



An
Bord
Pleanála

Inspector's Report ABP-313191-22

Development	Proposed new 110kV substation to be located within the boundary of the consented Dennistown Solar Energy Development by way of a 110kV underground grid connection to Wexford 110kV substation
Location	Dennistown, Co. Wexford and other townlands Co. Wexford
Planning Authority	Wexford County Council
Applicant(s)	ESB Solar (Ireland) Ltd & Harmony Solar Dennistown Ltd.
Type of Application	Application under the provisions of Section 182A of the Planning and Development Act 2000, as amended
Prescribed Bodies	Transport Infrastructure Ireland
Observers	None
Date of Site Inspection	16 May 2022
Inspector	Una Crosse

1.0 Introduction

- 1.1. An application has been made by ESB Solar (Ireland) Ltd & Harmony Solar Dennistown Ltd under the provisions of section 182A of the Planning and Development Act 2000, as amended ('the Act'), for the development of a 110kV electrical substation associated electrical and other infrastructure, underground cable and all associated site works and drainage in the townlands of Dennistown, Sallystown, Milltown and Murntown Lower Co. Wexford.
- 1.2. The purpose of the proposed development is to connect a permitted solar farm (refer to Section 6 below for details) and potentially other additional solar farms in the area (see Fig 1-2 in Planning and Environmental Report) where technically acceptable via an underground grid connection from the proposed substation hub for a distance of 8.8km to the existing Wexford 110kV substation at Ballygoman to facilitate the export of electricity from the permitted solar farm and others in the area, when operational, to the national grid. The subject proposal replaces the consented 38kV substation infrastructure which was permitted as part of the solar farm development and the 38kV grid connection deemed exempt by Wexford County Council.
- 1.3. The proposed development was the subject of pre-application consultation (ABP-310026-21) on foot of which the Board determined on 24 November 2021 that the proposed development would constitute Strategic Infrastructure Development.

2.0 Site Location and Description

- 2.1. The application site, which has a stated area of c. 4.15 hectares, is located within the boundary of the permitted Dennistown Solar Energy development. The site of the proposed substation is approximately 800 m south east of Murntown village, approximately 800 m south west of Piercetown village and approximately 6.5km from the centre of Wexford town. The site is currently in agricultural use surrounded by mature treelines and hedgerows and is accessed via a private lane, owned by the landowner, which connects to the local L7098 road which links Murntown and Piercetown. The landowners dwelling and farm buildings and yards are located to the west of the private lane.

2.2. The route of the 110kV underground cable extends for approximately 8.8km. From the proposed substation, it continues along from the private lane for c.753m onto the public road (L7098) at the site entrance from where it travels along the following local roads: L-7060, L-3027, L- 70422, L-30191, L-3024, L-7041, L-3018, L-30181, L-7017 and then onto the R733 regional road and from there onto the N25 national route for c.210m from where it connects into the existing Wexford 110kV substation. In addition to the 753m on the private lane, a section of 107m off road is proposed within Teagasc land to accommodate the Kildavin Upper watercourse. The cable is located within the following townlands: within the townlands of Ballindinas, Ballygoman, Barntown, Colestown, Dennistown, Forth Commons, Hayestown Great, Hayestown Little, Kildavin Lower, Kildavin Upper, Milltown, Mullanour, Murntown Lower, Scaughmolin, Shelmalierre Commons, Staplestown (Morgan), and Twentyacres. Letters of consent from the landowner of the substation and lane and Teagasc are included.

3.0 Proposed Development

3.1. Context

As outlined above, the proposed development will supersede the consented 38 kV substation (as part of the solar farm permission) and 38 kV underground cable (exempted) which are in place for the Dennistown Solar Energy Development with a 110kv substation and 110 kV UGC. The need for a 110 kV infrastructure is stated to be required to accommodate the consented Dennistown Solar Energy Development and potential additional solar farms in the area as may be considered technically acceptable which are in the control of ESB/Harmony solar and other private developers

3.2. Nature of Proposal

A ten year permission is sought for the following:

- Construction of a Standard C-Type EirGrid/ESB 110kV Tail-fed AIS (Air Insulated Switchgear) and associated works with the main substation comprising a total

compound footprint of 12,120m² (1.21 hectares), enclosed by palisade fencing comprising:

- One single storey substation control building (435 sq.m) approximately 8.7m in height.
- One Solar Park MV Building (c.212.75 sq.m and 7.2m high), primary plant electrical equipment, including one 110kV transformer,
- One 38kV transformer and switchgear, Arc Suppression Coil, Cable Sealing Ends, Cable Chair, Circuit Breakers, Current Transformers, Disconnects, Post Insulators, Surge Arrestors, Grid Code Compliance Equipment and Voltage Transformers
- Seven Lightning masts to a height of approximately 18m and exterior wall mounted lights on the control buildings.
- Permanent access road (ca. 753m in length) and associated internal compound roads to allow trafficking in and out of the substation with the entrance to the local road (L7098) to be shared with the permitted Dennistown solar farm.
- 2.6m high palisade guard railing with perimeter boundary fencing around the periphery for security and protection measures.
- 8.8km of 110 kV underground cable with 12 joints bays to be installed approximately every 700m - 850m along the UGC route to facilitate the jointing of 2 lengths of UGC. One watercourse crossing of the Kildavin River is proposed with the cable alignment to be taken off-road onto third party lands and the watercourse crossed by Horizontal Directional Drilling (HDD) parallel to the bridge structure.

