Inspector's Report

ABP-318677-23

Development	110kV Air Insulated Switchgear (AIS) tail-fed substation with a 110kV grid connection to existing Finglas 220kV
Location	Within the townlands of Fieldstown, Clonmethan Electoral District, Co. Dublin.
Planning Authority	Fingal County Council
Applicant(s)	Energia Solar Holdings Limited.
Type of Application	Application for approval under Section 182A of the Planning and Development Act 2000, as amended.
Prescribed Bodies	TII, DHLG&H (DAU), IFI and Meath Co. Co.
Observers	None
Date of Site Inspection	15th October 2024.
Inspector	Alan Di Lucia

Contents

1.0 Introduction

1.1. This case concerns an application for strategic infrastructure under section 182A of the Planning and Development Act, 2000, as amended. It is made on foot of pre-application discussions with the Board under ABP-311032-21 for a new tail fed 110kV substation in Fieldstown to connect to Finglas substation via 110kV underground cables. The Board decided that the development would fall within the scope of section 182A of the Act and would be strategic infrastructure.

2.0 Site Location and Description

2.1. The proposed site of the substation is located in the townland of Fieldstown, Co. Dublin and comprises several agricultural fields with hedgerow boundaries. The site is bounded by the R122 Regional Road to the west, agricultural field boundaries to the north and east and the Broadmeadow River and the R125 to the south. The nearest large towns are Ashbourne which is 4.5km to the west and Swords, which is c. 9.5km to the southeast. Smaller settlements in the area include Oldtown, c 2.5km to the north, Ballyboughal, c. 4.5km to the east and Rolestown, c. 1km to the southeast. The closest dwelling is stated to be c. 300m to the southeast of the site. Access to the site is provided from an existing farm gate on the R122 to the west.

2.2. The proposed substation would be connected to the existing 220kV Finglas substation in the townland of Balseskin via a 13.3km underground 110kV cable in the public road via the R122 for approximately 5km in a southerly direction to the junction of the R122 and R121 where it turns southwest, traversing beneath (and following the route of Shallon Lane [L7325] for approximately 2.6km to the junction leading onto Broughan Lane and Dunsoghly Lane [L7231], which it follows in a southeastern direction for approximately 2km, where it then re-joins the R122 at Saint Margaret's Bypass for approximately 2.3km, before turning westward, just prior to the junction with the M50, following the field boundaries for approximately 700m, finally crossing the N2 and entering the existing 220kV Finglas substation.

3.0 Proposed Development

3.1. Context

Pre-application consultations were held with the Board under Ref. ABP-311032-21 whereupon the Board determined that the proposed development would be strategic infrastructure within the meaning of Section 182A of the Act.

The proposed substation and associated infrastructure are proposed to connect three permitted solar farms, Fieldstown 75MW (F21A/0043), Ballaghaweary/Greenogue 18MW (MCC- 21/1436) and Gerradstown 55MW (F23A/0130) to the national grid with the solar farms connected to the proposed substation by way of 33kV underground cables. The substation would not form a node on the transmission network but would become part of ESB Networks infrastructure.

It should be noted that following the initial receipt of the application on 12th December 2023, that by way of correspondence dated 22nd December 2023, revised notices were submitted due to a typographical error and amendments were made to the schedule of drawings.

3.2. Outline of Development

The development for which a **10-year permission** is sought comprises the following elements:

Substation

- A 110kV Air Insulated switchgear (AIS) tail-fed substation compound comprising:
    - Single storey 110kV AIS substation building [gfa c.450m², approx. 6.3m].
    - MV switchgear container and switchboard total floor area comprising c.60m².
    - 110kV grid transformer and two-house transformers within bunded enclosures (approx 6m in height).
    - Diversion of existing 38kV overhead line (OHL).
    - 160MV transformer positioned within bunded enclosures (approx. 6m).
    - A shunt filter, diesel generator & diesel tank.
    - 12 lightning protection masts (approx 20m).

- Two service/maintenance carparking facilities.

Access and Associated Infrastructure

- Internal access roads and car parking.
- New site entrance from the R122 regional road.
- Drainage infrastructure.
- 420m of 2.6m high perimeter palisade fencing and post and rail fencing (1.4m high).
- 200m of internal separation fencing (2.6m high).
- Holding Tank to be emptied periodically or a septic tank alternatively.
- All associated and ancillary site development works including localised alterations to the landscape.

Underground Cable

- 13.3km of 110kV underground cable from the proposed substation to the existing Finglas 220kV Substation to facilitate connection to the transmission network which includes:
  - Approx. 20 joint bays primarily within public roadways at approx. 500m intervals
- Trenchless installation in the form of horizontal directional drilling (HDD) at the following locations:
  - o Broadmeadow River Bridge before the junction of the R122 and the R125 regional roads.
  - o Ward River Bridge on the R122 regional road.
  - o Under the N2 prior to entering Finglas Substation

3.3. **Documentation Submitted**

The application was accompanied by a suite of drawings and documents which include the following:

- Planning Statement
- Environmental Considerations Report:

- Screening for Appropriate Assessment Report
- Environmental Impact Assessment Screening Report
- Outline Construction Environmental Management Plan

4.0 Consultations

4.1. Prescribed Bodies

Details of the application to the Board were circulated to the following prescribed bodies:

- Minister for Housing, Local Government and Heritage.
- Inland Fisheries Ireland (IFI).
- Transport Infrastructure Ireland (TII).
- Meath County Council.

4.2. Submissions

4.2.1. DHLG&H (DAU) - Archaeology

- Desk based archaeological assessment included within Planning and Environmental Considerations Report (PECR)
- Recommends Conditions OPR Sample Conditions C3, C5 and C6 (OPR Practice Notes PN03 (2022) with appropriate site-specific additions/adaptations based on characteristics of the development and findings in the desk-based AIA.
- All mitigation measures in Chapter 13 of PECR to be implemented.
- Pre-development archaeological testing of greenfield areas by archaeologist.
- CEMP to include location of archaeological and cultural heritage constraints, impacts, and mitigation measures.
- Final report to DHLG&H & FCC, and costs borne by developer.

4.2.2. Inland Fisheries Ireland

The submission can be summarised as follows:

- Proposal located within catchment of Broadmeadow and Ward Rivers, both important salmonid system with salmonid waters constraints applying.

- Best practice implemented for activities which may impact surface water or riparian habitats with comprehensive surface water management measures to be implemented.
- No direct pumping of contaminated water to a watercourse, dewatering to be treated either by infiltration overland or to a settlement pond.
- Measures for storage of topsoil to avoid entry to surface water network.
- Use of pre-cast concrete.
- Surface water drains and ditches to be retained.
- Directional Drilling under the two rivers to be subject of agreed method statements**.**
- Designated, suitably experienced, qualified person to monitor construction phase.

4.2.3. **Transport Infrastructure Ireland**

The submission can be summarised as follows:

- Potential for interactions with the national road network in several locations including M50 and N/M2.
- Any works including temporary 'works area' require agreement and co-ordination with TII.
- TII seeks to address safety, capacity, and strategic function of road network in accordance with the Section 28 Guidelines (2012) and objectives in in RSES.
- TII requirements in relation to crossings of the network and horizontal directional drilling outlined.
- Number of operational issues related to the development proposal are required to be resolved as part of the Construction Traffic Management Plan proposed to be prepared.
- Conditions recommended in respect of the HDD crossing of the M50/Junction 5, updated Construction Management Plan and Construction Traffic Management Plan.

4.2.4. **Meath County Council**

The submission can be summarised as follows:

- Noted that no part of application site is within its functional area.

- Attention drawn to a SID application due to be lodged for the EirGrid East Meath-North Dublin Grid upgrade comprising a 400kV underground cable between Woodland and Belcamp with potential impact.
- Requested to consider relevant conditions applied by Meath County Council in solar farm Ref. 21/1436.
- Potential for cumulative effects with solar farms on Meath /Dublin border.
- Transportation request condition requiring CTMP submitted to MCC for review in relation to works which may interfere with flow of traffic on R125.
- Archaeologist sought clarification on areas.
- Board may wish to consider conditioning that no stockpiling of material/spoil in flood zones A & B.
- Community Liaison Officer recommended.
- Proposal consistent with policy.
- Requested to consider nearby area of County Meath in its landscape assessment and cumulative visual effect with solar farm developments and applicant requested to provide this in photomontages.
- Not considered views and prospects in MCDP will be affected.
- Proposed wastewater treatment proposals unclear and should be investigated further/conditioned.
- Board should satisfy itself regarding amount/length of hedgerow removal in terms of EIA screening.
- Operational noise condition may be considered.
- Works to be carried out in accordance with IFI Recommendations should be conditioned.
- If mitigation measures required for proposal, NIS may be required.
- Unclear if hedgerow along route surveyed for badger.
- Noise and vibration impact on fish not addressed in EcIA.
- All relevant mitigation measures in EcIA and ECR should be included in CEMP.
- Condition requiring biosecurity management plan advised.
- Condition regarding hedgerow plantation and reinstatement of fencing, road surfaces recommended.
- Condition regarding decommissioning recommended.

- Further information recommended.
- If permission granted, 30 conditions recommended.

