



An
Bord
Pleanála

Inspector's Report PL26.247217.

Development	Ten year permission for a solar PV development on a site of 89.46 hectares.
Location	Ballyminaun Big, Grahormick, Hilltown, Jonastown, Newhouse, Garryhask, Gibboghstown, Crosstown, Killinick, Tomhaggard, Co. Wexford.
Planning Authority	Wexford County Council.
Planning Authority Reg. Ref.	20160690.
Applicant	Highfield Solar Limited.
Type of Application	Permission.
Planning Authority Decision	Refuse.
Type of Appeal	First v Refusal
Appellant	Highfield Solar Limited.
Observer	Mary Roche Fenlon.
Date of Site Inspection	5 th December 2016.
Inspector	Mairead Kenny.

1.0 Site Location and Description

- 1.1. The site which is located 3 kilometres south of Killinick, County Wexford comprises a plot of land of 89.46 hectares separated into two distinct portions. The development site is currently used as agricultural land for the production of crops and for cattle grazing. The site is deemed to be of moderate grade agricultural value. It is a shallow sloping agricultural plot at elevation of 8 to 27 metres AOD. The eastern and western portions of the site are separated by a public road.
- 1.2. As set out on the site plan (and Figure 1.0) the majority of the agricultural land will remain available for vegetation or plant growth and the specific proposal is to grow a meadow of native grasses which will contribute to the biodiversity of the area.
 - 1.2.1. There are no recorded monuments within the development area. There are 30 recorded monuments within 1km. There are no protected structures within the site but 23 no. are found within 3km. At one of these sites (Bargy Castle) there is also a national monument. Within 1km of the site are 10 no. buildings or structures which are listed on the NIAH; all are described as being of regional importance.
- 1.3. The applicant's submission indicates that there are no public rights of way within the site. The lands are accessed by a number of private lanes, which are relatively narrow and agricultural in nature. The site is traversed by an overhead electricity line, which I was advised was never operational and which would appear to relate to a previously permitted windfarm which was never constructed.
- 1.4. Photographs of the site and surrounding area which were taken by me at the time of my inspection are attached.

2.0 Proposed Development

- 2.1. The significant elements of the development are described below.
- 2.2. The proposal comprises a Solar PV Energy Development straddling two plots of land. Its **main elements** are:
 - A single storey electrical substation building and electrical compound.

- A single storey electrical substation building.
 - Electrical transformer/inverter station modules.
 - Solar PV panels ground mounted on steel support structures.
 - 6km of access tracks using existing lanes and constructing new tracks.
 - Fencing around the entirety of the two plots of land.
 - 13km of electrical cabling, ducting and ancillary infrastructure.
- 2.3. The **permission is requested to be for a 10-year period** in order to allow for possible lengthy timescales for delivery of electricity grid infrastructure. The proposed **lifespan is projected to be at least 30 years**.
- 2.4. The **solar panels will be assembled in rows** over the development area. The photo voltaic modules will be mounted on galvanised metal racks. The racks will form rows which are known as arrays and which will run east to west across the site and be south facing. The panels will be fixed at an angle of 22 to 30 degrees to the horizontal. The array will be mounted 0.7 metres in height at its lowest point and 3.2 metres in height at the upper point. Each array will be mounted onto a simple galvanised metal framework allowing vegetation to grow below the panels. Figure 2.1 of the supplementary documentation refers. The rack variants proposed include arrangements of up to 3 panels in portrait orientation or 6 panels in landscape orientation and subject to the maximum height of 3.2 metres. The precise solar panel arrangement and rack variant to be used will be established prior to construction and dependent on commercial and technical issues.
- 2.5. The **metal framework will be driven directly into the soil** removing the need for deep foundations. No concrete works are required. The piles would be easily removed. A small gap between modules will allow water to drain.
- 2.6. The proposal as shown on the site plan includes locations for **two substations** in the eastern and western portions respectively. The grid connection voltage may be 20kV or 30kV. A typical 20kV substation building is shown in the application drawings. It would be a block structure with a rendered finish and tiled pitched roofs and of dimensions 15.4 metres by 5.4 metres by 4.2 metres to the apex. All cabling would enter the building underground.

- 2.7. The **possibility of a 38kV substation building and compound is included** in the application. The dimensions of such a structure would be 18.6 metres by 5.83 metres by 4.62 metres. This would be set in a compound enclosed by a palisade fence and of area 25 metres by 55 metres. All cabling would enter the building underground. A 38kV substation building would include a washroom. This would be connected to an external wastewater holding tank and subject to a regular maintenance contract.
- 2.8. The development includes up to **39 inverter and transformer stations** which will be located to facilitate the correct voltage for connection of the solar farm to the local grid network.
- 2.9. The design of the scheme includes where possible maximum use of existing site tracks and existing site entrances. In all 7 no. site entrances are described in Section 4.7 of the applicant's submission. In all **6 kilometres of new or upgraded site track** is required in order to access the inverter/transformer locations from the site entrances indicated. The site entrances involve some which are to be used on a permanent basis and some which are restricted to commercial phase traffic. The works identified in the planning application also include proposals to upgrade some of the tracks and roadways to benefit landowners using the laneways. Existing routes will be used for 2 kilometres. Any new tracks required will be constructed to a width of 4 metres.
- 2.10. The **site drainage** will use the existing channels and where appropriate will be enhanced or modified. Rainfall will discharge directly from the solar panels to the existing ground surface and the greenfield run-off rate will not significantly increase.
- 2.11. Alongside the track **ducting will be laid and into this the internal electrical and communications cables will be installed**. In general **site tracks will be used for the purposes of providing standing areas** for load bearing cranes. Some localised temporary widening will also be required to facilitate the crane operations.
- 2.12. A security fence around the perimeter of the proposed development is included. The **site will remain fenced and CCTV cameras may be located on poles of up to 5 metres in height. Motion activated lighting will be in place at the substations** for safety and security.

- 2.13. A number of temporary storage compounds for the storage of solar panels will be required. Two **spare parts containers** would be retained on site for the operational phase.
- 2.14. The exact location of **site tracks will be informed by geotechnical surveys and detailed designs but they will be within 20 metres** of the location shown on the attached site layout plans.
- 2.15. The **connection to the electricity grid will be by way of overhead or underground** cables and subject to technical, safety and any planning requirements. An **indicative study area has been used to identify potential grid connection routes** for the purposes of appropriate assessment screening. Appendix 1 and 2 refer. The connection is shown terminating at the Killinick Substation which is 3.5 kilometres to the north-east of the site.
- 2.16. Delivery of components to the site will be by way of the N25 primarily. Appendix 8 outlines envisaged HGV volumes and transport arrangements.
- 2.17. In terms of **site selection criteria**, the main issues identified by the applicant are the solar resource (Appendix 3 refers), proximity to existing electricity grid infrastructure which is approximately 3.5 kilometres away. Site selection took into account separation from residential properties being over 22 metres, the ecological value of the site (Appendix 1 refers) and the archaeological, architectural and cultural heritage. The site was selected following a high level screening process looking at the general region and the application of these criteria.
- 2.18. The proposed development includes a proposal for a **community contribution in the amount of €200 per hectare per annum** to be invested locally during the lifetime of the project representing up to €534,000 over the lifetime of the project.
- 2.19. Public **consultation prior to the application** involved circulation of all properties within 500 metres of the proposed solar panels (60 households) and a public information day. A number of concerns identified are addressed in 6.1.9.
- 2.20. The application **submissions include an ecological impact assessment (EclA)**. This includes **an appropriate assessment screening report**. It sets out construction phase measures and concludes that residual impacts will be negligible. Buffers have been applied to badger setts identified in the EclA.