3.3. Documentation Submitted

In addition to the forms, notices and letters to relevant bodies, the application is accompanied by the following:

Planning and Environmental Report – Main Report (Volume 1) which addresses the following:

- Description
- Planning Policy and Consultation

- EIA Screening
- Landscape and Visual
- Drainage and Water Quality
- Traffic and Transport
- Biodiversity
- Noise, Vibration and Air Emissions
- Cultural Heritage

Planning and Environmental Report - Appendices (Volume 2) which include:

- Determination from ABP on SID
- Outline Construction Methodology
- Outline Traffic management plan
- Screening Report for Appropriate Assessment
- Archaeological and Built Heritage Assessment

Report including the Application Addendums as follows:

- List of Drawings,
- Letters and of Consent and Statutory Undertaker Confirmation Letter
- Newspaper Notices
- Record of Meeting Minutes; and
- Letter to Wexford County Council and to Prescribed Bodies.

4.0 **Submissions and Observations**

4.1. **Planning Authority**

4.1.1. No submission was received from Wexford County Council.

4.2. Prescribed Bodies

4.2.1. One submission was received from **Transport Infrastructure Ireland** which is summarised as follows:

- Concerns regarding the location of the grid connection within the N25 which is part of the EU TEN-T Comprehensive network.
- Absence of details in relation to abnormal loads.

4.3. Third Party Observations

4.3.1. No observations were received.

5.0 Applicant's Response to Submissions

5.1. The applicant was invited to respond to the submission received from the TII. Their response was presented in a series of 8 matters which addressed the TII submission and I have set out the 8 headings (in bold) with the applicants response under each heading as follows:

1. Impacts on embankments, bridges, drainage and road furniture infrastructure leading to future maintenance liabilities.

- Development constructed to ensure that all temporary/permanent works within the road curtilage of the national road (N25) will be as per the Purple Book (Guidelines for Managing Openings in Public Roads 2017).
- All temporary works within the road curtilage of the national road (N25) to install the cable ducts will be subject to National Roads Guidelines, ensuring all trenching and reinstatements will be as per SD2 (Temporary Reinstatements) and SD6 (Permanent Reinstatement) along heavy trafficked carriageway.
- If any damage to existing footpaths or cycle lanes occurs during the build, these sections will be replaced by the awarded civils contractor as per The Purple Book (Guidelines for Managing Openings in Public Roads 2017 (SD12 Footways: Concrete Permanent Reinstatement)).
- No bridges exist within the sections of the national carriageway. There will be a requirement to under cross an existing culvert at one point (ITM Co-ordinate

699735.942, 699735.942). This will be crossed using ESNB Specification and in line with the road Engineers sign off on the design.

2. Impediments to future maintenance and operations activities, such as safety barrier repair and French drain renewal

- Proposed trench and ducting will be installed at a minimum depth of 1500mm so as not to conflict with the drainage for the national roadway.
- No existing safety barriers reside along the route in which the ducting is proposed.
- Ducting to be installed inline with EirGrid / ESNB specification and design reviewed with all relevant stakeholders prior to obtaining a road opening license.

3. Impediments to future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture

- Any improvements required to facilitate development will be identified prior to works.
- Ducting will be placed and designed in such a position to ensure that future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture are not impacted by the cable trench.

4. Impacts on network traffic flows during installation.

- Appointed contractor will at all times implement suitable traffic management in the form of a stop-go system.
- Enforcement of traffic management procedures will include temporary traffic lights/ flag men in place during proposed ducting works which will be agreed through condition during the road opening license process.
- Should the need for weekend or night works be required this will be adhered to by the build contractor and agreed with in writing prior to such works taking place.

5. Impediment to future on-line upgrades of national roads because of the implications to road authority / TII in having to incur the additional costs of moving underground cables in order to accommodate the road improvements.

- All concerns relating to future online upgrades will be catered for at detailed design stage in line with the applicable roads engineer.
- As this installation will be designed with all concerns and future upgrades, the risk of requiring to move the cable after installation should be eliminated in full.
- No joint bays proposed in the National roadway (N25) between the convergence of the local roads L-7014 and L-30181 respectively.
- All ducting will be installed within a trench width being less than 1m at all times.

6. Implications on the strategic capacity and safety of the national road network.

- There will be an objective to maintain the strategic capacity and safety of the N25 carriageway at all times, cognisant of the National Development Plan, 2021 – 2030, with key sectoral priorities for maintaining the N25 national road network to a robust and safe standard for users.
- Detailed design will be carried out with full stakeholder engagement and all concerns that may arise will be eliminated through this process.