4.3. Public Submissions

No public submissions received.

4.4. Planning Authority

The Planning Authority submitted a Planning Report on the proposed development to the Board on the 6th of February 2024

4.4.1. Planning Authority Report – Fingal County Council

The submission received from Fingal County Council is summarised as follows:

- Provides planning history along cable route, policy context from national to local with site in area designated 'RU' with part of cable on GE zoned lands.
- Proposal acceptable in principle and consistent with polices related to the type of utility proposed and overall energy policies and objectives.
- Condition requiring submission of detailed landscape plan and details of all external finishes required.
- All necessary conditions considered from FCC and TII to facilitate relevant works within the road network.
- Condition included requiring mitigation measures in ECR implemented in full.
- Construction and Demolition Resource Waste Management Plan and Construction Environmental Management Plan to be submitted.
- AASR does not provide adequate details to assess potential impact from HDD crossing streams – access to riverbanks, depths under the water course, type of machinery, bentonite blow out, waste handling.
- EcIA methodology for HDD only provided for Broadmeadow and Ward Rivers.
- Ecological Clerk of works to oversee HDD recommended.
- Cumulative assessment of substation and associated solar farms should include specific assessment of badgers and whether mammal gates have been utilised to ensure adequate foraging grounds remain.
- Location or quality of treeline and hedgerow to be removed not known.

- PA would support condition towards financing education and awareness programme under Community Gain Fund.
- Permission is recommended with 15 conditions.

4.5. Applicant Response to Submissions

The applicant was invited to respond to the matters arising in the submissions received from the Planning Authority and Prescribed Bodies. The response is summarised as follows:

4.5.1. Fingal County Council

- Drawing FT-621 was submitted but is appended to response.
- Pre-application engagement undertaken with FCC and TII in relation to cable route within Ward River and Broadmeadow River Valley Greenway.
- ABP invited to include pre-commencement conditions requiring Construction and Demolition Resource Waste Management Plan & full CEMP.
- EirGrid have functional specifications for steel masts and girders (Appendix B) with colours outside specification not accepted but will endeavour to harmonise colour of fencing within constraints.
- Protected and other historic structures listed in Appendix C with cable not impacted on most proximate protected structure.
- Environmental Constraints Report (ECR) outlines the HDD technique which avoids in channel works and uses a predetermined route with two temporary pits (entry and exit) excavated at each side with works area a minimum 15m back from watercourses and depth of drill below riverbed determined from site investigations.
- Nearest badger sett (210m south) not impacted and only 860sq.m of grassland foraging will be lost. Potential cumulative impact of the substation has been considered and concluded no need to utilise badger/mammal gates with fields surrounding substation remaining in agricultural use and badgers able to use grassland.
- Locations of hedgerow and tree removal shown on landscape plan.

- Condition requiring Ecological CoW for HDD invited.

4.5.2. **Meath County Council**

- Pre-application consultation undertaken with EirGrid which informed grid route vis a vis the proposed East-Meath/North Dublin grid upgrade.
- Application in Fingal and robust CTMP will be agreed prior to commencement.
- Chainages provided for each heritage asset and areas impacted by cable route.
- Section 26 licence to be made to NMS.
- All wastewater collected from sealed storage tank and removed from site.
- No vegetation removal required along cable route along road with three off road areas where vegetation removal surveyed for badgers (& other features) as shown in App C of EcIA.

4.5.3. **Transport Infrastructure Ireland**

- Applicant undertook pre-consultation with TII prior to submission and will endeavour to follow relevant standards.

4.5.4. **DHLG&H (DAU)**

- Request mitigation measures, testing, best practice implementation and CEMP, and submission of testing/monitoring report/s included as pre-commencement condition.

4.5.5. **Inland Fisheries Ireland**

- Applicant undertook pre-consultation with IFI prior to submission.
- Request that best practice implementation and CEMP, discharge application, consultation with IFI included as pre-commencement condition.

5.0 Planning History

5.1. Pre-Application Consultation

ABP-311032-21

The Board received a request on 4 th August 2021 from AECOM, acting on behalf of Energia Solar Holdings Limited ('the prospective applicant'), to enter into preapplication consultation under section 182E of the Planning and Development Act 2000, as amended ('the 2000 Act'), in relation to proposed development consisting of the construction of a new tail-fed 110kV substation in Fieldstown, Co. Dublin to connect to Finglas substation via 110kV underground cables.

Two consultation meetings were subsequently held between An Bord Pleanála and the prospective applicant on 22nd November 2021 and 31st May 2022, respectively. The prospective applicant formally requested closure of the pre-application consultation process in a letter dated 11th July 2022.

The Board decided that the development would fall within the scope of section 182A of the Act and would be strategic infrastructure.

5.2. Planning History (substation location)

There are several permitted solar farms within the wider area. The following planning history outlines the solar farms which the proposed development seeks to connect to the transmission network:

Fingal

F23A/0130 - Permission granted (03/10/23) for a solar farm on site of c.84.35ha with all associated infrastructure at Gerrardstown, Brownstown & Kinoud, Ballyboughal, Co. Dublin. (2km East))

F21A/0042: Permission granted (16/09/21) for a solar farm on a site of c.105ha with all associated infrastructure at Whitestown, Fieldstown and Killsallaghan, Co. Dublin. (2.2km northwest)

Meath

21/1436 – Permission granted (31/01/22) for a solar farm on site of c.34.4ha with all associated infrastructure at Ballaghaweary and Greenogue, Killsallaghan, Co. Meath. (2.5km southwest)

5.3. Planning History (grid connection route)

The following planning history outlines development along the grid route which might have cumulative effects.

ABP 317480 Permission granted (16/05/2024) for Demolition of buildings, road improvement works and construction of gas turbine power generation station with all associated site works. An Environmental Impact Assessment Report has been prepared. EPA licence is required at Kilshane, Finglas Dublin 11 (2km West)

FW23A/0111 permission granted (12/06/2023) for Material Recovery Facility at Huntstown / Coldwinters, Co . Dublin. (0.9km west)

FW20A/0040 permission granted (05/08/2020) an ESB Substation at Claremount Co. Dublin. (4.6km north-west)

6.0 Policy Context

6.1. National and Regional Policy

6.1.1. Climate Action and Low Carbon Development (Amendment) Act 2021

Introduces a legally binding path to net zero emissions no later than 2050, and to a 51% reduction in emissions by the end of the decade.

6.1.2. Policy Statement on Security of Electricity Supply

The Programme for Government commits Ireland to an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050. To contribute to the achievement of these 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. 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.

6.1.3. Climate Action Plan 2024

Climate Action Plan 2024 is the third annual update to Ireland's Climate Action Plan 2019 and the second to be prepared under the Climate Action and Low Carbon

Development (Amendment) Act 2021. It builds on the introduction of carbon budgets and sectoral emissions ceilings in the Climate Action Plan 2023 and sets a course for Ireland's targets to halve emissions by 2030 and reach net-zero no later than 2050. These national targets align with Ireland's obligations under EU and international treaties, most notably the Paris Agreement (2015) and the European Green Deal (2020).

6.1.4. **National Planning Framework Project Ireland 2040**

It is a goal of the National Planning Framework (NPF) to refocus planning to tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential, including, inter alia onshore and offshore wind energy. It contains several National Strategic Outcomes (NSOs) which include seeking a transition to a low-carbon and climate resilient society. It seeks to support the development of electricity from renewable sources, and the need to reduce reliance on fossil fuels and cut carbon emissions.

NSO8 seeks a transition to a low carbon and climate resilient society. The transition to a low carbon and climate resilient society recognises that more diversified and renewables focussed energy systems will be necessary. It aims to deliver 40% of electricity needs from renewable sources by 2020 with further increases through to 2030 and beyond in accordance with EU/National Policy.

National Planning Objective (NPO) 55 seeks to 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.

6.1.5. **National Biodiversity Plan 2023-2040 (NBAP)**

The NBAP includes five strategic objectives aimed at addressing existing challenges and new and emerging issues associated with biodiversity loss. Section 59B(1) of the Wildlife (Amendment) Act 2000 (as amended) requires the Board, as a public body, to have regard to the objectives and targets of the NBAP in the performance of its functions, to the extent that they may affect or relate to the functions of the Board. The impact of development on biodiversity, including species and habitats, can be assessed at a European, National and Local level and is taken into account in our

decision-making having regard to the Habitats and Birds Directives, Environmental Impact Assessment Directive, Water Framework Directive and Marine Strategy Framework Directive, and other relevant legislation, strategy and policy where applicable.

6.1.6. **Eastern and Midlands Regional Spatial & Economic Strategy 2019-2031**

The RSES supports the delivery of the programme for change set out in the National Planning Framework and the National Development Plan. It sets out a strategic vision and policy objectives for climate change, sustainable development, and renewable energy. It seeks to support the reinforcement and strengthening of the electricity grid to facilitate planned growth and transmission/distribution of renewable energy focused generation across the major demand centres.

