



An  
Bord  
Pleanála

## Inspector's Report ABP-312783-22

<b>Development</b>	220kV Gas Insulated Switchgear (GIS) Electrical substation and two 220kV underground transmission cables, interface compounds and pylons and associated works
<b>Location</b>	Kiltotan and Collinstown and Oldtown, Rochfortbridge, County Westmeath.
<b>Planning Authority</b>	Westmeath County Council
<b>Applicant</b>	Lumcloon Energy Limited
<b>Type of Application</b>	Application under the provisions of Section 182A of the Planning and Development Act 2000, as amended
<b>Observer(s)</b>	Transport Infrastructure Ireland Irish Aviation Authority Geological Survey Ireland
<b>Date of Site Inspection</b>	20 <sup>th</sup> April 2022
<b>Date of Oral Hearing</b>	N/A
<b>Inspector</b>	Niall Haverty
<b>Inspector's Recommendation</b>	Grant Permission with Conditions

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## 1.0 Introduction

- 1.1. An application has been made by Lumcloon Energy Limited under the provisions of section 182A of the Planning and Development Act 2000, as amended ('the Act'), for the development of a 220kV Gas Insulated Switchgear (GIS) Electrical substation, 2 No. 220kV underground transmission cables, interface compounds and pylons and associated works in the townlands of Kiltotan and Collinstown and Oldtown, Rochfortbridge, County Westmeath.
- 1.2. The purpose of the proposed development is to connect a permitted reserve gas-fired generator development and battery energy storage system development on adjacent lands, for which planning permission has been granted by Westmeath County Council (Reg. Ref. 21/515 and 21/532), to the national electricity transmission grid.

## 2.0 Project Background

- 2.1. Lumcloon Energy Limited made a request to enter into pre-application consultation under section 182E of the Act on 2<sup>nd</sup> September 2021 (Ref. ABP-311276-21). Following an assessment and recommendation from the reporting inspector, the Board determined on the 24<sup>th</sup> November 2021 that the proposed development falls within the scope of section 182A, and accordingly would comprise strategic infrastructure. On foot of that determination, the applicant subsequently submitted this application under the provisions of section 182A of the Act.

## 3.0 Site Location and Description

### 3.1. Overview

- 3.1.1. The application site, which is irregularly shaped with a total stated area of 7.58 hectares, is located in the townlands of Kiltotan and Collinstown and Oldtown, c. 2.2km south west of Rochfortbridge and c. 3.5km north east of Tyrrellspass, County Westmeath.
- 3.1.2. The M6 Motorway defines the southern boundary of the site and the main access to the site is from the R446 Regional Road to the north (i.e. the former N6). Access to

the site is also provided from an existing farmers lane off the L-51251 to the east of the site.

3.1.3. The application site and surrounding lands are currently in agricultural use, comprising fields with well-defined hedgerow and/or fenced boundaries. The site is at its lowest level at the south, adjacent to the M6 Motorway, with a gentle incline to the north and west. The existing 220kV Shannonbridge to Maynooth overhead power line traverses the site from north east to south west

3.1.4. The surrounding area generally comprises agricultural lands, with extensive cut-away bogs and a number of quarries in the wider area. Lands to the south of the site, on the other side of the M6 Motorway, are in forestry plantation use. The area in the vicinity of the application site is relatively sparsely populated, with dispersed rural housing concentrated along local roads, and to a lesser extent along the R446.

### 3.2. Natural Heritage Designations

3.2.1. The application site is not located within or immediately adjacent to any European Sites. The AA Screening Report identifies 7 No. European Sites within the zone of influence of the proposed development, as identified in the table below:

Site Code	Site Name	Distance (direction)
000582	Raheenmore Bog SAC	5.79km (south)
000685	Lough Ennell SAC	6.25km (north west)
001831	Split Hills And Long Hill Esker SAC	7.19km (west)
002205	Wooddown Bog SAC	14.33km (north)
004044	Lough Ennell SPA	6.94km (north west)
002299	River Boyne and River Blackwater SAC	19.47km (north east)
004232	River Boyne and River Blackwater SPA	19.48km (north east)

3.2.2. There are numerous Natural Heritage Areas and proposed Natural Heritage Areas within 15km of the site, primarily relating to bogs and eskers. These include Lough Ennell pNHA, Split Hills and Long Hill Esker pNHA, Grand Canal pNHA, Rahugh

Ridge (Kiltober Esker) pNHA, Murphy's Bridge Esker pNHA, Raheenmore Bog pNHA, Nure Bog NHA, Cloncrow Bog (New Forest) Bog NHA, Milltownpass Bog NHA, Black Castle Bog NHA and Daingean Bog NHA.

## 4.0 Proposed Development

4.1. The proposed development constitutes a 220kV Gas Insulated Switchgear (GIS) Electrical Substation and two 220kV underground transmission cables which will connect to the existing overhead lines within the development boundary. The proposed substation development is located adjacent to a permitted reserve gas-fired generator development and energy storage system development for which planning permission has been granted by Westmeath County Council (Reg. Ref. 21/515 and 21/532).

4.2. More particularly, the proposed substation development can be described as follows:

- Installation of a two-storey GIS substation building, 17m in height with a gross floor area of c. 2034 sq m, within a fenced compound;
- Installation of 2 No. 220kV underground circuits which will run from the proposed 220kV GIS substation and connect to existing overhead 220kV transmission lines located north-east and west of the proposed GIS substation and within the development boundary;
- Each of the two circuits will terminate in a cable within 2 No. separate fenced mini-interface electrical compounds (each with an area of c. 604.5 sq m), which will provide the interface between the proposed underground transmission circuits and overhead transmission lines. Both mini compounds will contain air insulated electrical equipment including a 17m high overhead gantry with line traps, surge arrestors and cable sealing ends. The mini-interface electrical compounds will connect the transmission lines to 2 No. proposed single circuit 24m high pylons (located to the west and northeast of the GIS substation building) set on top of concrete foundations;
- Removal of 2 No. existing electricity pylons within the development boundary along with portion of associated overhead transmission lines;
- 36m high communications tower; and

- Construction of a main entrance, access roadway, foul and surface water management systems and all ancillary site development works.

4.3. The applicant refers to the proposed development as the 'LEL GIS Castlelost' project. The adjacent permitted gas-fired generator and battery energy storage system developments are referred to as the 'LEL Flexgen Castlelost' and the 'LEL ESS Castlelost' projects, respectively.

4.4. Permission is sought for a period of ten years with an unlimited operational period, as part of the national electricity transmission system operated by EirGrid from commissioning.

4.5. The application was accompanied by an Environmental Impact Assessment Report (EIAR), AA Screening Report, Planning Statement, Drainage Report, Geophysical Survey Report, Construction Environmental Management Plan (CEMP), photomontages and various supporting documents and drawings.

#### 4.6. **Related Castlelost Projects**

4.6.1. As noted above, the proposed development before the Board comprises one of three related projects, the other two being a permitted gas-fired generator development (LEL Flexgen Castlelost) and a permitted battery energy storage system (LEL ESS Castlelost). The EIAR notes that the now-permitted LEL Flexgen Castlelost development will require an Industrial Emissions licence from the EPA and that it will comprise a lower tier establishment for the purposes of the Control of Major Accident Hazards (COMAH) Regulations. At the time of completing this report, it appears that the application for the IE licence had not yet been made to the EPA.

## 5.0 **Submissions and Observations**

### 5.1. **Local Authority**

5.1.1. Westmeath County Council submitted a report/submission which can be summarised as follows:

- Principle of proposed development is accepted.



- District Engineer has no objection, subject to conditions in relation to roads, water/wastewater, surface water and the inclusion of a special levy.
- No significant adverse effects on residential amenity are likely.
- No significant effects on visual amenities.
- Flood Risk Assessment is satisfactory.
- Environment Section reviewed AA Screening report and CEMP. The Board is the competent authority for AA. No likely impacts are envisaged on NHAs.
- CEMP is acceptable, subject to submission of an updated version prior to commencement to develop matters such as waste management, fuel storage, monitoring locations and key personnel.
- Archaeological test excavations should be carried out in advance of construction.
- EIAR is comprehensive and NTS is considered adequate.
- Consideration of alternatives is acceptable and proposed layout is logical and acceptable.
- Energy and climate change policy supports development.
- Potential for a Community Benefit Scheme has not been referenced.
- Area is of Low Local Ecological Value and potential direct effects on biodiversity will be imperceptible and neutral.
- Proposed development would not have adverse impact on land, soil and geology.
- Proposed development will not have any significant residual effects on the water environment post-implementation of mitigation.
- Potential air quality impacts are within the relevant Air Quality Standards. Construction stage air impacts will be short-term and will not have a significant impact on climate.
- Proposed development will not have any unacceptable direct or indirect impacts in terms of material assets.

- No significant adverse effects on noise and vibration on the surrounding area.
- Proposed development together with associated development under concurrent planning applications introduces a significant scale industrial landuse into an existing predominantly rural setting adjacent to a motorway. The sensitivity of the receptors are reduced by the motorway and the overall significance of 'moderate-slight' is appropriate.
- R446 was initially constructed as a national road and is capable of withstanding higher than current traffic volumes. The project will not impact significantly on the structure of the R446.
- Proposed development will not have significant environmental effects as a result of traffic. The proposed mitigation measures, including wheelwash and Stage 1 Road Safety Audit should be implemented in full.
- All interactions of effects were assessed and have been fully considered.
- Development contribution scheme should apply.
- A condition requiring pre-surveying of affected roads, post-construction survey and repair/remedial works should be applied.
- Proposed development: is required to support the growth of renewable energy; to ensure security of supply; would be in accordance with policy; would not seriously injure residential or visual amenities; would have an acceptable impact on the landscape; would not be likely to have a significant adverse impact on any designated site; would not adversely affect archaeological or natural heritage; would be acceptable in terms of traffic safety.
- Proposed development is in accordance with proper planning and sustainable development and it is recommended that permission be granted, subject to the recommended conditions.

5.1.2. A record of the views of the Elected Members was also submitted. The Members resolved to recommend the following conditions:

- Back-up supply be provided by way of indigenous biogas.
- Community Benefit Scheme be established.

- Dedicated point of contact to deal with noise, dust and emissions.
- Roads to be monitored and maintained throughout construction phase.
- Planting of trees and hedging be carried out prior to commencement.
- Further public engagement with the local community be carried out prior to commencement.

## 5.2. Prescribed Bodies

5.2.1. Submissions were received from Transport Infrastructure Ireland (TII), Irish Aviation Authority (IAA) and Geological Survey Ireland (GSI) and can be summarised as follows:

- **TII:**
  - The only reference to potential abnormal loads is in Section 12.8 of the EIAR. Any operator who wants to transport abnormal loads must obtain a permit from each local authority through which it will pass. All national road structures on the proposed haul route should be checked by the applicant to confirm their capacity to accommodate any abnormal loads proposed.
  - In addition to the permit requirements, the applicant should consult with all PPP companies, Motorway Maintenance and Renewal Contractors and road authorities to ascertain any operational requirements and to ensure the strategic function of the national road network is safeguarded.
  - Any damage caused to the pavement shall be rectified in accordance with TII Pavement Standards and details shall be agreed with the Road Authority prior to commencement.
  - The site adjoins the M6 national road reservation. No works shall impact the national road network or associated infrastructure, including the M6 drainage regime.
- **IAA:**
  - With regard to the proposed 36m high communications tower, the applicant should be required to engage with the Property Management Branch of the Department of Defence / Air Corps Air Traffic Services to

undertake a preliminary screening assessment to confirm that the proposed development and any associated cranes utilised during its construction would have no impact on the safety of flight operations along identified critical low level routes in support of Air Corps operational requirements.

- **GSI:**

- It is recommended that the Board review available GSI datasets that may be useful to its assessment.
- There are no County Geological Sites in the vicinity of the proposed development.
- Groundwater vulnerability map indicates that the area is classed as 'moderate' to 'high' vulnerability.
- GSI would appreciate a copy of site investigation reports, should the development proceed.

### 5.3. Observers

5.3.1. None.

### 5.4. Applicant's Response

5.4.1. The applicant's response to the submissions can be summarised as follows:

- **IAA Submission:** Subject to obtaining planning consent, the applicant will engage with the Property management Branch of the Department of Defence /Air Corps Air Traffic Services and undertake a preliminary screening assessment to confirm that the proposed development and any associated cranes that would be utilised during its construction would have no impact on the safety of flight operation along identified critical low level routes in support of Air Corps operational requirements.
- **TII Submission:** The applicant does not anticipate movement of potential abnormal loads to /from site associated with the proposed GIS substation development. Subject to obtaining planning consent, and in the unexpected event of the requirement to transport a vehicle or load whose weight falls

outside the limits allowed by SI 5 of 2003, the applicant notes the stipulation by TII to carry out the potential activity under permit as specified in the observation. The applicant also acknowledges the management structure of the national road network and the requirement to consult with all PPP companies MMarC Contractors and Road Authorities over which the haul routes traverses to safeguard the national road network and to prevent damage to existing national roads associated with movement and turning of abnormal 'length' loads.

- **GSI Submission:** Information from the GSI's referenced datasets was used to inform the submitted EIAR. Subject to obtaining planning consent, the applicant will furnish GSI with a copy of reports detailing future site investigations which will be carried out as part of detailed design stage works.

## 6.0 Planning History

### 6.1. Application Site

- 6.1.1. Reg. Ref. 21/515: Permission granted in March 2022 for a 10-year period for a 275MW reserve gas-fired generator to boost and back up the power system, including the following elements: 5 No. open cycle gas turbine modules; two-storey administration building; 2 No. bunded secondary fuel storage tanks; fenced above ground installation compound containing gas pipework, a regulator house enclosure, instrument kiosk, boiler house enclosure and analyser kiosk; fuel pump and filter unit; containerised water treatment module; purified water storage tank; 2 No. containerised diesel generators; ammonia storage tank; fire pump skid building; water tank; single storey IPP building; low voltage bunded house transformer; 5 No. medium voltage bunded step-up transformers; high voltage customer compound containing 2 No. bunded transformers; air compressor building; and all ancillary development including new access road, internal roads, fencing, gates and associated engineering works to provide for the connection of site services and for the treatment and disposal of foul wastewater and surface water. The development includes for construction of a new entrance to the site from the R446 with associated signage and an access road from the new entrance to the reserve gas-fired

generator. The development also includes for the demolition and removal of a farm shed, farm workshop, feed silo and a silage clamp.

- 6.1.2. Reg. Ref. 21/532: Permission granted in March 2022 for a 10-year period for an Energy Storage System (ESS) development comprising: an open area battery energy storage system (BESS) compound (area of 26,317sqm), containing 264 No. battery modules and associated medium voltage power station (MVPS) enclosures; IPP building; synchronous condenser compound, containing a horizontal synchronous generator positioned within a building; 5 No. control modules; associated banded transformers and electrical plant; high voltage customer compound containing 1 No. banded transformer and electrical plant to provide for connection to the electricity transmission system; and all ancillary development, including lightening mast protection, perimeter fencing, access gates, landscaping, lighting, car parking, internal access roads and all civil engineering works for the disposal of foul and surface water. The development includes for construction of a new entrance and access road to the facility from the R446 with associated signage from the new entrance to the ESS facility.

## 6.2. Surrounding Area

- 6.2.1. I am not aware of any other recent relevant planning history in the surrounding area.

## 7.0 Legislative and Policy Context

### 7.1. National Policy

#### 7.1.1. National Planning Framework

- 7.1.2. The National Planning Framework (NPF) is the overarching national planning policy document for Ireland. The NPF is a high-level strategic plan that sets out a vision for Ireland to 2040, expressed through ten National Strategic Outcomes (NSOs).

- 7.1.3. NSO No. 8 is “the transition to a low carbon and climate resilient society”. The NPF acknowledges that Ireland’s energy policy is focused on the pillars of sustainability, security of supply and competitiveness. It is an action of the NPF under NSO no. 8 to “reinforce the distribution and transmission network to facilitate planned growth and

distribution of a more renewables focused source of energy across the major demand centres”.

7.1.4. National Policy Objective 55 states:

“Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.”

7.1.5. Climate Action Plan 2021

7.1.6. The Plan states that electricity accounted for 16.2% of Ireland’s greenhouse gas (GHG) emissions in 2018 and that decarbonising of the electricity sector will continue by taking advantage of our significant renewable energy resources, while also ensuring the security of the electricity supply and decreasing dependence on imported fossil fuels.

