

Inspector's Report PL26.247780

Development	Development of a solar photovoltaic array farm on 9.91 hectares with all associated site services and works.
Location	Ballybrennan Little, Killinick, County Wexford
Planning Authority	Wexford County Council
Planning Authority Reg. Ref.	2016 1096
Applicant(s)	Solas Eireann Development Ltd.
Type of Application	Planning permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant(s)	Solas Eireann Development Ltd.
Observer(s)	None
Date of Site Inspection	10 th March 2017
Inspector	Mary Kennelly

1.0 Site Location and Description

- 1.1. The site comprises a U-shaped parcel of land which adjoins the N25 between Rosslare Harbour and Wexford. It is located between the villages of Killinick and Tagoat (on the N25), approx. 3km to the west of Rosslare town. The northern boundary of the site abuts the N25, directly adjacent to the roundabout junction with the R740 (which links the N25 with Rosslare Town). The road frontage is approx. 175m in length. The western end of the roadside boundary is stepped back from the road where there is an existing ESB substation site, which also fronts onto the N25 roundabout junction. The lands immediately to the west, south and south-east are under the control of the applicant. There is a single dwelling house immediately adjoining the site to the west, 20m away, (Ashfield House) and a further house on the opposite side of the road. There are a few further one-off houses and farmhouses in the general vicinity, but otherwise the lands surrounding the site are mainly in agricultural use.
- 1.2. The site is 9.9ha and comprises 3 fields which are in agricultural use (tillage). The fields are generally defined by low boundary hedging, with more dense hedging and tree groupings along parts of the western and southern boundaries. The central and eastern boundaries are also reasonably well screened but the northern roadside boundary is very low and quite sparsely vegetated. The lands are gently undulating. The proposed access track leading to the site travels along an existing grassy accessway (approx. 50m) adjoining the western boundary of the substation site. There are 38kV overhead lines running across part of the site, from the SE corner to the substation.

2.0 Proposed Development

2.1. It is proposed to construct the solar panels in linear arrays on ground mounted steel frames, (2.67m in height). It is proposed to provide 2m high stock-proof deer fencing and associated site works and landscaping measures. The application would have a generating capacity of 6MW of electricity. The proposal includes a substation and 4no. transformer stations. The proposed scheme is comprised of cells which combine to form modules, which in turn, are laid out in arrays. These arrays are then connected in series and are connected to the substation by means of collector

modules at each end of the arrays. It is stated that the proposed site would be connected to the ESB Network via the existing Killinick substation that adjoins the northern part of the site. The anticipated grid connection would be made at the existing substation, with an underground connection.

2.2. The application was accompanied by a Planning & Environment Report, an Ecological Report with an Appropriate Assessment Screening Report attached, a Landscape Visual Impact Report, A Biodiversity Management Plan, a Construction Management Plan and a Decommissioning Statement. A land-holders' consent letter was also submitted.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to refuse permission for three reasons. These were based the following matters

- <u>Premature development</u> due to location of site within the route corridor for the proposed Oilgate to Rosslare Road Improvement Scheme.
- <u>Traffic hazard</u> arising from the likely adverse impact of glint and glare on the users the surrounding road network, namely the N25.
- <u>Cumulative impact</u> insufficient information regarding potential for cumulative impact from a number of permitted solar arrays in the vicinity of the site.

3.2. Planning Authority Reports

3.2.1. Planning Reports

3.2.1.1 The Planning report notes that the development of renewable energy schemes are supported by national, regional and local policies. It is further noted that CDP policy EN10 seeks to prepare a Renewable Energy Strategy for the County during the lifetime of the Plan. It was considered that the proposal would not result in the permanent loss of agricultural land as the panels are to be secured to the ground by steel piles with limited soil disturbance, which could be removed in the future without permanent loss of agricultural land quality.

- 3.2.1.2 The location of the site within the route corridor for the N25 improvement to/from Rosslare Harbour, (i.e. within the 50m buffer zone), was considered to be of significance. It was noted that it is proposed that an intersection would be located immediately to the north of the site. Although comments had not been received from Transport Infrastructure Ireland, the concerns of the County Roads Design Office that the proposed development would be premature pending the precise delineation of the route were noted.
- 3.2.1.3 The area is not within a landscape designated area of great sensitivity and the population density is relatively low. It was considered that the visual impact would be localised as the development would be largely screened by means of topography, substantial hedgerows and setback from the public roads. Similarly, it was considered that the low lying nature and topography of the area means that with natural screening and fencing, the impact of glint and glare is likely to be limited.
- 3.2.1.4 However, the exception to this related to the northern boundary with the N25. It was considered that the first row of panels would be visible initially from this location. Although it was considered that a planting scheme would be capable of providing adequate mitigation in respect of visual impact, at least 6 rows of panels at the easternmost end of the northern part of the site would be likely to contribute to glint and glare on the N25. It was considered that in the event of a grant of permission, these rows should be required to be omitted.
- 3.2.1.5 It was considered that an EIA would not be necessary as the development did not qualify for the mandatory requirement and the proposal was not considered to be sub-threshold. An AA Screening Assessment was carried out and it was noted that there are 13 European sites within 15km of the site. It was concluded, however, that having regard to the limited extent of the proposed works and to the substantial distance to the nearest Natura 2000 site, no element of the proposed project, alone or in combination, is likely to give rise to any impacts on the European sites.

3.2.2. Other Technical Reports

<u>Chief Fire Officer</u> – the applicant should be advised that a Fire Safety Certificate is required which must be obtained prior to the commencement of development.

3.3.1 Prescribed bodies

3.3.1 There were no observations from prescribed bodies.

3.4.1 Third Party Observations

3.4.1 There were no third party observations.

4.0 Planning History

- **4.1.** There have been several recent planning decisions regarding solar farms in County Wexford. Information on each of the applications to date is not readily available. However, it is noted that the P.A. has granted planning permission for at least 4 separate solar farms within 1.2km of the appeal site (to the south/south-east) within the past year, with a combined land take of approx. 52 hectares. A further application for a solar farm at Murntown, with a land take of just under 40ha was granted by the P.A. (20161110), which is currently with the Board for a determination on a Section 48 condition (247801). In addition, the Board has granted permission for four solar farms in the centre of the county with a combined land take of approx. 53ha and a further 11ha near Bridgetown (split decision by the Board, Ref 247366). The Board has, however, in recent weeks refused permission for two solar farms in the south-east of the county, at Tomhaggard (89ha) and at Bridgetown (19ha). There are also a number of appeals currently pending, (See Table 4.1).
- 4.2. Recent permissions in vicinity of appeal site
- 4.2.1 20160520 Planning permission granted by P.A. on 16/8/16 for a Solar PV energy development (4MW) on a 10ha site at Ballycarran approx. 350m to the south-east of the appeal site.
- **4.2.2 20160008** Planning permission granted by P.A. on 31/3/16 for a Solar farm (4MW) on a 10ha site approx. 650m to the south east of the appeal site.
- **4.2.3 20160009** Planning permission granted by P.A. on 31/3/16 for a Solar farm (4MW) on a 10ha site approx. 750m to the south east of the appeal site.
- 4.2.4 2016/0644 Planning permission granted by P.A. for a Solar PV energy development (11MW) on a 22.75ha site approx. 1.2km to the south of the appeal site.

Table 4.1						
Solar farm appeals County Wexford						
Board Ref.	P.A. Ref.	Location	Proximity to site	Land take/size	Decision/status	
244351	20140392	Tintern	c.36km	10ha	Permission Granted	
246966	20160487	Enniscorthy	c. 32km	10ha	Permission Granted	
247179	20160717	Clonroche	c. 34km	20ha	Permission Granted	
247176	20160689	Enniscorthy	c. 36km	13ha	Permission Granted	
247217	20160690	Tomhaggard	c. 4km	89ha	Permission Refused	
247366	20160811	Bridgetown	c. 10km	31ha	Split decision 11ha of site Granted/19ha Refused	
247801	20161110	Murntown	c. 5km	39ha	Granted by PA appeal against S48 Condition pending	
247886	20161212	Ballyhoge	c. 23km	84ha	Appeal against PA decision to refuse pending	
247780	20161096	Ballybrennan Killinick	Subject site	9.9ha	Appeal against PA decision to refuse pending	

5.0 Policy Context

5.1 Energy White Paper – Transition to a Low Carbon Energy Future 2015-2030

- 5.1.1 The Energy White Paper comprises a complete update on national energy policy. It sets out a range of actions that the Government intends to take. The vision is to achieve low carbon energy, whereby Green House Gas (GHG) emissions from the energy sector would be reduced by 80-95% compared to 1990 levels and that GHG would fall to zero or below by 2100. However, it does not supercede the NREAP (National Renewable Energy Action Plan), which set out Ireland's approach to achieving its (legally binding) targets, with a target of 40% of electricity consumption to be from renewable sources by 2020.
- 5.1.2 Paragraph 137 of the White Paper states:

"The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity.......[and] is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016."

