- 7.7.6. The strategic case does not depend on disregarding the local effects. Rather, the evidence submitted with the application demonstrates that those effects have been identified, have influenced the design and, where they remain, can be satisfactorily avoided, mitigated or managed.
- 7.7.7. It is considered that the Proposed Substation Development represents an appropriate and justified use of these lands. It is supported in principle by the statutory Development Plan and higher-level planning policy, has a clear locational relationship with existing 220kV transmission infrastructure and the renewable generation project it is intended to serve, and can be accommodated without unacceptable environmental or amenity effects.
- 7.7.8. On that basis, and having regard in particular to the considerations identified in Sections 182B(1), 182B(10) and 143 of the Planning and Development Act 2000, as amended, the Proposed Substation Development is considered consistent with the proper planning and sustainable development of the area.

8.0. Conclusion

- 8.1.1. This Planning and Environmental Report has considered the Proposed Substation Development having regard to its site and surroundings, the applicable planning policy framework, the supporting environmental and technical assessments and the statutory considerations relevant to an application under Section 182A of the Planning and Development Act 2000, as amended.
- 8.1.2. The development has a clear locational and functional relationship with the existing 220kV transmission network and with the Proposed Solar Farm Development which it is intended to serve. Its siting and design have evolved through a constraints-led process, with particular regard to residential amenity, landscape and visual effects, biodiversity, the River Camogue and flood risk, archaeology, access and construction requirements.
- 8.1.3. The assessments submitted with the application demonstrate that the Proposed Substation Development can be accommodated at this location without giving rise to significant residual adverse environmental effects. The Natura Impact Statement also concludes that, with the identified mitigation measures implemented, the development will not adversely affect the integrity of the Lower River Shannon SAC, either alone or in combination with other plans or projects.
- 8.1.4. Having regard to the established need for electricity transmission and storage infrastructure, the strong policy support for renewable energy and associated grid infrastructure, the site-specific justification for the development and the findings of the supporting assessments, it is considered that the Proposed Substation Development accords with the Limerick Development Plan 2022–2028 and represents the proper planning and sustainable development of the area.