7. Alternative cable routing proposals.

- Alternative routes for the proposed cable had been assessed at a preliminary route development stage, however the connection point to the ESBN grid network (Wexford 110kV Substation) (ITM Co-ordinates 699535.621, 621974.399) requires the crossing of the N25 on at least one occasion.

8. Will the transportation of sub-station components to site represent abnormal loads and the implication of same on structures along the roads.

- A substation transformer unit will be transported to site which will be categorised as an abnormal load. As a result, an abnormal load permit will be sought for this movement.
- Multiple transformers have already been delivered to ESBN substations in the area without any impact on the structures along the road network.

6.0 Planning History

6.1. Wexford County Council Ref. 20161110

A ten year planning permission was granted in November 2016 for a solar photovoltaic panel array consisting of the following: up to 130,000 square metres of solar panels on ground mounted steel frames; a fenced electricity substation compound to include one number electricity control building and hardstands for ancillary electrical equipment; 10 number inverter units; underground cable and ducts; internal access tracks and hardstanding areas; boundary security fence; CCTV and all associated site service and works. Access is provided from the public road by an existing entrance and private road, all in the townlands of Dennistown, Sallystown, Milltown and Murntown Lower, near Murntown, County Wexford.

Financial Contribution Appeal - ABP-Reg. Ref. 247801 – An appeal was made in respect of conditions 8 & 9 which related to financial contributions with the conditions removed by the Board.

Wexford County Council Ref. 20200441 – Permission was granted In July 2020 to amend the design of the permitted solar farm as follows:

Optimised Solar PV panel configuration located within the same area of the site as previously permitted to comprise up to 234,000 sq.m of solar panels to allow for solar panel array height increase from up to 2.8m to 3.2m; Modifications and enlargement to the on-site substation and substation compound increasing from c. 80 sqm as permitted to c. 150 sqm with the substation compound increasing in size from c. 700 sqm as permitted to c. 1081 sqm; 10 additional inverter/transformer units in sound suppression containers within the existing inverter/transformer hardstanding areas.

6.2. EXD00749

- 6.2.1. A section 5 application to Wexford confirmed in April 2019 that a circa. 11.6 km underground grid connection within the corridor of public roads which links a 38kV substation at Dennistown Solar Farm near Murntown, Co. Wexford to the national grid via the 110kV substation at Ballygoman, Co. Wexford is development and is exempted development.

7.0 Policy Context

7.1. National Planning Framework

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

NSO 8 is “the transition to a low carbon and climate resilient society”. The NPF acknowledges that Ireland’s energy policy is focused on the pillars of sustainability, security of supply and competitiveness. It is an action of the NPF under NSO 8 to “reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres”.

National Policy Objective 55 states:

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

7.2. Climate Action Plan 2021

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

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

- Reduce CO₂eq. emissions from the sector to a range of 2 to 4 MtCO₂eq. by 2030.
- Increasing the share of electricity demand generated from renewable sources to up to 80% where achievable and cost effective, without compromising security of electricity supply.

- Expand and reinforce the grid – through the addition of lines, substations, and new technologies.

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

This white paper sets out a strategic energy policy framework to deliver a sustainable energy future for Ireland. One of the key elements is to ensure the delivery of security of supply, which is considered to be essential for all sectors of the economy, for consumers in general and for society as a whole. The key items needed to deliver a secure supply of electricity on a consistent basis are identified as robust networks and electricity generating capacity. To this end, it is an overall objective to strongly support electricity investment programmes in the high voltage transmissions network and the distribution network, in order to facilitate regional development. The white Paper also sets the target of 33% of electricity being produced from renewable generation by 2020.

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

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

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

The Policy Statement states that electricity is vital for the proper functioning of society and the economy and notes that in order to contribute to the achievement of

greenhouse gas emission targets, the Government has committed that up to 80% of electricity consumption will come from renewable sources by 2030 on a pathway to net zero emissions.

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

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

The Policy Statement states that the Government recognises that:

- ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions;
- there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply;

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

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

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

7.7. Regional Spatial and Economic Strategy for the Southern Region

Chapter 5 of the RSES focuses on environment and “*Creating a clean environment for a healthy society*”, within the region. A number of Regional Policy objectives are relevant to the proposal including RPO87 which relates to a low carbon energy future, RPO 90 which addresses regional decarbonisation; and RPO 98 which supports the development of a Regional Renewable Energy strategy.

7.8. Wexford County Development Plan 2022-2028

7.8.1. The Wexford County Development Plan 2022-2028 came into effect in July 2022 so is the relevant local policy context now pertaining. Volume 10 of the Plan sets out the Energy Strategy. Chapter 4 deals with Solar Energy. Chapter 8 deals with supporting infrastructure and notes the following (albeit refers to the CAP 2019 rather than 2021) with Objective ES35 stating seeking to facilitate the provision of and improvements to energy networks in principle, provided that it can be demonstrated that:

- The development is required in order to facilitate the provision or retention of significant economic or social infrastructure
- The route proposed has been identified with due consideration for social, environmental and cultural impacts
- The design is such that will achieve least environmental impact consistent with not incurring excessive cost
- Where impacts are inevitable mitigation features have been included
- Proposals for energy infrastructure should be assessed in accordance with the requirements of Article 6 of the Habitats Directive

7.9. Natural Heritage Designations

7.9.1. The application site is not located within or immediately adjacent to any sites with a natural heritage designation.