7.1.7. To meet the required level of emissions reduction by 2030, a series of targets are set out, including:

- Reduce CO<sub>2</sub>eq. emissions from the sector to a range of 2 to 4 MtCO<sub>2</sub>eq. by 2030.
- Increasing the share of electricity demand generated from renewable sources to up to 80% where achievable and cost effective, without compromising security of electricity supply.
- Expand and reinforce the grid – through the addition of lines, substations, and new technologies.

7.1.8. Energy Policy Framework 2007-2020 – Delivering a Sustainable Energy Future for Ireland (Energy White Paper)

7.1.9. This white paper sets out a strategic energy policy framework to deliver a sustainable energy future for Ireland. One of the key elements is to ensure the delivery of security of supply, which is considered to be essential for all sectors of the economy, for consumers in general and for society as a whole. The key items needed to deliver a secure supply of electricity on a consistent basis are identified as robust networks and electricity generating capacity. To this end, it is an overall objective to strongly support electricity investment programmes in the high voltage transmissions network and the distribution network, in order to facilitate regional

development. The white Paper also sets the target of 33% of electricity being produced from renewable generation by 2020.

7.1.10. Ireland's Transition to a low carbon Energy Future 2015-2030

7.1.11. This White paper on Energy policy published by the Department of Communications, Energy and Natural Resources in December 2015 sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95% compared to 1990 levels, by 2050, falling to zero or below by 2100. It states that as new energy solutions such as bioenergy, solar photovoltaic and offshore energy mature and become more cost effective they will be included in the renewable energy mix. The policy document recognises that solar photovoltaic technology is rapidly becoming cost competitive for electricity generation and that the deployment of solar power in Ireland has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs.

7.1.12. Government Policy Statement on Security of Electricity Supply, November 2021

7.1.13. The Policy Statement states that electricity is vital for the proper functioning of society and the economy and notes that in order to contribute to the achievement of greenhouse gas emission targets, the Government has committed that up to 80% of electricity consumption will come from renewable sources by 2030 on a pathway to net zero emissions.

7.1.14. It states that ensuring continued security of electricity supply is considered a priority at national level and within the overarching EU policy framework in which the electricity market operates. The challenges to ensuring security of electricity supply are stated to include:

- ensuring adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services are put in place to meet demand – including at periods of peak demand; and
- developing grid infrastructure and operating the electricity system in a safe and reliable manner;

7.1.15. The Policy Statement states that the Government recognises that:

- ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions;



- there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply;

7.1.16. It goes on to state that the Government has approved that it is appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply.

7.1.17. EirGrid Group Strategy 2020-2025: Transform the Power System for Future Generations

7.1.18. This provides a strategic overview for the development of the electricity transmission system. It confirmed the need for investment in the electricity transmission system. Their goal is stated to be achieving the required increase in renewables while minimising the addition of new infrastructure.

7.1.19. EirGrid and SONI: Shaping Our Electricity Future, 2021

7.1.20. EirGrid and SONI (electricity system operator for Northern Ireland) published the ‘Shaping Our Electricity Future Report 2030’ in support of decarbonisation policies set by the respective Governments. The purpose of the document is to assist in setting out the roadmap to achieving the 70% RES-E ambition.

7.1.21. Section 3.2.1 sets out the generation-led approach to grid reinforcement and states that “in the Midlands, onshore generation clusters are connected to the updated 220kV grid – in particular along the Maynooth – Shannonbridge 220 kV corridor”. Table C-1 in Appendix C ‘Reinforcement for Generation-Led Approach’ identifies the reinforcements identified as part of the approach. This includes a need for a 220kV GIS substation reinforcement on the Midlands 220kV transmission line.

## 7.2. **Regional Policy**

7.2.1. Regional Spatial & Economic Strategy for the Eastern and Midland Regional Assembly

7.2.2. I note that the Regional Strategic Outcomes contained in the Strategy include ‘Support the Transition to Low Carbon and Clean Energy’ (RSO 9) and ‘A Strong Economy supported by Enterprise and Innovation’ (RSO 12).

7.2.3. I also note the following Regional Policy Objectives:

- **RPO 10.20:** Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
- **RPO 10.22:** Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.

### 7.3. Local Policy

7.3.1. Westmeath County Development Plan 2021-2027

7.3.2. The Development Plan contains numerous policies and objectives supporting renewable energy and development of energy infrastructure, including:

- **CPO 5.56:** Support the development of industries that create and employ green technologies and take measures to accelerate the transition towards a low carbon economy and circular economy.
- **CPO 5.59:** Support Renewable energy initiatives that supports a low carbon transition.
- **CPO 9.34:** Support the rural economy and initiatives in relation to diversification, agri business, rural tourism and renewable energy so as to sustain employment opportunities in rural areas.
- **CPO 9.35:** Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and sustainability

- **CPO 10.139:** Support local, regional, national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner and having particular regard to the requirements of the Habitats Directive.
- **CPO 10.140:** Facilitate measures which seek to reduce emissions of greenhouse gases and support the implementation of actions identified in the Westmeath County Council Climate Change Adaptation Strategy 2019-2024 and any future amendments.
- **CPO 10.169:** Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, subject to landscape, residential, amenity and environmental considerations.
- **CPO 10.172:** Co-operate and liaise with statutory and other energy providers in relation to power generation, in order to ensure adequate power capacity for the existing and future needs of the County.
- **CPO 10.173:** Support the implementation of EirGrid's Grid 25 Investment Programme, subject to landscape, residential, amenity and environmental considerations.
- **CPO 10.174:** Support and facilitate the development of enhanced electricity and gas supplies, which do not negatively impact on environmental quality, landscape, wildlife, habitats or residential amenity and which are critical to the economic development of the County.
- **CPO 10.176:** Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

7.3.3. The following natural heritage policy objectives are noted:

- **CPO 12.37:** Preserve and enhance the amenity and biodiversity value of the County, by promoting the protection of trees, groups of trees and ancient woodlands, of significant amenity value, especially native and broadleaf species.
- **CPO 12.39:** Discourage the felling of mature trees and hedgerow, particularly species rich roadside and townland boundary hedgerows to facilitate development and seek Tree Management Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.
- **CPO 12.40:** Protect and preserve existing hedgerows in new developments, particularly species rich roadside and townland boundary hedgerows, and where their removal is necessary during the course of road works or other works seek their replacement with new hedgerows of native species indigenous to the area.

7.3.4. The application site is located within Landscape Character Area 10 ‘Lough Ennell and South Eastern Corridor’, which is described in Section 13.16 of the Development Plan as follows:

“This Character Area comprises pasture land of mixed productivity. Lough Ennell is situated to the western side of this Landscape Character Area (LCA) and is designated as an Area of High Amenity, SPA and SAC. A number of preserved views are listed from the R446 between Tyrrellspass and Rochfortbridge. The area around Lough Ennell and particularly to the south of the lake is characterised by scrub land with a mixture of marsh, bog and poor pasture land. There is also a large tract of bog to the east of Rochfortbridge and Milltownpass along the county boundary. The bog areas in this LCA are mainly exploited but some have been left intact. This area has a large number of old demesnes, which are easily recognisable in the landscape with the existence of fine mature hardwood trees and estate walls in some cases.

Settlements within this landscape have developed mainly along the main road network. These include Kinnegad, Milltownpass, Rochfortbridge, and Tyrrellspass along the former N6. Recreational areas have been developed

on the shores of Lough Ennell including Ladestown, Lilliput and Tudenham. The M6 traverses the southern part of the LCA. The N52 By-Pass has also added to the transport corridor around Mullingar.”

7.3.5. The following landscape character assessment policy objectives are noted:

- **CPO 13.8:** Protect the landscapes and natural environments of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted.
- **CPO 13.9:** Ensure the preservation of the uniqueness of a landscape character type by having regard to the character, value and sensitivity of a landscape in new development proposals.

## 8.0 EIA Screening

8.1. The proposed development is not considered to constitute a project within either Annex I or Annex II of the Directive 2011/92/EU as amended by 2014/52/EU or within Part 1 or Part 2 of Schedule 5 to the Planning and Development Regulations 2001, as amended. Nonetheless an Environmental Impact Assessment Report has been submitted by the applicant. Section 1.8 of the EIAR states that, whilst EIAR is mandatory only in the case of the LEL Flexgen Castlelost development, following consultation with Westmeath County Council and given the scale, nature and the proximity of the projects to each other, a single EIAR has been prepared for all three projects with the potential environmental impacts from each project assessed individually and cumulatively.

## 9.0 Oral Hearing

9.1. The Board directed on the 25<sup>th</sup> of May 2022 that an Oral Hearing in respect of the application should not be held.

## 10.0 Planning Assessment

### 10.1. Introduction

10.1.1. I consider that the main issues in respect of the planning assessment are as follows:

- Principle and planning policy.
- Residential amenity.
- Flood risk and surface water management.
- Services.
- Other issues.

10.1.2. The issues of Environmental Impact Assessment and Appropriate Assessment are considered separately below in Section 11 and 12, respectively.

### 10.2. Principle and Planning Policy

10.2.1. As set out above, the proposed development comprises a 220kV substation, underground cabling and associated development, which is required to facilitate the connection of a permitted reserve gas-fired generator (LEL Flexgen Castlelost) and battery energy storage system (LEL ESS Castlelost) to the national grid. The proposed substation will be operated by EirGrid once completed as part of the national electricity transmission system.

10.2.2. The stated purpose of the three projects is to provide a range of electricity capacity and ancillary services to the grid and assist with the transition to a low carbon economy.

10.2.3. The permitted LEL Flexgen Castlelost project is a 275MWe reserve generator that will provide back-up electricity to the national grid. It is designed to operate intermittently and provide generating capacity during periods of high demand or when renewable energy cannot meet demand. It is stated that this will ensure power supply continuity and assist with Ireland's transition towards 70% renewable sources by 2030. It is also stated that the selected turbines are capable of being converted to allow for the combustion of green hydrogen as a fuel in the future, which will allow for carbon free and climate-neutral plant operation.

- 10.2.4. The permitted LEL ESS Castlelost project comprises an open area battery storage system compound with ancillary electrical equipment to store surplus renewable energy that is generated during periods of low demand and release this to the grid when demand is greater. It is stated that the system will replace the functions of a conventional power plant including black start services as well as providing other services such as shifting and smoothing the demand curve by charging at night and discharging during peak daytime hours and during the occurrence of power system event such as faults in the lines, tripping generators, insufficient renewables supply etc.
- 10.2.5. In addition to facilitating the connection of the permitted LEL Flexgen Castlelost and LEL ESS Castlelost projects to the transmission system, the proposed LEL GIS Castlelost substation is stated to meet the identified need for reinforcement of the 220kV transmission infrastructure in the Midlands, as outlined in the EirGrid report 'Shaping our Electricity Future'.
- 10.2.6. While the proposed substation development, and the permitted developments that it will serve, do not constitute renewable energy projects in and of themselves, they are intended to complement the move to a robust renewable energy-based transmission system, as outlined above. Renewable energy projects are supported 'in principle' at national, regional and local policy levels, with the imperative at all policy levels being the need to reduce greenhouse gas emissions, reduce reliance on fossil fuels and combat climate change.
- 10.2.7. The Revised Renewable Energy Directive 2018/2001/EU sets a target of 32% of EU energy consumption from renewable sources. The more ambitious national objective, as expressed in the NREAP, is for 40% of electricity consumption to be from renewable sources by 2020, while the target set out in the Climate Action Plan 2021 is to increase the share of electricity demand generated from renewable sources to up to 80% where achievable and cost effective, without compromising security of electricity supply.
- 10.2.8. It is also an action of the NPF under National Policy Objective 8 to reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres. At a local level, the Westmeath County Development Plan 2021-2027 contains numerous

policies supporting renewable energy, the move to a low-carbon economy and development of energy infrastructure, including CPO 5.56, CPO 5.59, CPO 9.34, CPO 9.35, CPO 10.139, CPO 10.140, CPO 10.169, CPO 10.172, CPO 10.173, CPO 10.174 and CPO 10.176.

- 10.2.9. The application site is located on unzoned agricultural lands roughly equidistant between the villages of Rochfortbridge and Tyrrellspass. It is, however, located adjacent to an existing 220kV overhead power line with its associated pylons, and is sandwiched between the M6 Motorway to the south and the R446 Regional Road to the north (the old N6). As noted above, planning permission has been granted on the adjacent lands for a Flexgen gas-fired reserve generator and battery energy storage system development, both of which include various ancillary electrical plant and equipment.
- 10.2.10. The proposed substation would have considerable separation distances from the nearest residential dwellings and is not subject to any particular constraints in terms of archaeological, cultural and architectural heritage, landscape designation or land use zoning objectives.
- 10.2.11. I consider that the construction of a substation development in this area, adjacent to an existing 220kV overhead power line and the permitted Flexgen and BESS developments and in close proximity to the M6 Motorway, a major infrastructural corridor, would not be incompatible with the principles of proper planning and sustainable development. As set out above, there is substantial policy support at national, regional and local level for the development of the electricity network and for renewable energy projects, such as that which would be facilitated by the proposed development. I therefore consider the proposed development to be acceptable in principle, subject to consideration of the key planning issues outlined in Section 10.1 above.

### 10.3. Residential Amenity

- 10.3.1. The application site is located on agricultural lands with a separation distance of c. 300m between the proposed GIS building and the nearest residential dwellings. The proposed access road from the R446 which will be used in both construction and



operational phases will, however, pass adjacent to dwellings located to the west of the site.

10.3.2. I note that no third party observations were made in respect of this application.

10.3.3. Construction phase residential amenity issues with regard to the potential for traffic, dust and noise disturbance are examined within the relevant sections of the EIAR assessment hereunder and will not be repeated within this section of the report. However, having regard to the nature and scale of the proposed development before the Board, the separation distances and the limited duration of the construction period, I do not consider that any significant impacts on residential amenity are likely to occur during the construction phase. Notwithstanding this, given that the proposed substation development would be constructed at the same time as the permitted Flexgen and BESS developments, I recommend, should the Board be minded to grant permission, that a condition be attached requiring the submission of an updated Construction Environmental Management Plan (CEMP) for the agreement of the Planning Authority, prior to the commencement of development. The CEMP should address, inter alia, construction phasing and programme, supervisory measures, noise, dust and surface water management measures, construction hours, transport of materials to and from the site, traffic management and road safety procedures and proposals in relation to public information, communications and complaints procedures.

10.3.4. With regard to the operational phase, noting the separation distances involved and the nature of the proposed substation development, which will not result in significant noise emissions or emissions to air or water and which will generally be unmanned, I do not consider that the proposed development is likely to result in any significant adverse impacts on residential amenity during its operational phase.

#### 10.4. **Flood Risk and Surface Water Management**

10.4.1. A Flood Risk Assessment (FRA) for the overall development, prepared by JBA Consulting, was included as Appendix 7.1 of the EIAR. There are no significant hydrological features identified within or near the overall development site, however, three surface water drains (referred to as the western, middle and eastern drains) originate within the overall site boundary and run in a southerly direction before

flowing in a culvert under an access road and then into a TII drain that runs along the crest of the M6 motorway cutting in an easterly direction in an oversized grassy channel before meeting a headwall and culvert that goes under the M6 in a southerly direction. The three drains are c. 4-5m wide and 1m deep, with the culverts being 350 – 400mm diameter. The TII drain is c. 2.5m deep and 8m wide, with the culvert under the M6 being 530mm diameter. All drainage channels were dry on the day of the flood risk assessors site visit and on the date of my site inspection and the FRA states that it is expected that the channels would only convey flow after significant rainfall events or periods of prolonged wet weather.