Regional Policy Objective (RPO) 10.20 supports and facilitates *"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 supports "*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,."*

6.2. **Fingal County Development Plan 2023-2029 [FCDP]**

6.2.1. Climate Action Policy CAP13- -Energy from Renewable Sources states to "Actively support the production of energy from renewable sources and associated electricity grid infrastructure, such as from solar energy, hydro energy, wave/tidal energy, geothermal, wind energy, combined heat and power (CHP), heat energy distribution such as district heating/cooling systems, and any other renewable energy sources, subject to normal planning and environmental considerations."

6.2.2. Objective IUO44 states to “Support the development of enhanced electricity and gas supplies, and associated transmission and distribution networks, to serve the existing and future needs of the County, and to facilitate new transmission infrastructure projects and technologies.”

6.2.3. The proposed 110kV substation is located on lands zoned Rural RU in the FCDP. “The zoning objective is to “Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage.” Utility Installations are a permitted use under the RU land use zoning objective.

6.2.4. The proposed underground cabling is mainly along the road network, which has no designated zoning. The route also crosses the RU zoning objective mainly at the two river crossings. The route also crosses into the General Employment (GE) zoning objective on route to the Finglas substation. Utility installations are a permitted use under the GE land use zoning objective.

6.2.5. The proposed 110kV substation is located within the Agriculture Rolling Hills Character Type Landscape which is made up “*principally of agricultural land and is of value due to the Ward and Broadmeadow River and the ecological and visual attributes they bring*”.

6.2.6. The proposed 110kV substation is located within a Nature Development Area. ‘Nature Development Areas’ are locations where nature conservation can be combined with existing activities such as farming, forestry, quarrying and recreation (e.g. golf courses). These areas are reservoirs of biodiversity in the wider countryside and together with the corridors and stepping-stones allow species to move through the landscape. Specific objectives have been developed for the Nature Development Areas in the Fingal Biodiversity Action Plan and the Council will work with landowners to achieve benefits for biodiversity in these areas.

6.3. Fingal Biodiversity Action Plan 2023-2030

6.3.1. Nature Development Areas are areas where nature conservation can be combined with existing land use such as farming, quarries, golf courses and parkland. These areas have been selected based upon existing wildlife values or potential wildlife values related to habitats and species present on the site. The nature development sites will act as secondary core areas in the countryside and/or will act as stepping

stones along ecological corridors. The proposed 110kV substation is located within the Nature Development Area – Farmland.

6.3.2. The strategy for this area is "to work with local farmers to develop demonstration farms to promote wildlife and environmental enhancement works. The purpose behind the demonstration farms is to explore the range of habitat improvement measures and agri-environment possibilities on a farm, explore the costs associated with these measures, study the wildlife effects, and provide a cost-benefit analysis." Where development is proposed within the farmland nature development area, applicants will be requested to retain existing natural features as much as possible, but no specific additional measures will be required.

7.0 **Natural Heritage Designations**

There are no Natural Heritage Areas or Proposed Natural Heritage Areas in close proximity to the site, (red line boundary of the proposed development). The following SACs and SPAs were identified within the zone of influence of the proposed site.

Site Name	Distance from Proposed Development
South Dublin Bay and River Tolka Estuary SPA [004024]	Approximately 7.2km southeast of the Proposed Grid Connection
Malahide Estuary SAC [000205]	Approximately 7.4km southeast of the Proposed Substation Development. Approximately 7.4km southeast of the Proposed Grid Connection.
Malahide Estuary SPA [004025]	Approximately 7.8km southeast of the Proposed Substation Development. Approximately 7.8km southeast of the Proposed Grid Connection.
Rogerstown Estuary SPA [004015]	Approximately 8.8km northeast of the Proposed Substation

	Development. Approximately 9.0km northeast of the Proposed Grid Connection.

8.0 Environmental Impact Assessment

8.1. EIA Screening

8.1.1. The applicant's Environmental Impact Assessment Screening Report considers the requirement for EIA against the legislative basis set out in section 172 of the Planning and Development Act 2000 (as amended), Schedule 5 of the Planning and Development Regulations 2001 (as amended) and the criteria set out in Schedule 7 of the Regulations in respect of sub-threshold development.

8.1.2. The assessment considers that the proposed development does not fall within any Class of Schedule 5, including the following classes:

- Class 3(a) Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more, and
- Class 3(b) Industrial installations for carrying gas, steam and hot water with potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this schedule, where the voltage would be 200 kilovolts or more.

8.1.3. The assessment also refers to Class 15, as any sub threshold project in Schedule 5 Part 2 which would be likely to have significant effects on the environment.

8.1.4. The assessment, states that the development is not sub-threshold because it is not deemed to be a development which is relevant to any class as set out in Schedule 5, Part 2. Notwithstanding this, the applicant provides an assessment of the development against the criteria set out in Schedule 7 and provides the information specified in Schedule 7A (section 3.6). This assessment includes an evaluation of likely cumulative effects with other development in the area of the site.

8.1.5. I have carried out an EIA Pre-Screening (See Form 1 appended to this report) and an EIA Screening Determination (See Form 3 appended to this report). I concluded

that the proposed development would not be likely to have significant effects on the environment, and that an Environmental Impact Assessment Report is not required.

9.0 Planning Assessment

9.1. Context

Having examined the application details and all other documentation on file, including all the submissions received in relation to the application, and inspected the site, I consider that the main issues in the planning assessment relate to the following matters:

- Principle of Development
- Design, Layout and Visual Amenity
- Movement and Access
- Residential Amenity
- Water, Drainage and Flood Risk
- Biodiversity
- Climate
- Cultural Heritage
- Material Assets.

Issues raised in respect of EIA Screening are addressed in section 8 of this report.

Issues raised in respect of appropriate assessment are addressed in section 10 of this report.

9.2. Principle of Development

9.2.1. The Proposed Development is situated within the broader context of solar farm developments in the area. Although it is not part of the larger solar farm applications, it is essential for connecting solar farms to the Grid, ensuring security, and facilitating the transmission of solar-generated electricity. The aim of the Proposed Development is to strengthen the transmission network and provide strategic,

sustainable energy generation, support infrastructure and capacity, particularly during peak energy demand periods. This development is necessary to establish the infrastructure required for the permanent power supply to the Fieldstown, Ballaghaweary/Greenogue, and Gerradstown solar farms. It is designed to support, secure, and transport electricity from these renewable energy projects. The proposed development is essential to enable the integration of renewable energy from solar farm projects into the national grid. I am satisfied that the proposed development is in principle, consistent with both National and Regional Policy context as set out in Section 6.1 of this report. I am satisfied that the proposed development contribution to achieving Climate Action Policy CAP13 and Objective IUO44 of the FCDP as referenced in Section 6.2 of this report.

9.2.2. The site of the proposed substation compound is located in an area designated with zoning objective RU which is to protect and promote in a balanced way, the development of agriculture and rural related enterprise, biodiversity , the rural landscape, and the built and cultural heritage. The proposed substation is considered a utility instillation which is permitted in principle under the RU zoning objective. The underground cabling routes mainly through existing roadways, have no designated zoning. The cabling crosses RU zoned lands and crosses lands zoned GE into the Finglas Substation. The underground cabling considered a utility installations which is considered under the GE zoning objective. I am satisfied that the proposed development complies with the zoning objectives of the FCDP.

9.2.3. The site of the proposed substation is within an area designated as a Nature Development Area – Farmland. Specific objectives have been developed for the Nature Development Areas in the Fingal Biodiversity Action Plan and the aim is to collaborate with landowners to achieve benefits for biodiversity in these areas. The Bio-Diversity Action Plan states that where development is proposed within the farmland nature development area, applicants will be requested to retain existing natural features as much as possible, but no specific additional measures will be required. I am satisfied based on a site inspection and the information submitted with the application that it is intended to retain existing natural features were possible.

9.2.4. I consider, based on the above assessment, that the proposed development supports sustainable development and renewable energy targets as set out in National, Regional and Local policy and is designed to promote efficiencies in the

energy sector and facilitate the transition to a low carbon electricity system. Therefore, I conclude that the development as proposed is considered in principle at this location. I note that the submission from Fingal County Council considered that the principle of the proposed development aligns with the policies and objectives of the FCDP.

9.3. Design, Layout and Visual Amenity

9.3.1. The Design and layout of the proposed substation and the proposed grid connection route are set out in the applicant's application. The proposed 110kV substation is located within the Agriculture Rolling Hills landscape type which is designated as 'Modest Landscape Value' according to the landscape character assessment of the FCDP.

9.3.2. The proposed grid connection undergrounds the cable for 13.3km which is primarily within the existing road network. Following an inspection of the proposed grid connection route and the documentation submitted with the application, I am satisfied that undergrounding the cable, primarily within the existing road network, will not significantly alter the character of the current landscape. However, minor interventions, such as hedgerow removal, the installation of joint bays and associated infrastructure at the grid connection location, may cause localised changes to this landscape. These changes are expected to have minimal impact as joint bays will be present at 20 locations along the grid connection, hedgerow removal is mainly expected at the site entrance, and utility infrastructure will be erected at the connection point to the Finglas substations thereby providing negligible perceptual intrusion of the landscape at this location. I conclude that the underground cabling and grid connection will not negatively affect the landscape character or visual amenity of the area within which it is located.