- 2.21. The **landscape and visual impact assessment** report outlines the extremely limited impacts of the development particularly after the early phases. The effect on landscape character would be extremely limited. Long distance views of the site would be of negligible magnitude. The eight viewpoints from which photomontages were prepared are indicated.
- 2.22. A **glint and glare effect description** is also provided. Given the topography of the site and the recommended hedgerow maintenance and the proposed planting the impacts of the development on local residential receptors are anticipated to be limited and therefore of low significance. The impact on local roads is limited and considered negligible.
- 2.23. Section 10 of the planning application submission deals with **noise impact assessment**. Any noise generated is limited to the construction phase. In the operation phase solar panels will be completely silent. The transformers to be used will typically use decibel rating of 50 dB(A) at 1 metre. The housing surrounding the transformers combined with the distances to the nearest receptors result in a significantly reduced noise. No noise will be produced from the inverter/transformer stations at night.
- 2.24. In terms of impact on **site geology** the development will require minimal removal of soil, subsoil and bedrock. This will be a short-term slight negative impact. Standard construction practice will mitigate against any significant impacts. In the operational phase there will be no significant impacts on the site geology, surface water quality or groundwater quality.
- 2.25. The preliminary **flood risk assessment mapping** indicates that there is very limited local flood risk around the main watercourses serving the site. The site is deemed to have a negligible risk of flooding. The transformer/inverter stations and substations together with the solar panel arrays are all set back from the main watercourses.

3.0 Decision

The Planning Authority decided to refuse permission for three reasons.

- Referring to Section 14.4.3 of the County Development Plan Objective LO4 – due to the overall scale, siting and elevated nature the proposed development

fails to have regard to its setting in the landscape and therefore would have an adverse effect on the visual amenity of the area.

- Not satisfied that the proposed development would not adversely affect residential properties by glint and glare and considers that proposed development could endanger public safety by reason of traffic hazard as it has not been demonstrated that glint and glare would not have a negative impact on users of the regional roads (R739 and R736).
- Inadequate information submitted in relation to environmental impacts on water quality and wintering water fowl arising from the grid connection proposals.

4.0 Grounds of Appeal

4.1. The main points of the first party appeal include:

- Permission was previously granted at the adjacent site for a wind farm which permission has now lapsed.
- Although the site is of reasonable scale the maximum height of the solar panels is 3.2 metres and the visual impacts are limited in nature.
- It is unclear which areas are of particular concern to the Planning Authority with respect to being overly elevated. The site is in a lowland unit, is mostly surrounded by mature hedgerows and landscaping proposals are presented.
- The conclusions of the first party landscape architect in relation to the development are that the proposal is satisfactory with respect to visual impact and landscape character.
- With respect to the western parcel of land and its elevated nature this was a particular concern of the Planning Authority.
- Viewpoint 3 shows the effects immediately adjacent the site. Other viewpoints show the limited visibility of the site.
- The viewpoints were chosen following a site visit and technical modelling and the visual impact of the proposal is considered to be not significant and any impacts are constrained to the immediate locality of the site.

- The successful development of solar projects will be limited by a number of matters including access to the distribution system and the site is within 3.5 kilometres of Killinick 38kV substation. Consideration of suitability of substations combined with solar yield underpins the suitability of the site.
- HSL note the proximity of the site to infrastructure completed for the permitted wind farm for which permission is lapsed - that infrastructure remains unused.
- In relation to Reason No. 2 the comments from the inspector's reports under previous appeals indicate that glint can be mitigated and that glare is not especially relevant to solar panels especially in Ireland.
- The glint and glare assessment is at a suitable level of detail for a site of this scale and in excess of assessment for other permitted developments.
- The modelled impacts at first floor level typically and of durations between 0 and 16 minutes significantly limit any adverse effects on residential amenity. This information was available at the well-attended consultation day.
- The limited impacts are a worst case scenario and will be further reduced by weather and by existing and proposed hedges.
- The above is considered relevant to residential receptors and to the regional road network. However, further modelling evidence is now provided in the addendum report to the glint and glare assessment.
- Presence of hedgerows between Points 1, 2, 14, 15, 16, 17 has not been included in the modelling and their presence should provide further comfort.
- Regarding Reason 3 with respect to the information provided on the environmental impacts of the grid connection assertions of the Planning Authority concludes there is no potential for significant effects to Natura sites.
- The final design and connection methodology is subject to a number of items outside the control of the appellant but documents included an assessment of a reasonably confined study area between the site and the most likely termination point (Killinick Substation).
- The Planning Authority appear to agree on the conclusion of the EIA Screening Report that when assessed against the criteria detailed in the EIA Directive and

the PDR the development is unlikely to have significant effects sufficient to trigger a requirement for EIA.

- Suitable construction practices and environmental controls are identified in Section 3.1.2.1 and 3.1.2.2 of the AAS completed by WSI for underground cabling and for overhead lines respectively.
- Maintenance cleaning of solar panels is not envisaged.
- Regarding IFI observations on file – both the AA and EclA reference suitable construction practices with respect to management of construction works, potential siltation, storage of oils, fuels, greases and other hazardous wastes and in relation to the design of river crossings all of which can be developed in consultation with IFI and in accordance with guidance.
- Regarding the biodiversity comments security lighting will be intermittent and localised and allows for passage of small animal movements.
- Siting of badger gates has been a condition of planning permission in a number of permissions granted by the Council.
- Suitable management of solar farms can lead to an increase in the diversity and abundance of broad leaved plants and insects. The scheme will contribute to renewable energy targets and associated environmental benefits and also contribute to the implementation of the All Ireland Pollinator Plan 2015 – 2022.
- Vegetation will be managed by sheep grazing¹ or active moderate low intensity mowing to prevent encroachment of rank grassland or scrub species.
- Regarding the concerns of two residents in the locality suitable construction management will be developed on the L7117 and any damage will be reinstated and a road bond put in place with the local authority.
- Regarding the fence within reference cell F7/G7 this is approximately 50 metres north of the observer's dwellinghouse and there is an existing mature hedgerow at this location.

¹ This appears to be the only reference to sheep grazing, which appears to be for maintenance rather than productive agricultural uses primarily.

- Enclosed five annexes refer. These address the Decision, the Glint and Glare Assessment Addendum Report, the Appropriate Assessment Screening Report Determination, an Addendum Report for the Underground Cable Route Ecological Assessment and Annex V the effects of solar farms on local biodiversity.

5.0 Response to Appeal

5.1. The Planning Authority notes in response to the appeal.

- Outlines site context and planning history including 2 no. permissions refused permission but within the appeal period, 2 cases currently subject to appeal and 8 no. permissions granted.
- In the absence of national guidance and any specific reference to solar farms for the purposes of EIA the application has been assessed on its merits.
- The scheme would be the largest of its nature in the country at present.
- Given the scale and siting of the proposed development and the elevated nature of the site in particular the western parcel the Planning Authority is not satisfied that the development will not have a detrimental impact on the landscape and residential amenities of the area.
- Glint and glare would have an undue negative impact on the residential amenities in the area.
- Glint and glare are of concern from a traffic safety perspective in terms of the regional road in the absence of a detailed assessment.
- Comments of DAHRRGA especially need to be noted also in relation to AA screening.
- The Council has a record of being proactive in the promotion of renewable energies but the support of renewable energies is not *carte blanche* and permission should be refused.