- 10.4.2. OPW records do not indicate any recorded flood history at or in the vicinity of the site.
- 10.4.3. The FRA considers that the only potential sources of flooding at the site are fluvial and pluvial. The fluvial flood risk is considered to be low given the lack of watercourses and the site is considered to be within Flood Zone C. I note that substation developments constitute 'highly vulnerable development' under the Planning System and Flood Risk Management Guidelines with such development considered to be 'appropriate' in Flood Zone C under the Justification Test matrix contained in Table 3.2 of the Guidelines. With regard to potential pluvial flooding, where rainfall is flowing overland to reach the surface water drains or where the surface water drains overflowed, I concur with the FRA that the risk is low given the ground conditions, the slope across the site and noting that the drains originate within the site and are predominantly dry and drain into the oversized TII drain. There are no significant low spots within the site to catch surface water.
- 10.4.4. I also note that the Local Authority did not express any concerns in relation to flood risk and considered the FRA to be satisfactory.
- 10.4.5. Therefore, having regard to the location of the proposed substation development, I do not consider that the proposed development would be subject to a significant flood risk or that it would exacerbate the risk of flooding on other lands.
- 10.4.6. With regard to surface water management, it is proposed to incorporate a SuDS management train for the operational phase, in accordance with the Greater Dublin Strategic Drainage Study. Roof runoff from the GIS building and hardstanding areas will be intercepted at source and will flow to stone-filled soakaways. Internal roads

will drain to filter drains running parallel with the road, infiltrating into the surrounding soils. As all surface water runoff is being intercepted at source and infiltrating directly into the subsoils, it is not proposed to provide flow restriction mechanisms such as a hydrobrake or attenuation systems.

10.4.7. I note that TII, in their submission, state that no works shall impact the national road network or associated infrastructure, including the M6 drainage regime. Since runoff will be dealt with within the site boundaries, there is not likely to be any impact on the M6 drainage regime.

10.4.8. Having regard to the sustainable drainage proposals set out in the submitted Engineering Assessment Report and associated drainage drawings, I am satisfied that the surface water management proposals are generally acceptable. If the Board is minded to grant permission, I recommend that a condition be included requiring drainage arrangements, including the attenuation and disposal of surface water, to comply with the requirements of the planning authority for such works.

## 10.5. **Services**

10.5.1. It is proposed to provide a water supply to the proposed development by a connection to an existing well on site. No further details of the well or water quality and yield are provided, however given the nature of the development and the sporadic occupation of the building, the level of water use is likely to be relatively minor.

10.5.2. With regard to foul water, there is currently no public sewer connection or private treatment plant in place. It is proposed to provide a wastewater treatment plant a short distance to the north west of the proposed GIS substation building. Calculations of foul water quantities and a Site Characterisation Report and plant specification are contained in the submitted Engineering Assessment Report. I note that different sections of the report variously states that there will be 2, 3 or 8 persons utilising the foul system, with various estimates of discharge/person/day.

10.5.3. While the Site Characterisation Report indicates that the site is suitable for the proposed Klargest treatment system with percolation area, I note that the proposed substation development will be an unmanned facility in the operational phase, with limited visits for maintenance, servicing etc. In my experience of similar proposals for

substations in rural areas, they have typically proposed sealed wastewater holding tanks, since the low and irregular discharge flow can create difficulties with the biological mechanisms required for effective wastewater treatment in a proprietary treatment system.

- 10.5.4. If the Board is minded to grant permission, I recommend a condition requiring the replacement of the proposed wastewater treatment system with an underground sealed wastewater holding tank, with effluent to be removed to a licenced wastewater treatment facility for treatment and disposal at regular intervals. Details of the holding tank and maintenance regime should be submitted for the agreement of the Planning Authority.

## 10.6. **Other Issues**

### 10.6.1. Duration of Permission and Decommissioning

- 10.6.2. I note that the applicant is seeking a 10-year permission. While the proposed development is not particularly extensive in scale or complexity, I consider this duration to be appropriate, given that the stated purpose of the proposed substation is to facilitate the connection of adjacent energy projects to the national grid, for which 10-year permissions have recently been granted by the Planning Authority (Reg. Ref. 21/515; 21/532).

- 10.6.3. With regard to the lifespan of the proposed development, it will be handed over to EirGrid upon completion and will operate as part of the national electricity transmission system. For this reason, I do not consider it necessary to attach a decommissioning and reinstatement condition to any grant of permission.

### 10.6.4. Development Contributions and Bonds

- 10.6.5. Westmeath County Council, in their submission, have sought the imposition of a section 48 development contribution condition in the amount of €47,782, in accordance the terms of their adopted Development contribution Scheme 2022. This has been calculated on the basis of €23 per square metre for Class 3 development ('commercial/industrial/retail/retail warehousing/data centres) and €1,000 per km for Class 13 development ('transmission and utility supply lines').

- 10.6.6. Section 7 of the Development Contribution Scheme sets out exemptions and reductions for certain types of development. I do not consider that the proposed development would fall under any of the exemptions listed. Accordingly, should the Board be minded to grant permission, I recommend that a suitably worded condition be attached requiring the payment of a section 48 development contribution in accordance with the Acts.
- 10.6.7. Westmeath County Council has also sought a special contribution of €31,000 towards the cost of upgrading the road serving the development. Having regard to the limited nature and scale of the proposed development and noting the reasonably good condition of the R446 (the former N6) and that the proposed development will generate no significant level of operational traffic, other than routine maintenance vehicles, I do not consider that a special contribution is justifiable. I note that similar conditions requiring special contributions of €31,000 have also been imposed in respect of the adjacent permitted Flexgen and BESS developments, which are substantially larger in scale and which will use the same roads and access point for construction. Rather than another special contribution, I consider it more appropriate that a cash deposit or bond be imposed by way of condition to cover any damage to the public roads.
- 10.6.8. Community Benefit Scheme
- 10.6.9. With regard to community gain, the elected Members of Westmeath County Council has requested a condition requiring the establishment of a Community Benefit Scheme. Given the nature and purpose of the proposed development, which will be transferred to ESB Networks/EirGrid upon completion and which will operate as part of the national electricity transmission system, strengthening the grid in the area and facilitating increased use of renewable energy sources, I do not consider that a community gain condition would be warranted in this instance.
- 10.6.10. Aviation Safety
- 10.6.11. The Irish Aviation Authority, in their submission, note the proposed 36m high communications tower and advise that the applicant should be required to engage with the Property Management Branch of the Department of Defence / Air Corps Air Traffic Services to undertake a preliminary screening assessment to confirm that the proposed development and any associated cranes utilised during its construction

would have no impact on the safety of flight operations along identified critical low level routes in support of Air Corps operational requirements.

- 10.6.12. The applicant, in response to this issue states that, subject to obtaining planning consent, they will engage with the Department of Defence /Air Corps Air Traffic Services as requested by the IAA.
- 10.6.13. Given the site location and the presence of existing sizable steel pylons associated with the 220kV overhead power line, there is no particular reason to believe that the proposed communications tower would pose a risk to aviation. Nevertheless, should the Board be minded to grant permission, I recommend the inclusion of a condition requiring engagement with the Dept. of Defence and Air Corps as requested by the IAA.

## 11.0 Environmental Impact Assessment

### 11.1. Introduction

- 11.1.1. An Environmental Impact Assessment Report (EIAR), prepared by Halston Environmental and Planning Ltd., has been submitted with the application. The Board should note that the EIAR relates to the three projects that together form what I will refer to as the 'overall development', namely:

1. **LEL Flexgen Castlelost:** Permitted 275MWe reserve gas-fired generator development (Granted by Westmeath County Council under Reg. Ref. 21/515).
2. **LEL ESS Castlelost:** Permitted battery energy storage system development (Granted by Westmeath County Council under Reg. Ref. 21/532).
3. **LEL GIS Castlelost:** Proposed 220kV GIS substation and cabling development (i.e. this application).

- 11.1.2. Section 1.1 of the EIAR states that whilst EIAR is only mandatory in the case of the LEL Flexgen Castlelost development, a single EIAR was prepared for all three of the projects, following consultation with Westmeath County Council.

- 11.1.3. This section of my report comprises an environmental impact assessment of the proposed development. As noted in Section 10 above, some of the matters

considered have already been addressed in the Planning Assessment above. This section of the report should therefore be read, where necessary, in conjunction with the relevant sections of the Planning Assessment.

## 11.2. Format of EIAR

11.2.1. The EIAR comprises 3 No. volumes. Volume 1 is a Non-Technical Summary (NTS), which provides a summary of the EIAR in non-technical language. Volume 2 comprises the main body of the EIAR, and Volume 3 comprises a series of appendices relating to various chapters of Volume 2. The AA Screening Report is included as a separate standalone document.

11.2.2. The EIAR:

- Describes the project and provides information on the site, design, size and particular features of the proposed development;
- Describes the likely significant effects of the project on the environment;
- Describes the features of the project and/or measures envisaged to avoid, prevent, reduce, and if possible, remedy significant impacts;
- Provides a description of the main alternatives studied, and an indication of the main reasons for the choice of alternative put forward, taking into account environmental effects; and
- Includes a non-technical summary of the above information.

11.2.3. As is required under Article 3(1) of the amending Directive, the EIAR describes and assesses the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape. It also considers the interaction between the factors referred to in points (a) to (d).

11.2.4. I have carried out an examination of the information presented by the applicant, including the EIAR and the submissions made during the course of the application. A summary of the submissions made by the planning authority and prescribed bodies has been set out at Section 5 of this report and the issues arising are addressed

below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation, including conditions.

- 11.2.5. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the developer is up to date, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2001, as amended.

### 11.3. Alternatives

- 11.3.1. The issue of alternatives is addressed in Section 2.8 of the EIAR. I note that Article 5(1)(d) of the 2014 EIA Directive requires:

“(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;”

- 11.3.2. Annex IV of the Directive (Information for the EIAR) provides more detail on ‘reasonable alternatives’:

“A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”

- 11.3.3. The EIAR describes the alternatives that were considered for each of the three elements of the overall development under the headings of ‘do-nothing’, ‘alternative technologies’, ‘alternative locations’ and ‘alternative layouts’.

- 11.3.4. In the ‘do-nothing’ scenario, integration of renewable energy generators will be constrained and Ireland’s emissions reduction commitments will be impeded. In the absence of the proposed substation, the permitted Flexgen and BESS developments would not be able to connect to the transmission system and export power. With regard to alternative technologies, both Air Insulated Switchgear (AIS) and Gas



Insulated Switchgear (GIS) substations were considered. A GIS substation was chosen due to its compact size being 4-5 times less than the minimum landtake for an AIS substation with a consequent reduction in impacts on the receiving environment.

- 11.3.5. A total of six alternative sites were considered for the overall development, with a ranking exercise undertaken against a number of criteria such as proximity to electricity and gas infrastructure, site access, zoning, environmental constraints etc. The chosen site was determined to be the optimal site for the development. It is noted that a March 2021 EirGrid and SONI report entitled 'Shaping our Electricity Future' identifies a need for a reinforcement (specifically a GIS) on the Midlands 220kV transmission line. A number of alternative layouts were considered for the substation development and its interface with the 220kV overhead power line. The chosen layout was considered to reduce risk, visual impact and the duration of the outage while the development is brought online.
- 11.3.6. The consideration of alternatives is an information requirement of Annex IV of the EIA Directive, and the single most effective means of avoiding significant environmental effects. Having regard to this requirement and its purpose (i.e. avoidance of significant environmental effects) and noting the nature and purpose of the proposed development, I am satisfied that the consideration of alternatives is adequate.

#### **11.4. Population and Human Health**

- 11.4.1. Population and human health are addressed in Chapter 4 of the EIAR. The introduction to the Chapter notes that potential impacts on human beings are also addressed, where appropriate, in other chapters of the EIAR, such as Noise and Vibration, Landscape and Visual, Traffic and Transport etc.
- 11.4.2. The permitted LEL Flexgen Castlelost development will constitute a 'lower tier' site under the Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209/ 2015; 'the COMAH Regulations'), as it holds quantities of dangerous substances (diesel/gas oil as a secondary fuel) above the specified threshold quantities. An Environmental Risk Assessment (ERA) of the overall development was undertaken and is included as an Appendix to the EIAR.

This concludes that the LEL Flexgen Castlelost project qualifies as a 'lower tier' site under the COMAH Regulations. The permitted LEL ESS Castlelost project and the proposed LEL GIS Castlelost project that is the subject of this application, are stated not to fall under the provisions of the COMAH Regulations.

- 11.4.3. In the 'do-nothing' scenario the site will remain in agricultural use. However, failing to address identified electricity supply and network challenges will have a direct impact on the future growth of the economy. The site is stated to have been carefully selected to avoid impacts on sensitive receivers and the overall development is stated as having been designed to provide the system with low carbon reserve capacity and flexible carbon-free ancillary services and to support further integration of renewable generators, such as off-shore renewables, whilst providing for security of supply.
- 11.4.4. With regard to potential impacts on population and settlement patterns, it is noted that the overall development does not contain any housing or services element and is not considered to have any direct positive or negative impact on the local or regional population levels. During the construction phase there is the potential for limited impacts on the residential amenity of the local population. The overall impact is stated to be short-term imperceptible in terms of population and an increase in construction traffic volume causing noise and dust. With the recommended traffic and transport mitigation measures in place, no significant adverse roads and traffic related environmental impacts are stated as being anticipated during the construction, operational or decommissioning phases of the proposed development.
- 11.4.5. With regard to potential impacts on land use or severance of agricultural lands, no significant impacts are anticipated.
- 11.4.6. Given the separation distance to residential properties and settlements, the EIAR considers the sensitivity of the receivers to be low. The predicted impact on air quality is short term and not significant and it is therefore considered that the potential human health impact during construction is imperceptible. In terms of noise and vibration, it was determined that there are no significant adverse effects during construction and the magnitude of potential effects is considered negligible.
- 11.4.7. With regard to potential road safety issues, the EIAR notes that a Stage 1 Road Safety Audit has been carried out and that all issues raised in the RSA have been

addressed so the proposed development will be satisfactory in terms of traffic operations and safety.

- 11.4.8. In terms of COMAH, the EIAR states that the ERA concluded that the level of mitigated risk posed by the permitted LEL Flexgen Castlelost Project and the LEL ESS Castlelost Project is acceptable and is therefore the potential effect is considered imperceptible.
- 11.4.9. Section 4.5 of the EIAR relates to mitigation measures and states that a CEMP, incorporating the mitigation measures set out in the EIAR will be prepared and implemented by the nominated contractor. I note that a Preliminary CEMP was submitted with the planning application. No additional mitigation measures are proposed.
- 11.4.10. No significant residual impacts are predicted following implementation of the mitigation measures and no cumulative impacts on population and human health are anticipated.
- 11.4.11. Assessment
- 11.4.12. The application site is located in an area of low population density and at a remove from local centres of population and community facilities. The permitted Flexgen and BESS developments will be located on adjacent lands and the site is already adjacent to an existing 220kV overhead power line and the M6 Motorway. I consider that the majority of effects on population and human health are likely to occur during the construction stage of the development, associated with increased traffic, noise, visual effects and impacts on local amenities. These impacts will be temporary and of relatively short duration and I accept the conclusions reached in the EIAR that the effects are not likely to be significant and will be mitigated by the implementation of standard best construction practices as set out in the EIAR and associated Preliminary CEMP.
- 11.4.13. I have considered all of the written submissions made and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not

have any unacceptable direct, indirect or cumulative impacts on population or human health.

## 11.5. Biodiversity

- 11.5.1. Biodiversity is addressed in Chapter 5 of the EIAR. An Appropriate Assessment Screening Report was also submitted with the application, and I have addressed the issue of Appropriate Assessment separately in Section 12.
- 11.5.2. The EIAR identifies all European sites that are located within a 15km potential Zone of Influence of the proposed development and these are listed in Table 5.1 and illustrated in Figure 5.1 of the EIAR. I note that the application site is not located in or immediately adjacent to any designated sites.
- 11.5.3. The site is located within the hydrological catchment of the Mongagh River. The river is stated in this section of the EIAR as being located c. 1.1km south of the site, whereas the water chapter of the EIAR states that it is 0.5km. It appears that the main channel of the river is a distance of 1.1km, while an unnamed watercourse, which collects water from a number of drains and which feeds the river is located at a distance of 0.5km. The Mongagh River flows east into the River Boyne with its associated European sites, the River Boyne and River Blackwater SAC (Site Code 002299) and the River Boyne and River Blackwater SPA (Site Code 004232), which are located over 20 river km to the northeast of the application site.
- 11.5.4. The applicant undertook a desktop study of existing records in relation to habitats and species present in the study area and consideration of other environmental information for the area to determine potential links with hydrologically connected areas outside the proposed development site. Following this, site visits were undertaken in July and August 2021 to establish the existing environment in the footprint of the proposed development area. This included a habitats study of the site, undertaken in accordance with the Fossitt guidelines, with the results mapped in Figure 5.2 of the EIAR.
- 11.5.5. The overall development site is described as comprising a mosaic of improved agricultural grassland (GA1) and Arable Crops (BC1). Species present within the GA1 habitat, which is noted as being heavily grazed by horses and cattle, include Cocks foot (*Dactylis glomerata*), Bent (*Agrostis* spp.), Meadow grass (*Poa* spp.),

Ribwort plantain (*Plantago lanceolata*), Buttercup (*Ranunculus acris*), Daisy (*Bellis perennis*), Nettle (*Urtica dioica*) and Dandelion (*Taraxacum* spp.). The fields are bordered by low gappy sections of hedgerows (WL1) with occasional semi-mature or mature trees including Hawthorn (*Crataegus monogyna*), Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*) and Elder (*Sambucus nigra*). Three drainage ditches (FW4) run from north to south within the overall development site. These ditches are shallow and did not carry flow during the summer surveys. Species within the ditches include Great willowherb (*Epilobium hirsutum*), Meadowsweet (*Filipendula ulmaria*), Buttercup (*Ranunculus acris*) and Nettle (*Urtica dioica*).