9.3.3. The proposed 110kV substation is located within the Agriculture Rolling Hills landscape type which is designated as 'Modest Landscape Value' according to the landscape character assessment of the FCDP. Access to the site is via the Regional Road R122. To achieve necessary sight visibility, the access point has been relocated to the south of the existing agricultural access, requiring the removal of approximately 160 meters of hedgerow. The access road extends eastward for 180 meters to the proposed substation. About 100 meters from the R122, the access

road passes through a mature tree and hedgerow, which provides screening for the proposed substation. I am satisfied that the proposed access to the substation will have minimal impact as it will be localised to this location, and replanting will reduce the extant of the impact.

9.3.4. Following a site inspection, I concur with the applicant that the visual impact of the proposed substation will be confined locally to a distance of approximately 300m due to the intervening mature / semi mature vegetation along surrounding field vegetation. I consider that the proposed substation will have maximum potential intrusion on the landscape to the south of the proposed site along the R122 from the bridge crossing the Broadmeadow River to approximately 300m south along the R122 from the junction with the R125. The applicant proposes mitigation planting in the form of wildflower mix, instant mature native hedgerow mix and native shrubs and woodland at the site boundary. I am satisfied that the landscaping measures proposed by the applicant, along with additional planting along the substation boundary fencing, will effectively screen the proposed substation. In their submission on the proposed development, the Planning Authority notes that the proposed development is acceptable subject to appropriate screening. I recommend that a condition requiring a detailed landscaping plan including additional planting along the permitter fencing to be agreed with the PA is included should the Board decide to grant permission.

9.3.5. The site layout plans and details submitted with the application indicates twelve 20-m high lightning masts proposed within the substation. I acknowledge that lightning masts are necessary for such developments, however, following an inspection on site and the visual analysis submitted with the application, I consider that the height of these masts have the potential to be visually intrusive. The applicant has not provided any detailed justification for the proposed configuration. I note that the standard for the Irish transmission network is set by EirGrid, but typically, bespoke lightning risk assessments are prepared for individual proposals. I would be satisfied with the proposed lightning mast configuration if justification for the layout and configuration was included with the application. Therefore, I recommend that a condition should be included, should to Board decide to grant permission, requiring the submission of a Lightning Protection Study to be agreed with the Planning

authority that clearly demonstrates the optimal layout and configuration of lightning masts for the proposed substation.

9.3.6. In response to the PA's submission, the applicant states that there is limited scope to condition materials and finishes, as all the items must meet EirGrid's functional specifications. I note that EirGrid have a Functional Specification document, which specifies the finish to certain equipment. Notwithstanding this, the applicant states that they will endeavour to harmonise the colour of the fencing with the landscape. This matter can be addressed by condition.

9.4. Movement and Access

9.4.1. The study area includes the development site and surrounding road network and is defined by the distribution of trips from the site onto the local road network, impacting immediate junctions to high priority roads. The proposed development route crosses one National Primary Road (N2), three Regional Roads (R125, R121, R122), and one local road. The road network in the vicinity of the Proposed Substation Development is currently operating well below capacity with no significant delays.

9.4.2. Construction of the proposed development is expected to take 24 months, peaking at 80 vehicles per day, including 30 HGVs, with a Construction Traffic Management Plan in place. It is anticipated that a stop/go system will operate along the regional roads, with the probability of road closures along the local road. Details of these road closures are to be agreed with the PA.

9.4.3. Construction materials will be transported along the R122 and R125 regional roads, in clean, enclosed, or covered vehicles. Materials will be sourced locally where possible to minimise transportation distances. During the construction phase, the R122 will see an increase in Average Annual Daily Traffic (AADT) by 30 HGVs and 50 vehicles from construction staff. Traffic surveys conducted identified peak hour periods for base traffic flows, with the highest percentage impact at the site access junction and Junction R122/R125. Growth rates for future travel demand are projected at 1.62% per annum from 2016-2030 and 0.51% per annum from 2030-2040. Junction analysis indicates that the proposed site access and R122/R125 junction will operate within capacity during the construction period. The overall traffic impact of the proposed development is considered low, with negligible traffic expected during the operational phase.

9.4.4. I am satisfied based on the information provided by the applicant and following a site inspection, that a detailed Traffic Management Plan to be agreed with the PA will minimise potential impacts during construction and that residual impacts during operation will be negligible.

9.4.5. I note that the submission from the Planning Authority has no objections to the proposed development subject to a number of conditions relating to the preparation of a traffic management plan, relevant consents from both the PA and TII, restoration plan for public roads to be agreed, traffic safety measures at substation access and standard conditions relating to surface water disposal and relocation of any utility poles required during construction phase. It is also noted that the submission from TII has no objections subject to details regarding potential construction across the National Road Network to be agreed prior to construction. This can be addressed by condition.

9.5. Residential Amenity

9.5.1. There are small number of one-off rural housing units located in the proximity of the proposed substation, with the nearest located approximately 300m west. There are a number of residential properties along the route of the proposed grid connection.

9.5.2. The potential impacts to residential amenity relating to the proposed development would be mainly during construction phase, with disruption along the road network relating to transportation of materials, and travel times due to stop/go restrictions, dust, noise, and possible vibrations during construction. Potential impacts during operation linked to the proposed substation include noise from the transformers, and light spillage from the prosed floodlighting.

9.5.3. Limiting light pollution is important in the interests of residential amenity. Any artificial lighting will be directed onto required areas and light spill will be minimised using beam light deflectors. I consider that due to the separation distance between the proposed substation and nearest residential property, that light pollution will not have a significant effect on the residential amenity of properties at this location. However, it is important to ensure that lighting proposals adequately light the area without using more light than necessary, eliminate or minimise glare and excessive lighting, prevent light trespass and minimise sky glow. This matter could be addressed by condition.

9.5.4. Noise and vibration from the proposed development will occur during both construction and operational phases, with the highest noise levels expected during early site preparation. Construction activities are expected to comply with noise limits due to large distances between the site and sensitive receptors, except for the grid connection route where limits may be exceeded temporarily. Vibration from construction activities, including HDD, is expected to be perceptible but not significant, with all predicted levels falling below the threshold for cosmetic damage to buildings. It is not anticipated that the proposed grid connection will produce any significant noise and vibration levels during the operational phase of the proposed development. Mitigation measures, such as acoustic barriers, are expected to ensure compliance with sound limits and preventing adverse impacts from operational phase sound emissions at the proposed substation.

9.5.5. No significant noise or vibration effects are expected at nearby receptors after mitigation measures. Cumulative effects may occur if construction of approved projects occurs in tandem with the proposed development, but no significant noise impacts are expected due to low volumes of construction traffic. Construction noise emissions are manageable with recommended mitigation measures and operation noise limits are achievable with proper design.

9.6. Water, Drainage and Flood Risk

9.6.1. The study area identified all water bodies within 2km of the site boundary. The Broadmeadow River 200m from the site boundary, flowing west to east, is the closest surface water feature to the proposed substation, and the site lies within the Broadmeadow_030 River Sub Basin. The Proposed Grid Connection crosses several water bodies, including the Broadmeadow River and Ward River, both classified as having a 'Moderate' WFD status and 'at risk.'. The aquifer beneath the Proposed Substation Development is classified as 'Locally Important - Moderately Productive in Local Zones,' while the Grid Connection has areas of 'Poor Aquifer.' Groundwater vulnerability ranges from low to high at the Proposed Substation Development and from low to extreme along the Proposed Grid Connection. Several groundwater wells are within a 2km radius of the Proposed Grid Connection, with varying yields from low to good.

9.6.2. A Stage 2 Flood Risk Assessment (FRA) concluded that the Proposed Development lies in Flood Zone C, with low pluvial, groundwater, and fluvial flood risks. A Stage 3 Detailed FRA is not required due to the low flood risk assessment results.

9.6.3. Construction and operational phases of the proposed development could lead to increased sediment loading, contamination from spills, changes to groundwater recharge due to hardstanding cover.

9.6.4. Mitigation measures for sedimentation include avoiding instream works, using double silt fencing, and diverting rainwater away from construction areas. Fuel and chemical handling measures involve bunded storage areas, designated refuelling zones, and the use of spill-kits to manage accidental spills. Concrete washout will be managed in designated areas to prevent direct discharge into surface waters. Excavated materials will be stored in designated areas, with topsoil stockpiles kept under 2m high to prevent soil structure damage. HDD drilling fluid management includes using non-toxic, biodegradable fluids and maintaining a minimum soil cover depth of 2m under roads and watercourses.

9.6.5. I am satisfied based on the information provided and with the preparation of a detailed Construction Environmental Management Plan that the proposed development will not have any significant impacts relating to hydrology and water quality. The cumulative effects with the construction of permitted projects may cause temporary indirect cumulative effects, but mitigation measures will prevent significant impacts.

9.7. **Biodiversity**

9.7.1. The application was accompanied by a detailed Ecological Impact Assessment. The assessment considered the potential ecological impacts on designated nature conservations sites, habitats, flora, fauna, and ecosystems, whilst providing mitigation measures where necessary. Desk studies identified nature conservation designations within 15km, national statutory conservation designations within 2km and records of protected species within 1km of the development site boundary, Field surveys were conducted in July and August 2021; December 2022 and October 2023. The surveys included habitat mapping, badger surveys and preliminary bat roost appraisals.