6.0 Observation

6.1. The observation by Mary Roche Fenlon includes the following comments.

- The site notice (No. 6) is at a private lane in my ownership and rights of way are for agricultural and residential purposes only.
- The applicant has not consulted me.
- My kitchen, living room and rear bedrooms look onto the site from an elevated point.
- Viewpoints 6 and 7 are enclosed and are of interest.
- No record of a glint and glare assessment.
- The Council's concerns regarding impact on dwellinghouses are noted.
- The Council's concerns regarding the impact of the western part of the site is shared by me.
- The site is not outside any designated settlement but the western part is close to Ballycogley Village.

7.0 Planning History

- 7.1. The application submission refers to recently permitted applications approximately 2.5 kilometres to the north-east. These applications reg. ref. 20160008, 20160009, 20160644 and 20160520 are all for developments on sites of 10 hectares or over.
- 7.2. Under PL26.244351 permission was granted by the Board for a 5MW development at a site of 10 hectares at Tintern in southwest Wexford.
- 7.3. PL26.247179 and PL26.247176 both of which are in the Clonroche / Enniscorthy area and on sites of 20 hectares and 13 hectares are on appeal.
- 7.4. There is another live appeal under PL26.247366 at a 9 hectare site.
- 7.5. Planning Reg. Ref. 2016/0443 refers to an incomplete/invalid application at this site for a similar development.

8.0 Planning Policy Context

- 8.1.1. The foregoing sets out a brief outline of key recent publications and policy provisions which I consider are most relevant to this case.

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

- 8.2.1. This is a research paper which was funded by the SEAI . It does not purport to be a policy document. The report contains a set of planning policy and development guidance recommendations, which it is suggested 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.
- 8.2.2. It notes that over a hundred applications for USSPV developments have been lodged with planning authorities by October 2016 and that an estimated 594 MW have been granted or are on appeal. The combined site area for these schemes is 1331.9 hectares. This constitutes 0.03% of the area of land available for agriculture.
- 8.2.3. Recommendations include that the development plans set out policy objectives to support USSPV development and put in place development management standards. Clear policy guidance can alleviate public concerns. Agricultural lands are listed amongst the list of types of locations where such development is particularly suited.

8.3. Energy White Paper - Transition to a Low Carbon Energy Future 2015:2030.

- 8.3.1. This comprises a complete energy policy update. It sets out a range of actions that the Government intends to take and reiterates a previously adopted target of achieving 40% of electricity generation by 2020 in renewable forms. The document emphasises the role of new technologies and the role of the citizen. Paragraph 137 refers to the potential of solar energy.

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. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. Solar technology 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.

8.3.2. Paragraph 171 sets out the goal 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. This plan will give guidance to those seeking development consent in relation to larger-scale onshore renewable electricity projects, and to planning authorities, statutory authorities and citizens.

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

8.4.1. Consultation has completed and the final document is awaited. The document outlines a process to identify potentially suitable land areas for large scale generation of renewable electricity. The ultimate aim is the identification of areas generally deemed suitable for locating large scale energy projects (over 50MW). The information would then be incorporated into any revised NSS, as well as into regional and local planning documentation.

8.4.2. Up to 4,000MW of renewable energy generation capacity will be required to allow Ireland meet its 40% renewable electricity needs for 2020. The report notes 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.

8.4.3. Section 5.1.3 refer to solar power noting that the

The 2010 NREAP does not envisage solar power making a contribution to Ireland's 2020 renewable electricity targets.

However, there has recently been a significant decrease in the cost of solar PV panels and 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.

- 8.4.4. Table 1 page 15 shows the contribution of solar on an all-island basis in 2014 was 5.6MW of a total of 3,194 MW renewable capacity in situ.

8.5. Food Harvest 2020

- 8.5.1. This identifies access to land as a critical issue for a range of agricultural sectors. The high cost of land and the fragmented small scale of holdings is identified as placing Irish cereal growers at a disadvantage.
- 8.5.2. Wind energy is described as a technology that will not interfere with agricultural activity.
- 8.5.3. Farm-level developments such as installation of renewable energy generators (wind/solar) should be encouraged. This is referenced in the section in relation to the dairy industry.
- 8.5.4. Opportunities for renewable energy should be exploited where possible but care is required to ensure no conflicts with environmental sustainability requirements, food security and with other industries.

8.6. National Landscape Strategy for Ireland 2015-2025

- 8.6.1. The National Landscape Strategy was published by the Department of Arts, Heritage and the Gaeltacht in June 2015.
- 8.6.2. The objectives are to implement the European Landscape Convention by integrating landscape into our approach to sustainable development, to carry out an evidence based identification and description of the character, resources and process of the landscape, to provide a policy framework which will put in place measures at a

national, sectoral (including energy) and local level to properly manage and plan and take advantages of opportunities to implement policies that are mutually reinforcing and avoid conflicting policy objectives.

- 8.6.3. The strategy identifies concerns relating to siting of national infrastructure. It aims to provide a high level policy framework to achieve balance between the protection, management and planning of the landscape.
- 8.6.4. The strategy sets an objective of compiling a National Landscape Character Assessment. This is identified under the Implementation Programme as part of Phase One – years 1-5.

8.7. Wexford County Development Plan

- 8.7.1. Objective EN07 is to favourably consider proposals for renewable energy subject to compliance with standards in Chapter 18.
- 8.7.2. 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).
- 8.7.3. Section 11.3.5 refers to Solar Power –providing a description of the technology.
- 8.7.4. 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.
- 8.7.5. 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.
- 8.7.6. 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.
- 8.7.7. Consideration of siting, design and landscaping is another over-arching objective for all developments under Objective L09 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.

- 8.7.8. There are no listed views in the vicinity of the site. There are no protected structures within the site.
- 8.7.9. Section 6.4.6 outlines the importance of agricultural in the local economy including for employment. ED17 is to promote the continued development of food production and processing. Other policies refer to diversification.

8.8. National Inventory of Architectural Heritage

- 8.8.1. Within 1km of the site are 10 no. buildings or structures which are listed on the NIAH. At one of these sites (Bargy Castle) there is also a national monument.

8.9. Natura Sites

- 8.9.1. The nearest sites designated under the Habitats Directive are the Wexford Harbour and Slobs SPA, Tacumshin Lake SAC and SPA and Lady's Island SAC and SPA.
- 8.9.2. I attach a map which is taken from the website of the National Biodiversity Data Centre which shows the sensitivity of bird species to windfarms. This has some relevance to the current case insofar as it identifies areas where habitat loss and potential collisions including with grid lines are most likely to impact on birds of interest. I consider that it highlights the relative importance of this part of the country for birds. The background material also refers to the increasing importance of the south-east for some species.

8.10. UK Guidance

- 8.10.1. There is a range of UK Guidance which is described in more detail under various documents under PL26.244351. This guidance is relevant only as background.
- 8.10.2. The main guidance notes are **Planning Practice Guidance for Renewables and Low Carbon Energy (DCLG 2013)** and **Planning Guidance for the development of Large-scale Ground mounted Solar PV systems (BRE 2013)**. Both refer to the desirability of preserving good agricultural lands and set out issues and mitigations.