5.1.3 The White Paper also sought to publish a Renewable Electricity Policy and Development Framework (with a spatial dimension) to underpin the proper planning and development of larger scale renewable electricity generation development on land. It is envisaged that such a plan will give guidance to those seeking development consent and to planning authorities in relation to larger-scale onshore renewable electricity projects.

5.2 Draft Strategic Environmental Assessment Scoping Report for a Renewable Electricity Policy and Development Framework 2016 (DCENR)

5.2.1 The Draft Scoping report was published in early 2016. The consultation phase has ended but the final document has not yet been published. This document outlines a process which seeks to identify potentially suitable land areas for the large scale generation of renewable energy (over 50MW), which would in future inform any revised NSS and/or regional and local planning policy. It is stated that up to 4,000MW of renewable energy generation capacity will be required to allow Ireland to meet its 40% renewable electricity needs by 2020. It is stated that

A Progress Report on the NREAP was issued in January 2012, showing that 3,900MW of renewable energy grid connection offers had been made. Not all of these projects have planning permission and it is likely that a significant number will not be developed.

5.2.2 Reference to solar power is made in Section 5.1.3

The 2010 NREAP does not envisage solar power making a contribution to Ireland's 2020 renewable electricity targets. However, it is noted that there has recently been a significant decrease in the cost of solar PV panels and that this technology should offer some possibilities in Ireland in the medium term up to 2030. The recently published Green Paper on Energy Policy in Ireland, May 2014, DCENR, raises the question of the future role of solar energy. The contribution made in 2014 by solar power on the island of Ireland is shown in Table 1. This indicates that out of a total of 3,194MW of renewable capacity, 5.6MW was contributed by solar power.

5.3 Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland October 2016

5.3.1 This is a research paper which was funded by the SEAI. It sets out the policy framework for renewable energy, including reference to relevant targets, and provides information on the achievements to date. It is noted that at the beginning of October 2016, planning applications for over 100 utility scale solar PV (USSPV) developments had been submitted to planning authorities across the state. It was estimated that, if implemented, these would contribute at least 594MW of renewable electricity. However, it was also noted that there is currently no REFIT scheme to subsidise the generation of electricity from USSPV sources. The document also provides guidance on the assessment of proposed solar farm

developments. It is suggested that this guidance may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility Scale Solar Photovoltaic (USSPV) developments in Ireland in due course.

5.4 Wexford County Development Plan 2013-2019

5.4.1 Renewable Energy

Objective EN07 is to favourably consider proposals for renewable energy subject to compliance with standards in Chapter 18.

Objective EN10 is to prepare a Renewable Energy Strategy for County Wexford during the lifetime of the Plan which will build on and support the Wind Energy Strategy 2013-2019, any Climate Change Strategy for the County and the National Renewable Energy Action Plan (DCENR 2010).

- **5.4.2 Solar power Section 6.4.4** notes that the County is ideally positioned to capitalise on its assets in terms of hydro, solar, tidal and wind energy. **Section 11.3.5** refers specifically to Solar Power, providing a description of the technology.
- **5.4.3 Landscape** The area in which the site is located is within the 'Lowland' landscape which areas are deemed to have a higher capacity to absorb developments.

Objective L04 is to require all developments to be appropriate in scale and sited, designed and landscaped having regard to their setting in the landscape so as to ensure that any potential adverse visual impacts are minimised.

Objective L09 - Consideration of siting, design and landscaping for all developments and to have regard to the site specific characteristics of the natural and built environment. In Volume 3, it is noted that care still needs to be taken on a site by site basis, particularly to minimise the risks of developments being visually intrusive.

There are no listed views in the vicinity of the site. There are no protected structures within the site, but there are a number of structures in the vicinity.

5.4.4 Agriculture - Section 6.4.6 outlines the importance of <u>agriculture</u> in the local economy including for employment. **Objective ED17** is to promote the continued development of food production and processing, while other policies refer to diversification.

5.5 UK Guidance – PPG for Renewables and Low Carbon Energy (DCLG 2015)

- 5.5.1 This guidance includes advice on developing a strategy for renewable and low carbon energy development, as well as particular planning considerations relating to specific renewable technologies, including solar power. These include the following points:
 - Encourage effective use of land by focussing large scale developments on previously developed and non-agricultural land.
 - On greenfield sites, question whether the proposed use of agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land.
 - Establish whether the proposal would allow for continued agricultural use where applicable or encourage biodiversity improvements around arrays.
 - Consider visual impacts and the impacts of glint and glare on the landscape, local residents and aircraft safety and the potential to mitigate these impacts through for example screening with native hedges.
 - Consider the impacts of security lighting, fencing etc.
 - Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance.
 - Cumulative impacts should be considered.

5.6 Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems (BRE 2013)

5.6.1 This guidance provides similar advice to the PPG but also includes advice on Environmental Impact Assessment in relation to solar farms. It is stated that USSPV developments should be directed to brownfield or industrial land in preference to agricultural land and that the best quality agricultural land should not be the first choice, with lands in the poorer classifications being the most appropriate.

6.0 The Appeal

6.1. Grounds of Appeal

The first party appeal was submitted by CD Consulting Environmental & Planning Consultants on behalf of the applicant. The main points raised may be summarised as follows:

- 6.1.1 Premature development pending finalisation of road scheme design The site falls within the route corridor for the Oilgate to Rosslare Road Improvement Scheme. It was noted that whilst this formed the first reason for refusal, the Regional Design Office had not recommended refusal on these grounds. The following points were also made
 - <u>Design stage</u> As the proposed road scheme has not received funding and is only entering the final design stage, there is still a large degree of flexibility with the final design. It would be unreasonable to sterilise all lands within the buffer zones.
 - <u>Alternative sites available</u> Part of the site is located within the 450m diameter circle earmarked for a proposed junction at Killinick. The total area within the circle is 16.2ha, but the area of the site that would affect the possible road scheme is only 2.43ha, or 15% of the land area required for the road scheme. It is considered that there is ample space within the road reservation to implement the road scheme without impeding on the development lands.
 - <u>Electricity infrastructure</u> The presence of an existing sub-station and several, (at least 5), overhead electricity lines exiting the substation and crossing the proposed development land means that it is unlikely that the land immediately south of the sub-station would be suitable for road development. If the substation remains in place, the overhead lines are likely to remain unchanged. It would be much more costly to remove and reroute all of this existing infrastructure when there is much more suitable land in the middle of the northern section of the 450m circle.
 - <u>Agreement to possible redesign</u> If considered necessary, appellant is prepared to remove a number of panels from the north-eastern corner

immediately to the east of the substation and directly adjoining the N25 (shown as pink in Fig. 3 of the Grounds of Appeal).

6.1.2 Traffic hazard from glint and glare for users of the N25 National Primary Road

- The Area Planner's report initially stated that there were no issues arising from glint and glare, due to the topography of the site and the level of natural screening as well as the proposed planting, orientation and extent of predicted glint and glare. It is submitted, however, that notwithstanding this, this issue had been included because it was proposed to recommend refusal on other grounds. The appellant considers that this is not a material reason for refusal.
- The P.A. planning report refers to glint and glare affecting users to the north of the site. However, the proposed panels will be oriented to the south (line of sun) and therefore would be facing away from the N25
- It is reiterated that whilst it is considered that no mitigation is deemed necessary, as there is limited visibility into the site from the N25, the screening proposed in the Landscape Masterplan will be implemented and that this will ensure that the proposed solar farm would be adequately screened from the road.