9.7.2. An Appropriate Assessment State 1 Screening Report was completed to determine potential significant effects on European Sites within the zone of influence of the proposed development. No NHAs or pNHA were identified within 2km of the proposed site. Eight SACs and six SPAs were identified within 15km. I concluded that 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 European Site Malahide Estuary SAC or SPA or any other European site, in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required. (Refer to Section 9 Appropriate Assessment of this report.)

9.7.3. Various habitats such as arable crops, buildings, low land rivers, drainage ditches, dry meadows, grassland, and treelines are present within the study area. Several bat species including Leisler's bat and common pipistrelle, were recorded within 1km of the study area. A potential badger sett was identified outside the proposed substation, with evidence of badger activity recorded. The presence of other mammals such as Irish hare, otter, pine martin and grey squirrel was noted. Invasive plant species such as butterfly bush, winter heliotrope and snowberry were recorded along the proposed grid connection.

9.7.4. Construction impacts include potential habitat loss, pollutions, and disturbances to species. Operational impacts are considered minimal with no significant effects identified.

9.7.5. Mitigation measures include embedded measures such as pollution control, habitat protection, compensatory planting, and specific measures to prevent harm of species during construction. Mitigation measures also include careful design to avoid damage to hedgerows, drainage ditches and treelines. Site personal will be trained on ecological features and mitigation and restricted construction hours will apply. Pre-construction surveys for badgers will be conducted. Method statements for species protections and avoiding invasive non -native species will be prepared and a biosecurity management plan will be prepared if they cannot be avoided. All will be provided for with the preparation of a Construction Environmental Management Plan to be approved by the Planning Authority

9.7.6. Cumulative impacts with other projects are not expected to be significant due to compensatory planting and the temporary nature of the grid connection works.

Residual effects after mitigation are considered negligible for all ecological features identified. Enhancement measures include planting native species, installing bat and bird boxes.

9.7.7. I am satisfied based on the information provided and with the preparation of a detailed Construction Environmental Management Plan that the proposed development will not have any significant impacts in terms of Biodiversity

9.8. **Climate**

9.8.1. The Environmental report submitted with the Planning Application evaluates climate impacts focusing on Green House Gas (GHG) and Climate Change Resilience (CCR). The GHG assessment examines both direct and indirect emissions, using a Do Minimum scenario as the baseline, and includes lifecycle stages such as land clearance, construction, and operational energy use. The CCR assessment uses historic data and future projections to determine baseline environments and potential climate change impacts.

9.8.2. Total GHG emissions from construction phase estimated at 5,088 tCO2e, with transport of materials contributing to 27%., worker travel at 26% waste disposal at 22% and construction materials 12%. This represents 0.009% of the current Irish National GHG inventory. The operation phase is estimated to produce 15,493 tCO2e over the 40-year design life period. Operational energy use accounts for 59% of annual operational emissions, with 38% for maintenance. The operational phase emissions would contribute to 0.03% of Irelands 2030 GHG reduction target.

9.8.3. Mitigation is included in the CEMP and includes the following for GHG:

- Specification of locally sourced materials with lower embodied carbon content where feasible, in line with circular economy principles.
- Turning off machinery engines when not in use.
- Ensuring regular maintenance of construction machinery.
- Handling materials efficiently on site to minimise the waiting time for loading and unloading, thereby reducing potential emissions.

And the following for CCR:

- Substation to be constructed at a level above any potential flooding.

- A flow control device will be included within the Proposed Substation Development to limit surface water discharge.
- Have a policy in place for flood defence which is reviewed on a regular basis. For example, portable flood defence equipment deployed at strategic locations (e.g., aqua sack, barriers, high speed pumps).
- Substation equipment (e.g., cables) to be specified for use in higher temperatures projected in the future.
- Maximise the use of natural ventilation to keep internal temperatures within plant and equipment operating within their optimum parameters.

9.8.4. The EPA identifies residual effects as impacts remaining after mitigation, with unavoidable GHG emissions during both construction and operation phases of the Proposed Development. These emissions are classified as minor with low significance. The proposed development's GHG emissions during construction are minimal and cumulative climate impact is imperceptible.

9.8.5. I am satisfied based on the information provided that the proposed development will contribute to meeting the targets set out in the policy documents referred to in Section 6.0 above by enabling the renewable energy of three permitted solar farms to connect to the National Grid. The proposal in itself will have an insignificant impact on the climate.

9.9. Cultural Heritage

9.9.1. Study area is 1km from proposed substation boundary and 200m from proposed grid connection boundary. Heritage assets include monuments, buildings and sites that constitute the historic or built environment. The assessment is based on currently available online information, with no fieldwork undertaken.

9.9.2. No sites or monuments under Preservation Order or National Monuments are within the site boundary. Dunsoghly Castle within 200m is the only one within the 1km study area. The substation development areas10 sites on the record of monuments and places. The grid connection study area includes 40 sites within 200m. Eleven protected structures within the substation development area with one protected structure within the grid connection area.

9.9.3. No recoded heritage assets within the substation development site. The Proposed grid connection includes two recorded heritage assets Chapelmidway Dridge and the base of a stone cross at Kilsallaghan. Construction proposed grid connection is unlikely to impact the base on the cross due to its unknown location, but there is high potential for encountering unknown remains in the area.

9.9.4. The construction phase will introduce temporary traffic and noise, impacting the setting of the protected structure recorded . All impacts will occur during construction phase, with no impacts predicted during operational phase.

9.9.5. Archaeological testing will be carried out pre-construction to assess the potential impacts. A qualified and licensed archaeologist will be onsite during construction phases.

9.9.6. I am satisfied based on the information provided within the Environmental Considerations Report submitted that the proposed development would have insignificant impacts on cultural heritage assets within the study area and that mitigation measures proposed, which include monitoring will ensure that an unexpected issues that arise during construction will be identified and addressed.

9.10. **Material Assets**

9.10.1. Material assets are built services, waste management, and infrastructure, including utilities networks and roads. Utilities networks assessed include electricity, telecommunications, gas, water supply, and drainage, with a focus on ownership, access, and built services. Potential impacts on utilities are evaluated in terms of power supply, telecommunications, surface water, foul drainage, and water supply.

9.10.2. Water demand will be minimal, with a proposed 100mm connection to the existing water network, and foul waste will be stored and removed by tanker. A statutory operator will connect telecommunications, and there is no requirement for gas utilities within the development boundary.

9.10.3. The Proposed Grid Connection will navigate existing utilities, including electricity lines, gas mains, water mains, sewer lines, surface water drainage, telecommunications lines, and traffic signal ducting. Measures will be taken to avoid unplanned disruptions to utility services during the proposed works, including thorough investigations to identify utility infrastructure. Service disruptions will be

minimised, and prior notifications will be given to impacted properties, detailing the schedule and duration of disruptions. Temporary construction compounds will have welfare facilities with discharges connected to sealed holding tanks, and water will be tankered onto the site as required.

9.10.4. The Proposed Development will have a negligible demand on power and minimal use of material assets during construction, with no impact once operational. The cumulative impact is long-term and not significant. Construction impacts are localised, temporary, and imperceptible-slight; no significant operational or cumulative effects expected.

9.10.5. I am satisfied that the proposed development, based on the information provided, conditions imposed, and mitigation provided, will not have any significant impact on material assets within the study area.

10.0 **AA Screening**

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 European Site Malahide Estuary SAC or SPA or any other European site, in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.

11.0 **Recommendation**

Having regard to the foregoing, I recommend that permission is granted subject to conditions hereunder.

12.0 **Reasons and Considerations**

In coming to its decision, the Board considered the following:

a) The nature, scale and extent of the proposed development,

b) The pattern of development within the area and context of the receiving environment,

c) The national targets for renewable energy contribution to the overall national grid,

d) The national, regional and local policy support for developing renewable energy, in particular the decision is consistent with the provisions of the:

   i. Climate Action Plan 2024

   ii. Climate Action and Low Carbon Development Act 2015 (as amended)

   And had regard to:

   iii. Project Ireland 2040 National Planning Framework (2018)

   iv. National Biodiversity Action Plan 2023-2030

   v. Eastern and Midlands Regional Spatial & Economic Strategy 2019-2031

   vi. Fingal County Development Plan 2023-2029

e) Measures proposed for the construction, operation and decommissioning of the development,

f) The submissions on the file, and

g) The documentation submitted with the application,

h) The Likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the absence of any likely significant effects of the proposed development on European Sites.

Appropriate Assessment: Stage 1

The Board completed an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European Sites, taking into account the nature, scale and location of the proposed development, Distance from and weak indirect connections to the European sites, no ex-situ impacts on wintering birds, the screening for appropriate assessment submitted with the application, the Inspector's report and submissions on file. In completing the

screening exercise, the Board adopted the report of the Inspector and concluded that, that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on European Site Malahide Estuary SAC or SPA or any other European site, in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.

Environmental Impact Assessment Screening

The Board completed an Environmental Impact Assessment Screening exercise and

Having regard to: -

1. the criteria set out in Schedule 7, in particular

(a) the nature and scale of the proposed Proposed1 10kv AIS tail-fed substation compound with associated equipment and grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid. Development in an area mainly consisting of grassland, with the grid connection route underground.