- 11.5.6. With regard to invasive species, small patches of Japanese Knotweed were recorded during preliminary site visits in 2019. The area is located outside of the application site along the access road (L51251) that runs to the east of the site (see Figure 5.2 of EIAR). It is stated that this invasive species was treated in the past 5 years, with an extensive patch along the road reduced to a few persistent plants.
- 11.5.7. A walkover mammal survey was undertaken at the same time as the habitats study. No badger setts were identified along field boundaries and there were no signs of badgers in the study area. Similarly, there were no signs of otters in the site or along the drainage ditches which are stated to have no fisheries value. There were signs of fox recorded along with rabbits. These species are of low ecological concern and are not protected.
- 11.5.8. A site-specific bat survey was carried out on the night of 28<sup>th</sup> July in line with the Bat Conservation Trust 'Good Practice Guidelines' and Irish Wildlife Manual No. 25. A dusk mobile detector survey was carried out completing looped transects of the site to survey for commuting, feeding and potential roost sites. Two confirmed bat species were confirmed to be present; Soprano pipistrelle (*Pipistrellus pygmaeus*) and Leisler's bat (*Nyctalus leisleri*). The calls of Leisler's bats were distant, appearing to come from the northwest of the main central site area, while the Soprano pipistrelle calls were determined to come from the north of the site and may be associated with farm buildings to the north. It is stated that the site is of relatively low value to commuting bats with the internal hedgerows being well maintained and low cut.

- 11.5.9. Birds were also surveyed using standard transect methodology, with signs recorded where encountered during the field walkover surveys. Species recorded included Blackbird (*Turdus merula*), Rook (*Corvus frugilegus*), Chaffinch (*Fringilla coelebs*), Magpie (*Pica pica*), Robin (*Erythacus rubecula*), Woodpigeon (*Columba palumbus*), Wren (*Troglodytes troglodytes*), Swallow (*Hirundo rustica*). These are all stated to be Green-listed bird species, with the exception of Swallow, which is Amber-listed.
- 11.5.10. The EIAR considers that the site is of Low Local Ecological Value and that potential direct effects on breeding birds can be avoided by appropriate timing of works. It considers that the potential direct effects on Biodiversity will be imperceptible and neutral. It also considers that potential indirect effects on habitats will be imperceptible and neutral. While there will be earth movement during site preparation, it is stated that there will be no discharge of silt laden or contaminated surface water to the Mongagh River. As a consequence of this and the over 20km river km distance, the possibility of contaminated surface water reaching the Rover Boyne is considered extremely low. The potential for lighting to alter the behaviour of bats and the insects they prey on is identified.
- 11.5.11. There are no predicted significant cumulative impacts identified.
- 11.5.12. With regard to mitigation measures, it is stated that potential impacts on birds will be avoided by cutting of vegetation outside the bird nesting season March 1<sup>st</sup> to August 31<sup>st</sup>. If this cannot be enforced, then the site will be surveyed for the presence of nesting birds and/or nests prior to cutting and if none are recorded the vegetation may be removed within 48 hours. In order to minimise light spill onto perimeter habitats, it is also proposed that all lights that are pole mounted will be directional and/or cowled to ensure that light is directed downward and inwards and that lights will be programmed to be off unless required.
- 11.5.13. No ecological monitoring is proposed during the construction phase. It is stated that review of the lighting plan by a bat ecologist may require additional surveys and monitoring during site construction and operation.
- 11.5.14. The residual impact of the proposed development on biodiversity is stated to be neutral, imperceptible and long-term.
- 11.5.15. Assessment

- 11.5.16. Having regard to the nature and scale of the proposed development, the evaluated low importance of the habitats present on the site and the abundance of similar habitat in the surrounding area, I do not consider that significant effects on habitats are likely to occur. Similarly, any effects on species that would use the site for foraging would be highly localised given the abundance of similar habitat in the wider environs to accommodate species that may be displaced by the proposed development. There is no evidence that the site is of any significance to bats or bird species of particular conservation concern. I note the commitment to the cutting of vegetation outside the bird nesting season and I recommend that this be included as a condition.
- 11.5.17. With regard to the submissions of the Local Authority and prescribed bodies, I note that no issues or concerns were raised in relation to biodiversity.
- 11.5.18. I have considered the potential effects on European Sites in Section 12 below, where I conclude that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of any of the European sites in the identified zone of influence, in view of the sites' Conservation Objectives.
- 11.5.19. I have considered all of the written submissions made and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on biodiversity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on biodiversity.

## 11.6. **Land, Soil, Water, Air and Climate**

- 11.6.1. Soils and Geology is addressed in Chapter 6 of the EIAR, while Water, Air Quality and Climate, and Noise and Vibration are addressed in Chapters 7, 8 and 10 respectively. Land is addressed within the Material Assets chapter of the EIAR and is addressed in Section 11.7.2 below.
- 11.6.2. **Land and Soil**
- 11.6.3. The site and surrounding lands are predominantly in agricultural use, comprising pastures with some arable lands and a review of historical aerial imagery and mapping indicates that the site was also historically used as agricultural land. There

are areas of extensive cutaway bogs, quarries and forestry located to the south, beyond the M6 motorway.

- 11.6.4. GSI Sediments mapping described the sediments underlying the site as “Cut over raised peat” and “Till derived from limestones”. The soils within the overall development site are classed as fine loamy drift with limestones (Eton association) of moderate drainage with cutover peat near the southern boundary. Subsoils are classed as limestone tills (Carboniferous) and peat. The GSI bedrock geology mapping shows that the bedrock geology underlying the development site as Waulsortian Limestones, which are described as Massive unbedded lime-mudstone and are dominantly pale-grey, crudely bedded or massive limestone. While no bedrock outcrops are identified by the GSI, the EIAR envisages that bedrock is close to the surface in the extreme southwestern area of the site, a position which is supported by GSI vulnerability classification and the existing M6 motorway rock cutting in the general area of existing electricity tower (No. 150) which is located adjacent to the motorway.
- 11.6.5. A number of trial pits were excavated across the lands to depths of c.2.7m below ground level for drainage design purposes and no bedrock was encountered in any of the trial pits excavated. The encountered soils were described as silty clay containing an abundance of cobbles and boulders and no evidence of mottling.
- 11.6.6. There are no recorded karst features or sites of geological interest in the vicinity of the site.
- 11.6.7. Potential impacts on soils and geology are outlined in Section 6.5 of the EIAR for both construction and operational phases. During construction, potential impacts on soils and geology include: contamination from spills or leaks of fuel/oil, paints, cement etc.; loss of shallow soils and drift through construction; disturbance of contaminated soil; and contamination of bedrock due to foundation construction and road works. The significance of these impacts, prior to mitigation, are tabulated in Table 6.6 of the EIAR, and range from negligible to moderate.
- 11.6.8. In the operational phase, potential impacts on soils and geology are associated with contamination of underlying drift deposits, soils and bedrock due to road drainage and leaks from chemicals, solvents, transformer oils etc. The significance of these



impacts, prior to mitigation, are tabulated in Table 6.9 of the EIAR and are classified as minor.

11.6.9. Mitigation measures for the construction phase and operational phase are set out in Tables 6.10 and 6.11 of the EIAR, respectively.

11.6.10. The construction phase mitigation measures generally comprise relatively standard good practice construction management and pollution prevention measures, including:

- Construction compounds will be located at least 30m from local on-site drains.
- Dedicated area of hard standing for material deliveries separated a minimum of 10m from adjacent watercourses.
- Concrete will be mixed off-site and imported to the site.
- Dedicated area of hard standing for vehicle wash-out.
- Specific areas for oil storage and refuelling, separated a minimum of 10m from adjacent watercourses and comply with legislation, including providing bunds which contain 110% of on-site fuel storage capacity.
- Use spill kits, fill point drip trays, banded pallets and secondary containment units.
- Enclosed and secured site and fuel storage areas will be secondarily secured.
- Appointed contractor to develop CEMP.
- Develop a site-specific Incident Response Plan.
- Works involving the use of chemicals which are potentially harmful to the aquatic environment will be undertaken in a contained or lined area.
- Good housekeeping on the project site.
- Retention of all excavated material on site for use for landscaping berms.

11.6.11. The operational phase mitigation measures relevant to the proposed substation development include:

- All roads are designed to drain to the filter drains running parallel with the road. This system shall allow runoff to filter down through the stone media

providing filtering and delay and storage action. This stone shall be wrapped in a permeable membrane allowing runoff to infiltrate into the surrounding soils thus providing reduction action.

- Dedicated indoor chemical storage areas.
- Specific areas for oil storage and refuelling, separated from local drainage. Bunding is designed to comply with best practice – the greater of (a) 110% of the largest tank or drum within the bund or (b) 25% of the total volume of substance within the bund.
- Bunds floor fall to internal sump areas which will allow bunds to be emptied via pump only. Sumps will have impermeable surfaces. Pumps will either be permanently fitted in sumps / bunds or dry mounted at bund wall height with suction lift. Mobile pumps will also be used for smaller bunded structures as and when required.
- Site drainage network are designed in consideration of SuDS principles. Stormwater moving through 'dirty' site areas (e.g., parking, deliveries) to pass through oil interceptor prior to being infiltrated.
- Spill kits, fill point drip trays, bunded pallets and secondary containment units provided will be provided across all projects.
- Enclosed and secured site and fuel storage areas will be secondarily secured.
- A site-specific Incident Response Plan will be put in place.
- Works involving the use of chemicals which are potentially harmful to the aquatic environment will be undertaken in a contained or lined area.
- The drainage system is designed to ensure separation and isolation of 'contaminated' surface water with 'uncontaminated' surface water. In order to ensure that uncontaminated surface drains are not mixing with possibly contaminated surface drains, risk areas will discharge into a separate system. Small areas that have the potential for causing contamination of surface drain water are separated from the overall surface water drainage.
- Interceptors containing oil contaminated rainwater will be contained before being exported offsite for suitable disposal.

- Appropriate surfacing and containment or drainage facilities for all operational area is designed taking into consideration collection capacities, surface thicknesses, strength/reinforcement; falls, materials of construction, permeability, resistance to chemical attack, and inspection and maintenance procedures

11.6.12. Following the implementation of the mitigation measures, the EIAR considers that the residual effects on soils and geology will not be significant.

11.6.13. With regard to potential cumulative impacts, the EIAR considers the potential impacts of all three projects that form part of the overall development (i.e. LEL Flexgen Castlelost, LEL ESS Castlelost and LEL GIS Castlelost project). It also considers the proposed natural gas pipeline connection for the Flexgen development, which is not part of the proposed development before the Board, and which will be managed and undertaken by Gas Networks Ireland. No significant cumulative impacts on soils and geology are anticipated.

11.6.14. Assessment

11.6.15. I consider that the potential for effects on land and soil is greatest during the construction stage and relates to direct effects on soil, subsoil and the geological environment. Having regard to the nature, scale and limited footprint of the proposed development and the abundance of similar lands and soils in the wider environment, I do not consider that significant effects are likely.

11.6.16. The potential effects are localised and contained within the development site. No specific issues relating to land, soils and the geological environment have been raised in the submissions.

11.6.17. I accept the conclusions reached in the EIAR that the effects associated with the proposed development on its own, or in combination with the permitted Flexgen and BESS developments or other existing, permitted or proposed development are not likely to be significant and will be mitigated by the measures outlined in the EIAR, which generally comprise good practice construction management measures.

11.6.18. Water

11.6.19. Historical aerial imagery and mapping indicates that the site was historically used as agricultural land, with areas of extensive cutaway bogs, quarries and forestry located

to the south and beyond the M6 motorway. Lands in the general area of the site are predominantly agricultural pastures with some arable lands.

- 11.6.20. The site is positioned between the R446 (former N6) to the north and the M6 motorway to the south. The topography in the general area gently slopes from the agricultural pastures to the north towards peatlands, beyond the M6 to the south /southeast. The site topography is described as gradually sloping from higher ground in the west and north to lower ground in the southeast. The lands within the development boundary gently rise from the lowest point of 93.5m OD in the southeast, close to the boundary with the M6 motorway, to 107.1m OD in the west of the site.
- 11.6.21. The development lands are located in the Athboy groundwater body (GWB) which is classed as having 'Good' status (2013-2018) and which extends from Navan in the northeast to Tyrrellspass and Rochfortbridge in Westmeath. This GWB discharges to the overlying rivers and streams, with discharge to the adjacent Trim GWB to the east in some instances. Discharge to rivers will be in the form of baseflow. Dry Weather Flows (DWF) are moderate to low and EPA data indicates that the water in the GWB is generally hard with high electrical conductivity.
- 11.6.22. The aquifer beneath the overall development site is classed as a 'Locally Important aquifer – bedrock which is moderately productive only in local zones'. Groundwater vulnerability across the majority of the overall development site is classed as 'Moderate' vulnerability, with an area of 'High' vulnerability in the southwestern corner of the site and near the proposed site entrance at the R446.
- 11.6.23. With regard to groundwater flow directions and gradients, no field data was available and the EIAR assumes that groundwater flow direction will coincide with topography and be to the east/southeast towards the Mongagh and Castlejordan Rivers. This is a reasonable assumption in my opinion.
- 11.6.24. With regard to EU Water Framework Directive (2000/60/EC) WFD catchments, the site is located within the Boyne WFD Catchment, the Yellow [Castlejordan]\_SC\_010 Sub-Catchment and the Castlejordan\_020 River Sub-Basin.
- 11.6.25. GSI data for groundwater recharge rates for the site and surrounding area range from 20mm/year (described as "Moderate permeability subsoil, cut peat") to

319mm/yr (described as “Moderate permeability subsoil overlain by poorly drained (gley) soil”).

- 11.6.26. There are a number of wells identified by GSI at and in the vicinity of the overall development site and historic OSI mapping shows a further three “wells” in the vicinity. It is stated that there are no groundwater wells impacted by the siting of infrastructure associated with the three projects and that this was confirmed by a ground truthing survey.
- 11.6.27. With regard to hydrology, the site is located within the catchment of the Mongagh River, which is located c. 500m to the south. This River flows east into the River Boyne with its associated European sites, the River Boyne and River Blackwater SAC (Site Code 002299) and the River Boyne and River Blackwater SPA (Site Code 004232), which are located over 20 river km to the northeast of the proposed development lands. There are no significant hydrological features identified within or near the site, however, some surface water drainage ditches were identified within the site boundary. These ditches originate within the overall development site boundary and run in a southerly direction before flowing in culvert under a gravel surfaced access road and then into a TII drain that runs along the crest of the motorway cutting in an easterly direction before passing through a culvert under the M6 in a southerly direction, discharging to the Mongagh River.
- 11.6.28. With regard to flood risk, a Flood Risk Assessment was undertaken and is included as an Appendix to the EIAR. The site was found to be located in Flood Zone C and at low risk of flooding.
- 11.6.29. Potential impacts on water are outlined in Section 7.5 of the EIAR for both construction and operational phases. During construction, potential impacts on surface water and groundwater include contamination from spills or leaks of fuel/oil, paints, cement etc., overland run-off of silty water to local drainage, disturbance of contaminated soil and subsequent pollution of water, increased vulnerability of the aquifer due to removal of soil, decreased infiltration due to increased hardstanding. The significance of these impacts, prior to mitigation, are tabulated in Table 7.7 of the EIAR, and range from negligible to moderate.
- 11.6.30. In the operational phase, potential impacts on water are associated with contamination caused by leaks from transformers, contamination of groundwater due

to road drainage and leaks from chemicals stored on site and decreased infiltration due to the increased hardstanding. The significance of these impacts, prior to mitigation, are tabulated in Table 7.10 of the EIAR and range from minor to moderate.