9.0 Assessment

9.1. Overview

9.1.1. I consider that the main issues in this case can be considered under the following headings:

- Principle and planning policy
- Requirement for EIA
- Landscape and visual amenity
- Appropriate assessment
- Residential amenity
- Ecology
- Other comments
- Planning conditions.

9.2. Principle and planning policy

9.2.1. I first consider the principle of the development from a strategic point of view particularly in relation to national policy.

9.2.2. At a strategic level the proposal is presented as supporting the national objective to achieve the target of 40% electricity generation from renewable sources by 2020. The submission is that achievement of this task will require a contribution from developments such as this proposal, which can be delivered without the necessity for construction of significant transmission grid and the associated delays.

9.2.3. In relation to the delivery of renewable energy without undue delay, I consider that the applicant's case is undermined by the request for a ten year permission, which is stated to be required for the purpose of the grid connection. I accept the point that this type of development can be put in place quickly once the grid connection is available.

- 9.2.4. The applicant's submission based on national policy documents is that the achievement of the required further 1500MW of electricity generation² from renewable sources is likely to require a contribution from all forms of renewable energy and that the solar industry may play a significant contribution in this regard.
- 9.2.5. The research paper on USSPV indicates that 594MW of solar energy capacity has been permitted or is on appeal. The Board is referred to the stated capacity of 5.6MW in situ on an all-Ireland basis in 2014. Based on these figures it is clear that there is considerable potential for the sector in meeting targets. It also signifies the extent of the surge of applications for solar PV developments in this country at present.
- 9.2.6. At a local level there are currently 4 no. proposed solar developments on appeal in Wexford alone at the time of writing. An examination of the pattern of applications made to date indicates that the majority (7 no. proposals) are south of a line between Rosslare and Waterford city but two of the larger schemes are further north in the centre of the county.
- 9.2.7. While the southern coastal strip of the country has been identified as having the highest solar radiation there is potential for solar energy developments throughout much of the country and the Board has permitted one such development near Edgeworthstown in Longford. As outlined in the Inspector's report on that case:

It is stated by the applicant that PV cells are driven by visible light rather than sunshine and that Ireland gains from long hours of daylight. It is also stated that solar PV cells respond to both direct radiation (from sunlight) and diffuse radiation (through clouds). By way of comparison, it is stated that Ireland's radiation levels are 78% of those in Madrid in Spain.

² The minimum requirement of 3800MW from renewable sources is referenced in section 3.4.1 of the application submission. The wind capacity installed and in construction is stated to be 2,300 MW meaning that a further 1,500MW is required from renewable sources.

- 9.2.8. There have been recent media reports of a largescale proposal under consideration in addition at Rhode, Co. Offaly and Bord na Mona has identified the sector as one which it is to investigate.
- 9.2.9. The context for consideration of the current appeal therefore is that while it is positioned in the part of the country which receives most horizontal irradiation, development at other less favourable locations appear also to be very viable. The question arises as to whether the location of such developments on lands, which are in relatively intensive agricultural uses is an appropriate way forward.
- 9.2.10. The Board is tasked with determining this appeal in the context of a national and local policy vacuum. The absence of statutory guidance has not to date precluded the Board from granting permission for developments of this type. In my opinion due to the nature and siting of the current proposal a grant of permission in the absence of a clear policy direction would not be in accordance with the proper planning and development of the area.
- 9.2.11. Regarding the nature of the proposal it is remarkable for its scale. UK guidance would identify this as a 'very large' project and the planning authority identifies the proposal on a 89.5 hectare site as being the largest in the country to date. By comparison with other projects for which an estimated capacity output was provided, I suggest that this project might give rise to 45MW approximately.
- 9.2.12. The nature of the proposal involves the use of land instead as a wildflower meadow. No explanation is given for this choice in this case. It is perhaps relevant that the existing form of agricultural activity would not be generally compatible USSPV. UK guidance notes that while sheep and fowl would be generally compatible with this type of development, large animals are not.
- 9.2.13. Not only would the development sterilise lands from agricultural uses - the scheme also effectively results in some farm fragmentation. The lands identified within the site boundary comprise part of other farm holdings in some cases - a larger area outlined in blue is also identified on the application submissions. The future use of the remaining farm lands and the impact on the viability of the future farming enterprise on the overall farms is not clear. Whether those lands would retain a viable agricultural use as part of a smaller holding is an issue. The siting of the solar panels also may be on the lands which are most suited to agricultural production.

- 9.2.14. I submit that the industry is emerging in this country at a rapid pace and largely in the absence of planning policy, each case being considered on its own merits at a local level but without any overarching guidance. Various government publications have referenced an intent to introduce strategic guidance including guidance with a national spatial dimension.
- 9.2.15. In relation to land use and the rural economy, I consider that the current case due to its nature, scale and location would set an undesirable precedent for similar developments. My opinion is that when considered at a cumulative level there is no clarity relating to the consequences for agriculture and the food industry, a national priority under Harvest 2020. I note the comments in the SEAI funded research paper in relation to the limited level of agricultural lands, which would be used but I remain of the view that this matter requires a national policy decision, appropriate guidance and a county level strategy.
- 9.2.16. Apart from the matter of use of agricultural lands, I have other concerns relating to the development of the solar energy sector at significant scale in the absence of a land use framework. I refer in this regard to the potential for significant landscape impacts and the need for grid connections. These are discussed further below and at this stage I refer only to the potential for cumulative landscape and visual impacts and also to the potential for adverse effects on bats and birds in the context of multiple grid connections and the SPAs in the area.
- 9.2.17. In conclusion I consider that it is not demonstrated in the absence of an assessment at national level that this particular type of development involving removal of productive lands from agricultural use and significant landscape changes would be beneficial to the country as a whole. As noted above there is considerable potential for this industry throughout the country, including on lands which have limited beneficial use. The SEAI funded research paper has recommended that the industry not be directed away from 'good quality' agricultural lands and the paper gives figures which indicate that the amount of land involved would be insignificant on a national level³. It may be that there will be agreement that 'the need for renewable energy may trump the desire to retain high quality agricultural land in the short to medium term'. That however is a decision which requires to be made at a national

³ See 4.3.1.2 of the paper for further detail if required.

level and transposed through statutory guidance. Pending that decision I consider that a grant of permission for the current proposal would be inappropriate.

9.2.18. I next refer to the principle of the development in terms of the local policy context.

9.2.19. The importance of agriculture in county Wexford is set out in section 6.4.6 of the development plan, which notes its role in employment terms and sets out a range of policies to promote and encourage food producers and processing and to encourage and facilitate the diversification of the agricultural economy and to facilitate and support the development of sustainable agricultural practices and facilities.

9.2.20. I consider that the development proposed by reason of its scale and nature is not compatible with the development policies relating to agricultural activity and that it would set a precedent, which when considered on a cumulative basis could undermine the strength of agriculture in the area.

9.2.21. A comparison with the wind energy industry may be relevant in this regard. It is noted under Food Harvest 2020 that this form of renewable energy does not impede ongoing farming activities. In many cases it may provide additional income and an opportunity to invest in the remaining lands thus strengthening the agricultural enterprise in an area, allowing for farm families to remain in situ, supporting the rural economy and providing raw materials for the food sector.