(b) the absence of any significant environmental sensitivity in the vicinity, and the location of the proposed development outside of the designated archaeological protection zone

(c) the location of the development outside of any sensitive location specified in article 109(4)(a) of the Planning and Development Regulations 2001 (as amended)

2. the results of other relevant assessments of the effects on the environment submitted by the applicant including and Environmental Considerations Report, A Flood Risk Assessment, an outline Construction Environmental management Report and an Appropriate Assessment Stage 1 Screening Report.

3. the features and measures proposed by applicant envisaged to avoid or prevent what might otherwise have been significant effects on the environment, and in particular the proposal to prepare a final Construction Environmental Management Report which contains all relevant construction standards and embedded mitigation measures.

4. The Inspector's report

concluded that the proposed development would not be likely to have significant effects on the environment, and that an environmental impact assessment report was not required.

Proper Planning and Sustainable Development

it is considered that, subject to compliance with the conditions set out below, the proposed development would not have an unacceptable impact on the character of the landscape or on cultural heritage, would not seriously injure the visual and residential amenities of the area, would be acceptable in terms of public health, traffic safety, would not have undue impacts on surrounding land uses, would not have an unacceptable impact on ecology or on any European Site, would not lead to an increased risk of flooding within the site or adjoining lands, and would make a positive contribution to Ireland's requirements for renewable energy in accordance with national regional and local policy. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

13.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application dated 12th December 2023, 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 mitigation, environmental commitments and monitoring measures identified in the Environmental Consideration Report shall be implemented.

   Reason: To protect the environment.

3. The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan which shall be submitted to, and agreed in writing with, the Planning Authority prior to commencement of development. The CEMP shall incorporate, but is not limited to, the following:
    a. Construction Stage Traffic Management Plan, to include all traffic and transport mitigation measures, timing and routing of construction traffic to and from the construction site, associated directional signage, arrangements for the delivery of abnormal loads to the site.
    b. Details of all works along the National, Regional and Local Road network to comply with appropriate guidelines.
    c. Describe all identified likely archaeological impacts and mitigation measures.
    d. Invasive species management plant,
    e. Measures to minimise noise and vibration,
    f. Measures to protect soils, ground and surface water and hedgerows,
    g. Arrangements for water quality monitoring and reporting to the PA, upstream and downstream of the development site, prior to, during and post construction works,

    A record of daily checks that the construction works are being undertaken in accordance with the CEMP shall be kept at the construction site office for inspection by the Planning Authority. The agreed CEMP shall be implemented in full in the carrying out of the development.

Reason: In the interests of amenities, environmental protection and safety

4. Prior to the commencement of development, the developer shall prepare a Resource Waste Management Plan (RWMP) as set out in the EPA's Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects (2021) including demonstration of proposals to adhere to best practice and protocols. The RWMP shall include specific proposals as to how the RWMP will be measured and monitored for effectiveness; these details shall be placed on the file and retained as part of the public record. The RWMP must be submitted to the Planning Authority for written agreement prior to the commencement of development. All records (including for

waste and all resources) pursuant to the agreed RWMP shall be made available for inspection at the site office at all times.

Reason: In the interest of proper planning and sustainable development of the area.

5. a)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.

   b) All works in the vicinity of watercourses shall be in accordance with the recommendations in Inland Fisheries Ireland's Guidance Document on Protection of Fisheries during Construction Works in and adjacent to Waters, 2016 and shall be referred to in the Construction and Environmental Management Plan (CEMP) and shall be supervised by an Ecological Clerk of Works and Project Hydrologist.

   c) Where Horizontal Directional Drilling (HDD) is to be utilised under watercourses ,appropriate plans and details shall be submitted to and agreed with the Planning Authority in collaboration with IFI in advance of any construction to ensure avoidance of damage to any watercourse. Details of the methods to be employed shall be agreed in writing with the Planning Authority.

   d) Any new surface water outfalls which may be required as a result of laying the underground cable, shall be constructed in a manner which protects riparian habitat and does not result in excessive erosion of such habitat.

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

6. The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development archaeology testing of all greenfield areas within the development redline boundary and to submit an archaeological impact assessment report for written agreement of the Planning Authority, following consultation with the department, in advance of any site

preparation works of groundworks, including site investigative works, topsoil stripping, site clearance or construction works.

a. The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or archaeological monitoring may be required.

b. Any further archaeological mitigation requirements specified by the Planning Authority, following consultation with the Department, shall be complied with by the developer.

c. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approved to proceed is agreed in writing with the Planning authority.

Reason: To ensure the continued preservation (either in-situ or by record) of places, caves, sites features or other objects of archaeological interest.

7. The Planning Authority and National Monuments Service of the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the development.

Reason: To ensure the continued preservation (either in-situ or by record) of places, caves, sites features or other objects of archaeological interest.

8. Where Horizontal Directional Drilling (HDD) is to be utilised along the public road network ,appropriate plans and details shall be submitted to and agreed with the relevant road's authority in collaboration with TII in advance of any construction to ensure avoidance of damage to the national road infrastructure, including structures, associated embankments, drainage, communications, etc. Details of the methods to be employed shall be agreed in writing with Planning Authority and TII.

Reason: In the interests of the proper planning and sustainable development of the area and to protect the integrity and carrying capacity of the national road network.

9. A pre-condition survey will be carried out on all public roads and bridges that will be used in connection with the development to record the condition of the public roads in advance of construction commencing. A post-construction survey will also be carried out after the works are completed. The specification and timing of the surveys will be agreed with the Planning Authority

   Reason: In the interest of orderly development.

10. Prior to the commencement of development, the developer shall agree details for all crossings above and below any public utility assets with the relevant utility providers. All detailed designs including separation distances shall be in accordance with relevant Technical Standards, Codes of Practice, Standard Details and other associated requirements.

    Reason: To protect existing utility Infrastructure.

11. (a) All lighting shall be operated in such a manner as to prevent light overspill to areas outside of compounds and works areas.

    (b) Prior to the commencement of development, the developer shall submit a detailed lighting plan for the written agreement of the Planning Authority. The plan shall include the type, duration, colour of light and direction of all external lighting to be installed within the external areas of the development site. Proposals should the ensure that the area is adequately light without using more light than necessary, eliminate or minimise glare and excessive lighting, prevent light trespass and minimise skyglow.

    Reason: In the interests of clarity, and of visual and residential amenity and protection of local biodiversity.

12. Prior to commencement of the development, the developer shall submit final design details to be agreed with the Planning Authority in relation to the proposed site access, including vehicle entry splays, access gate and boundary treatment and to provide solutions to prevent the large overrun area from being unnecessarily accessible.

    Reason: In the Interests of traffic safety

13. Prior to commencement of the development, the developer shall submit a detailed Lightning Protection Study for written agreement with the Planning Authority. The study should clearly demonstrate the optimal layout and configuration for the proposed lightning masts required to protect the proposed substation development.

    Reason: In the Interests of visual and residential amenity.

14. Prior to commencement of the development, a detailed landscaping plan shall be prepared for the entire substation site and agreed with the Planning Authority. The Plan shall include all proposed planting at both permitted fencing around the substation compound and boundary screening to the site, specifying species type and mix to be provided.

    Reason: In the interests of visual amenity.

15. Prior to commencement of the development, the developer shall submit to the Planning Authority for written agreement, details of all finishes of structures such as lightning protection masts, buildings, roof finishes lighting poles to reflect the rural location, where possible and not contrary to EirGird Specifications

    Reason: In the interest of visual amenity.

16. The developer shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

    Reason: In the interest of the proper planning and sustainable development of the area.

17. Site development and building works shall be carried out only between the hours of 0800 to 2000 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.

18. Prior to commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to secure the provision and satisfactory completion of roads, footpaths, watermains, drains, open space and other services required in connection with the development, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

    Reason: To ensure the satisfactory completion of the development.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Alan Di Lucia
Senior Planning Inspector

December 2024

Appendix 1

EIA Pre-Screening

Form 1

An Bord Pleanála Case Reference	ABP-318677-23
Proposed Development Summary	110kv AIS tail-fed substation compound with associated equipment. Proposed grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid.
Development Address	Lands off the R122 regional road, within the townlands of Fieldstown, Clonmethan Electoral District, County Dublin,

1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)	**Yes**	√
	~~**No**~~	

2. Is the proposed development of a CLASS specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended)?			
~~**Yes**~~			
No	√		Proceed to Q3
3. Does the proposed development equal or exceed any relevant THRESHOLD set out in the relevant Class?			
~~**Yes**~~			
No	√		Proceed to Q4
4. Is the proposed development below the relevant threshold for the Class of development [sub-threshold development]?			