11.6.31. Mitigation measures for the construction phase and operational phase are set out in Tables 7.11 and 7.12 of the EIAR, respectively.

11.6.32. The construction phase mitigation measures generally comprise relatively standard good practice construction management and pollution prevention measures, including:

- Construction compounds will be located at least 30m from on-site drains and material deliveries area will be separated a minimum of 10m from adjacent watercourses.
- Concrete will be mixed off-site and imported to the site.
- Dedicated areas for vehicle washout, oil storage and refuelling, separated a minimum of 10m from adjacent watercourses, including bunds which contain 110% of on-site fuel storage capacity.
- Provision of spill kits, fill point drip trays, bunded pallets and secondary containment units.
- Develop a Construction Waste Management Plan and site-specific Incident Response Plan.
- Works involving the use of chemicals which are potentially harmful to the aquatic environment will be undertaken in a contained or lined area.
- Excavation and disposal off-site of contaminated soils (where required).
- Good housekeeping on the project site.
- Minimisation of exposed ground and soil stockpiles, through careful earthworks design and construction programming.
- Stockpiles will be located away from watercourses, limited in height to 3m (topsoil) and the surface smoothed. Use of silt fences around stockpiles where required. Stockpiles which may be present for some time will be covered or seeded.

- Areas around infrastructure will be landscaped and restored with topsoil and revegetated as soon as possible.
- Track drainage will be porous and act as soakaways thereby minimising any direct discharge to watercourses.
- Wheel washing activities will be conducted in designated areas, with runoff waters being conducted to soakaways constructed according to best practice.
- Use of buffer zones, silt traps and settlement ponds to avoid sediment reaching watercourses.
- A suitable casing will be used where wet concrete is proposed to ensure protection of groundwater until concrete has set.
- Areas where the bedrock aquifer is exposed during construction should be protected from surface activities through utilisation of appropriate surface coverings.

11.6.33. The operational phase mitigation measures relevant to the proposed substation development include:

- Design of all roads to drain to the filter drains running parallel with the proposed access road to allow runoff to infiltrate into the surrounding soils thus providing reduction action.
- Dedicated indoor chemical storage areas. Oils will be stored in bunds, with floor falling to internal sump areas which will allow bunds to be emptied via pump only.
- Stormwater moving through 'dirty' site areas (e.g., parking, deliveries) to pass through oil interceptor prior to being infiltrated.
- Provision of spill kits, fill point drip trays, bunded pallets and secondary containment units.
- Site-specific Incident Response Plan will be put in place.
- Works involving the use of chemicals which are potentially harmful to the aquatic environment will be undertaken in a contained or lined area.

- Design of the drainage system to ensure separation and isolation of 'contaminated' surface water with 'uncontaminated' surface water.
- Appropriate surfacing and containment or drainage facilities for all operational area taking into consideration collection capacities, surface thicknesses, strength/reinforcement; falls, materials of construction, permeability, resistance to chemical attack, and inspection and maintenance procedures.
- Interceptors containing oil contaminated rainwater will be contained before being exported off-site for suitable disposal.

11.6.34. Following the implementation of the mitigation measures, the EIAR considers that the residual effects on the water environment will not be significant.

11.6.35. With regard to potential cumulative impacts, the EIAR considers the potential impacts of all three projects that form part of the overall development (i.e. LEL Flexgen Castlelost, LEL ESS Castlelost and LEL GIS Castlelost project). It also considers the proposed natural gas pipeline connection for the Flexgen development, which is not part of the proposed development before the Board, and which will be managed and undertaken by Gas Networks Ireland. No significant cumulative impacts on the water environment are anticipated.

11.6.36. Assessment

11.6.37. I consider that the potential for impacts on the water environment is greatest during the construction stage and relates to potential direct impacts on surface waters and groundwater due to contamination with pollutants, oils, chemicals etc or runoff of sediment-laden water from the site to receiving watercourses. I consider that the EIAR has adequately assessed these potential impacts. The site is located a considerable distance from the nearest sizable watercourse, with drainage ditches within the site generally being dry due to the relatively good permeability of the soil. I am satisfied that with proper implementation of the best practice mitigation measures as detailed in the EIAR and associated CEMP, that impacts on water quality will not be significant.

11.6.38. I have addressed Flood Risk in Section 10 above, where I concur with the applicant's conclusions that there is no significant risk of flooding at the application site.



- 11.6.39. I note that the Local Authority is generally satisfied with the drainage proposals, subject to conditions, and considered the Flood Risk Assessment to be satisfactory. TII, in their submission, note that the proposed development is adjacent to the M6 national road reservation and state that no works should impact the national road network or associated infrastructure, including the M6 drainage regime. Having regard to the good drainage characteristics of the site and the details of the proposed development, including the proposed use of soakaways to manage roof water and permeable hardstandings, I do not consider that there is likely to be any impact on the drainage regime for the Motorway.
- 11.6.40. I accept the conclusions reached in the EIAR that the effects associated with the proposed development on its own, or in combination with the permitted Flexgen and BESS developments or other existing, permitted or proposed development are not likely to be significant and will be mitigated by the measures outlined in the EIAR and the associated Preliminary CEMP. I note that the proposed mitigation measures comprise relatively standard best practice construction management and pollution prevention measures.
- 11.6.41. **Air and Climate**
- 11.6.42. The site is currently a greenfield site in agricultural use and the EIAR states that the only potential for emissions to air from the site currently are associated with the occasional use of agricultural machinery on the land or from ruminants grazing on the land. Existing activities in the immediate vicinity of the site that have the potential to exert an influence on air quality include heating sources (particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO) and traffic on adjoining roads, including the M6 Motorway (particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO). The EIAR considers that the magnitude of the emissions from the existing site is very small relative to the dominant influence on air quality in the surrounding area which is traffic from the adjoining road network.
- 11.6.43. With regard to Air Quality Standards Regulations, the subject site is considered to be located in Zone D, rural Ireland. EPA air quality data from representative air monitoring stations in Zone D were therefore considered representative of air quality at the subject site, with average baseline air quality set out in Table 8.5 of the EIAR. It is noted that existing ambient air quality is good for all health-related pollutants and

that all concentration levels are well within the EU Standards for all parameters of interest.

- 11.6.44. A site-specific survey of ambient nitrogen oxides (NO, NO<sub>2</sub> and NO<sub>x</sub>) was also undertaken at the site in July – September 2021. The results indicated that the levels are generally low and are clearly influenced by emissions from traffic on the motorway, with a decrease in concentration with increasing distance from the motorway. All of the monitoring results were compliant with the annual mean air quality standard for NO<sub>x</sub> and consistent with the abovementioned EPA data for rural locations.
- 11.6.45. In the ‘do-nothing’ scenario, there will be no significant change in air quality impacts if the proposed development does not proceed.
- 11.6.46. With regard to the construction phase, the EIAR considers the potential air quality impacts for the overall development, as the three elements are likely to overlap. An assessment of potential dust impacts was undertaken in accordance with guidance published by the Institute of Air Quality Management (IAQM). As there are no European or designated sites within 50m of the site boundary (threshold distance for ecological sensitivity) no significant construction dust impacts are predicted for ecological sites.
- 11.6.47. The highest receptor sensitivity in the immediate vicinity of the proposed site is considered to be medium and is low for the vast majority of the construction activity.
- 11.6.48. Using IAQM guidance, the magnitude of the potential dust emissions associated with construction is assessed as Low. Using an alternative assessment approach outlined in the Draft Guidelines on Environmental Impact Assessment, the most significant potential impacts are those associated with excavation work, with a temporary, slight impact on the closest receptors, reducing to a not significant impact during the construction works. In the absence of mitigation measures, therefore, the overall impact of dust arising during the construction phase is considered to be short-term in duration and its significance will vary from not significant to slight.
- 11.6.49. The principal emissions from HGV vehicles will be fine particulate matter, nitrogen oxides and carbon monoxide. As a worst-case assessment, the EIAR assumes that site works for the overall development will generate 135 staff trips (one-way) during the peak hour periods. It is envisaged that peak hour HGV traffic will depend on the

construction activities active on the site when considering the worst-case construction scenario and most construction vehicles will stay on site for the duration of construction.

- 11.6.50. In the absence of mitigation measures the EIAR considers that the construction phase activities will range from an imperceptible to slight impact on local air quality depending on the activities occurring and, in all cases, will be short-term in duration.
- 11.6.51. With regard to the operational phase, the EIAR considers the potential impacts of the three elements of the overall project, with emphasis on the now-permitted LEL Flexgen Castlelost development and Air Dispersion Modelling of its combustion emissions. With regard to the substation development that is before the Board, it is stated that there are no significant emissions associated with the operational phase of the project. The air quality impacts of the substation development is therefore considered to be long-term and imperceptible.
- 11.6.52. With regard to potential climate impacts, the principal greenhouse gas (GHG) emissions associated with the construction phase are CO<sub>2</sub> from transport and machinery and are considered to be short-term and imperceptible in a regional or national context. In the operational phase, it is stated that the overall development will be part of the Emission Trading Scheme and that GHG emissions are exempt from consideration in terms of the targeted reduction in emissions from the non-ETS sector. It is concluded that the proposed facility will not affect Ireland's obligations to meet the EU Effort Sharing Decision in relation to reduction of greenhouse gas emissions.
- 11.6.53. The EIAR and the accompanying Preliminary CEMP set out a series of mitigation measures for the construction phase, which generally comprise best practice construction methods. The measures will be contained within a Dust Management Plan and include:
- Designated Site Agent with overall responsibility for Dust Management.
  - Implementation of the CEMP.
  - Design of the site and construction programme to consider dust impact management and choose design approaches to minimise dust emissions.
  - Training programme for site personnel.

- Implementation of communications strategy with the local community.
- Implementation of a programme of dust minimisation and control measures.
- Locating of activities with potential for significant emissions as far as possible from the nearest residential and commercial receptors.
- Use of hard-surfaced or compressed ground surfaces to reduce the potential for dust emissions from vehicles. Construction compound to have hardstanding areas to minimise dust generation from windblow.
- In order to minimise the potential for wind-generated emissions from material storage bays, these bays will be oriented away from the dominant wind direction to minimise the effects of wind on release of dust and particulate.
- Use of fixed and mobile water sprays to control dust emissions from material stockpiles, road and yard surfaces.
- Implementation of daily inspection programme to ensure that dust control measures are effective.
- Implementation of dust deposition monitoring programme.
- Compliance with National Guidelines for the effective management of Aspergillus risks.

11.6.54. Additional mitigation measures contained in the CEMP include: enforcement of appropriate on-site speed limit on surfaced roads; turning off engines when not in use; no burning on site; ensuring vehicles do not queue at the site entrance; and provision of wheel washing facilities at the entrance to the construction site.

11.6.55. No mitigation measures are proposed for the operational phase, given the lack of significant negative impacts identified.

11.6.56. With regard to potential cumulative impacts, the EIAR considers the potential impacts of all three projects that form part of the overall development (i.e. LEL Flexgen Castlelost, LEL ESS Castlelost and LEL GIS Castlelost project). It also considers the proposed natural gas pipeline connection for the Flexgen development, which is not part of the proposed development before the Board, and which will be managed and undertaken by Gas Networks Ireland. No significant cumulative impacts on air quality and climate are anticipated.

11.6.57. Once operational, no significant negative residual impacts on air quality or climate are likely to arise.

11.6.58. Assessment

11.6.59. Air quality in the area is good and typical of a rural environment with a low level of pollutants. The main potential for significant effects will arise during the construction stage associated with the generation of dust and other fugitive emissions. The construction stage will also involve the operation of plant and machinery that will generate exhaust emissions. Subject to the mitigation measures proposed which generally comprise good practice methods and measures for construction projects, no significant effects on air quality and climate are likely to arise.

11.6.60. I accept the conclusions reached in the EIAR that the impacts associated with the proposed development on its own, or in combination with the permitted Flexgen and BESS developments and other existing, permitted or proposed developments are not likely to be significant and will be mitigated by the measures outlined in the EIAR.

11.6.61. Noise and Vibration

11.6.62. The application site is located in a rural area, to the south of the R446 between the villages of Rochfortbridge and Tyrrellspass. The site and surrounding lands are primarily in agricultural use, with scattered detached residential dwellings along local roads. The main existing noise source in the area is the M6 Motorway, along the southern site boundary and the EIAR includes EPA road noise contour mapping arising from the motorway.

11.6.63. The receiving noise environment was determined utilising desk-based study and field surveys to identify the nearest Noise Sensitive Receptors (NSRs) and baseline noise surveys were completed on various dates from 5<sup>th</sup> – 29<sup>th</sup> July 2021, comprising both short-term attended and longer-term unattended monitoring. A total of 14 No. Noise Monitoring Points (NMPs) were utilised for this survey, and the locations of the NSRs and NMPs are illustrated in Figures 10.1, 10.2 and 10.3 of the EIAR and described in Table 10.1 therein. The nearest NSRs to the overall development site are existing dwellings c. 60m east of NMP6. Additional receptors lie off the proposed main access to the overall proposed development site.

11.6.64. The baseline noise survey indicates that some NSRs to the immediate north east may be in an area of low background noise as defined in EPA guidance. It appears

that distance from the M6 motorway is likely to dictate as to whether an individual NSR is within an area of low background noise. Overall results of monitoring in the wider area generally indicate low background noise levels, except in close proximity to the motorway and the R446. No existing sources of vibration were noted during the site visits.

- 11.6.65. Having regard to the results from the baseline monitoring, the applicant proposes a construction phase noise limit of 65 dB  $L_{Aeq,1hr}$ , Monday – Friday (07:00 – 19:00) and Saturday (07:00 – 13:00) at existing NSRs. Works are not proposed on Sundays, public holidays, evening (19:00 – 23:00) and night-time (23:00 – 07:00). This would be consistent with British Standard BS5228:2009 + A1:2014: Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise and would be lower than those contained in the TII Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes.
- 11.6.66. The EIAR considers the construction phase noise impacts from the three elements of the overall development. With regard to the proposed substation development that is before the Board, it states that the development is c. 330m distant from NSR1 and that site development noise levels are not expected to be above existing ambient levels at NSR1 during the development of this site due to its smaller footprint (relative to the permitted Flexgen and BESS developments) and distance.
- 11.6.67. While it is dealt with in the Flexgen section of the construction noise assessment, I note that the construction of the proposed main access road to the projects from the R446 is within 10m of NSR3. During construction of the access route, it is anticipated that noise levels are likely to be elevated above existing ambient noise levels at NSR3. While the works to construct the road will be brief to short-term in nature, once constructed the route will be used by construction traffic including HGVs delivering materials, etc. over the duration of each project. In order to reduce the impact magnitude and potential adverse effects, mitigation in the form of temporary screening is proposed for NSR3.
- 11.6.68. Based on the distance to NSRs, and noting that piling will not be required, it is considered unlikely that vibration impacts on human beings or buildings could occur. No further assessment of potential short-term construction related vibration impact was deemed necessary.

11.6.69. With regard to the operational phase, the EIAR considers the potential impacts of the three elements of the overall project. With reference to the proposed substation development that is before the Board, it is stated that the equipment will be housed internally and that two external transformers have been modelled using the data for the step-up transformers. The predicted sound pressure levels for the substation development for the identified NSRs ranges from 12 – 23 dB  $L_{Aeq,t}$ . The predicted noise levels are well below the limits applied to low background areas and existing background levels.

11.6.70. The EIAR and the accompanying Preliminary CEMP set out a series of mitigation measures for the construction phase, which generally comprise relatively standard best practice noise mitigation methods during construction methods, including:

- Appointment of a Site Representative for matters related to noise and vibration.
- Investigation of any complaints received, and maintenance of a written complaints log.
- Noise monitoring shall be conducted at nearby NSRs throughout site development and construction, including at NSRs 1, 2 and 3 at a minimum.
- Cessation of works in the event of exceedance of specified limits at NSRs and immediate implementation of measures to ensure that the limits are complied with.
- Managing the operation of certain pieces of equipment, where substitution etc cannot be carried out through monitoring and timing of use to ensure that the threshold values/criteria specified are complied with.
- All equipment shall be required to comply with noise limits set out in Directive 2000/14/EC and the 2005/88/EC amendment.
- Temporary acoustic screening/hoarding shall be erected along the boundary of NSR3 with the construction access route.