9.2.22. The development plan supports renewable energy development and notes that the county is ideally positioned to capitalise on its assets including solar energy. However, there is to date no detailed guidance in relation to the siting of such schemes⁴. In the absence of a specific development plan policy relating to the development of large scale solar developments, I am not convinced that there is a basis for the Board to decide that this project by itself and by the precedent it would set would be in accordance with the proper planning and sustainable development of the area.

9.2.23. EN10 of the development plan sets out an objective to prepare a Renewable Energy Strategy for the county during the lifetime of the plan. The Development Management Guidelines recommend that reasons for refusal related to prematurity

⁴ There is a commitment to review policies pending national landscape strategy and other developments outside of the control of Wexford County Council.

pending commitments to prepare a strategy or other plans be used only where there is a realistic prospect of the strategy or plan being completed within a specific stated time frame. I have no reason to doubt that this time frame will not be met. I consider that it is appropriate and reasonable having regard to EN10 to refuse permission for this proposal.

- 9.2.24. I conclude that the development should be refused for reasons related to national and local policy issues particularly the matter of prematurity pending the preparation of national and development plan policies as set out in EN10, which would provide a spatial strategy and guidance for solar energy developments and for reasons related to the undermining of the agricultural sector.

9.3. Requirement for Environmental Impact Assessment

- 9.3.1. Regarding the requirement for EIA I consider that under current legislation there is generally no requirement for such assessment. This matter is addressed in the applicant's submission and has been thoroughly considered in other cases presented to the Board.
- 9.3.2. I note the case presented by the applicant, which states that solar PV electrical generation parks/farms are not listed in either Annex I or Annex II of the EIA Directive. A similar point is made in relation to Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations and Article 172 of the Planning and Development Act.
- 9.3.3. In relation to specific categories of development types I have had regard to the following in particular;

Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.

All private roads which would exceed 2000 metres in length

- 9.3.4. I agree with the applicant on the first point type and consider that the development does not fall within this development type. While this is development type appears to

have some relevance to the case I agree with the reasoning set out in other cases namely that this relates to some form of combined heat and power plant.

9.3.5. Further it is also relevant that specific forms of energy proposals are included and solar energy is not.

9.3.6. The applicant's submissions do not address the second development type listed above. The relevant definition of 'road' relied upon under the Planning and Development Act is that found under the Roads Act 1993

(a) any street, lane, footpath, square, court, alley or passage,

(b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge, flyover, carriageway (whether single or multiple), pavement or footway,

(c) any weighbridge or other facility for the weighing or inspection of vehicles, toll plaza or other facility for the collection of tolls, service area, emergency telephone, first aid post, culvert, arch, gully, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hard shoulder, island, pedestrian refuge, median, central reserve, channelliser, roundabout, gantry, pole, ramp, bollard, pipe, wire, cable, sign, signal or lighting forming part of the road, and

(d) any other structure or thing forming part of the road and—

(i) necessary for the safety, convenience or amenity of road users or for the construction, maintenance, operation or management of the road or for the protection of the environment, or

(ii) prescribed by the Minister.

9.16. The proposal involves construction of 6 kilometres of new or upgraded site track. The Board may wish to consider whether this structure described as a track would fall within the above definition of a road. The purpose of the site track is primarily for

the purpose of construction and maintenance of the development. Its purpose is not for the conveyance of people and vehicles *per se* except as necessary in connection with the maintenance and construction of the development. I submit that the site track is materially different from a road as defined.

- 9.16.1. I conclude that the scheme does not fall within Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations. I agree with the applicant's submission that EIA is therefore not required under the Irish Transposition of the EIA Directive. The development is of a type which is not listed in the legislation and therefore does not trigger a requirement for EIA.

9.17. Landscape and visual amenity

9.17.1. Overview

- 9.17.2. Reason 1 of the decision of the planning authority to refuse permission refers to Objective LO4 of the development plan and the requirement that all developments 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. I consider that this objective is reasonable. I note that the applicant emphasises the locational requirements of the industry including proximity to the grid noting that this as a factor in the development of the industry. I note the comments of the planning authority which refer to their strong record of promoting and supporting the industry but also stating that there cannot be a *carte blanche*.
- 9.17.3. The application supplementary documentation includes a landscape and visual impact assessment. I consider that the 5km radius for the study area is appropriate in this area. A modelled zone of theoretical visibility was undertaken and a viewpoint analysis is presented. I consider that the assessment undertaken was generally thorough, with the exception of issues related to cultural heritage, which I address below. In particular, in relation to the issue overall the number and the location of the viewpoints selected was adequate in my opinion. I also noted during site inspection that the images presented are highly representative of the existing landscape. I consider that the Board can have confidence in the accuracy of the future views subject to full implementation and on maturation of proposed planting.

9.17.4. The proposal involves a very substantial land use change, which will have significant landscape and visual impacts. Notwithstanding the location of the development in a 'Lowland' landscape the general development plan requirements relating to siting and scale and design prevail.

9.17.5. The selection of a site within the Lowland landscape is noted and the absence of protected views is also noteworthy. I acknowledge that there is a lack of landscape sensitivities in terms of the designations under the development plan. The landscape value would not be described as high. Equally however it is worth noting that the development plan does not anticipate the significant landscape changes associated with the development of solar PV, in relation to which policy review is to be undertaken. I consider that the main concerns relate to the scale and nature of the proposal and whether it can be integrated into the landscape and to cultural heritage.

9.17.6. Having regard to the short duration of the construction phase (44 weeks) and to the nature of the works involved I agree with the applicant's submission that the visual effects would be temporary, intermittent and short term. I restrict my consideration below to the 30-year operational phase.

9.17.7. **Scale and Design**

9.17.8. The overall scale of the development is significant in the context of the landscape character which comprises traditional farmsteads and associated buildings scattered amongst gently undulating and generally low-lying lands.

9.17.9. The scale of the development is exacerbated by the fact that the site is split into two portions. I consider that this greatly increases the dominance of the development and intensifies the impact on the landscape. Moving through the overall site the development would be intermittently visible in both directions. I agree with the submission on behalf of the first party which indicates that views are relatively localised. That however does not take from the fact that the existing landscape character includes clear views to a mosaic of agricultural lands. The change resulting from the development of these fields (or complete screening of views with planting) as proposed would be very noticeable in places. The magnitude of landscape change would be very large and of medium term duration.