7.9.2. With regard to Natura 2000 sites, the Slaney River Valley SAC (000781) and Wexford Harbour and Slobbs SPA (004076) are located c.4-5km from the substation site but are separated from these sites by the N25.

8.0 EIA Screening

8.1. Section 4 of the Planning and Environmental Report submitted with the application relates to EIA screening. It contends that the proposed 110kV substation and associated development does not come under Schedule 5 of the Regulations and does not require an EIA. It states that for robustness a screening of the proposal is provided which demonstrates that there will be no significant impacts.

8.2. As noted by the applicant, the prescribed classes of development and thresholds that trigger a mandatory EIAR are set out in Schedule 5 of the Regulations. The only classes that I consider to be of potential relevance to the proposed development are as follows:

- **Schedule 5, Part 1, Class 19:** 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, Class 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.

8.3. I note that an electrical substation is not a class of development contained in Parts 1 or 2 of Schedule 5 of the Regulations, and I further note that the proposed development does not entail the construction of any overhead power lines, regardless of voltage or length. The proposed connection to the existing Wexford 110kV substation would be of way of underground 110kV cable, and therefore would not come within either of the classes listed above (the class being overhead powerlines, and the threshold being the voltage/length).

8.4. As no element of the proposed development falls into a class of development contained in Schedule 5, Parts 1 or 2, I am satisfied that the proposed development

does not therefore constitute sub-threshold development and neither a mandatory EIA, nor screening for EIA, is required.

9.0 Oral Hearing

9.1. The Board directed on the 22rd July 2022 that an Oral Hearing in respect of the application should not be held.

10.0 Planning Assessment

10.1. Outline of Assessment

I consider that the key planning issues arising are as follows:

- Principle and planning policy.
- Traffic and Transport
- Residential Amenities
- Landscape and Visual
- Drainage and Water Quality
- Biodiversity
- Cultural Heritage
- Other Matters

10.2. Principle and Planning Policy

10.2.1. As set out above, the proposed development comprises a 110kV substation and associated electrical and other infrastructure and grid connection, which is required to connect a permitted solar farm to the national grid. Other solar farms in the area may also be connected to same. Renewable energy projects are supported 'in principle' at national, regional and local policy levels, with the imperative at all policy levels being the need to reduce greenhouse gas emissions, reduce reliance on fossil fuels and combat climate change. The Government Policy Statement on Security of Electricity Supply published in November 2021 states that 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. It goes on to state that ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions and that it is appropriate for additional electricity transmission and distribution grid infrastructure to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply.

10.2.2. The application site is located within a large agricultural landholding, upon which permission has been granted for a large solar farm. The proposed development would have significant separation distances from the nearest public roads and residential dwellings (in excess of 400m for the substation), and would be surrounded to the west, north and east by photovoltaic panels and other infrastructure associated with the permitted solar farm. The site is not subject to any particular constraints in terms of archaeological, cultural and architectural heritage, landscape designation or land use zoning objectives.

10.2.3. It is clear from the policies outlined in Section 7 above, that there is substantial policy support at national, regional and local level for the development of the electricity network and for renewable energy projects, such as that which would be facilitated by the proposed development. I therefore consider the proposed development to be acceptable in principle, subject to consideration of the key planning issues outlined in Section 10.1 above.

10.3. **Traffic and Transport**

This matter is addressed in Section 7 of the Planning and Environmental Report which notes that the traffic associated with the overall solar farm development was addressed in the permitted development and that the additional traffic movements associated with upgrading the 38kv onsite substation to 110kv will not be significant in the context of the permitted development. An outline traffic management plan has been submitted with the application. I consider that the documentation submitted is satisfactory and the proposed development will not impact negatively on the local or wider traffic network.

A submission was received from the TII which outlined two concerns. Firstly, concerns were expressed regarding the location of the grid connection within the N25 which is part of the EU TEN-T Comprehensive network. The second matter related to the absence of details in relation to abnormal loads. The applicant was invited to respond and their response was presented in a series of 8 matters which addressed the concerns expressed in the TII submission and I have addressed the matters using the two TII concerns and the sub headings provided by the applicant as it is more detailed.

10.3.1. **Location of the grid connection within the N25 which is part of the EU TEN-T Comprehensive network**

As outlined above, the applicant has provided seven subheading responses (in bold) to this matter which I will address in turn.