6.1.3 Cumulative landscape impacts

- 6.1.3.1 The LVIA submitted with the application had indicated that the design process had been informed by the need to avoid undue visual impact. It was reiterated that there would be no landscape impact and it was noted that the P.A. report had considered that the site was well chosen in terms of limited visual impact. The LVIA had identified that the sensitivity of the landscape character is classified as low and that the magnitude of change would also be low, thereby resulting in a slight to imperceptible significance of landscape effect. It is stated that the findings of this LVIA report still stand.
- 6.1.3.2 An addendum to the LVIA has been submitted with the grounds of appeal to specifically address the issue of cumulative visual impacts in respect of four approved solar parks within 1km of the site. The landscape character has been assessed as having a low sensitivity to cumulative impacts with the magnitude of change also being low. It is submitted that this would result in the significance of a

cumulative impact from the proposed development together with four permitted solar farms of slight to imperceptible. It was concluded that the proposed development at Ballybrennan would not be seen in association with the other permitted solar farms. The reasons for the low impact are highlighted as follows:-

- The screening effect provided by the level of mature hedgerows around the site and surrounding area restricts views into the development and also prevents long range views;
- The topographical make-up of the area is virtually flat which restricts longer range views by preventing higher, more elevated vantage points.

6.2. Planning Authority Response

- 6.2.1 The P.A. responded on the 19th January, 2017. The following points were made:-
 - A significant part of the proposed development site is located within the route corridor of the proposed Oilgate to Rosslare Road Improvement Scheme, (a map of the route corridor inserted into letter).
 - The N25 (E30) is part of the Trans European Network, linking Rosslare Europort with Dublin-Belfast-Larne and Waterford-Cork respectively. The development and enhancement of this significant transport infrastructure is of strategic importance at regional and national level. The proposed solar farm at this location is premature pending completion of the design scheme.
 - There is a possibility of glare occurring on the N25 from 6 rows of panels from the northern part of the easternmost field. If permission was to be granted, these panels should be required to be omitted. This was included as a reason for refusal having regard to the Oilgate to Rosslare Road Improvement Scheme.
 - The further assessment of the cumulative visual impact is acknowledged.
- 6.2.2 It is requested that the Board uphold the planning authority's decision to refuse permission for the proposed development.

6.3 Prescribed bodies

6.3.1 Transport Infrastructure Ireland (21/3/17)

- 6.3.1.1 TII raised serious concerns that there is no record of the matter having been referred to TII by the P.A. It was also pointed out that the grounds of appeal had not been available to TII as details had not been provided by the Board and this information was not accessible from the P.A.'s on-line resource. Notwithstanding these concerns, the following observations have been made in respect of the proposed development.
- 6.3.1.2 <u>Oilgate Rosslare Road Scheme</u> this is a national road scheme and is an objective of the County Development Plan for the area. TII therefore supports the P.A.'s decision to safeguard the route corridor. The Board will be aware of the DoECLG Spatial Planning and National Roads Guidelines regarding the protection of alignments for future national road projects (Section 2.9).
- 6.3.1.3 <u>Glint and Glare</u> The assessment of glint and glare contained in the applicant's document Environmental and Planning Technical Assessment (section 5.4) appears to be a generic assessment and does not make any specific reference to the N25, a national primary route. This is not considered to be sufficient to assess and address the potential impacts on the adjacent national road network.
- 6.3.1.4 <u>Direct Access from N25</u> TII notes that the proposed access to the solar farm is directly to the N25 at a location where the 100km speed limit applies. Reference is made to Section 2.5 of the Spatial Planning and National Roads Guidelines, which specifies that the policy of the planning authority should be to avoid the creation of any additional access point from new development or the generation of increased traffic from an existing access to national roads. TII considers that it has not been adequately demonstrated that the proposed development complies with official policy or that it would not result in an intensification of a direct access onto the national road.

6.3.2 Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (2/3/17)

6.3.2.1 <u>Appropriate Assessment - Cumulative impacts</u> – The Department considers that the document of screening for Appropriate Assessment does not provide sufficient information to assess the cumulative impacts of the development.

6.3.2.2 Impact on Qualifying Interests of Wexford Harbour and Slobs SPA - It is noted that the site of the development is in close proximity to the Wexford Harbour and Slobs SPA (004076). As such, the potential impacts on the qualifying interest species of that designation need to be fully assessed, and in particular any impacts on flight lines.

7.0 Further submissions

7.1 The submissions from the TII and from the Dept. of Arts, Heritage, Regional, Rural and Gaeltacht Affairs were circulated to all parties. Further responses were received from the first party (12/04/17), from the Planning Authority (7/04/17) and from TII (3/04/17). The P.A. and the TII had no further comments to make. However, the P.A. disputed the lack of consultation with the TII and enclosed copies of correspondence to this effect.

7.2 First Party response to S131

- 7.2.1 **Transport Infrastructure Ireland** the appellant mainly reiterated the points made in the grounds of appeal in respect of the issue of prematurity pending the final design of the Oilgate to Rosslare Road Scheme and in regard to impacts of glint and glare on users of the N25. In respect of the access to the national road, it was confirmed that access is proposed by means of the existing accessway from the N25 adjacent to the ESB substation.
- 7.2.2 DAHRR&GA the appellant has provided an updated Appropriate Assessment Screening Report in which the in-combination effects of the proposed development together with the effects of the permitted solar farms at Blusheens and Ballykeeran have been considered. It was noted that there is only one European site within the zone of influence, which is Wexford Harbour and Slobs SPA, which it is stated is located 750m to the north. [It should be noted that in previous submissions it was stated to be 300m to the north]. It was considered that the impact of the proposed development on qualifying interests, which includes mobile species, is deemed to be negligible/low due to the nature of the site and the development and to the use of the lands with low ecological value. It was further considered that significant incombination effects are not expected given the slight potential for stand-alone impacts from either of the solar farms or the cabling routes.

7.2.3 It was concluded that Stage 2 Appropriate Assessment was not warranted on the basis of the nature of the proposal, the implementation of best practice and the location of European sites and their qualifying interests, for which no connection has been demonstrated.

8.0 Assessment

- 8.1 It is considered that the main issues arising from the appeal are as follows:-
 - Strategic policy and need for the development
 - Land-use Planning and Transportation Policy
 - EIA screening
 - Visual amenity and landscape character
 - Glint and Glare
 - Traffic and access
 - Drainage
 - Cultural Heritage
 - Ecology
 - Appropriate assessment

8.2 Strategic policy and need for the development

8.2.1 Need for development

8.2.1.1 The need to urgently and strenuously combat climate change is consistent with the identified need for additional renewable energy development and is supported by national and local policy objectives. The national objective, contained in NREAP, of achieving 40% of electricity generation from renewable sources by 2020 forms part of the national strategy for meeting our legally binding targets in this respect. Thus the contribution of renewable energy projects, such as that proposed, to achieving the transition to a low carbon future is well established. Solar power is also acknowledged as being capable of being delivered relatively quickly and efficiently without the need for large scale transmission grid infrastructure. Thus it is accepted that the proposed USSPV development, which could contribute up to an estimated

6MW of electricity, is a desirable form of development, which is supported in principle in both national and local policy guidance.

8.2.2 Absence of strategic policy

- 8.2.2.1 Notwithstanding the general acceptability of solar power as a form of energy generation, the land-use policy and spatial framework is poorly developed, and there is no guidance on the type of land or landscape which would be most appropriate. The SEAI document referred to at 5.3 above indicated that by October 2016, 100 planning applications for solar energy development projects had been submitted to planning authorities across the country and that, if implemented, this would amount to 594MW of renewable electricity being generated, encompassing a land area of 1,331.9ha. The first appeal against such a scheme came before the Board in July 2015 and since then, over 12 appeals have been decided, the majority of which have been granted. In Wexford alone there have been five solar farms granted by the Board and there are three, (including this one), awaiting decision. The P.A. has also granted several solar farms within the county, four of which are in close proximity to the appeal site, (See Table 4.1 above). The earlier solar farm developments were medium in scale, (approx. 5MW and occupying 10-20ha), but more recent proposals have been larger, varying in land area from 30ha – 90ha. The Board has, however, refused two recent proposals in Wexford, one 19ha in area (near Bridgetown -247366) and another at Tomhaggard near Rosslare at 89.46ha, (247217).
- 8.2.2.2 It is clear, therefore, that there has been a sudden wave of proposed solar power development within the last two years and that both the volume and scale of such development is increasing. At present, however, there is no spatial strategy or strategic plan to direct such important renewable energy development to appropriate locations at either a national, a regional or a local level. Although the majority of proposals have tended to occur along the south coast, with a particular concentration in Wexford/Waterford, there is recent evidence of development proposals in the midlands and the west. For example, the Board recently granted permission for a development in Longford (246850), which indicates that locations other than the south may be viable for solar power investment. The most recent intake of appeals on this subject matter is also represented across the country with appeals in Cork, Kerry, Clare, Kilkenny and Wicklow, in addition to Wexford and Waterford.