- 9.18. The applicant acknowledges the significant size of the site but refers to the location within a lowland landscape and to the screening of the site by hedgerows. The location within a lowland site is relevant in terms of landscape sensitivity but does not remove the obligation that the scale of the development be appropriate.
- 9.18.1. I consider that having regard to the scale of this proposal and the extent of land over which it is spread the preparation of a revised strategy for the renewable energy sector is necessary to likely assist in development of guidance on landscape context. Such a revised strategy is envisaged in the county development plan. Pending such an assessment the development would be premature in my opinion.
- 9.18.2. The nature of the development is alien to the existing landscape character, which derives from agricultural activities such as pasture and crop production. There appears to be no established use of glasshouses or growing under plastic on any significant scale. As such the introduction of rows of 3m high structures covering the landscape would constitute a form of development which is quite removed from its existing character. Not only would the proposed development including the panels and the fencing constitute an alien form of development, they would give rise to a uniformity which is not characteristic of the area. I do not consider that a development of this nature can be easily assimilated into the landscape and consider that the screening would be of limited effect in this regard.
- 9.18.3. I submit that due to the characteristics of the development by reason of its industrial nature, uniformity, materials and the fencing, the scale and location of this form of development warrants a refusal of permission pending the adoption of a local strategy for siting and scale of such facilities.
- 9.18.4. In relation to the potential for cumulative visual impacts I note the permitted development of solar energy development at sites about 2.5 km from the subject site. At this distance given the elevation it is unlikely that there are places from which the permitted and proposed schemes would be visible and cumulative impacts are not likely. I support the conclusions of the applicant in this regard.
- 9.18.5. **Cultural heritage**
- 9.18.6. In general I consider that the submissions presented by the applicant demonstrate that the site itself is of limited cultural heritage importance and does not contain any

protected features. I note that the applicant references cultural heritage as one of the matters which were taken into account in the site selection process.

- 9.18.7. There are no recorded monuments within the development area. There are 30 recorded monuments within 1km. There are no protected structures within the site but 23 no. are found within 3km. At one of these sites (Bargy Castle) there is also a national monument. Within 1km of the site are 10 no. buildings or structures which are listed on the NIAH; all are described as being of regional importance.
- 9.18.8. The applicant's submission is that there are no known likely direct impacts on buildings or features of architectural heritage interest. The relevant assessment is described as a desk based study only but in fact a two-day site visit did take place. There is no detailed written presentation of the assessment undertaken in relation to the impact on the setting of buildings of architectural heritage interest. The report is accompanied by a range of photographs and text which indicates that the focus of the site investigations was relevant more to archaeological assessment.
- 9.18.9. The applicant's submission draws conclusions in relation to the setting of features of interest. Operational impacts are attributed as resulting in 'imperceptible visual operational impact' on the protected structures, buildings listed under the NIAH and recorded monuments in the area. I consider that this conclusion is unsubstantiated and should be further investigated in the event that the Board is minded to grant permission. In particular it would be appropriate that the applicant identify any architectural heritage features which might be impacted and describe the character of those features and identify the nature and significance of impacts. In particular the impact on views from the main rooms and places of interest within the curtilage of the more significant houses may warrant consideration. The landscape setting may be of particular importance and may be adversely impact but the information is not available in this regard. In the absence of such investigation and based on the available information I recommend that this matter be addressed by way of a reason for refusal as it is my conclusion that the Board cannot be satisfied that the development is acceptable in this regard.
- 9.19. Due to the extent of the site and the nature of the proposal involving laying of 13km of underground ducting and cabling and 6km of tracks and other works previously unknown archaeological remains may be encountered. A licensed archaeologist will

supervise all soil stripping and critical excavation works and preserve all cultural heritage finds. This is acceptable and can be addressed by condition. The development is not likely to result in significant adverse impacts on the archaeological heritage.

9.20. Appropriate assessment

- 9.20.1. The EU Habitats Directive requirement is that “any plan or project not directly connected with or necessary to the management of the (European) Site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in light of its conservation objectives”.
- 9.20.2. I refer to the development description, presented in detail in section 2 of this report. The site is not part of a European Site. The application submissions include a AA Screening Report which concludes that the development would not be likely to give rise to significant effects on a European Site having regard to the conservation objectives.
- 9.20.3. The AA Screening report presented restricts its consideration to Natura 2000 sites within 5km of the appeal site. Having regard to the nature of the proposed development I consider that the 5km radius selected is appropriate and that other Natura 2000 sites which are at greater remove from the site can be reasonably discounted due to the distance.
- 9.20.4. The nearest Natura sites are:
- Tacumshin Lake SAC, site code 000709, 1.7km from the site
 - Tacumshin Lake SPA, site code 004092, 1.9km from site
 - Wexford Harbour and Slobs SPA, Site Code 00406, 3km from the site.
 - Lady’s Island SAC, site code 000704, 4.3km from the site
 - Lady’s Island SPA, site code 0040009, 4.3 km from the site
- 9.20.5. The screening report submitted identifies possible linkages between the site of the proposed development and the following:
- Tacumshin Lake SAC, site code 000709, 1.7km from the site
 - Tacumshin Lake SPA, site code 004092, 1.9km from site
 - Wexford Harbour and Slobs SPA, Site Code 00406, 3km from the site.

- 9.20.6. This is based on the proximity to the proposed development and hydrological linkages in the case of Tacumshin Lake SAC and SPA and in the case of Wexford Slob there is reference to the Site being within 1km of the proposed future grid connection. I agree with this assessment. NPWS indicates that there is a risk of collision.
- 9.20.7. In relation to the two other European Sites within 5km of the proposed development site I refer now to Lady's Island SAC. I agree with the assessment presented in relation to the SAC and consider that it is reasonable to conclude that in the absence of a clear hydrological connection the site is sufficiently removed to have no potential for impact on the SAC which comprises a shallow brackish coastal lagoon.
- 9.20.8. In relation to the Lady's Island Lake SPA which is of international importance for 6 bird species and is at a distance of 4.3km away, I accept that the development is at sufficient remove to the site. There is no indication in the submission of DAHRRGA to the planning authority of any concern in relation to potential impacts on bird species which are of interest for the Lady's Island Lake SPA. These species are Gadwall, Black-headed Gull, Sandwich Tern, Roseate Tern, Common Tern, Arctic Tern, Wetland and Waterbirds.
- 9.20.9. I agree with the AA Screening report assessment that a finding of no likely significant effects can be made in relation to the Lady's Island's Sites. In making a decision as to whether or not a Natura Impact Assessment should be prepared therefore consideration of the Wexford Slob SPA and of Tacumshin Lake SAC and SPA is required.
- 9.21. The special conservation interests of Wexford Slob SPA include a range of bird species which are identified on Table 4 of the AA screening report. The site is one of the most important ornithological sites in the country. It is of global importance for Greenland White-fronted Goose and supports internationally important populations of four other species and 25 species of national importance. The qualifying species include Bewick's Swan, Whooper Swan, Hen Harrier, Golden Plover, Bar-tailed Godwit, Little Tern and Greenland White-fronted goose.
- 9.22. Tacumshin Lake SAC is a sedimentary lagoon. The qualifying interests are Coastal lagoons, Annual vegetation of drift lines, Perennial vegetation of stony banks,

Embryonic shifting dunes and Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes).