In response to concerns regarding **impacts on embankments, bridges, drainage and road furniture infrastructure leading to future maintenance liabilities** the applicant states that the development will be constructed to ensure that all works both temporary and permanent within the road curtilage of the national road (N25) will be undertaken in accordance with the relevant guidelines which include: the Purple Book (Guidelines for Managing Openings in Public Roads 2017), National Roads Guidelines, SD2 (Temporary Reinstatements) and SD6 (Permanent Reinstatement). If any damage to existing footpaths or cycle lanes occurs during the build, these sections will be replaced by the awarded civils contractor as per The Purple Book (Guidelines for Managing Openings in Public Roads 2017 (SD12 Footways: Concrete Permanent Reinstatement). It is stated that no bridges exist within the relevant sections of the national carriageway. There is a requirement to under cross an existing culvert at one point (ITM Co-ordinate 699735.942, 699735.942) and that this will be crossed using ESNB Specification and in line with the road Engineers sign off on the design.

In terms of the potential **impediments to future maintenance and operations activities, such as safety barrier repair and French drain renewal, it is stated that** proposed trench and ducting will be installed at a minimum depth of 1500mm so as not to conflict with the drainage for the national roadway and that ducting will be

installed inline with EirGrid / ESNB specification and design reviewed with all relevant stakeholders prior to obtaining a road opening license.

In terms of **Impediments to future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture**, it is stated that any improvements required to facilitate development will be identified prior to works and that ducting will be placed and designed in such a position to ensure that future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture are not impacted by the cable trench.

In relation to potential **impacts on network traffic flows during installation**, it is stated that the appointed contractor will at all times implement suitable traffic management in the form of a stop-go system. Furthermore, enforcement of traffic management procedures will include temporary traffic lights/ flag men in place during proposed ducting works which will be agreed through condition during the road opening license process. It is also stated that should the need for weekend or night works be required this will be adhered to by the build contractor and agreed with in writing prior to such works taking place.

In terms of the concerns that the proposal may be an **impediment to future on-line upgrades of national roads because of the implications to road authority / TII in having to incur the additional costs of moving underground cables in order to accommodate the road improvements**, it is stated that all concerns relating to future online upgrades will be catered for at detailed design stage in line with the applicable roads engineer. It is further clarified that **as** this installation will be designed with all concerns and future upgrades, the risk of requiring to move the cable after installation should be eliminated in full. It is also stated that no joint bays proposed in the National roadway (N25) between the convergence of the local roads L-7014 and L-30181 respectively and that all ducting will be installed within a trench width being less than 1m at all times.

One of the main concerns I would suggest are the potential **implications on the strategic capacity and safety of the national road network**. In response the applicant has stated that there will be an objective to maintain the strategic capacity and safety of the N25 carriageway at all times, cognisant of the National

Development Plan, 2021 – 2030, with key sectoral priorities for maintaining the N25 national road network to a robust and safe standard for users. They also outline that a detailed design will be carried out with full stakeholder engagement and all concerns that may arise will be eliminated through this process.

Finally, **in terms of alternative cable routing proposals**, it is stated that alternative routes for the proposed cable had been assessed at a preliminary route development stage. This is outlined in Section 2 of the Planning and Development Report with Figure 2-2 outlining alternative grid options considered with all options to connect to the ESBN grid network (Wexford 110kV Substation) requiring the crossing of the N25 on at least one occasion.

In conclusion, to access the grid to connect a permitted renewable energy development, the proposed connection requires the crossing of the N25. The applicant has outlined in considerable detail their proposals to address the concerns and I consider that the matter has been appropriately addressed by the applicant.

10.3.2. **Absence of details on Abnormal Loads.**

In relation to the second matter of the absence of details in relation to abnormal loads, the applicant framed this concern by asking if the transportation of sub-station components to site represent abnormal loads and the implication of same on structures along the roads. In response they state that a substation transformer unit will be transported to site which will be categorised as an abnormal load and as a result, an abnormal load permit will be sought for this movement. They also state that multiple transformers have already been delivered to ESBN substations in the area without any impact on the structures along the road network. I consider that this matter has been satisfactorily addressed.

10.4. **Residential Amenities**

I note that the Planning and Environmental Report address Noise, vibrations and air emissions at Section 9 of the report which proposes noise limits and dust suppression mitigation along the access track for potential dry weather periods. The report does not address residential amenities per se and I have not been able to find any reference to the distance of the substation site to the nearest receptor which I

note is the landowners home which from the drawings is c.330m from the substation site. Notwithstanding I note that in section 1.3 it is stated that there are approximately 170 dwellings within 1km of the site but as I have outlined the nearest one is c.330m away and therefore the proposed location of the substation is I consider appropriate in the context of protecting the residential amenities of the most proximate dwellings.

10.5. **Landscape and Visual**

The area within which is site is located is described as being a 'lowland' area and is defined as such in the Landscape Character Assessment in the recently adopted Development Plan. Such areas are considered to have the ability to absorb development without causing significant visual intrusion. The immediate area in the vicinity of the site comprises pasture and tillage farms bounded with mature trees and vegetation with areas of woodland and conifer plantations interspersed. The highest point in the surrounding landscape is Forth Mountain, 3.5km to the north-west of the site, which is described as a rock outcrop that rises to a height of 235m. Johnstown Castle, a protected structure is located to the north of the site. There are a few small settlements within the area with Murntown, c1.5km away the most proximate.