8.2.2.3 It is noted that until quite recently, the Board had not considered the absence of a land-use policy framework to be an impediment to granting permission. However, the refusal of permission for an 89ha development at Tomhaggard, (247217), followed by a split decision in respect of a 31ha solar farm near Bridgetown, (247366 - 19ha parcel refused and 11ha parcel granted), in January and March, 2017 respectively, have signalled a reluctance by the Board to accept the continuation of this piecemeal approach to solar power development. These decisions to refuse were on the grounds of premature development pending the adoption of national, regional and local policy guidance or strategy for solar power, having regard to the scale of these developments.

8.2.3 Local policy

8.2.3.1 Wexford CDP 2013-2019 is supportive of renewable energy in general, and solar power, in particular and acknowledges the geographical advantages of the area in this respect. However, it does not contain any specific policies in relation to large scale solar power schemes. Objective EN10 seeks to prepare a Renewable Energy Strategy within the lifetime of the Plan. It is noted that the Development Management Guidelines (DoELG 2007) indicate (7.16.1) that where the issue of prematurity arises because of a commitment in a development plan to prepare a strategy, this should only be used as a reason for refusal where there is a realistic prospect of the strategy being completed within a specific time frame. It is considered that given the stated objective to prepare a Renewable Energy Strategy (2013-19), and the large number of applications coming before the P.A., there is a reasonable prospect that such a strategy will be adopted in the near future.

8.2.4 Loss of agricultural land

8.2.4.1 The SEAI document (3.2) provides an overview of policy and practice relating to solar power elsewhere, (including countries with established markets such as the USA, the UK and Germany), where there is concern regarding the perceived loss of good quality agricultural land. The UK's PPG and the BRE documents (5.3 above), each indicates that solar power development should ideally be directed to previously developed land, brownfield land, contaminated land, industrial land or agricultural land is

classified with the most productive at Grade 1 and the most marginal at Grade 5. Due partly to concerns about the dependence on the UK on imported foods, the UK Government has stated that solar farms should be directed to lands graded 3b - 5. California too seeks to minimise solar power development on active farmland and Germany has withdrawn financial support for larger schemes partly on the basis of the need to balance the land use needs of agriculture and forestry against renewable energy development.

- 8.2.4.2 The SEAI document strongly recommends that national, regional and local policy should set out clear policy objectives which support USSPV development, but that land-use policy "should not prioritise the delivery of development of utility scale solar PV on lands with lower agricultural value". Notwithstanding this, there is broad cross-sectoral support for the adoption of consistent planning policy approaches, which is seen as key to the realisation of community acceptance and to providing greater certainty to both developers and communities.
- 8.2.4.3 The site is located within an area which is predominantly in use as operational farms engaged in productive agriculture, in the midst of a landscape that is characterised by high quality farmland. The topography is generally flat to gently undulating and the fields are of a reasonable size and well drained. The proposed development is sited on three large fields which are currently in productive agricultural use. The lands are under tillage, although no crops were planted at the time of my inspection. The site is somewhat unusual in that there are a considerable number of overhead electricity lines criss-crossing the lands and the existing substation occupies the north-western corner. The size of the site, at 9.9ha, is considered to be a medium sized solar farm, and on its own, would not result in an unacceptably significant loss of productive agricultural lands. However, the P.A. has within the past year granted permission for three further solar power developments on the neighbouring farm to the southeast, with a combined land area of solar arrays of 30ha. A further solar farm has been recently permitted on a site to the southwest with a land area of 22.75ha. Thus if the current proposal is also permitted, the total land area within a 1km square block would be 62.65ha.
- 8.2.4.4 The first party has indicated the location of these permitted developments, (in relation to the current proposal), on an OS map at Appendix 1 (LVIA Photo Viewpoint Locations). It is considered that the proposed solar power development, in

combination with the permitted solar farms nearby, raises significant concerns regarding the loss of, and potential sterilisation of, a sizeable portion of productive lands, as well as the fragmentation of farms. Given the sudden and rapid escalation in the number and scale of such developments, particularly in this part of Wexford, it is considered that there is also potential for a cumulative effect on the viability of agriculture in the area, which could undermine the national objectives of the agrifood industry as expressed in the Government's Food Wise 2025. These objectives include increasing the value of the primary production sector by 65%, the value of the agrifood exports by 85%. Some of the weaknesses and threats identified, particularly in respect of cereals, tillage and horticulture include limited land availability. Thus it is considered that a national strategy is required for solar power development due to the competing objectives of agriculture and renewable energy.

- 8.2.4.5 The applicant submits that management of the land will involve reseeding with grazing or species-rich wildflower meadow mix and subsequently with livestock grazing continuing between and underneath the solar PV panels. However, this would result in a considerably less productive use of the lands (in agricultural terms) than is currently possible. The temporary nature of the use is also part of the justification for the development, but as this is likely to involve a period of 25 years, it is considered that this is of medium duration.
- 8.2.5 In conclusion, it is considered that given the escalating number and scale of solar farm development proposals in County Wexford and to the extensive area of land in close proximity to the site of the appeal with the benefit of recent permissions for solar arrays, it is considered that a grant of permission for the proposed development, having regard to the absence of any current national, regional or local spatial strategy or land-use planning guidance, would be premature pending the preparation and adoption of a renewable energy strategy for solar power for the area, which is an objective of the current County Development Plan.

8.3 Land-use Planning and Transportation Policy

8.3.1 Spatial Planning and National Roads Guidelines (DoECLG, 2012)

8.3.1.1 The primary purpose of the national road network is described in the Guidelines as to provide strategic transport links between the main centres of population and

employment, including key international gateways, such as the main ports and airports, and to provide access between all regions. It is pointed out that considerable investment has been made in the national road network to date and the importance of maintaining the efficiency, capacity and safety of the network is emphasised. 'Strategic Traffic' is defined as "major inter-urban and inter-regional traffic which contributes to socio-economic development and to the transportation of goods and products, especially traffic to/from the major ports and airports." The Guidelines state that the planning system must ensure that the strategic traffic function of national roads is maintained and that Development Plans must protect the capacity, efficiency and safety of these roads.

8.3.1.2 In addition, Development Plans are required to protect emerging or preferred route corridors and land requirements for future upgrades. It is stated (2.9) that the Development Plan should identify land to be retained free from development and to ensure that measures are put in place to ensure that any sensitive uses on adjacent lands are compatible. It is stated that inappropriate zoning can significantly increase the cost of such schemes, make the road project uneconomic and lead to significant material alterations to the project or even abandonment. This can negate a significant amount of planning work carried out to date.

8.3.2 Oilgate to Rosslare Harbour Road Scheme

8.3.2.1 The proposed N11/N25 Oilgate to Rosslare Harbour road scheme forms part of the E01 and the E30, providing cross border links to Northern Ireland (E01) and the UK mainland (E30) and improving access to markets in the UK and Europe. The scheme is intended to complete the improvement of the route from Dublin to Rosslare Harbour, which is part of the Trans European Network linking Rosslare Europort with Dublin-Belfast-Larne and Waterford-Cork, respectively. The scheme will also improve journey times between Waterford and Rosslare Harbour, which provides improved connectivity with the Atlantic corridor. By providing improved access to Rosslare Europort, the South and the East of the country benefits from much improved accessibility to the UK and mainland Europe providing an alternative to Dublin Port, while avoiding congested corridors in midland UK. The road scheme would provide for a safe intersection of the N25 and the N11 at Wexford Town and link to Rosslare Europort. This will facilitate the integration of the port facilities and the National Primary road network. The section between Oilgate and Rosslare is one

of the few sections of the Rosslare-Larne route that has not yet been upgraded to dual carriageway/motorway standard. The N11 has been upgraded from Dublin to south of Gorey, and the section from Gorey to Oilgate is currently under construction. The N25 New Ross Bypass has also been approved by the Board.