Yes	√	*Schedule 5 Part 1 (20)* *"Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres."* *Schedule 5 Part 2 1(a)* *"Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares."* Schedule 3 Part 2 3(b) *"Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more."* Proposed Development Proposed grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid. Hedgerow removal 200m, Area of substation compound 3Ha	Preliminary examination required (Form 2)

5. Has Schedule 7A information been submitted?		
~~**No**~~		~~**Screening determination remains as above (Q1 to Q4)**~~
Yes	√	**Screening Determination required**

Inspector: _____ **Date:** _____

Form 3 - EIA Screening Determination

A. CASE DETAILS		
An Bord Pleanála Case Reference	ABP-318677-23	
Development Summary	Proposed1 10kv AIS tail-fed substation compound with associated equipment. Proposed grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid.	
	Yes / No / N/A	**Comment (if relevant)**
1. Was a Screening Determination carried out by the PA?	**NA**	**Section 182A(1) Strategic Infrastructure Development**
2. Has Schedule 7A information been submitted?	**Yes**	
3. Has an AA screening report or NIS been submitted?	**Yes**	**AA Screening Assessment Submitted with application**
4. Is an IED/ IPC or Waste Licence (or review of licence) required from the EPA? If YES has the EPA commented on the need for an EIAR?	**NA**	

5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA	**YES**	**Environmental Considerations Report and Flood Risk Assessment Submitted with the Application.** **SEA, AA and FRA were undertaken in respect of the Fingal County Development Plan 2023-2029**	
B. EXAMINATION	**Yes/ No/ Uncertain**	**Briefly describe the nature and extent and Mitigation Measures (where relevant)** (having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact) **Mitigation measures** –Where relevant specify features or measures proposed by the applicant to avoid or prevent a significant effect.	**Is this likely to result in significant effects on the environment?** **Yes/ No/ Uncertain**
This screening examination should be read with, and in light of, the rest of the Inspector's Report attached herewith			
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)			
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	Yes	the Proposed Development includes a substation110kV AIS tail-fed substation compound located in an area of agricultural grassland. Minor land-take within the context of surrounding area, removal of any trees / hedgerows offset by additional planting. Grid connection underground.	No
1.2 Will construction, operation, decommissioning or demolition works cause	Yes	Substation location will require alterations to topography and removal of some trees and	No

physical changes to the locality (topography, land use, waterbodies)?		hedgerows. Landscaping and sites will negate to impact.	
1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?	Yes	Materials will be non-renewable but not in short supply and will be relatively small quantities. Materials will be soused locally to minimise transportation distances.	No
1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?	No	It is not envisioned that hazardous waste will occur within the site, however fuels. Drilling fluids etc will be used during construction. Construction Environment Management Plan will provide construction standard mitigation.	No
1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?	Yes	Any waste produced will be dealt with in a sustainable manner and in accordance with the Waste Management Act, 1996 and Waste Management Amendment Act 2001	No.
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes	Potential impacts include accidental spills and leaks of fuels and chemicals, construction standard mitigation will be included in the detailed Construction Environmental Management Plan	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	Noise and Ground Vibrations have potential to increase during constructions, noise will be generated in the vicinity of the substation during operational phases. Noise mitigation will comply with best practice guidance. Increase in noise from traffic is considered minimal due to the nature of the development. Such measures will be incorporated into the Construction Environmental Management Plan.	No.

1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	Yes	Damage or injury through the use of heavy machinery or through chemical or fuels during construction. A health and Safety Plan will be implements throughout the construction phase	
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No	Nothing envisioned due to nature and location of the prosed development	No
1.10 Will the project affect the social environment (population, employment)	No	The development is situated in a rural area, removed from nearest sensitive receptors. Short term effects may arise for traffic and transport/use of the public roads. Some positive local economic and employment benefits may arise	No
1.11 Is the project part of a wider large-scale change that could result in cumulative effects on the environment?	Yes	Potential for cumulative impacts associated with other consented development within the surrounding area. Mitigation measures proposed throughout the project will minimise potential cumulative impacts	No
2. Location of proposed development			
2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following: - European site (SAC/ SPA/ pSAC/ pSPA) - NHA/ pNHA - Designated Nature Reserve - Designated refuge for flora or fauna - Place, site or feature of ecological interest, the preservation/conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan	Yes	AA Screening report submitted with the application concludes no significant effects on European Sites.	No

2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be affected by the project?	No	None identified	No
2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?	Yes	No significant impacts on heritage assets; archaeological monitoring and mitigation measures will be implemented.	No
2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?	Yes	The proposed development is not located in any groundwater source protection area, it does traverse a number of surface water bodies. The construction will be carried out in accordance with standard construction mitigation measures contained within a Construction Environmental Management Plan	No
2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	No	A stage 2 Flood Risk Assessment was carried out and indicated that proposed development is in Flood Zone C, the pluvial, groundwater and fluvial flood risk is considered to be low.	No
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	None	No
2.7 Are there any key transport routes(eg National primary Roads) on or around the location which are susceptible to congestion, or which cause environmental problems, which could be affected by the project?	No	Temporary increase in traffic during construction on the regional and Local Road network; a Construction Traffic Management Plan will be implemented. Effects will be short term	NO

2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be affected by the project?	No	Traffic Management during construction may have a low impact on community facilities in terms of travel time, but this will be short lived.	No
3. Any other factors that should be considered which could lead to environmental impacts			
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?	No	The EIA Screening report submitted with the application identified numerous projects within a 5km radius of the site boundary. It highlights the potential for these developments to cause transient impacts, particularly from noise, traffic, and dust associated with the construction of the Proposed Development. However, these effects are expected to be temporary and not significant. If several large developments, as identified in the planning search, were to occur simultaneously, there could be slight to moderate negative effects. These impacts would also be temporary, primarily occurring during the construction phase.	No
3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	No transboundary impacts are expected.	
3.3 Are there any other relevant considerations?	No	No	
C. CONCLUSION			
No real likelihood of significant effects on the environment.	**YES**	EIAR Not Required	
~~**Real likelihood of significant effects on the environment.**~~	☐	~~EIAR Required~~	
D. MAIN REASONS AND CONSIDERATIONS			

Having regard to: -

1. the criteria set out in Schedule 7, in particular

   (a) the nature and scale of the proposed Proposed1 10kv AIS tail-fed substation compound with associated equipment and grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid. Development in an area mainly consisting of grassland, with the grid connection route underground.
   (b) the absence of any significant environmental sensitivity in the vicinity, and the location of the proposed development outside of the designated archaeological protection zone
   (c) the location of the development outside of any sensitive location specified in article 109(4)(a) of the Planning and Development Regulations 2001 (as amended)

2. the results of other relevant assessments of the effects on the environment submitted by the applicant including and Environmental Considerations Report, A Flood Risk Assessment, an outline Construction Environmental management Report and an Appropriate Assessment Stage 1 Screening Report.

3. the features and measures proposed by applicant envisaged to avoid or prevent what might otherwise have been significant effects on the environment, and in particular the proposal to prepare a final Construction Environmental Management Report which contains all relevant construction standards and embedded mitigation measures.

The Board concluded that the proposed development would not be likely to have significant effects on the environment, and that an environmental impact assessment report is not required.

Inspector _____ **Date** _____

Approved (DP/ADP) _____ **Date** _____

Appropriate Assessment: Screening Determination

(Stage 1, Article 6(3) of Habitats Directive)

I have considered the proposed 110kv AIS tail-fed substation compound with associated equipment and grid connection comprising of a 13.3km underground 110kV cable connection from the proposed substation to Finglas Substation to facilitate connection to national grid. in light of the requirements of S 177S and 177U of the Planning and Development Act 2000 as amended. A Screening report for Appropriate Assessment was submitted with the planning application.

Description of the proposed development

It is intended that three solar energy projects (Fieldstown, County Dublin (c. 75 megawatt (MW)), Ballaghaweary Co. Meath (c. 18MW) and Gerradstown County Dublin (c. 55MW)) will connect to the Proposed Substation Development via underground cables with a maximum voltage of 33kV is to provide the necessary infrastructure to support the permanent power supply for the development of three solar projects.

The Proposed Substation Development will facilitate the connection of three nearby Energia solar developments to the local electricity network via a 13.3km underground cable (Proposed Grid Connection). It is intended that three solar energy projects will connect to the Proposed Substation Development via underground cables with a maximum voltage of 33kV which are considered to be exempted development under Class 26 of the Planning and Development Regulations 2001, as amended. The substation is required to support, secure and transport the supply of electricity from these renewable energy developments, as part of its place on the wider solar scheme.

The Proposed Substation Development comprises a 110kV AIS tail-fed substation compound (approximately 7.5ha), diversion of existing overhead lines (OHLs), a shunt filter, diesel generator and tank, twelve lighting protection masts, two service/maintenance carparking facilities, internal roads, new site access from R122 to the west and perimeter palisade fencing.

The Proposed Grid Connection, which will comprise 13.3km underground 110kV cable connection to Finglas Substation. It will involve twenty joint bays primarily within public roadways. Trenchless installation in the form of horizontal directional drilling (HDD) will be used at watercourse crossings at Broadmeadow River Bridge (before the junction of the R122 and R125, Ward River Bridge (on R122), and under the N2 prior to entering Finglas Station.

The application site was surveyed by ecologists with habitat, mammal and bat surveys undertaken at the appropriate time of year and in accordance with standard methodologies.

The presence of non-scheduled invasive species butterfly bush (Buddieja davidii), winter heliotrope (Petasites pyrenaicus) and snowberry (Symphoricarpos albus) were recorded along the proposed grid connection route.