Section 5 of the Planning and Environmental Report includes a Landscape and Visual Assessment. This includes an assessment of a number of viewpoints as shown on Figure 5-1. These include locations on Forth Mountain and a number of locations along the local road (L-7098) to the north of the site. The site will not impact on views from Forth Mountain and while there will be some views along the local road to the north they are glimpses between vegetation. As stated by the applicant, the building structure is to be located adjacent to existing mature hedgerows which will provide effective screening to absorb the structure into the landscape. In addition, to assist the building further merge into the existing landscape, all building and associated inverter/transformer modules will be coloured a dark green. I agree with the applicants conclusion that there will be no adverse impact to the landscape character and that the proposal can be successfully accommodated into the landscape.

10.6. Drainage and Water Quality

As outlined in the Planning and Environmental Report (section 6), the substation drainage will comprise of drainage to perimeter ditches and also percolation to ground with this drainage will be part of a permanent drainage system for the substation. Any increase in surface water run-off from the site will be negligible, given the small increase in hard standing area anticipated as a result of the proposed development. There will be no disturbance to the existing drainage regime at the site. There is no history of flooding at the site nor are there any indications of fluvial flooding from the available OPW flood mapping.

In terms of the grid connection, this is proposed within public road including the N25 national carriageway with a crossing of the Knockahone stream which is within an existing culvert beneath the roadway. It is proposed that where the cable route crosses existing culverts, the culvert will remain in place and the ducting will be installed above the culvert to provide minimum separation distances in accordance with ESB/Eirgrid specifications. Therefore, there is no potential connectivity to the stream. The grid connection route will also cross Kildavin river, this crossing will be completed using horizontal directional drilling as the existing bridge crossing of this river is insufficient to allow a cable crossing. The proposed development does not involve the draining or modifying of any of the minor or major tributary watercourses. I consider that this matter has been satisfactorily addressed in the documentation submitted with the application.

10.7. Biodiversity

I would refer the Board to Section 11 of my report where I undertake appropriate assessment screening. The proposed development site is not located within or close to any European designated sites with the nearest site being Wexford Slobs and Harbour SPA c. 4.3km over-land from the substation site. Section 8 of the Planning and Environmental report refers to the walkover surveys carried out by Dr Katherine Kelleher in July 2016 and again in March 2020 to support the planning applications for the solar farm development and which identify the site of the proposed substation development as associated with intensive agriculture and associated drainage ditches, hedgerows and tree lines. Habitats within the proposed development

footprint were assessed to be of lower (i.e. improved agricultural grassland) to higher local ecological value (i.e. hedgerows, treelines, drainage ditches). All flora and fauna species recorded are considered common for similar habitats in the general area. There are no habitats within the substation development site that conform to those listed under Annex I of the EU Habitats Directive or listed as qualifying interests of any European site. It is also noted that the field survey did not identify any mammal breeding sites on the site. Badger are known to occur in the area but no setts were observed during the walkover survey. Mature and semi-mature trees on site were considered suitable opportunities for bat roosts, however the treelines and hedgerows will not be affected by the proposed substation development.

In terms of the grid route, as the cable will be buried in the road for most of its length there is no potential impact. I note reference in the biodiversity section of the Planning and Environmental report to the section of cable within Teagasc lands (i.e. the crossing of the Kildavin Upper watercourse) which will be through a section of habitat identified in the National Survey of Native Woodlands (Perrin et al, 2008) as a section of wet pedunculate oak-ash woodland (equating to Annex I type Alluvial woodland habitat). This habitat is noted by Perrin as primarily comprising ash-dominated stands and as being very common across the country. It is stated that the habitat at this location is quite scrubby in nature and includes areas of previous disturbance. A section of this habitat (24 meters wide and 133 meters in length) will be cleared to accommodate the cable installation at the Kildavin Upper watercourse crossing and to provide and access for ESB future maintenance therefore there will be a permanent loss of a small area of wet woodland habitat however, the impact is considered to be minimal considering the scale of the clearance and the existing poor condition of this habitat. I consider that the matter has been satisfactorily addressed and the impact of the small loss of habitat at this location will not be significant.

10.8. Cultural Heritage

As outlined in Section 10 of the Planning and Environmental Report which addresses cultural heritage, there are no recorded archaeological sites (as recorded by the ASI) located on the footprint of the proposed development. The proposed UGC route does, however, extend through the archaeological *Zones of Notification* (ZON) of

four recorded archaeological sites. There are no protected structures within the vicinity of the substation site or within the 100m corridor of the proposed underground route. No impact expected on known archaeological features or on landscape.

There is proposed to be one short off-road/track section to the UGC in the townland of Kildavin Lower, where it is proposed to use Horizontal Directional Drilling (HDD) in order to extend under the Kildavin River. While the area is located within the ZON associated with Kildavin church (WX042-015001-) and graveyard (WX042-015002-) site, due to the nature of the ground conditions, this area is considered to possess a low archaeological potential.