- 9.22.1. Tacumshin Lake SPA contains an exceptionally diverse waterfowl population and is of international importance for 14 bird species. The qualifying interests are Little Grebe, Bewick's Swan, Whooper Swan (*Cygnus cygnus*), Wigeon, Gadwall, Teal, Pintail, Shoveler, Tufted Duck, Coot, Golden Plover, Grey Plover, Lapwing, Black-tailed Godwit and Wetland and Waterbirds.
- 9.22.2. The development has the potential for significant effects on these Sites as a result of water quality impacts in the construction phase and operational phase impacts on birds.
- 9.22.3. Earthworks and excavations in the construction phase and potential run-off of pollutants could lead to deterioration of water quality and habitats with possible consequences for the designated habitats or for foodstuff on which birds are dependent.
- 9.22.4. A small watercourse at the eastern site discharges to Tacumshin Lake 2.3 km away. The project works are confined to the areas removed from this and other watercourses and standard mitigation measures reduce potential risk to downstream watercourses. The Board should note that there is some level of uncertainty about the nature of works to the surface water system and in particular there is reference under the proposed development section of this report to the possible enhancement of drainage. There is not likely to be a significant increase in the surface water from the site according to the applicant. Nevertheless I consider that the nature of any proposals to enhance the surface water system are an uncertainty in terms of the extent of the proposed development and its consequences for the SAC / SPA at Tacumshin Lake.
- 9.22.5. I note that the development also involves allowance for the location of the site tracks. This may require further consideration in terms of the water quality impacts.
- 9.22.6. In general I consider that the nature of the potential risks to water quality are well understood and are discrete and capable of being controlled. This matter would be likely to be capable of resolution in the event of a grant of permission. However, based on the information available I do not accept the applicant's conclusion that

there are no potential direction, indirect or cumulative impacts is reasonable and that further consideration of this site in terms of AA would not be warranted.

- 9.22.7. The grid connection is addressed in the AA screening report. I note that the comments of DAHRRGA submitted to the planning authority refer to connections between the Slobs and Tacumshin Lake . The submission to the planning authority raises the issue of the grid connection and the uncertainty as to whether it would be positioned underground or over ground. The commuting by Whooper Swans and other species between the Slobs and Tacumshin Lake is identified by NPWS, which submission also notes the importance of this general area for birds. In response to this the applicant has indicated a possible underground cable route. The supplementary report dated September 2016 refers.
- 9.22.8. I submit that the concerns of DAHRRGA and the planning authority in relation to the grid connection are not relevant to the making of a decision in this case. The Board should restrict its consideration to the solar farm. The grid connection will be required to be subject to a separate consent process involving at least a screening for AA. That is the appropriate forum for consideration of the potential for effects on the European Sites arising from the grid connection.
- 9.22.9. The final potential impact may result from the possibility that birds would mistake the solar panels for waterbodies and that this could result in collisions. The DAHRRGA submission notes that this potential impact is not addressed in the screening report. DAHRRGA does not highlight this as a matter of particular significance. I consider that the potential for any such impacts could be addressed by way of a further information request to the applicant. The potential would appear to me to be likely to be capable of resolution through design mitigation measures. In view of the recommendation below I do not recommend that this be pursued at this time.
- 9.23. In general I conclude therefore that the information presented in relation to AA is adequate with the exception of the potential surface water quality impacts. I do not consider that the Board can be satisfied that the development subject of the application would not be likely to would not be likely to have a significant effect on any designated Natura 2000.
- 9.23.1. In the event that the Board is minded to grant permission I recommend that the exact nature of changes to the surface water drainage and of earthworks be further

described. Also the potential for mistaking the solar farm as a water body could be addressed by way of a request for further information to the applicant. Based on the information available I recommend that reason 3 be upheld and my opinion is that the main issue is likely to relate to surface water quality impact.

9.24. Ecological impacts

- 9.24.1. The EclA presents an appropriate level of detail in relation to the ecological impacts of the proposed development. This was compiled from desktop and site surveys. No Annex 1 sites are affected. In general the development impacts on lands which are subject to reasonably intensive agriculture. The habitats of highest value namely the treelines and hedgerows will be retained except at limited crossing points. The development also involves measures which will strengthen and protect the hedgerows. I agree with the assessment conclusions in general and consider that the impacts on habitats is acceptable.
- 9.24.2. In relation to the potential for impact on mammals there are two active badger setts at the southern end of the eastern plot. Construction phase impacts arising will be mitigated in accordance with the NRA recommendations. I consider that this is adequate and note the recommendation of DAHRRGA refers only to the size of the buffer zone. This could be amended if deemed necessary by a site ecologist and the matter should be addressed by condition in the event of a grant of permission. In relation to the potential impacts on bats I note that the protection of treelines and the minimal use of artificial lighting in the construction phase are likely to minimise impacts. The operational phase lighting will operate only on sensors. I conclude that the impact on mammals is acceptable subject to mitigation as presented.
- 9.24.3. Regarding the potential for impacts on the aquatic environment I refer to the nature of the existing land use which involves extensive areas in crop production and regular ploughing. The measures presented in the application supplementary documentation address handling of concrete, for which there will be very limited requirement and handling of other potential pollutants such as hydrocarbons. I have referred above to the possible enhancement of the drainage system and this is a potential impact in terms of the ecological receptors. Otherwise subject to best practice including the retention of buffer zones around watercourses as proposed, I

consider that there is no reasonable likelihood of significant ecological impacts arising in the construction phase. Any buffer zones should have regard to the flood risk mapping presented in Appendix 7.

- 9.24.4. In relation to potential ecological impacts the location of access tracks is indicated on the drawings in detail but a variation of 20m from that location is suggested as applying. In the event of a grant of permission the Board may wish to consider a condition which ensures that any alteration to the trackways is subject to agreement with the planning authority, provides for the retention of buffer zones from badger setts and watercourses and does not impact on habitat of higher value. In addition the Board might wish to consider whether there should be a limit to alterations in heights of tracks over (or below) ground level and it would appear to me that such measure would be appropriate.
- 9.24.5. Subject to the above I consider that the development is generally acceptable in terms of impacts on ecology apart from potential water quality impacts, which require further consideration.

9.25. Residential amenity

- 9.25.1. In relation to residential amenity potential concerns relate to glint and glare and noise. I note that a large proportion of residents may also be beneficiaries of the development and that the area has a relatively low level density of residential population. I address the potential for glint and glare impacts on the users of the regional road network at this point also.
- 9.25.2. Construction phase noise impacts involving earthmoving using relatively small vehicles would not be likely to be significant in my opinion and operation noise would be negligible. Construction phase traffic is addressed under the relevant section of this report and subject to mitigation would not impact on the wellbeing or safety of the local residential population for the 44 week duration of the build. Operational noise is addressed in the application submissions and I accept the conclusions that it is not significant including by reason of the absence of noise from the inverter and transformer stations at night.
- 9.25.3. Glint and glare is assessed in a main report and in supplementary submissions as part of the appeal. The assessment undertaken considers sun position, observer

location and the position of the modules to determine whether a receptor will be affected by solar reflection.

- 9.25.4. The reports concentrate on the impact of glint which is described as a momentary flash which may cause viewer distraction. The main source of glint and glare is from the panels. The potential for impacts is assessed in this case as being restricted to residential units and roads.
- 9.25.5. The submissions do not refer to the use of tracking panels, which follow the sun and I assume that these are not intended to be used. However, a condition in this regard may be deemed appropriate as the assessment herein would not be sufficient.
- 9.25.6. The assessment band was a 500m zone within which 37 residential receptors were identified and solar reflections possible only for 22 no. of these residences. The assessment indicates that the impacts would be limited to the period between March and September and to durations of between 4 and 16 minutes per day.
- 9.25.7. Table 6.1 of the report identifies receptor and indicates whether based on the ZTV prepared and other analysis there is potential for glint and glare impact. The assessment makes a separate assessment for the two plots within the development and where feasible groups receptors in close proximity to each other.
- 9.25.8. The results of the technical analysis is the identification of a number of receptors which are described as being likely to experience the greatest effect. The conclusion is that the impact on ground based receptors would not be considered major.
- 9.25.9. I refer to the observer's submission which states that she was advised of the potential for glint and glare from the two plots of land. This appears to be a reference to the location of the dwellinghouse (close to site notice 6) in relation to the zone of theoretical visibility which indicates that impacts from both sites is possible. I note that the assessment does not appear to have specifically modelled the observers house. It also is noted that the report grouped houses together for the purposes of the assessment and looked in most detail at the houses where it was considered that most impact would arise.
- 9.26. The observer's house is close to a number of receptors (2, 3, 4, 5, 6 and 7) in relation to which the modelling conclusions presented in section 6.34 would be relevant. The conclusion is that there would be a level of impact for 4-6 minutes of

the day and limited to a few months of the year. I do not consider that there is any requirement for further detailed consideration of the effect on the observer's house but in the event of a grant of permission the Board may wish to attach a condition relating to monitoring and the introduction of mitigation if required.