- 8.3.2.2 The Preferred Route Option was arrived at following a Constraints Study in 2009, a public consultation exercise in 2010, (which generated over 2,000 submissions), and a subsequent detailed and systematic examination of alternative route options. Information regarding the process is available on the planning authority's website. The Stage 1 assessment included 187 option combinations, of which 15 were carried through to Stage 2. The option that was finally selected to be taken through to the Design Phase was stated to be the optimum one in terms of a wide range of criteria. This option also includes a section of the 'Preferred route corridor for the N25 Rosslare Harbour Access Road Scheme' ('Orange Route') and was also described as being amenable to phased route construction.
- 8.3.2.3 It is evident, therefore, that a rigorous process was undertaken in the route selection process, during which it was necessary to balance a wide range of issues, engineering, environmental and economic. The protection of the Preferred Route Corridor was published in 2011 and is an objective of the current Wexford County Development Plan, 2013-2019, (T14, T15, T18), and of both national and regional policies, (such as the NSS, the National Development Plan, and the Regional Planning Guidelines for the South East). Thus the need for the proposed road scheme is clearly established and supported by national, regional and local policy. As such, the fact that it is at Design Stage is not considered to be an indication of a lack of commitment to the project. Although I would accept that there is likely to be some flexibility in the final design, the optimum deign will require careful balancing of the various environmental, economic and engineering criteria, which will presumably require a certain amount of flexibility in terms of land availabilty.
- 8.3.2.4 The appellant considers that there is ample space within the road reservation to accommodate the road scheme and the solar farm. However, the road reservation includes a proposed junction at this location, which was one of four principal junctions, Ashfield Crossroads. The stated purpose of this junction was to maintain access between the national road network and the south of Wexford Town as well as Rosslare Strand. The proposed solar farm would occupy the southern half of the

junction circle within the Preferred Route Corridor. As the design of the junction is not yet determined, the P.A. considers that it could be grade separated with slip roads, etc. Given that the existing N25/R740 road junction is located close to the centre of the circle, and that the development site abuts the N25 along its northern boundary, it is difficult to envisage how the design could accommodate both developments without restricting the final design of road junction.

- 8.3.2.5 It has been suggested that it is unlikely that the substation and/or overhead lines would be relocated to facilitate the road scheme due to cost considerations. I note that the Constraints Study (2009) included consultation with utility providers including the ESB, and that data relating to the transmission network was mapped, (6.4.11 of the Route Selection Report). It was stated that services along the route which would conflict with the road scheme may result in disruption of service provision or could impact on the construction of the scheme. It is stated that route option combinations which were found to conflict with 110kV ESB lines were either medium or lower preference, (and hence screened out), but that all other route option combinations were deemed 'high preference' in terms of comparative service conflicts. It would appear, therefore, that this issue has been taken into account in the rigorous process of route selection, and as such, there is insufficient evidence to conclude that the final design would avoid the relocation of the utilities on site, if required.
- 8.3.2.6 In conclusion, the Guidelines on Spatial Planning and National Roads requires that Preferred Route Corridors be protected. To do otherwise could give rise to significantly increased costs or material alterations to the project, or even abandonment, which would undermine the considerable work undertaken to date. It is considered, therefore, that the proposed development would be premature pending the finalisation of the design of the road scheme and that it would contravene Objectives T14 and T15 of the Wexford County Development Plan and would be contrary to the proper planning and sustainable development of the area.

8.4 EIA Screening

8.4.1 The first party considers that the proposed development does not fall within a class of development requiring EIA under either Part 1or Part 2 of Schedule 5 of the planning and Development Regulations 2001 (as amended), and as such, the requirement for EIA can be screened out. This approach is generally consistent with that taken by the Board in previous decisions and by the planning authority in this case. It has also been established in previous decisions that a solar power generation facility, such as that proposed, does not qualify as subthreshold development. This is where a project listed in Schedule 5 Part 2 does not exceed a quantity, area or other limit specified in respect of the relevant class of development but would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7 of the Regulations.

8.4.2 I would agree that the solar farm does not fall within any of the categories of installations for the production of electricity, i.e. Class 2(a) Thermal power station (300 megawatt output threshold); Class 3(a) Industrial installation for the production of electricity, steam and hot water not included in Part 1 (300MW output threshold); Class 3(h) Installation for hydroelectric energy production; Class 3(i) Wind farm. Class 3(a) relates to combined heat and power plants and the other two classes are not relevant to the current case. Thus the need for Environmental Impact Assessment can be ruled out in the instance of the current case.

8.5 Impacts on visual amenity and landscape character

8.5.1 The Visual Impact Assessment considered that the receiving landscape is characterised by an open, flat and fertile patchwork farmland with mature but managed hedgerows and mainly broad leafed tree lines. The site is located in the 'Lowlands' Landscape Character Unit, which is characterised by gently undulating lands with higher levels of population and more intensive agriculture due to the high quality and fertility of the soils. It is described as a landscape with a higher capacity to absorb development without causing significant visual intrusion. The site does not fall within any areas designated as 'Landscapes of Greater Sensitivity' and there are no scenic routes or views or prospects listed in the Development Plan. The lands immediately to the north, however, fall within the 'Coastal Area' Landscape Character Unit which is more sensitive. The 'Coastal Area' incorporates a number of 'Landscapes of Greater Sensitivity such as Wexford Slobs (south) to the north of the site, which is a low-lying flat landscape with drainage ditches and wetland areas. The Coastal Area extends along the coast to the east and south, where it incorporates Lady's Island and Tacumshin Lake, which are coastal lagoons which are also of 'Greater Landscape Sensitivity'.

- 8.5.2 A distinction was drawn in the LVIA between impacts on the immediate area and the wider landscape. It was considered that the broader landscape generally has the capacity to absorb the development, that there would be no significant change to the landscape character in the long term. However, it was acknowledged that there would be some localised residual landscape and visual impacts, but that these would dissipate to slight to imperceptible impacts over a short distance and as the proposed planting established and matures. Construction impacts would be substantial but would be temporary and localised in nature. Cumulative impacts were also considered in respect of three adjoining solar farms permitted to the south-east.
- 8.5.3 The potential operational impacts on the landscape character and visual amenity principally comprise of the introduction of a strongly geometric and engineered appearance across the existing field pattern. The generally flat landscape is gently undulating with enclosed views in and around the site. The sense of enclosure is gained mainly from the vegetation which consists of dense hedgerows and tree coverage. At a local level, the screening effect of vegetation along the northern boundary with the N25 is poor in places. The LVIA recognised that the introduction of solar arrays would have a slight impact on landscape character and sensitivity at this location. However, it was also noted that the proximity of the existing substation and telemetry mast detract from the overall sensitivity of the area and increases the capacity to absorb some level of new development. The existing hedges would not be affected and as such, the negative impacts would be minimised.
- 8.5.4 The prominence of the site is highlighted by the fact that it is bounded by the N25 and is in close proximity to the R740, as well as to a number of protected structures. Notwithstanding this, I would agree that the site is generally well screened by mature hedging and due to the flat to gently undulating nature of the landscape, that the proposed development would be visible from very few vantage points, the main one being the N25 close to the site, and to a lesser extent from the R740. This is primarily due to the scant hedging along the roadside boundary at present, and also to the orientation of the arrays, which means that the tallest elements will face the road. Views from these locations are best represented by Viewpoints 2 and 3 of the submitted photomontages. VP3 shows that the operational impact would be quite extensive and intrusive, but would be mitigated by the substantial hedge strengthening proposed. The time frame for this planting to take effect is likely to be

about 5 years. The effectiveness of the hedgerow screening at present in the remainder of the site is generally much more robust, but is also patchy in places as the hedgerows are low or intermittent. As such, the fields within which the solar farm panels would be placed are visible along much of the public road. However, there are very few houses along the public roads in the vicinity of the site, and as the topography of this site is flat to gently undulating, I would agree that any visual impacts would be slight.