The Proposed Substation Development is located within an area of agricultural grassland with several wet drainage ditches, treelines, and hedgerows. Broadmeadow River is located to the south. The Substation is bounded by the R122 regional road immediately east and the R130 to the west and R125 regional road to the south.

The Proposed Grid Connection is approximately 13.3km and is primarily located within public roadways. The cable run will exit the substation compound travelling west before heading south and entering the R122 regional road. The proposed cable connection will follow the path of the R122 to the L7325 and L7231 before returning to the R122, before heading west adjacent to the M50, under the N2 to the boundary of Finglas Substation.

The proposed grid connection crosses the following watercourses Broadmore River, Ward River. Rowlestown West River, Huntstown River, and Dunbro River.

European Sites

Three European sites are potentially within a zone of influence of the proposed development (Table 1 below).

I note that the applicant considered a further eleven sites in a wider area (within 15km) including the Rogerstown Estuary SAC (000208) and North Dublin Bay SAC [000206] but rules these out for further examination due to distance and lack of/ weak ecological connections.

European Site	**Qualifying Interests (summary)**	Distance	**Connections**
Malahide Estuary SAC [000205]	Mudflats and sandflats not covered by seawater at low tide • *Salicornia* and other annuals colonising mud and sand • Atlantic salt meadows • Mediterranean salt meadows • Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) • Fixed coastal dunes with herbaceous vegetation (grey dunes)	Approximately 7.4km southeast of the Proposed Substation Development. Approximately 7.4km southeast of the Proposed Grid Connection.	Connections via Broadmedow River, Rowlestown West River, Ward River, Huntstown River, Dunbro River, Castlefarm River, Fieldtown River, Skephubble River and

			Ballystraha River.
Malahide Estuary SPA [004025]	• Great crested grebe *Podiceps cristatus* • Light-bellied Brent goose • Shelduck *Tadorna* • Pintail *Anas acuta* • Goldeneye *Bucephala clangula* • Red-breasted merganser *Mergus serrator* • Oystercatcher • Golden plover *Pluvialis apricaria* • Grey plover • Knot • Dunlin • Black-tailed godwit *Limosa limosa* • Bar-tailed godwit • Redshank • Wetlands and waterbirds	Approximately 7.8km southeast of the Proposed Substation Development. Approximately 7.8km southeast of the Proposed Grid Connection.	Connections via Broadmedow River, Rowlestown West River, Ward River, Huntstown River, Dunbro River, Castlefarm River, Fieldtown River, Skephubble River and Ballystraha River.
Rogerstown Estuary SPA [004015]	• Greylag goose *Anser anser* • Light-bellied Brent goose • Shelduck • Oystercatcher • Ringed plover • Grey plover • Knot • Dunlin • Black-tailed godwit • Redshank • Wetlands and waterbirds	Approximately 8.8km northeast of the Proposed Substation Development. Approximately 9.0km northeast of the Proposed Grid Connection.	Within foraging distance of species listed

Likely impacts of the project (alone or in combination with other plans and projects)

As the proposed application site is not located within or adjacent to a European site there will be no direct impacts and no risk of habitat loss, fragmentation, or any other direct impact.

With regard to indirect impacts, in relation to:

Construction Phase

- Disturbance of qualifying animal species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery during construction.

- Airborne or waterborne pollution of QI or SCI habitats/species, or habitats supporting QI/SCI.
- Direct loss of or damage to qualifying or supporting habitat(s)
- Spread of invasive non-native species

Operational Phase

- Disturbance of qualifying animal species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery
- Airborne or waterborne pollution of QI or SCI habitats/species, or habitats supporting QI/SCI.

Likely significant effects on the European sites in view of the conservation objectives

At more than 7km distant from the Proposed Development, there is no potential for direct disturbance of the SCI bird species of the Malahide Estuary SPA or the other SPAs, when within the boundary of these designations. Although the Proposed Development lies within the core foraging range of greylag goose and potentially of other waterbird species, it is almost 8km from the nearest SPA (Malahide Estuary SPA). For the following reasons, even if SCI species were to occur in the vicinity of the Proposed Development, there is not expected to be any significant effect from disturbance: There is a large area of similar suitable foraging habitat for these species between the Proposed Development and the SPAs which could be used should disturbance/displacement occur. The site of the Proposed Substation Development is relatively small (approximately 7.5ha). The loss of the Site would have negligible effect on the overall availability of foraging habitat for SCI species. The Proposed Grid Connection follows the route of the existing regional road R122. The route does not pass through or near any European sites. At its closest point, it is 7.2km from a European site, the South Dublin Bay and River Tolka Estuary SPA. The route is along an existing road and is unsuitable for foraging. The Proposed Grid Connection will involve minimal temporary works along mainly hardstanding and occasional small off-road areas. Therefore, no significant effect from disturbance is expected.

Operational activities are likely to be very minor in nature and will involve infrequent visits by small numbers of personnel to conduct operational and maintenance activities. There is a low likelihood of such activities having an effect through disturbance of SCI species occurring in the vicinity of the Proposed Development.

The very minor construction works will not generate sufficient quantities, even in a worst-case scenario, of airborne pollution (e.g., dust) to result in likely significant effects on any European site. The Broadmeadow River is 200m from the Proposed Substation Development, with intervening land being agricultural grassland with trees and hedges. Any pollution generated by the construction of the Proposed

Development would be very unlikely to reach the watercourse due to natural filtration by vegetation. Moreover, although the watercourse connects to European sites downstream (Malahide Estuary SAC and Malahide Estuary SPA), these are more than 7km distant. Over such a distance, the degree of dilution would be extremely large and there is no possibility of any waterborne pollution generated by construction of the Proposed Development having an effect on any European site. Similar to the Proposed Substation Development, the sections of the watercourses crossed by the Proposed Grid Connection are all more than 7km from the European sites they flow into, Malahide Estuary SAC and Malahide Estuary SPA. Furthermore, trenchless installation in the form of horizontal directional drilling (HDD) will be used at watercourse crossings.

Given the nature of the works and the distance, there would be a dilution of any possible waterborne pollution resulting in no likelihood of waterborne pollution of European sites.

There will be no impacts from dust or other airborne pollution, thus there is no possibility of effects. Due to the inherent design of the equipment within the substation, there is no potential for liquid pollutants to escape the Site and enter the surface water system.

There is no potential for direct loss of or damage to qualifying or supporting habitats. For the reasons set out above in relation to the potential for disturbance, loss of supporting habitat is not expected to result in any significant effects on any SCI species.

There is no potential for invasive non-native species to spread to a European site during the construction phase. None of the locations that invasive species were recorded are within or beside a European site. The locations are not beside any of the watercourses crossed by the Proposed Grid Connection. Additionally, the European site that has a hydrological connection to the Proposed Grid Connection is saline in nature and not a hospitable environment for the terrestrial floral species recorded.

The Ecological information presented by the applicant clearly shows that the current land use is not suitable for any regular use by SCI wintering waterbirds of the SPA. No wintering birds were recorded at the site over a number of site visits and the unsuitability of the site verified by an independent ornithologist. There will be no direct or ex-situ effects on wintering water birds or breeding terms from disturbance during construction or operation of the proposed development.

In combination effects

There are no approved projects or plans nearby the Proposed Substation Development which could result in construction-related disturbance of SCI waterbird species. Furthermore, given the nature of the Proposed Grid Connection development, which will involve temporary works to install an underground Proposed Grid Connection mainly along an existing road, it is not anticipated that the Proposed Grid Connection will result in any significant effects acting cumulative with other plans or projects.

There is a consented solar energy development in Fieldstown and Whitestown, Kilsallaghan, Co. Dublin (planning reference F21A/0042) located approximately 800m northwest of the Proposed Substation Development that could result in the possibility of construction-related disturbance of SCI waterbird species. This project includes solar panels, one substation, and associated cabling and ducting. The total site area is approximately 105ha. An AA Screening report was submitted for this project, which specifically considered the associated grid infrastructure to the associated substation (i.e., the Proposed Development which is the subject of this AA Screening Report). It was concluded that the solar energy development will not lead to a significant adverse effect upon European sites, alone or in combination with other proposed developments in the wider area. Furthermore, there are plentiful fields in the wider area that are similar to those within this proposed solar PV energy development site and similar to those within the Site.

Screening Determination

Having carried out Screening for Appropriate Assessment of the project in accordance with Section 177U of the Planning and Development Act 2000 (as amended), 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 Malahide Estuary SAC or SPA or any other European site, in view of the Conservation Objectives of those site and Appropriate Assessment (and submission of a NIS) is not therefore required.

This determination is based on:

- The scale and location of the development
- Distance from and weak indirect connections to the European sites
- No ex-situ impacts on wintering birds

Possible impacts identified would not be significant in terms of site-specific conservation objectives for the Malahide Estuary SAC or SPA and would not undermine the maintenance of favorable conservation condition or delay or undermine the achievement of restoring favorable conservation status for those qualifying interest features of unfavorable conservation status.

No mitigation measures aimed at avoiding or reducing impacts on European sites were required to be considered in reaching this conclusion.