- 9.26.1. In response to the assessment undertaken mitigation including removal of part of the proposed development and increased planting in places are incorporated. Figure 2 refers. 7.1 of the assessment report describes the nature of the mitigation including the removal of a small part of the northernmost and southernmost extent of the eastern plot and tree planting / hedgerow reinforcement to provide screening.
- 9.26.2. Regarding the regional road the addendum report refers to this matter in more detail and focuses on the impacts on the R736 to the south and the R739 to the west. Key dates and times of potential impacts on these stretches of road are set out for 4 times of the year.
- 9.26.3. Regarding the R736 the worst case assessment is that glint and glare is possible for a period of 5 minutes per day over the period of March to August. For the R739 the time of impact is the very early morning for a period of around 7 minutes daily between March and September.
- 9.26.4. The observed angle is small (under 21 degrees in both cases) and the conclusion is that the solar panel reflection would be considerably less intense than direct light from the sun. The assessment is worst case as the intervening buildings and vegetation are not included.
- 9.26.5. I agree with the conclusion presented that the effects of glint and glare on the regional roads and on the residential receptors would be described as negligible.

9.27. **Other issues**

- 9.27.1. The traffic management plan presented refers to the construction, operational and decommissioning stages. For the construction phase in response to public consultation it is intended to limit the traffic movements along the county road L7117. Any such measures such as a one-way system which appears to be under discussion would have to be agreed with the planning authority. In view of the narrow nature of parts of the road network and the concerns raised by residents a condition

relating to a traffic management plan would be appropriate. The nature of the development does not involve significant movement of large vehicles - circa 20 hgv movements per day at peak construction phase. However, the receiving environment is sensitive and it is reasonable to minimise the impact on local residents. The operational phase and decommissioning generate lower traffic levels as site tracks and fencing are likely to be retained in situ.

9.27.2. I now refer to the concern raised by the observer and the use of the private laneway in her ownership. Site notice 6 is identified on Figure 1.1. However it is clear from the application drawings and the description of traffic management and the construction plan that there is no intention on the part of the applicant to rely on this lane for access to the site. The development will be constructed and maintained by the five other entrances which are shown. This matter is clearly described in the application documents and does not need to be addressed by condition.

9.27.3. I concur with the applicant that this site is outside a designated settlement area. The nearby cluster of buildings at Ballycogley is not zoned for development, which would be the important consideration in terms of the assessment of this case.

9.28. Planning conditions

9.28.1. Regarding the request for a **ten year permission** I recommend that in the event that permission is granted the Board reject this request. The applicant's own submission refer in section 3 to the development as one which is capable of delivery without delay. The grid connection process has commenced it is stated. There is reference in the application submissions to use of existing infrastructure constructed for wind energy development which did not materialise. This appears to be a reference to the un-used electricity line which traverses the site. Delivery of the scheme would not involve large numbers of landowners and the construction period is described as being straight forward and taking under a year.

9.28.2. Based on the applicant's own submission there is no need for a ten year permission in this case. A grant of permission for this duration would exacerbate the uncertainties in relation to land use planning in this area and would interfere unduly with the agricultural enterprise in my opinion. If the scheme is to be permitted then it would be appropriate that it be put in place as soon as possible.

- 9.28.3. I refer the Board at this time also to UK practice in the absence on national guidance. In that jurisdiction it is not uncommon to allow short timescales to undertake the development.
- 9.28.4. In relation to the requirement for **financial contributions** I note that the planning authority in the absence of a specific measure for solar energy has recommended the payment of contributions based on the wind energy category which is capacity based. I have estimated that the capacity of the development may be in the region of 45MW. The applicant may be in a position to confirm this. The other option would be put a cap on the capacity thereby ensuring that the relevant contribution is paid.
- 9.28.5. In relation to the matter of **community gain** I note the proposal presented by the applicant for the payment of €200 per hectare per annum to be lodged in a fund and administered by the community. The suggested requirement is that funds be diverted to the upgrading of the energy efficiency of buildings in the area. The Board may wish to consider whether such a fund is necessary in the event of permission being granted.
- 9.28.6. I consider that there is a lack of clarity in the documentation provided in relation to the amount of earthworks to be undertaken in the construction of the scheme. I noted at the time of my inspection that some lands in the western plot are relatively sloping in nature and not always aligned in the required direction. This matter should be addressed by further information or condition in the event that the Board is disposed to granting permission.

10.0 Recommendation

- 10.1. I recommend that the decision of the planning authority to refuse permission be upheld for the reasons and considerations below.

11.0 Reasons and Considerations

1. Having regard to
 - (a) The objectives of Food Harvest 2020 in relation to the agricultural sector

- (b) The policy under Transition to a Low Carbon Energy Future 2015-2030 to publish a Renewable Electricity Policy and Development Framework with a spatial dimension
- (c) Policy EN10 of the Wexford County Development Plan to prepare a Renewable Energy Strategy for County Wexford during the lifetime of the Plan
- (d) Objective ED17 of the Wexford County Development Plan 2013-2019 to promote the continued development of food production and process
- (e) The existing productive agricultural use of the site and the nature of the proposed development, which does not provide for the retention of agricultural use for the duration of the solar PV farm

it is considered that the proposed development would undermine the agricultural sector in the area and would by itself and the precedent it would set be contrary to the provisions of the Wexford County Development Plan 2013-2019 and would be premature pending the adoption of a Renewable Energy Strategy for County Wexford and thus be contrary to the proper planning and sustainable development of the area.

2. Having regard to

- (a) The commitment in the National Landscape Strategy for Ireland 2015-2025 to compile a National Landscape Character Assessment in Phase One
- (b) Objective L04 of the Wexford County Development Plan 2013-2019 to ensure that all developments are appropriate in scale and sited and designed and landscaped to minimise potential adverse visual impacts are minimised
- (c) Policy EN10 of the Wexford County Development Plan to prepare a Renewable Energy Strategy for County Wexford during the lifetime of the Plan
- (d) The cultural heritage resources in the environs of the site and the limited assessment thereof

It is considered that a development of this nature and scale due to its character and location on a fragmented holding of 89 hectares would militate against the preservation of the landscape and cultural heritage resources of the area and

would be premature pending the adoption of a Renewable Energy Strategy for the county.

3. The Board is not satisfied that the Stage 1 Appropriate Assessment Screening report adequately assesses the potential for water quality impacts.

Mairead Kenny
Senior Planning Inspector

15th December, 2016.