8.5.5 The proposed landscaping mitigation measures include retention and enhancement of existing hedges and reinforcement of these hedges with deer proof fencing and additional hedgerows. It is proposed to restore and reseed any areas disturbed during construction with agricultural meadowland grass. Native hedges would be planted on the outer side of the security fencing with extra robust screens provided near residential properties. It is considered that the proposed landscape mitigation would provide adequate screening, provided that the landscaping is implemented in a timely manner, in accordance with best practice, and maintained to ensure an effective screen is established. Thus it is considered that although visibility of the proposed solar panel arrays would not be eliminated, the localised impacts would be adequately mitigated in the medium to longer term. I would agree that the impact on the landscape character and visual amenity of the area in the medium to longer term would not be significant.

8.6 Cumulative Landscape and Visual Impacts

8.6.1 The potential for USSPV developments to incrementally alter the character of the landscape is a material consideration and could give rise to cumulative impacts which would, in due course, adversely affect the visual amenity and landscape character of the area. Cumulative impacts were considered at application stage, but were largely confined to 3 adjoining developments to the south-east. It was concluded that the cumulative landscape and visual impact of the development would be slight. However, a more comprehensive cumulative assessment of the landscape and visual impacts was undertaken as part of the appeal in order to address the P.A.'s reason for refusal on these grounds. This assessed the cumulative impact of the proposed development together with four additional solar parks which have been permitted by the P.A. in the past year within 1km of the appeal site.

- 8.6.2 The cumulative landscape and visual impact assessment (received by the Board on 22/12/16) concluded that:
 - The landscape character of the proposed development site has been assessed as having a low sensitivity to cumulative impacts with the magnitude of change assessed as low. The significance of effect was therefore considered to be slight.
 - The cumulative visual impact was assessed and classified as being slight to imperceptible. Although some of the viewpoint locations are taken from areas which exhibit a high level of sensitivity, there is a negligible magnitude of effect in all cases.
 - The assessment and conclusions documented in the LVIA Report of August 2016 remain unchanged. The proposed solar park will not have a significant impact on the landscape character or visual amenity of this area, in isolation, or when viewed cumulatively in association with nearby approvals.
- 8.6.3 Having reviewed the submissions and inspected the site and surrounding area, I would generally agree with these conclusions. Although the Ballybrennan development would be visible and quite prominent at the outset from the N25, the existing and proposed vegetation would generally screen the other permitted developments from this location. The flat nature of the landscape with good levels of mature hedging would mitigate the impact from other locations within a 1km distance, and I would accept that in this landscape, views from beyond 1km are not likely to result in any significant impacts. Notwithstanding this, however, should further solar parks be permitted in the immediate vicinity, the potential for cumulative impacts on the visual amenity and landscape character of the area could rise sharply.
- 8.6.4 Thus, in conclusion, it is considered that the grant of permission for this proposal, in the absence of any strategic or policy guidance on the most appropriate locations for such development, would contribute to the cumulative effects raised in the earlier conclusions regarding the issue of prematurity of the development, although it is accepted that in the instant case, cumulative visual and landscape impacts are unlikely to arise at his point in time.

8.7 Glint and Glare

- 8.7.1 Glint and glare from reflected surfaces is a recognised issue in relation to solar farms. Glare is described in the submissions as reflected diffuse light, which is not a direct reflection of the sun, but a reflection of the bright sky around the sun. Glint is defined as either specular (concentrated) reflection or diffuse reflection of sunlight and is the principal element of nuisance. It is noted that solar panels are designed to absorb light in order to convert it to useful energy, rather than reflect it, as reflected light is wasted. For glint and glare to occur, however, the sun must be shining. Most reflections are skyward due to the angle of orientation, with reflections to the east in the evening and to the west in the morning, when the sun is low in the sky, and are generally confined to the months of March to September.
- 8.7.2 The applicant has not submitted a Glint and Glare Study with the application. The issue has been addressed in the Planning and Environmental report (5.4). It is pointed out that the proposed solar panels will be static (not 'tracking') and will face south, where views of the site are well screened. The only residential properties (other than the landholder's) nearby are to the north. I would agree that the proposed development would not give rise to any significant effects from glint and glare on residential properties in the vicinity, principally due to the orientation of the proposed panels.
- 8.7.3 The planning authority had decided to refuse permission on the grounds of the effects of glint and glare on users of the surrounding road network. Reason No. 2 considered that it had not been demonstrated that glint and glare from the proposed development would not have a negative impact on users of the N25 and as such, would endanger public safety by reason of a traffic hazard. The Area Planner had accepted that the effects of glint and glare could be addressed by means of mitigation in respect of most cases, but remained concerned that it could not be ruled out in respect of road receptors. These concerns were echoed by Transport Infrastructure Ireland.
- 8.7.4 The first party response (12/04/17) made the following points:
 - The panels are oriented south (line of sun) and therefore away from users of the N25. Thus any views into the site would be towards the back of the panels and hence there would be no potential for glint and glare impacts.

- Views into the site from the north are limited and would be intermittent and fleeting. These views would be further reduced by means of the proposed landscape mitigation.
- It is acknowledged that there is some limited visibility from the north where existing hedging is poor, as evidenced in Viewpoints 3 and 4, but the appellant is confident that the implementation of the proposed landscape screening will effectively mitigate any glint and glare impacts.
- 8.7.5 I would agree with the appellant's conclusion that the proposed development is unlikely to result in glint and glare which would adversely affect road users on either the N25 or the R740, which would give rise to a traffic hazard.

8.8 Traffic and access

- 8.8.1 It is proposed to access the site via an existing farm entrance from the N25 immediately to the west of the ESB substation site. This entrance is close to the existing entrance to Ashfield House, home of the landowner, which is a tree-lined driveway further to the west. The access will be used for all construction related traffic as well as for maintenance and operational traffic. The proposed delivery route is not expected to necessitate any road improvements along the route. The construction phase is anticipated to be for a maximum of 10 weeks, during which the average number of HGV movements would be 6 per day. An on-site construction compound would accommodate a car park for construction staff. Traffic would approach the site from the west, utilise the roundabout (with the R740) and enter the site from the east. It is stated that all of the components can be transported on standard HGVs and there will be no abnormal loads associated with the development.
- 8.8.2 The TII raised concerns regarding the provision of a new access and/or intensification of an existing access onto a national primary road, which is contrary to policy to restrict access to national roads. However, the appellant has pointed out that the access is existing and that during the operational phase, access would be required on average every 3-4 months. It is also noted that the presence of the roundabout has the effect of slowing the traffic on approach, which means that the 100kph speed limit is of less significance at this location. Given the short duration and temporary nature of the construction period, together with the anticipated traffic levels and

arrangements set out in the Construction Management Plan, it is considered that the proposed development is not likely to give rise to a significant traffic hazard or to undermine the policy in relation to restriction of access to national roads.

8.9 Cultural Heritage

- 8.9.1 A Desktop Archaeological Assessment was carried out. The site does not contain any recorded archaeological monuments or zones of notification. However, there are a number of Recorded monuments and Protected Structures within 800m of the site, which are set out in Table no. 2 (Section 5.5 of Planning and Environmental Report). The assessment concentrated on the visual impact on these structures/monuments. It was concluded that the proposed development would not impact on any recorded or protected archaeological heritage due to the screening effect of vegetation. I would agree that the proposed solar farm is unlikely to adversely impact the setting of these protected structures/monuments by reason of the distances involved and/or screening by means of existing vegetation.
- 8.9.2 However, it is considered that there is also some potential for ground works to affect unrecorded sub-surface archaeology, and a programme of pre-development archaeological testing should therefore be required to be carried out by a suitably qualified archaeologist. It is considered that should the Board be minded to grant permission, that a condition to this effect should be attached to any such decision.