11.6.71. During the operational phase, it is stated that the proposed substation development will comply with the lower limits assigned to low background areas, as follows:

- Daytime (07:00 to 19:00hrs) – 45dB  $L_{A,T}$ .

- Evening (19:00 to 23:00hrs) – 40dB L<sub>Ar,T</sub>.
- Night-time (23:00 to 07:00hrs) – 35dB L<sub>Aeq,T</sub>.

11.6.72. With regard to potential cumulative impacts, the EIAR considers the potential impacts of all three projects that form part of the overall development (i.e. LEL Flexgen Castlelost, LEL ESS Castlelost and LEL GIS Castlelost project). It also considers the proposed natural gas pipeline connection for the Flexgen development, which is not part of the proposed development before the Board, and which will be managed and undertaken by Gas Networks Ireland. No significant additional cumulative noise impacts are anticipated, and it is stated that the proposed construction noise limits will apply cumulatively.

11.6.73. No significant residual noise impacts are predicted in relation to either the construction or operation of the development.

11.6.74. Assessment

11.6.75. I consider that the potential for significant noise and vibration effects associated with the proposed development, including cumulatively with the adjacent permitted Flexgen and BESS developments, has been adequately and appropriately assessed in accordance with established guidance.

11.6.76. The greatest potential for noise impacts is associated with the construction phase, and it has been demonstrated in the EIAR that the combined noise levels from construction activities will be at or below the appropriate limits for daytime hours. The applicant has committed to a programme of noise monitoring and protocols for dealing with noise related complaints and exceedances of noise limits.

11.6.77. I consider that the information provided in the planning application documents is sufficient to allow the impacts of the proposed development on noise and vibration to be fully assessed.

11.6.78. Considering the separation distances between the main substation compound site, the two tower interface compound sites and the closest residential properties and noting the temporary nature of the construction activities, I consider that no significant adverse impacts are likely arise during the construction phase. Similarly, during the operational phase, while the electrical plant and equipment within the



substation will generate a limited level of noise, the impact on noise sensitive receptors will not be significant due to separation distances.

11.6.79. I therefore accept the conclusions reached in the EIAR that the impacts associated with the proposed development on its own, or in combination with the permitted Flexgen and BESS developments and other existing, permitted and proposed development, are not likely to be significant and will be mitigated by the measures outlined in the EIAR.

11.6.80. **Conclusion on Land, Soil, Water, Air and Climate**

11.6.81. I have considered all of the written submissions made in relation to land, soil, water, air and climate and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on land, soil, water, air and climate can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on land, soil, water air and climate.

11.7. **Material Assets, Cultural Heritage and the Landscape**

11.7.1. Material Assets is addressed in Chapter 9 of the EIAR, while Traffic and Transportation is addressed separately in Chapter 12. Landscape and Visual Impact and Archaeology and Cultural Heritage are addressed in Chapters 11 and 13, respectively.

11.7.2. **Material Assets**

11.7.3. The site and surrounding lands are currently in agricultural use (mainly grazing of cattle and horses with some fields within the development area being used for tillage). The 220kV Shannonbridge-Maynooth overhead transmission line transects the southern area of the development lands.

11.7.4. The existing farm residence and farm activity is served by a groundwater well on site and foul wastewater from the existing residence is treated by an on-site wastewater treatment system.

11.7.5. It is proposed to use the existing groundwater well to serve the water requirements of the overall development, which is stated as being very low. The existing residence

on the farm will be served by a second existing well within the landowner's boundary. Foul wastewater which will be generated from the three projects will be managed and treated using an onsite proprietary wastewater treatment plant (domestic wastewater treatment system with a population equivalent  $\leq 10$ ), with the volume of foul wastewater generated expected to be low (see Section 10 above, where I have recommended that the proposed wastewater treatment system be replaced with a holding tank, due to the likely very low level of use). Stormwater arising from impermeable surfaces (e.g., roof of buildings, roadways) will be collected and infiltrated to ground. It is stated that stormwater generated from oil risk areas will pass through a Class 1 bypass petrol interceptor and grit trap prior to discharge to ground.

- 11.7.6. It is stated that the proposed development will result in the change of use of lands from agricultural to industrial use. Soils excavated as part of development works will be used within the overall development boundary to create landscaped berms. The lands affected are under the ownership of one landowner and it is also proposed to develop a secondary access for the operational phase from the L51251 and farmer's lane which runs parallel to the M6 motorway. Whilst ownership of this lane is vested in Westmeath County Council, it is currently used to access the lands by the existing landowner and another landowner to the east of the proposed development lands and it is stated that the proposed development will not impact access rights associated with the laneway. Once developed, ownership of the proposed substation development will transfer to ESB Networks and it will be operated by Eirgrid. It is proposed that they will access the asset via the proposed primary access roadway to the overall development lands, with secondary access provided from the L51251.
- 11.7.7. The EIAR states that there are no direct or indirect negative effects on material assets but goes on to state that the proposed substation development will positively benefit the electricity transmission system by assisting with identified network reinforcement requirements in the Midlands. It then states that, once operational, the impact on the environment will be long-term, neutral and imperceptible.
- 11.7.8. No specific mitigation measures are proposed.
- 11.7.9. With regard to cumulative and residual impacts, it is stated that development of the three projects will result in temporary short-term effects on material assets during

construction and no negative impact on material assets once operational. The overall predicted residual environmental impact is stated to be neutral, slight, long-term. Construction of the associated gas pipeline serving the permitted Flexgen development is stated to result in short term, negative and not significant impacts during construction with a long-term neutral and imperceptible impact in the operational phase.

11.7.10. Overall, the cumulative impact of the three elements of the overall development on material assets are stated to be positive, significant and long-term.

11.7.11. Assessment

11.7.12. It is clear from the above that there is some confusion and inconsistency within the EIAR with regard to the magnitude and significance of potential impacts on material assets.

11.7.13. Notwithstanding this, having reviewed all information submitted including the EIAR, appendices, drawings and submissions I accept the conclusions reached in the EIAR that the impacts on material assets associated with the proposed development on its own, or cumulatively with the permitted Flexgen and BESS developments and other existing, permitted or proposed development in the area, are not likely to be significant adverse impacts. There will, however, be a positive residual impact on the electricity transmission system due to the network reinforcement provided by the proposed development and the increased security of supply provided by the overall development.

11.7.14. Traffic and Transportation

11.7.15. The application site is located to the south of the R446 Regional Road which, prior to the opening of the M6 motorway, was part of the N6 national road linking Dublin to Galway. The road has a sealed width of c. 11.85m, with eastbound and westbound running lanes and hard shoulders on both sides of the carriageway and a posted speed limit of 100km/h. The villages of Rochfortbridge and Tyrrellspass are located c. 2.1km east and c. 3.7km west of the site, respectively.

11.7.16. The proposed primary access point to the overall development site is from the R446, c. 3.1km east of the N52/R446 junction and immediately to the east of the R446/L5125 junction. A secondary access point to the site is proposed from the

L51251 for occasional /emergency attendance by ESB/EirGrid who would require access to the electricity substation and transmission infrastructure.

- 11.7.17. The proposed haul route does not pass through either Rochfortbridge or Tyrrellspass, with traffic instead travelling westward on the M6 Motorway, existing at Junction 4 onto the northbound N52 and turning east onto the R446.
- 11.7.18. With regard to baseline traffic volumes, an automatic traffic count was undertaken on 9<sup>th</sup> and 10<sup>th</sup> September 2021 on the R446 at the location of the proposed site access junction. In a 24-hour period, the traffic count recorded 1,021 vehicles in an eastbound direction and 1,022 vehicles in a westbound direction. Video-based manual classified turning counts were also undertaken on 9<sup>th</sup> September 2021, at the R446/L5125 and R446/L51251 junctions for the AM and PM peak hours (see Appendix 12.1 of EIAR).
- 11.7.19. In order to assess the robustness of the baseline traffic survey data and the potential for Covid-19 related traffic restrictions to have impacted the traffic figures, the applicant compared data from the permanent TII traffic counter site on the N52 at Tyrrellspass for the pre-Covid-19 period of 12<sup>th</sup> and 13<sup>th</sup> September 2019, and the abovementioned traffic survey period. This found that traffic volumes on the N52 on the 2021 survey dates were c. 4% higher than in 2019, which was similar to the change anticipated by TII growth factors for this period and therefore the collected data was considered to be robust.
- 11.7.20. The peak construction traffic period for the proposed substation development and the permitted LEL Flexgen Castlelost is predicted to be 2023, and for the permitted LEL ESS Castlelost project is predicted to be 2024. A common opening year of 2025 has been used for the traffic assessment, with growth rates applied to traffic count data in accordance with TII guidance.
- 11.7.21. The construction programme and trip generation for the three projects are set out in Appendix 12.2 of the EIAR. Appendix 12.3 sets out the traffic calculations and Appendix 12.4 sets out the results of PICADY analysis of the site access junction.
- 11.7.22. The traffic modelling undertaken indicates that the proposed junction will have no material impact on the operation of the R446 at this location. The maximum queue being 0.5 PCUs with the proposed site access junction having 98% spare capacity in

the AM peak hour and 95% spare capacity in the PM peak hour and a Level of Service classification of 'A'.

- 11.7.23. With regard to potential impacts on road structure, the EIAR states that the R446 was constructed as a national road capable of withstanding higher than current traffic volumes and that no significant visual defects within the immediate vicinity of the proposed site access junction were observed during a site visit. It considers that the level of traffic generated by the substation development would not be anticipated to impact significantly on the structure of the R446. A Stage 1 Road Safety Audit of the R446 in the vicinity of the proposed access junction has been undertaken and is included as Appendix 12.5 of the EIAR. The RSA identifies a number of potential road safety issues and includes recommendations for addressing these.
- 11.7.24. Potential air quality and noise impacts associated with construction traffic are addressed in Chapters 8 and 10 of the EIAR, and in the relevant sections of this report.
- 11.7.25. During the operational phase, as there will be negligible traffic movements associated with the operation of the substation development, it is concluded that there will be no measurable traffic-related environmental impacts.
- 11.7.26. The EIAR also considers the potential cumulative impacts of the three elements of the overall development progressing simultaneously and the cumulative impact with the associated gas pipeline connection development. The pipeline development is anticipated to result in negligible impacts on traffic due to its nature and scale.
- 11.7.27. Traffic modelling undertaken for the cumulative impact on the proposed access junction in the 2023 AM and PM peak hours should all three elements of the overall development progress simultaneously is summarised in Table 12.4 and Appendix 12.4 of the EIAR. The modelling output indicates that the proposed junction will have no material impact on the operation of the R446, with a maximum queue of 0.3 PCUs with the junction having 86% spare capacity in the AM peak hour and 75% spare capacity in the PM peak hour.
- 11.7.28. In the operational phase, the cumulative traffic generated by the three elements of the overall development is considerably lower than the construction phase and therefore no significant traffic and transport related environmental impacts are predicted.

11.7.29. Given that the three elements of the overall development will share the same site access, the following construction phase mitigation measures are proposed in respect of each of three projects:

- To mitigate the potential for debris from the site to be carried by vehicles onto the adjacent road network, vehicles exiting the site should pass through a wheel wash facility in reasonable proximity to the project access junction.
- The recommendations of the Stage 1 Road Safety Audit should be implemented in full.

11.7.30. It is also stated that, depending on the axle loading of construction related vehicles and/or abnormal loads, further tests to determine the structural strength of the R446 carriageway, or further visual inspections prior to and post construction, should be undertaken, if necessary, in agreement with Westmeath County Council. It is proposed that the detailed design of the project site access junction and access road be subject to a Stage 2 Road Safety Audit prior to construction.

11.7.31. No significant residual impacts on traffic and transport are anticipated.

11.7.32. Assessment

11.7.33. TII, in their submission, advise that any operator who wants to transport abnormal loads must obtain a permit from each local authority through which it will pass. They also recommend that all national road structures on the haul route should be checked to confirm their capacity to accommodate abnormal loads and that the applicant should consult with all PPP companies, Motorway Maintenance and Renewal Contractors and road authorities to ascertain any operational requirements and to safeguard the strategic function of the national road network. They also state that any damage caused to the pavement should be rectified in accordance with TII Pavement Standards, with details to be agreed with the Road Authority prior to commencement.

11.7.34. In response, the applicant stated that they do not anticipate movement of potential abnormal loads for the substation development. Subject to obtaining planning consent, and in the unexpected event of the requirement to transport abnormal loads, the applicant notes the stipulation by TII to carry out the potential activity under permit as specified in the observation. The applicant also acknowledges the

management structure of the national road network and the requirement to consult with the identified parties, in order to safeguard the national road network and prevent damage.

- 11.7.35. Given the nature and scale of the proposed substation and grid connection works, as described in the EIAR, I do not consider it likely that there would be a requirement for abnormal load deliveries and am satisfied that any such arrangements can be adequately dealt with by way of standard protocols for such vehicle movements, as outlined by TII.
- 11.7.36. TII also note that the proposed development is adjacent to the M6 National Road reservation and state that no works should impact the national road network. I am satisfied that there are no works proposed that would have the potential to impact on the continued safe operation of the M6. The only interaction will be the use of the M6 for some construction traffic, which will not be of a level as to impact on the operation of the Motorway.
- 11.7.37. I note that the Planning Authority has no objection to the proposed development on traffic and transportation-related grounds, subject to condition.
- 11.7.38. Noting the existing access point to the site from the L51251 local road to the east, I agree with the Planning Authority's recommended condition, clarifying that this local road not be used by construction traffic. While the applicant is not proposing to use this access point during the construction phase, I consider that this should be specified as a condition since the road is a narrow tertiary road used to access a small number of dwellings and agricultural lands and would not be suitable for HGV construction traffic use.
- 11.7.39. Having regard to the nature of the proposed development and the receiving environment which is relatively sparsely populated, the level of construction traffic that will be generated, the short-term nature of the construction phase, and noting that the R446 is a wide, relatively straight road in good condition which is over-designed for the level of traffic it currently experiences following the opening of the M6 Motorway, I concur with the EIAR assessment that the construction phase impacts on traffic, transport and the local road network will not be significant.

11.7.40. Operational phase traffic associated with the proposed development will be minimal due to the nature of the development and I agree with the EIAR's conclusion that no significant impacts are likely as a result.

11.7.41. **Archaeology and Cultural Heritage**

11.7.42. A desk-based assessment was undertaken within a 2km radius of the overall development site. There are no recorded monuments or archaeological features within or in the immediate vicinity of the application site. The closest recorded archaeological monuments within the study area are as follows:

SMR No.	Class	Townland	Distance
WM033-061----	Ringfort – rath	Kiltotan and Collinstown	c. 160m
WM033-062	Ringfort – rath	Oldtown	c. 167m
WM033-066----	Ringfort – rath	Kiltotan and Collinstown	c. 360m
WM033-068----	Ringfort – unclassified	Farthingstown	c.260m

11.7.43. There are also a number of other archaeological sites, again primarily consisting of Ringforts, within the study area. These are identified in Figure 13.10 of the EIAR. Archaeological excavations were previously carried out in the vicinity of the site in connection with the M6 Motorway construction. These excavations identified numerous previously unrecorded features including burnt mounds, evidence of a furnace, slag, charcoal, pits and ditches.

11.7.44. There are no protected structures, structures listed on the NIAH, designed landscapes, historic gardens or Architectural Conservation Areas in the vicinity of the site.

11.7.45. A field inspection of the site was undertaken to identify any previously unknown archaeological sites or features.