The impacts of the proposed development on the protected archaeological and architectural heritage resource are assessed as being imperceptible in nature. This largely due to the UGC utilising public and forestry roads, combined with the relative absence of protected monuments or structures on the direct footprint, or in immediate vicinity to, the proposed development. The buried nature of the completed development will result in no visual impacts on the cultural heritage resource. The applicants experts recommend a programme of pre-development archaeological testing be undertaken across the proposed substation site with the testing programme to be undertaken in advance of any proposed groundworks at the location in order to allow sufficient time to deal appropriately with any revealed archaeological features.

While it is acknowledged that the area has been assessed as having low archaeological potential, any off-road ground works associated with the HDD within the ZON of Kildavin church and graveyard site or any off-road works associated with the installation of joint bays or communications chambers elsewhere, should be subject to a programme of licensed archaeological monitoring.

I consider that the matter has been appropriately addressed and would recommend that a condition is attached which requires pre-development archaeological testing at the site of the substation and a programme of licensed archaeological monitoring in the area of the HDD in Kildavin.

10.9. Other Matters

10.9.1. Duration of Permission and Decommissioning

I note that the applicant is seeking a 10-year permission. This duration would be consistent with the duration of the permission granted for the solar farm, and I consider it to be appropriate in the circumstances, should the Board be minded to grant permission.

With regard to the lifespan of the proposed development, I note that the permitted solar farm has a permitted operational lifetime of 35 years, after which the site is to be reinstated, unless planning permission has been granted for a further period (Condition 29 of Reg. Ref. TA/181225 refers).

While the proposed substation development is intended to serve this solar farm, it will form a node on the transmission network by virtue of its loop in/loop out connection to the existing overhead transmission line (i.e. the existing 110kV powerline will be severed and routed through the proposed substation). For this reason, I do not consider it necessary to limit the lifetime of the proposed substation development to the lifetime of the solar farm development and consequently I do not consider it necessary to attach a decommissioning and reinstatement condition to any grant of permission.

10.9.2. Development Contributions

The Planning Authority did not make a submission to the Board so therefore we do not have their views in respect of development contribution that may be payable. I note that two conditions requiring payment of contributions were removed by the Board on appeal in respect of the permitted solar farm.

The 2018 Development Contribution Scheme does not reference the infrastructure associated with renewable energy developments. As outlined above, we do not have the views of the Planning Authority, but I would note that the Development Contribution Scheme does state that “*Development charges will be exempt on any technical telecommunications infrastructure, both mobile and broadband (e.g. masts, substations, power connections and security fencing)*” (my emphasis). Therefore, I would propose that in the absence of advice to the contrary from the Planning

Authority that a contribution for the proposed development and a condition should not be attached in respect of same.

10.9.3. **Community Fund**

This application relates to a substation and associated development required to connect a permitted solar farm to the transmission network. Given the limited scale of the proposed development, and the fact that it does not generate electricity itself, I do not consider it appropriate to attach a condition requiring the establishment of a community benefit fund.

11.0 **Appropriate Assessment Screening**

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

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

11.2. **Background on the Application**

11.2.1. The applicant submitted a report entitled 'Report to Inform Screening for Appropriate Assessment', dated January 2022, which was prepared by their agent, Fehily Timoney as part of the subject planning application.

11.2.2. The applicant's AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development, the proposed construction methodology and undertakes a source-pathway-receptor assessment in order to identify the potential for significant effects on European Sites within a possible zone of influence of the development.

11.2.3. The applicants AA Screening Report concludes that, of the 16 Natura 2000 designated sites within the identified 15km zone of influence, the proposed development, alone and in combination with other plans and projects, is unlikely to have any significant effect on any European site given the absence of any source-pathway-receptor connectivity.

11.2.4. Having reviewed the documentation submitted with the application, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

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

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

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

11.3.3. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction phase impacts on surface water due to pollution or contamination with silt, chemicals, oils, hydrocarbons, etc.
- Habitat disturbance /species disturbance (construction and or operational).

11.4. **Submissions and Observations**

11.4.1. There were no third-party observations and TII, the only other prescribed body to make a submission, did not raise any issues relevant to Appropriate Assessment. There is no submission from the Planning Authority.

11.5. **European Sites**

11.5.1. The development site is not located in or immediately adjacent to a European site. The applicant's AA Screening Report considers European Sites within 15km of the proposed development. Having regard to the nature of the proposed development, the nature of the receiving environment and the source-pathway-receptor model, I consider this to be a reasonable zone of influence. I also note that within the

applicant screening report their source pathway receptor assessment outlines 4 potential sources as follows: land take; dust and air quality; emissions to water; and disturbance to conservation interest species.

11.5.2. There are 16 European Sites within the zone and the following table lists these sites and the potential for connectivity.