8.10 Drainage

- 8.10.1 The proposed drainage systems are stated to be adequate, (Section 5.3 of the Planning Report which accompanied the planning application). It is noted that the existing grass covered areas will only be marginally reduced, the additional impermeable area due to the development would be minimal (representing approx. 36% of the total site area) and that it is not anticipated that there would be a need for any significant drainage systems. It is stated that there would be no disturbance to the existing drainage regime and that mitigation measures will be provided during construction mainly in the form of silt protection controls.
- 8.10.2 The site is not located within a flood zone and there have been no recorded flooding events on the lands. It was found that the solar panels would not increase surface water run-off and that the hardstanding around the electrical infrastructure would increase run-off minimally. In light of the design of the proposed development, with

the proposed mitigation measures, it is considered that the proposal would not result in any significant increase in flooding, (or in any cumulative impacts), or in contamination of the receiving waters downstream.

8.11 Ecological Impacts

- 8.11.1 The Planning Report includes an Ecological Assessment comprising a desk top study and a field survey carried out on 9th April 2015. In general, the habitats recorded reflect the intensively farmed nature of the area, with improved grassland and arable crops (mainly tillage) dominating, contained within hedgerows and tree lines. There are no Annex I habitats and the key ecological receptors included Hedgerows, Treelines, Drainage ditches and Lowland Depositing Streams. Limited impact was anticipated as most biodiversity is concentrated within hedgerows and treelines, which will not be reduced. It is stated that the proposed development would have positive benefits for biodiversity as the intensive nature of the agricultural practices would cease and the biodiversity management plan would provide for a greater diversity of species of flora beneath the panels and enhancement of treelines and hedgerows.
- 8.11.2 The site is not located within any European or nationally designated site. It was noted, however, that there is a hydrological link to Wexford Harbour and Slobs SPA to the north via a small stream. The stream is stated to be stagnant in places and heavily vegetated. It was considered that as the construction would not produce any windborne or water borne contaminants that could affect the SPA, there would be no pathway for impact on the SPA. The only other designated site identified within the study area ("zone of influence") was noted as Lady's Island Lake SAC, which is approx. 5km to the south. It was considered that given the distance, there would be no impact on this European site. The only mammals recorded were rabbits.
- 8.11.3 Bird species recorded were mainly common garden birds, apart from Yellowhammer. Although it was noted that there would be a slight impact on Yellowhammer due to the removal of arable crops, an important source of food, there are plenty of similar habitats in the area. No evidence was recorded of use of the site by wintering wildfowl associated with the Wexford Harbour and Slobs SPA, such as Whooper Swan or Greenland White Fronted Goose, within the study area. It was acknowledged, however, that the survey was conducted in Spring, when most of the

wildfowl would have dispersed. Notwithstanding this, it was stated that as the site is maintained in stubble over winter, it was considered that stubble would be unlikely to be particularly attractive to wintering wildfowl. It was further considered that the site is unlikely to be a "stepping stone" for populations of mobile species such as birds from the SPAs. Thus it was concluded that there would be no impact, directly or indirectly, on the European site from the development.

- 8.11.4 In terms of impacts from the operational phase on birds, it was acknowledged that there was a slight risk of waterfowl being attracted to the solar farm due in part to its proximity to the Wexford Harbour and Slobs SPA. However, it was considered that this was an "undefined risk" and that the site is unlikely to be attractive to overwintering waterfowl. It was further stated that there is little scientific evidence for fatality risks to birds associated with overflying large solar arrays. This issue is discussed further in Section 8.12, Appropriate Assessment.
- 8.11.5 No bat roosts were recorded. It was acknowledged that the hedgerows and treelines would provide foraging for bats, but given that there were to be reinforced and enhanced, there would be no significant impacts on bats. It is also proposed to maintain a gap of 4m as a wildlife corridor between the hedgerows and the perimeter fence. It is considered that should the board be minded to grant permission, an appropriately worded condition(s) should be attached to any permission to ensure that no bat roosts are disturbed.

8.12 Appropriate Assessment

8.12.1 The site of the proposed development is not located within any European designated sites. The Appropriate Assessment Screening Report is confined to European sites which are present within the "Zone of Influence". This is not defined or justified, but appears to consist of a 5km radius of the development site. It identified 2 no. Natura 2000 sites within this radius, one of which is an SPA (Wexford Harbour and Slobs) and the other a cSAC (Lady's Island Lake). However, I estimate that there are at least 7 no. European designated sites within 5km of the site as follows:

Wexford Harbour and Slobs SPA (004076)	750m to North
Raven SPA (004019)	within 5km to North
Slaney River Valley SAC	within 5km to North

Tacumshin Lake SPA	within 5km to South
Tacumshin Lake SAC	within 5km to South
Lady's Island Lake SPA	within 5km to South
Lady's Island Lake SAC	within 5km to South

8.12.2 Having regard to the nature of the development, a 10km or 15km radius is generally considered to be appropriate, with one exception, that is in relation to bird flight paths, as the potential impact may be on an SPA which is greater than 15km away. It is considered that bird migration routes should be included in any impact assessment, as well as routes of birds travelling on a daily basis between roosting and feeding areas. The site is centrally located within a ring of SPAs and SACs (see Map No. 12 of Wexford County Development Plan). The Planning Authority report (AA) noted that there are 13 no. European sites within a 15km radius, five of which are SPAs. As such, the delineation of the buffer zone and identification of the designated sites in the AA Screening Report is not considered to be adequately comprehensive, particularly in respect of SPAs.

Hydrological link - source-pathway-receptor

- 8.12.3 The Screening Report states that as no part of the site or development lies within or crosses a European site and that the closest site is 750m distant, there is no pathway for impact. It is further stated that notwithstanding the hydrological link to the South Slob of the Wexford Harbour and Slobs SPA, the construction phase, which will involve principally piling, will not produce any wind borne or water borne contaminants that could affect the SPA. The Ecological Assessment submitted with the application indicated that the stream is a slow moving watercourse. The stream traverses the site at the southern end, dividing the westernmost northern and southern fields, and continuing north-westwards towards the N25. From here it seems to join a further channel leading to the drainage channels associated with the polderlands that form the South Slob of the SPA. The geographical distance between the site and these drainage channels is approx. 750m
- 8.12.4 Wexford Harbour and Slobs is described on the NPWS website as two empoldered areas of farmland, mainly arable and pasture grassland that was created by the building of dykes in the 1800s. It is stated that the network of drainage channels drain into a main central channel and when the water reaches a certain height, it is

pumped into the harbour. It is considered, therefore, that the flow rate of the stream is likely to be variable and dependent to some extent on the manually operated devices controlling the hydrology of the area. Thus the stream, could be quite fast moving at times and is, therefore, considered to be a more significant sourcepathway-receptor linkage than indicated in the Screening Report. In addition to the issue of uncertainty discussed at 8.12.2 above, I would be reluctant, therefore, to screen out the SPA to the north on the basis of lack of proximity and of a hydrological link. However, the applicant has screened it out.

- 8.12.5 The potential impacts on the Wexford Harbour and Slobs SPA would, in my opinion, include indirect impacts via water quality arising from construction works. The main impacts on water quality were identified in the amended Screening Report as siltation from run-off and/or eutrophication (from fuel spills or contaminated run-off). This could cause degradation of aquatic or associated Habitats which could also result in degradation of habitat quality for wintering waterfowl and birds which are qualifying interests of this SPA, (and of many of the SPAs in the vicinity of the site). Mitigation measures are set out in Section 1.3.2 of the amended Screening Report and are also contained in various other documents submitted to the planning authority such as the Planning and Environment Report and the Biodiversity Management Plan. These include silt protection measures and the creation of a 5m buffer zone around drainage ditches and hedgerows.
- 8.12.6 It is considered that the measures proposed are generally standard measures based on good practice and published guidelines. As noted in section 8.10 above, the proposed drainage measures are quite limited and it is not anticipated that the existing drainage regime will be significantly altered. I would agree, therefore, that provided the proposed mitigation measures are implemented to prevent contamination, siltation or sedimentation of any watercourse, the proposed development is not likely to have a significant effect on the European site, Wexford Harbour and Slobs SPA, having regard to the site's Conservation Objectives.

Loss of foraging land

8.12.7 It can be seen from the Site Synopses for the above listed European sites that the area in general, and the SPAs located within 15km radius of the site in particular, are of significant ornithological interest, particularly for wetlands and waterbirds and

especially during the winter months. Many of the sites support an excellent diversity of wintering waterfowl and some are considered to be amongst the most important ornithological sites in the country for breeding and/or wintering birds. The Stage 1 Screening report initially screened out all Natura sites, apart from Wexford Harbour and Slobs SPA mainly on the basis of distance. The potential impacts in terms of loss of foraging land and mortality risks were then considered further in respect of this SPA. The Amended AA Screening Report states that there is no evidence that the site is being used by foraging birds from a Natura site. It goes on to say that

"Considering the separation distance of 750m from the nearest Natura site, how intensively farmed the land is and the large amount of alternative foraging land available closer to the SPA, it is considered that the potential impact significance would be low/negligible".