11.7.46. In the 'do-nothing' scenario there would be no impact on any potential unrecorded sub-surface deposits.



- 11.7.47. Given the lack of known archaeological and architectural heritage sites within the site, the EIAR considers that there are no potential direct impacts on the known cultural heritage resource as a result of the proposed development.
- 11.7.48. With regard to the potential for direct impacts on unrecorded archaeological features/sites, the EIAR considers that the area is archaeologically sensitive and that there is a moderate to high potential for the presence of previously unknown subsurface archaeological sites or features to be present. In the absence of mitigation construction work could potentially negatively impact previously unknown sites resulting in the loss or damage of archaeological artefacts and features.
- 11.7.49. I note that a Geophysical Survey Report was also submitted with the application. This was prepared following completion of the EIAR and was submitted to Westmeath County Council in response to a request for further information on the planning applications for the associated Flexgen and BESS developments. The geophysical survey was undertaken across 21 hectares of land, spread across nine fields, including the application site and surrounding lands.
- 11.7.50. The survey identified numerous anomalies in the majority of the fields and while no large scale monuments were considered to be apparent in the survey data, the smaller anomalies suggest the possible presence of features of archaeological significance. The survey recommends that targeted test trenching of recorded anomalies should be undertaken, under licence, in advance of construction.
- 11.7.51. With regard to potential indirect impacts, as noted above there are no recorded archaeological sites/features within the boundary of the subject site. While there are several ringforts in the vicinity of the subject site, the impact on the setting of the ringforts is not considered significant.
- 11.7.52. In order to mitigate the potential direct impact on unrecorded archaeological features/sites, it is proposed that a suitably qualified archaeologist under licence to the National Monuments Service will undertake a programme of archaeological testing in advance of construction works. Archaeological monitoring may be recommended pending the results of the programme of archaeological testing.
- 11.7.53. With regard to cumulative impacts, the same potential impacts and mitigation is proposed in respect of the other two elements of the overall development, which are now permitted. Cumulative impacts are also considered with respect to the

associated gas pipeline connection being considered by Gas Networks Ireland. As the pipeline will be underground, there is potential for impacts on previously unknown subsurface archaeological remains. This effect would be cumulative to the proposed development.

11.7.54. No significant residual impacts are anticipated.

11.7.55. Assessment

11.7.56. With regard to the identified cultural heritage assets, I accept that no significant direct effects are likely as a result of the proposed development. Similarly, having regard to the nature of the proposed development and the separation distances from these identified sites, I do not consider that the proposed development would have significant indirect effects on the setting or character of any identified protected structures or recorded monuments.

11.7.57. In order to mitigate the identified moderate to high potential for significant direct effects on unknown sub-surface archaeology, it is proposed to undertake archaeological test excavations in advance of construction. I recommend a suitable condition, in this regard, should the Board be minded to grant permission. Following mitigation, no significant residual effects are anticipated.

11.7.58. Subject to such pre-commencement testing, I accept the conclusions reached in the EIAR that the impacts associated with the proposed development on its own, or in combination with the permitted Flexgen and BESS developments and other existing, permitted or proposed development in the area, are not likely to be significant and will be mitigated by the measures outlined in the EIAR.

11.7.59. **Landscape and Visual Impacts**

11.7.60. The EIAR assesses landscape and visual impacts within a 3km radius study area as well as considering impacts at Croghaun Hill in County Offaly, c. 5km south of the site, which is one of the few notable topographic features in this generally flat landscape.

11.7.61. The site is located within the Lough Ennell & South Eastern Corridor Landscape Character Area (LCA10). This is described as follows:

“This LCA “comprises pasture land of mixed productivity. Lough Ennell is situated to the western side of this Landscape Character Area (LCA) and is

designated as an Area of High Amenity, SPA and SAC. A number of preserved views are listed from the R446 between Tyrrellspass and Rochfortbridge..... The bog areas in this LCA are mainly exploited but some have been left intact. This area has a large number of old demesnes, which are easily recognisable in the landscape with the existence of fine mature hardwood trees and estate walls in some cases.”

11.7.62. A number of ‘Areas of High Amenity’ are also designated in the county and mainly relate to key lakes. However, none of these are located within the study area.

11.7.63. Notwithstanding what is stated in the LCA description above, the nearest and only relevant scenic designation in the County Development Plan is View 13, which is indicated on Map 67 of the Plan as being a 360° view, but which is described in Appendix 5 of the Plan as being to the northeast and southwest from the R446 from the hilltop at Garrane. The view from this location towards the site is to the east and is relatively enclosed by vegetation.

11.7.64. A portion of the 3km study area encroaches into County Offaly. There is currently no Landscape Character Assessment for Offaly, however the portions of Offaly within the study area are identified as being of Moderate and Low sensitivity, with Croghaun Hill and its surrounds identified as being of High sensitivity and also designated as a High Amenity area. There are a number of protected views in County Offaly to and from Croaghaun Hill, however none of these are from the hill towards the north, where the application site is located.

11.7.65. A Zone of Theoretical Visibility (ZTV) map is provided in Figure 11.6 of the EIAR. This is based on a ‘bare ground’ terrain model (i.e. excluding potential screening features such as trees, hedgerows etc.). The ZTV indicates that the proposed development has the potential to be extensively visible from the central and eastern areas of the study area where the terrain is generally flatter or lower lying than the site. To the west, beyond c. 1km of the site, and to the north west and south west beyond c. 2km of the site there is no potential for scheme visibility due to a band of higher ground.

11.7.66. A Digital Surface Model (DSM) based ZTV map is also provided in Figure 11.7 of the EIAR, taking account of screening by hedgerows, buildings etc. This is within a closer 1km radius of the site. This DSM ZTV map demonstrates that the existing

vegetation in the vicinity of the site has a substantial screening effect that reduces the potential to see the proposed development beyond 1-2 fields from the site (c. 500m). Where visibility remains beyond this 500m distance, it tends to be in a shard pattern which indicates intermittent visibility through and between hedgerows and treelines. The proposed development remains relatively openly visible from the M6 motorway, but visibility from the R446 is very restricted. The EIAR considers the R446 to be the more sensitive of these routes as it is a designated scenic route and lined by residential houses. Visibility from the direction of Rochfortbridge to the north east appears to be precluded by intervening vegetation.

- 11.7.67. With regard to likely landscape impacts, the EIAR considers the potential impacts of the overall development. The landscape is considered to be of Medium – Low sensitivity, since it is heavily influenced by human activity and is a common productive rural landscape. The magnitude of the landscape impacts for the overall development is considered to be High – Medium in both construction and operational phases within a 500m, reducing to Medium and Low with distance. The significance rating is consequently considered to be Moderate within the 500m near vicinity of the overall development, reducing to Moderate – Slight or Slight beyond this.
- 11.7.68. With regard to likely visual impacts, the EIAR identifies 10 No. Viewshed Reference Points (VPs) in the vicinity which are considered to be reflective of representative views experienced from various visual receptor types. The locations of the VPs are illustrated in Figure 11.8 of the EIAR with a more detailed assessment of each VP set out in Appendix 11.1 of the EIAR. The majority of the VPs are located along the R446, M6 and local roads in the vicinity of the site, with VP9 located at a greater distance to the south, on a local road on Croghan Hill. VP6 is from Garrane Hilltop and corresponds to the designated Scenic View 13 referenced above.
- 11.7.69. Photomontage views are provided for each of the VPs, and it should be noted that these show the overall development scenario in a colour-coded format (proposed substation + permitted Flexgen and BESS developments) as well as pre and post-mitigation views. Photomontages from an additional 3 No. VPs, which were submitted to the Planning Authority in response to a Request for Further Information in respect of the Flexgen development, were also submitted with the application. These additional VPs (referred to as RFI1 – 3) are located to the east of the site.

- 11.7.70. Having inspected the application site and surrounding area, I consider the selection of viewpoints to be reasonable and suitably representative.
- 11.7.71. The sensitivity of the VPs is variously classified as low, medium-low or medium. The only exception to this is VP9 (longer-range view from Croghan Hill) which is stated as having high-medium sensitivity.
- 11.7.72. The EIAR states that the GIS substation building, comprising a 17m high block, will make the highest contribution to visual impact of any of the components contained within the three projects that comprise the overall development due to its height, bulk and positioning in the more visually exposed south-eastern corner of the overall site. It is contended that the proposed 220kV pylons will be a near like-for-like replacement of the existing pylons and this element is not considered to have a material consequence for visual amenity.
- 11.7.73. The visual impact at VP1 and VP2, which relate to relatively open views of the GIS building and communications mast and partial views of the permitted Flexgen and BESS projects, are considered to be of 'Moderate-slight' and 'Moderate' significance, respectively. Post-mitigation planting, the GIS building remains substantially visible. Again, at VP3, the GIS building is the most prominent feature, but the overall significance of impact is considered 'Slight' because of the low sensitivity of this receptor. There is very little visibility of the proposed development or the overall development from the north, west and south as represented by VP4 to VP9, with the significance of visual impacts in the range of 'Slight-imperceptible' to 'Imperceptible' for these receptors. At VP10, from the adjacent M6 motorway layby, there is a clear view of the proposed GIS substation building and communications mast. These will rise prominently above the planted embankment of the road corridor from a relatively short distance away. Although other elements of the overall development, such as the permitted Flexgen stacks will also be visible, a High-medium magnitude of visual impact is mainly attributed to the GIS building, with a Moderate-slight significance of impact due to the low sensitivity for this receptor.
- 11.7.74. The EIAR concludes that the proposed substation development is not considered to give rise to significant visual impacts in its own right or in combination with the other projects that comprise the overall development.

- 11.7.75. The main mitigation by avoidance measure is the proposed siting of the development in a robust, relatively flat to low rolling rural area that avails of a high degree of vegetative screening so that the proposed development will not be a prominent feature within the surrounding landscape. The decision to site it alongside a motorway is contended to reduce its effects, relative to a wholly green-field scenario.
- 11.7.76. In addition to retaining the existing hedgerows / treelines around the site, a large 3m high earthen embankment is permitted to the north of the BESS development, which is to the north of the proposed substation. This will have native woodland planting, which will be allowed to mature to at least 8m in height. A smaller area of planting is also permitted to the west of the BESS development and to the south east of the proposed substation, along the existing farmer's lane.
- 11.7.77. The proposed colour scheme for the GIS building is stated as having been chosen to complement the mitigation screen planting and take advantage of the likely backdrop in terms of tonal contrast. The lowest 5m of the structure will comprise a dark olive-green plinth to integrate with surrounding vegetation, with the next 3m of height being a mid-green, intended to blend with the treetops of existing and proposed planting around the site, while the upper sections of the building (above 8m) will have a light green / grey that is intended to recede against a light backdrop of sky in most instances. The visual effect of this banded cladding colouring can be seen in the submitted photomontages.
- 11.7.78. I note, however, that the submitted booklet of amended and additional photomontages, which were prepared on foot of a request for further information for the Flexgen planning application, indicate a more random and staggered cladding colour arrangement.
- 11.7.79. With regard to cumulative impacts, the landscape impact assessment in the EIAR considers the overall development. The same approach was also taken for the visual impact assessment, contained in Appendix 11.1 of the EIAR. Thus, the assessments are considered to be cumulative in respect of the overall development.
- 11.7.80. The only other cumulative impact identified is the proposed development in combination with the adjacent M6 motorway and 220kV overhead line. It is stated that the proposed development was deliberately placed adjacent to these features to take advantage of the robust and utilitarian landscape and visual setting, as well as

physical proximity to the OHL. No significant cumulative landscape and visual impacts are considered likely to arise.

- 11.7.81. The EIAR concludes that the overall development is not considered to give rise to any significant residual impacts on landscape and visual amenities, with the development being well screened or otherwise well assimilated within the prevailing landscape pattern.
- 11.7.82. Assessment
- 11.7.83. I have inspected the site and its surroundings from the adjacent road network and have had regard to the relevant chapters of the EIAR, the supporting appendices and the photomontages submitted, which I consider are sufficiently representative of views in the area and adequate for the purposes of the assessment.
- 11.7.84. The site and surrounding area are not particularly remarkable in terms of scenic qualities and is not subject to any sensitive landscape features, protected views or important stands of trees that are considered to warrant protection in the Development Plan.
- 11.7.85. The proposed development will comprise the insertion of a relatively large industrial type development into what is currently a greenfield site in a rural area. However, while the site is currently an agricultural site, planning permission has already been granted for the Flexgen and BESS developments on adjacent lands, which will be connected to the national grid by the proposed substation development. I also note that the landscape and visual character of the area, while rural, is already affected by the presence of the M6 Motorway corridor and its associated structures, and the existing 220kV overhead power line and associated angle towers.
- 11.7.86. Having regard to the existing Motorway and 220kV OHL and the permitted Flexgen and BESS developments, it is clear that the character of the area is evolving and having regard to the landscape and visual characteristics of the area, I consider that the proposed development can be accommodated on the site without resulting in significant effects on the landscape or visual amenities of the area.
- 11.7.87. The proposed GIS building is a sizable structure, however its simple cuboid shape is similar to warehouse or logistics type buildings often found along Motorway corridors. It will be most visible from the M6, however given that views from this viewpoint will be from vehicles travelling at speed and therefore fleeting, I do not

consider its visual impact to be significant. I consider that the proposed use of colour banding is a reasonable mitigation through design measure that will reduce the apparent bulk of the structure. As noted above, the cladding arrangement shown on the RFI photomontages is more random and staggered, which introduces a degree of visual interest to what is otherwise a featureless functional structure. I recommend that details of the proposed cladding colouring be agreed with the planning authority prior to commencement.

11.7.88. With regard to the communication tower and the proposed interface masts, these are similar in materials, design and scale to the existing 220kV masts in the area and the associated small compounds at each mast location will not be readily visible from outside the site.

11.7.89. I note that the planning authority, in their submission, conclude that the proposed development would not seriously injure the visual amenities of the area or have an unacceptable impact on the landscape.

11.7.90. I accept the conclusions reached in the EIAR that the proposed development can be accommodated and is capable of effectively assimilated into the landscape without resulting in significant adverse residual impacts on the landscape and visual amenities of the area. I consider that the proposed development will not negatively impact on any designated landscape, scenic view or designated scenic routes and that the visual impact that does arise will be localised, intermittent in nature and constrained, to a degree, by topography and vegetation.

11.7.91. **Conclusion on Material Assets, Cultural Heritage and the Landscape**

11.7.92. I have considered all of the written submissions made in relation to material assets, cultural heritage and the landscape and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on material assets, cultural heritage and the landscape can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on material assets, cultural heritage and the landscape.



## 11.8. The Interaction between the Above Factors

- 11.8.1. The potential interactions between the above factors are addressed in Chapter 14 of the EIAR. The interactions primarily relate to construction phase effects, although some operational phase interactions are identified. The interactions between the factors are tabulated in Table 14.1 of the EIAR.
- 11.8.2. In particular, interactions are identified between: Air Quality, Population & Human Health and Biodiversity; Noise, Human Beings and Biodiversity; Landscape & Visual, Biodiversity, Population & Human Health; Soils & Geology and Water Environment; Traffic & Transport, Population & Human Health, Noise & Vibration, and biodiversity.
- 11.8.3. None of the potential interactions identified between the various environmental factors are considered to be significant.
- 11.8.4. Having regard to the nature of the proposed development, the receiving environment and the foregoing chapters of the EIAR, I am satisfied that the summary of the potential for interactions between environmental factors is reasonable.

## 11.9. Reasoned Conclusion

- 11.9.1. Having regard to the examination of environmental information contained above, and to the submission by the planning authority and prescribed bodies it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
- **Population and Human Health:** Potential air quality, dust and noise impacts on human health will be mitigated through compliance with a Construction Environmental Management Plan, best practice construction methods and distance to sensitive receptors.
  - **Biodiversity:** No significant effects on biodiversity are likely due to the low ecological value of the site and the nature of the proposed development. Potential effects will be mitigated through standard good practice construction measures, timing of vegetation removal, water pollution prevention measures and the implementation of a Construction Environmental Management Plan.
  - **Land, Soils, Water, Air and Climate:** Potential effects on hydrology, hydrogeology and soils are identified, due to construction phase disturbance,

erosion, stockpiling of materials, sedimentation of watercourses and potential contamination of hydrology and soils with hydrocarbons, cement, pollutants etc. These effects will be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR and preliminary Construction Environmental Management Plan.

- **Material Assets, Cultural Heritage and the Landscape:** The location of the proposed development is of moderate to high potential for unknown subsurface archaeological remains, noting the results of archaeological testing undertaken in the vicinity as part of the M6 Motorway project. This will be mitigated through archaeological testing in advance of construction works.

11.9.2. The EIAR has considered that the main direct and indirect effects of any significance arising from the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. I am satisfied on the basis of the submitted information that impacts can be adequately mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment can be excluded on the basis of the submitted information.