European Sites within 15 km

European Site	Site Code	Distance from Substation (km)	Connectivity/ Pathway
Wexford Slobs and Harbour SPA	004001	4.3	No
Slaney River Valley SAC	000781	4.7	No
Saltee Islands SAC	000707	4.7	No
Tacumshin Lake SAC	000709	6.8	No
Tacumshin Lake SPA	004092	7.0	No
The Raven SPA	004019	8.5	No
Ballyteige Burrow SAC	000696	9.8	No
Ballyteige Burrow SPA	004020	10.3	No
Lady's Island Lake SAC	000704	10.4	No
Lady's Island Lake SPA	004009	10.4	No
Carnsore Point SAC	002269	10.6	No
Raven Point Nature Reserve SAC	000710	12.6	No
Long Bank SAC	002161	13.0	No
Screen Hills SAC	000708	14.3	No
Saltee Islands SPA	004002	14.7	No
Bannow Bay SAC	000697	14.9	No

11.6. Identification of likely significant effects

- 11.6.1. As noted above, there is no pathway from the subject site to any of the European sites identified above. One proviso is outlined in the applicants screening report which I will discuss. As outlined elsewhere in this report, the proposed grid connection includes an element of HDD to cross the Kildavin Upper watercourse. As outlined by the applicant in their screening report, the Kildavin Upper watercourse is not located within the boundary of any European site. The river flows in a southerly direction for approximately 4.7 km where it joins the Assaly River which ultimately enters Wexford Harbour a further 8.8km downstream. As acknowledged by the applicant, the Harbour is part of the Slaney River Valley SAC and the Wexford Harbour and Slobs SPA, however, given the small scale of the HDD works (Entry and exit pits 1m x 1m x 2m) and the extensive hydrological distance from the European sites, any potential sediment runoff would be negligible and would not have an effect on the European sites. As such there is no tangible pathway for effect. I would remind the Board that the test for screening is that the project is likely to have a significant effect either individually or in combination with other plans or projects. In this regard given the hydrological distance it could not be considered that the potential effect could be significant.
- 11.6.2. Having regard to the nature of the proposed development that is before the Board (i.e. the substation development and grid connection), the separation distance from the designated sites and the absence of any tangible pathways, I consider that there is no potential for likely significant effects on any designated site.
- 11.6.3. With regard to the potential for in-combination effects, given that no significant effects have been identified, there is no likelihood of in-combination effects.

11.7. Mitigation Measures

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

11.8. Screening Determination

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

12.0 Recommendation

- 12.1. Having regard to the foregoing I recommend that permission for the proposed development be granted, subject to conditions, for the following reasons and considerations.

13.0 Reasons and Considerations

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

- (a) the nature, scale and extent of the proposed development,
- (b) the characteristics of the site and of the general vicinity,
- (c) national, regional and local policy support for developing renewable energy, in particular:
 - National Planning Framework, 2018,
 - Climate Action Plan, 2021,
 - Government Policy Statement on the Security of Electricity Supply, 2021,
 - Regional Spatial and Economic Strategy for the Southern Region,
 - Wexford County Development Plan, 2022-2028,
- (d) the distance to dwellings or other sensitive receptors from the proposed development,
- (e) the planning history of the immediate area including proximity to the permitted solar PV development with this development serving as the grid connection for that generating asset infrastructure,
- (f) the submission on file from a prescribed body,
- (g) 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 likely effects of the proposed development on European Sites,
- (h) the report of the Inspector.

13.1. Appropriate Assessment Screening

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and

assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European Sites in view of the sites' Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on any other European site, in view of the site's Conservation Objectives.

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

13.2. **Proper Planning and Sustainable Development**

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

14.0 **Conditions**

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

Reason: In the interest of clarity.

2. All of the environmental, construction and ecological mitigation and monitoring measures set out in the Planning and Environmental Report, and other

particulars submitted with the application shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order.

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

3. The period during which the development may be carried out shall be 10 years from the date of this Order.

Reason: In the interest of clarity and having regard to the sale and nature of the proposed development.

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

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

5. The developer shall comply with the following requirements:

- (a) No additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.

- (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or roads.

- (c) Cables within the site shall be located underground.

- (d) All fencing, gates and exposed metalwork shall be dark green in colour. The roofs of the buildings within the substation compound shall be dark grey or black and the external walls shall be finished in neutral colours such as grey or off-white.

Reason: In the interest of clarity, of visual and residential amenity.

6. The developer shall comply with the transportation requirements of the planning authority and other relevant bodies for such works and services as appropriate.

Reason: In the interest of traffic and pedestrian safety.

7. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and

agreed in writing with the planning authority, generally in accordance with the Outline Construction Methodology report submitted with the application. The CEMP shall incorporate the following:

- (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site noise liaison officer, construction hours and the management, transport and disposal of construction waste;
- (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;
- (c) an emergency response plan; and
- (d) proposals in relation to public information and communication.

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

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

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

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

9. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –

- (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
- (b) employ a suitably-qualified archaeologist who shall undertake pre-development archaeological testing at the site of the substation and a

programme of licensed archaeological monitoring at the site of the HDD at Kildavin and

- (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

Una Crosse

Senior Planning Inspector

2 September 2022