- 8.12.8 The Ecological Assessment also addressed this matter. It was stated that Geese and Swans tend to feed on arable land but are more likely to utilise winter cereals than stubble. Given that spring cereals are grown on the site with overwintering stubble, it was considered that it would not be attractive to wintering waterfowl. It was also stated that no evidence was found of such usage on the April walkover survey. The NPWS, however, has raised concerns about the adequacy of the assessment given the close proximity of the SPA and the potential impacts on the Qualifying Interests of the designation, especially with regard to flight lines. The Site Synopsis lists a considerable number of Qualifying Interests including Whooper Swans, Greenland White-Fronted Goose and Bewick's Swan. These and many other QI's are also listed in the Site Synopses for the other SPAs which encircle the site. I note that there is a supporting document on the NPWS website which relates to specific surveys that were carried out in respect of the Conservation Objectives for Wexford Harbour and Slobs SPA and Raven SPA. This document contains information about the foraging habits and distribution of many of the QI's. Although it is pointed out that this information is not definitive, (as it is based on a limited number of surveys), it is nonetheless instructive. (See a few examples in extracts from Waterbird Survey Programme 2009/10 – Waterbird Distribution Discussion Notes', attached).
- 8.12.9 I note for instance that most of the wintering swans and geese are described as herbivores and that they feed on aquatic plants, grasses and agricultural plants such as grain and vegetables, but also feed on agricultural stubble and fodder beet. In

addition, Golden Plover and Lapwing also tend to feed on grass, winter cereal and stubble. Thus the justification or evidence for ruling out the potential use of the development site as foraging land associated with the nearby SPA, and potentially with the other SPAs within 5km of the site, is not clear. It is further noted that the walkover survey was based on a single day which was outside of the main winter season, when wintering wildfowl would have dispersed.

Bird mortality/collision risk

- 8.12.10 It is generally accepted that there is a risk of bird species mortality due to collision associated with large scale solar arrays, as solar farms can be mistaken as water bodies by birds and aquatic insects. However, the issue of bird flight paths over the site was ruled out as a source-pathway-receptor on the basis of a statement in the Screening Report that the development posed no risks in terms of moving parts or height of structures and that there was no evidence to suggest that the site is regularly over-flown by water fowl. It is not clear on what basis this conclusion was reached and whether the evidence relied upon included any bird surveys (over an extended period of time and linked to overall populations and their dynamics), which would have provided information regarding bird migration routes and routes between roosting and foraging areas. It is considered, therefore, that considerable uncertainty remains regarding this issue as the information submitted is based on a single walkover survey, (with no information regarding methodology etc.), and no evidence is provided to corroborate the statements regarding the absence of flight paths overhead. Notwithstanding this, the appellant has suggested that in the "unlikely event that bird mortalities are recorded, further mitigation may be put in place to prevent recurrence". It is considered that this is vague and does not address the issue of uncertainty.
- 8.12.11 It is acknowledged that the significance of the loss of this site alone as a foraging area is unlikely to be great in terms of displacement, given the availability of alternative feeding areas and the nature/use of the site. However, it could be of some concern when combined with any flight paths overhead and the potential for incombination effects with other solar farms in the immediate vicinity of the site, (4 no. within 1km). It is noted that the Board (in PL26.247366), had dismissed the potential for the proposed solar arrays to be mistaken by birds as a water body, due to the design of that particular solar farm with intermittent gaps, which it was considered

would reduce the homogeneity of the surface area. It should also be noted that this solar farm was at a considerably greater distance from a European site and that the proposed development had been subject to a Stage 2 Appropriate Assessment. Notwithstanding this, it is considered that the issue of the potential for significant effects on bird species associated with Special Protection Areas has been ruled out on the basis of poorly substantiated scientific knowledge. As such, the Board may wish to seek further information on this matter, particularly in terms of the potential for in-combination effects with other solar farms in the area on the mortality risk to wildfowl. In the absence of this further information, it is difficult to be confident that impacts on wintering wildfowl, which are qualifying interests for so many European sites (SPAs) within a 15km radius of the site, would not be significant.

- 8.12.12 In conclusion, it is considered that the information contained in the Appropriate Assessment Stage 1 Screening Report is considered to be inadequate in respect of the issue of the potential impact on key species (wildfowl) in terms of disturbance (foraging/flight paths) and key density reduction (collision/mortality). As a result, determination on whether or not likely significant effects on a European site within a 15km radius of the site, in view of the Conservation Objectives of the various SPAs within this zone, cannot be reasonably ruled out on the basis of objective scientific information. I do not consider, therefore, that the Board can be satisfied that the proposed development, individually or in combination with other projects, would not be likely to have a significant effect on these SPAs whose Qualifying Interests include wintering wild fowl, that is, in respect of the following European sites : Wexford Harbour and Slobs SPA, Raven SPA, Tacumshin Lake SPA, Lady's Island Lake SPA and Ballyteigue Burrow SPA, in view of the conservation objectives of these sites.
- 8.12.13 Given that there are other more substantive reasons for refusal highlighted in my assessment, I intend to cite the above as a reason for refusal. However, should the Board be minded to grant permission, it is considered that further information should be required from the applicant to remove any uncertainty as to whether the sites are used by wintering wildfowl and/or whether the flight paths of such birds overfly the sites. Copies of the Site Synopses for the above sites are appended to this report.

9 Recommendation

9.1 It is recommended that planning permission be refused for the reasons and considerations set out below.

10 Reasons and Considerations

- 1. Having regard to -
 - (a) The competing policy objectives to increase electricity consumption from renewable energy sources contained in the Government's White Paper The Transition to a Low Carbon Economy (2015), and to increase the value of primary production and exports in the agri-food sector contained in the Government's Food Wise 2025 and in Policy ED17 of the Wexford County Development Plan 2013-2019;
 - (b) The absence of any current strategic or spatial policy guidance to direct such development to the most appropriate locations and the commitment of the planning authority in Policy EN10 to prepare a Renewable Energy Strategy within the lifetime of the current County Development Plan;
 - (c) The location of the site in 'Lowlands' Landscape Character Unit which is characterised by gently undulating lands with higher levels of population and more intensive agriculture due to the high quality and fertility of soils;
 - (d) To the nature of the lands which form substantial parts of operational farms engaged in productive agriculture;
 - (e) The scale of permitted solar power generation developments in the immediate vicinity of the site;

It is considered that the proposed development, which would occupy highly productive agricultural lands would by reason of its scale and extent together with other similar developments in the wider area, undermine the agricultural sector in the area and would result in piecemeal and premature development pending the adoption of a Renewable Energy Strategy for the area. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

- 2. The proposed development, is located within the Preferred Route Corridor for the proposed Oilgate to Rosslare Harbour Road Improvement Scheme, which forms part of a Trans European Network linking Rosslare Europort with Dublin-Belfast-Larne (E01) and Waterford-Cork (E30), the protection of which is an objective of the current Wexford County Development Plan, which is in accordance with the Government's Guidelines on Spatial Planning and National Roads (2012). The proposed development would, therefore, be premature pending the determination by the planning authority of a final road layout for the area, would materially contravene Objectives T14 and T15 of the Wexford County Development Plan 2013-2019, and would be contrary to the proper planning and sustainable development of the area.
- 3. On the basis of the information provided with the application and appeal, including the Appropriate Assessment Screening Report and Amended Screening Report, and in light of the assessment carried out above, the Board is not satisfied that the proposed development, would not have a significant effect, either individually or in combination with other plans or projects, on the following European sites, in view of the Conservation Objectives of those sites.

Wexford Harbour and Slobs SPA 004076

Raven SPA 004019 Lady's Island Lake SPA 004009 Tacumshin Lake SPA 004092 Ballyteigue Burrow SPA 004020

Mary Kennelly Planning Inspector

26th April 2017