## 12.0 **Appropriate Assessment – Screening**

### 12.1. **Compliance with Article 6(3) of the Habitats Directive**

12.1.1. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000, as amended, are considered fully in this section.

### 12.2. **Background on the Application**

12.2.1. The applicant submitted an Appropriate Assessment Screening Report (dated 17<sup>th</sup> December 2021), prepared by Moore Group Environmental Services, as part of the planning application.

- 12.2.2. I note that the AA Screening Report relates to the “overall” development (i.e. the permitted 275MW gas-fired generator (Reg. Ref. 21/515), the permitted 65MW battery energy storage system (Reg. Ref. 21/532) and the proposed substation development). It is stated as having been updated to address comments from the Department of Housing, Local Government and Heritage and requests for further information by Westmeath County Council in respect of planning applications Reg. Ref. 21/515 and 21/532.
- 12.2.3. The applicant’s AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development and identifies European Sites within a possible zone of influence of the development.
- 12.2.4. The applicant’s AA Screening Report concludes that, of the 7 No. European sites within the identified zone of influence, there is no direct connectivity to any of the identified sites and no predicted effects on any of the sites given: the intervening land uses and distance; lack of direct connections with regard to the source-pathway-receptor model; no predicted emissions to air, water or the environment that would result in significant effects. It goes on to conclude that:
- “It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site. An Appropriate Assessment is not, therefore, required.”
- 12.2.5. A ‘finding of no significant effects report’ reflecting this conclusion was included as an Appendix to the screening report.
- 12.2.6. Having reviewed the documentation submitted with the application, and the submissions made, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

### 12.3. **Screening for Appropriate Assessment – Test of Likely Significant Effects**

- 12.3.1. The proposed development is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on any European sites.

12.3.2. The proposed development is examined in relation to any possible interaction with European sites, i.e. designated Special Areas of Conservation (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

#### **12.4. Brief description of the development**

12.4.1. The applicant provides a brief description of the overall development in Section 3 of the AA Screening Report. In summary, the proposed development before the Board comprises a 220kV substation development with underground 220kV cable connections to a nearby overhead powerline. As noted above, the AA Screening Report relates to both the proposed substation development and the permitted gas-fired generator and BESS developments which will be served by the substation.

#### **12.5. Submissions and Observations**

12.5.1. The submission received from Westmeath County Council notes that the Board is the competent authority in making a determination on appropriate assessment. I note that Westmeath County Council, in its assessment of the associated planning applications for the gas-fired generator and BESS, did not determine that Stage 2 Appropriate Assessment was required in either of those cases.

12.5.2. There were no third party observations and the prescribed bodies that made submissions did not raise any issues relevant to Appropriate Assessment.

#### **12.6. European Sites**

12.6.1. The development site is not located in or immediately adjacent to a European site. The applicant's AA Screening Report considers European Sites within 20km of the proposed development. I note that this is a particularly wide potential zone of influence having regard to the nature and scale of the proposed development and the nature of the receiving environment. The reason for the 20km radius is that that drainage from the site flows to the Mongagh River, which is a tributary of the Castlejordan River which ultimately enters the River Boyne almost 20km downstream of the application site. Measured by river kilometres, rather than straight-line distance, the separation distance from the River Boyne and River

Blackwater SAC and SPA is slightly in excess of 20km. Having regard to the source-pathway-receptor model, I consider it appropriate to give further consideration to these two sites, notwithstanding the considerable separation distance. There are 7 No. European Sites within the zone and Table 12.1 below lists the qualifying interests of these sites, their conservation objectives and identifies possible connections between the proposed development (source) and the sites (receptors).

Table 12.1: Table of European Sites Within a Possible Zone of Influence of the Proposed Development					
European Site (Code)	Distance (Direction)	Qualifying Interest(s)	Conservation Objectives	Connections (Source-Pathway-Receptor)	Considered further in screening
<b>Raheenmore Bog SAC (000582)</b>	5.79km (S)	Active raised bogs [7110]  Degraded raised bogs still capable of natural regeneration [7120]  Depressions on peat substrates of the Rhynchosporion [7150]	To <u>restore</u> the favourable conservation condition of Active raised bogs, as defined by a list of specific attributes and targets.  Separate conservation objectives are not set for the other QIs.	<b>No</b>  No hydrological connection or other pathways.	<b>No</b>  Due to lack of pathway.
<b>Lough Ennell SAC (000685)</b>	6.25km (NW)	Alkaline fens [7230]	To <u>maintain</u> the favourable conservation condition of Alkaline fens in Lough Ennell SAC, as defined by a list of specific attributes and targets.	<b>No</b>  No hydrological connection or other pathways.	<b>No</b>  Due to lack of pathway.
<b>Lough Ennell SPA (004044)</b>	6.94km (NW)	Pochard ( <i>Aythya ferina</i> ) [A059]  Tufted Duck ( <i>Aythya fuligula</i> ) [A061]  Coot ( <i>Fulica atra</i> ) [A125]	To <u>maintain or restore</u> the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.  To <u>maintain or restore</u> the favourable conservation condition	<b>No</b>  No hydrological connection or other pathways.	<b>No</b>  Due to lack of pathway, distance and lack of any relevant ex situ factors of significance to the species.

		Wetland and Waterbirds [A999]	of the wetland habitat at the SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.		
<b>Split Hills and Long Hill Esker SAC (001831)</b>	7.19km (W)	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*important orchid sites) [6210]	To <u>restore</u> the favourable conservation condition of the Annex I habitat, as defined by a list of specific attributes and targets.	<b>No</b>  No hydrological connection or other pathways.	<b>No</b>  Due to lack of pathway.
<b>Wooddown Bog SAC (002205)</b>	14.33km (N)	Degraded raised bogs still capable of natural regeneration [7120]	To <u>maintain or restore</u> the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	<b>No</b>  No hydrological connection or other pathways.	<b>No</b>  Due to lack of pathway, distance and lack of any relevant ex situ factors of significance to the habitat.
<b>River Boyne and River Blackwater SAC (002299)</b>	19.47km (NE)	Alkaline fens [7230]  Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]  <i>Lampetra fluviatilis</i> (River Lamprey) [1099]	To <u>maintain or restore</u> the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected as defined by a list of specific attributes and targets.	<b>Yes</b>  Proposed development is in catchment of Mongagh River, which flows into the Castlejordan River, Yellow River and ultimately into the	<b>Yes</b>  Hydrological connection to SAC could give rise to changes in water quality during construction and/or operational phases with consequent effects on qualifying habitats and species through

		Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]		River Boyne. This is at a straight-line distance of c. 19.5km or over 20 river km.	sedimentation, contamination or disturbance.
<b>River Boyne and River Blackwater SPA (004232)</b>	19.48km (NE)	Kingfisher (Alcedo atthis) [A229]	To <u>maintain or restore</u> the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.	<b>Yes</b> Proposed development is in catchment of Mongagh River, which flows into the Castlejordan River, Yellow River and ultimately into the River Boyne. This is at a straight-line distance of c. 19.5km or over 20 river km.	<b>Yes</b> Hydrological connection to SPA could give rise to changes in water quality during construction and/or operational phases with consequent effects on qualifying species through sedimentation, contamination or disturbance.



## 12.7. Identification of likely effects

- 12.7.1. As noted above, the River Boyne and River Blackwater SAC and SPA (Site Codes 002299 and 004232) are considered to be the only European sites with the potential to be located in the Zone of Influence of the proposed development by means of a potential pathway via which effects could occur. The nature of this pathway is hydrological, due to the site being in the catchment of the Mongagh River (also referred to as the Kiltotan Stream in the AA Screening Report). The site is c. 1.1km north of the main channel of the Mongagh River, and c. 0.5km north of a watercourse which flows into the river. The Mongagh River flows into the Castlejordan River, which is a tributary of the River Boyne. I note that the straight-line separation distance between the site and the River Boyne and River Blackwater SAC/ SPA is c. 19.5km, with an actual river distance in excess of 20km.
- 12.7.2. The existing drainage ditches within the site appear to infrequently carry surface water out of the site, with water instead infiltrating to ground. The ditches were dry on the date of my site inspection and were also noted to be dry and vegetated in the Biodiversity assessment contained in the EIAR.
- 12.7.3. Having regard to the nature of the proposed development that is before the Board (i.e. the substation development), the nature of the Qualifying Interests and the substantial separation distance from the designated sites, I consider that the potential for any effects on the designated sites is limited to the construction phase and is primarily related to water pollution or contamination with silt, oils, hydrocarbons, chemicals, cement etc.
- 12.7.4. It is proposed to adhere to standard best practice pollution prevention measures during the construction phase. The measures include proper storage of oils, hydrocarbons etc., servicing of all machinery, waste management procedures and various other measures as outlined in the CEMP, with responsibility placed on relevant staff to ensure implementation of the measures. I do not consider that these measures are mitigation measures in the context of Appropriate Assessment, as they are not required to reduce/avoid impacts on the Qualifying Interests of the relevant designated sites. Having reviewed the measures outlined, I consider that they comprise standard good practice construction management methodologies and measures, of a type and scale that would be implemented on any development of a

similar nature, regardless of location. During the operational phase it is proposed to implement sustainable drainage system for the management of surface water, however this is not required for the purposes of mitigating effects on the qualifying interests of the designated site.

- 12.7.5. The proposed development that is before the Board is limited in nature and scale. The pathway potentially connecting the site to the River Boyne is convoluted, with shallow dry drainage ditches, culverts, streams and various rivers before the River Boyne SAC/SPA is reached at a river distance in excess of 20km. This convoluted pathway would appear to have limited carrying capacity for suspended solids/pollutants from the site and the substantial distance would be likely to result in a significant dilution effect and opportunity for materials to drop out of suspension. Having regard to these considerations and noting the nature of the qualifying interests and associated conservation objectives, I do not consider it likely that any suspended solids or pollutants that enter watercourses in the vicinity of the application site as a result of the proposed development are likely to reach the SAC/SPA in sufficient quantity or concentration so as to be likely to result in a significant effect on the European Sites in light of their Conservation Objectives.
- 12.7.6. With regard to the potential for in-combination effects, as noted above, the AA Screening Report considers the overall development. The Planning Authority undertook AA Screening of the associated Flexgen and BESS developments and, in granting permission for those substantially larger developments, did not consider that an Appropriate Assessment was required.
- 12.7.7. The potential effects of nitrogen deposition from the Flexgen plant are also considered in the AA Screening Report. There will be no nitrogen emissions from the proposed development before the Board and therefore no potential for in-combination effects to arise in respect of this environmental factor.
- 12.7.8. The AA Screening Report also considers other permitted development in the area, which is generally of a relatively minor nature, comprising residential and small-scale agriculture development. Given the limited scale and extent of the proposed development, the other permitted development in the area, and the separation distance from the designated sites, I do not consider that any significant in-combination effects are likely to arise.

## 12.8. Mitigation Measures

- 12.8.1. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

## 12.9. Screening Determination

- 12.9.1. The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on the River Boyne and River Blackwater SAC and SPA (Site Codes 002299 and 004232, respectively), or any other European sites, in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.
- 12.9.2. This determination is based on the nature and scale of the proposed development, the nature of the Conservation Objectives, Qualifying Interests and the separation distances between the proposed development and the European sites.

## 13.0 Recommendation

- 13.1. I recommend that permission be granted, subject to conditions, for the reasons and considerations set out below.

## 14.0 Reasons and Considerations

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

- (a) the nature, scale and extent of the proposed development;
- (b) the characteristics of the site and of the general vicinity;
- (c) the national targets for renewable energy contribution;
- (d) national, regional and local policy support for developing the electricity transmission system and renewable energy, in particular:
  - Government's Strategy for Renewable Energy, 2012-2020;

- National Planning Framework, 2018;
  - Delivering a Sustainable Energy Future for Ireland - the Energy Policy Framework, 2007-2020;
  - Government Policy Statement on Security of Electricity Supply, 2021;
  - Climate Action Plan, 2021;
  - Regional Spatial and Economic Strategy for the Eastern and Midlands Region; and
  - Westmeath County Development Plan, 2021-2027;
- (e) the proximity of the site to the permitted gas-fired generator and battery energy storage system developments and the existing 220kV Shannonbridge to Maynooth overhead power line;
- (f) the distance to dwellings or other sensitive receptors from the proposed development;
- (g) the submissions on file from prescribed bodies and the Planning Authority;
- (h) the documentation submitted with the application, including the Environmental Impact Assessment Report and the Appropriate Assessment Screening Report; and
- (i) the report of the Inspector.

### **Environmental Impact Assessment**

The Board completed an Environmental Impact Assessment of the proposed development taking into account:

- (i) the nature, scale and extent of the proposed development;
- (ii) the Environmental Impact Assessment Report and associated documentation submitted in support of the application;
- (iii) the submissions made in the course of the application; and
- (iv) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct,

indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application.

The Board considered, and agreed with the Inspectors reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- **Population and Human Health:** Potential air quality, dust and noise impacts on human health will be mitigated through compliance with a Construction Environmental Management Plan, best practice construction methods and distance to sensitive receptors.
- **Biodiversity:** No significant effects on biodiversity are likely due to the low ecological value of the site and the nature of the proposed development. Potential effects will be mitigated through standard good practice construction measures, timing of vegetation removal, water pollution prevention measures and the implementation of a Construction Environmental Management Plan.
- **Land, Soils, Water, Air and Climate:** Potential effects on hydrology, hydrogeology and soils are identified, due to construction phase disturbance, erosion, stockpiling of materials, sedimentation of watercourses and potential contamination of hydrology and soils with hydrocarbons, cement, pollutants etc. These effects will be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR and preliminary Construction Environmental Management Plan.
- **Material Assets, Cultural Heritage and the Landscape:** The location of the proposed development is of moderate to high potential for unknown subsurface archaeological remains, noting the results of archaeological testing undertaken in the vicinity as part of the M6 Motorway project. This will be mitigated through archaeological testing in advance of construction works.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures set out in the Environmental Impact Assessment Report, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

### **Appropriate Assessment – Stage 1 Screening**

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European Sites in view of the sites' Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on the River Boyne and River Blackwater SAC and SPA (Site Codes 002299 and 004232, respectively) or any other European site, in view of the sites' Conservation Objectives.

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

### **Proper Planning and Sustainable Development**

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

would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 15.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

**Reason:** In the interest of clarity.

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

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

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

**Reason:** In the interest of clarity.

4. The proposed wastewater treatment system shall be replaced with an underground sealed wastewater holding tank, with effluent to be removed to a licenced wastewater treatment facility for treatment and disposal at regular intervals. Details of the holding tank shall be submitted for the agreement of the planning authority prior to the commencement of development.

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

5. Details, including samples, of the materials, colours and textures of all the external finishes to the proposed buildings shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

**Reason:** In the interest of the visual amenities of the area.

6. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works in respect of both the construction and operation phases of the proposed development.

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

7. Prior to commencement of development, the developer shall engage with the property management branch of the Department of Defence /Air Corps Air Traffic Services in order to confirm that the proposed development and any associated construction equipment would have no impact on the safety of flight operation along identified critical low level routes in support of Air Corps operational requirements.

**Reason:** In the interests of air traffic safety.

8. (a) The developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate.  
  
(b) The existing agricultural access point from the L51251 Local Road shall not be used for construction traffic.

**Reason:** In the interest of traffic and pedestrian safety.

9. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the planning authority, generally in accordance with the preliminary CEMP submitted with the application. The CEMP shall incorporate the following:
  - (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site liaison officer, construction hours and the management, transport and disposal of construction waste;
  - (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;



- (c) traffic management and road safety procedures and measures;
- (d) an emergency response plan; and
- (e) proposals in relation to public information and communication.

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

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

10. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

- (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
- (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:

- (i) the nature and location of archaeological material on the site, and
- (ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

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

**Reason:** In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

11. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

**Reason:** In order to safeguard the amenities of property in the vicinity.

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

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

13. Hedgerows or trees to be removed on site shall not be removed during the bird nesting season of 1<sup>st</sup> March to 31<sup>st</sup> August.

**Reason:** In the interest of nature conservation.

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

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

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

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

b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

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

15. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of

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

**Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

16. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or other security to secure the provision and satisfactory completion of the development, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the development.

**Reason:** To ensure the satisfactory completion of the development.

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Niall Haverty  
Senior Planning Inspector

18<sup>th</sup> July 2022