

Inspector's Report ABP-301726-18.

Development

29 hectare solar farm.

Location

Johnstown North, County Wicklow.

Planning Authority

Planning Authority Reg. Ref.

Applicants

Type of Application

Planning Authority Decision

Type of Appeal

Appellants

Observers

Date of Site Inspection

Inspector

Wicklow County Council.

17/1497.

BNRG Neoen Holdings Ltd

Permission

Grant with conditions

First and Third Party

Johnstown Residents Group Joe & Carrie Jane Kelly BNRG Neoen Holdings Ltd.

None

11th January 2019 Philip Davis

Contents

1.0 Introduction	
2.0 Site Location and Description	
3.0 Proposed Development	
4.0 Planning Authority Decision	
4.1.	Decision4
4.2.	Planning Authority Reports4
4.3.	Prescribed Bodies6
4.4.	Third Party Observations6
5.0 Planning History	
6.0 Policy Context	
6.1.	Development Plan7
6.2.	Natural Heritage Designations7
7.0 The Appeal	
7.1.	Grounds of Appeal7
7.2.	Applicant Response 10
7.3.	Planning Authority Response
7.4.	Observations12
8.0 Assessment	
9.0 Recommendation24	
10.0	Reasons and Considerations25
11.0	Conditions

1.0 Introduction

This is an appeal by local residents and the applicant against the decision of the planning authority to grant permission with conditions for a 39 hectare solar farm in a rural area about 4 km north of Arklow along the Irish Sea coast. The third party grounds of appeal relate mostly to amenity and landscape issues. The first party appeals 2 no. conditions by the planning authority to reduce the scale of the proposed development and to protect a number of hedgerows.

2.0 Site Location and Description

2.1. Johnstown North

Johnstown North townland is located in low-lying coastal farmland along the Wicklow coast some 4 km north of Arklow Town. The area is primarily pastureland on a gently rolling topography with a steady descent in levels to the shore. The M11 runs on the western side of the townland, with the R750 Arklow to Wicklow town road hugging the coast at this point. A third class road runs parallel to the M11 and another third class road runs east to west connecting the latter road with the R750. The area is sparsely populated, with a scattering of dwellings along the minor road and R750, with a notable increase in density of what appear to be mostly holiday homes further south, closer to the town of Arklow.

2.2. Appeal site

The appeal site, with an area given as 39 hectares, is an irregularly shaped area of farmland made up of around 13 mid-sized fields occupying a significant part of the townland between the two main roads. The land is mostly in rough pasture with some tillage, and appears generally low quality land (if well drained), with significant areas of furze and scrub. It is intersected and bounded by ditches and scrubby hedgerows.

To the **west** of the site is a private road – a residual part of the former N11, with the M11 running on a very slightly elevated level. Beyond the M11 is a parallel service road. Beyond this, on rising land, are open fields with a number of dwellings. To the north-west is Ballymoyle Hill, the most prominent hill in the area. To the **north** is a small unnamed watercourse with open fields beyond this. **South** of the site is

bounded by a third class road, beyond which are open fields and a number of dwellings extending along the coast. To the **east** is a narrow line of fields before the coast road between Arklow and Wicklow. This road is next to the coast, which at this point is a mix of stony beach and low rocky shore marked by dune systems and rocky outcrops. There is a small holiday dwelling next to the beach about 100 metres north-east of the site. North of this dwelling is an extensive marram grass dune system.

3.0 **Proposed Development**

The proposed development is described on the site notice as follows:

A solar farm within a site area of approximately 39 hectares consisting of solar photovoltaic panels covering an area of up to 27.2 hectares on ground mounted steel frames, 1 no. on-site substation; 8 no. inverter/transformer stations, underground cables and ducts, boundary security fence, new internal tracks, CCTV cameras and all associated site services. Planning permission is sought for a period of 10 years.

4.0 Planning Authority Decision

4.1. Decision

The planning authority decided to grant permission for 15 largely standard conditions. Condition 2 altered the permission by deleting some of the proposed solar panel areas. Condition 3 set the permission for 10 years. Condition 4 set the operational life of the solar farm to 30 years from the date of commencement of development. Condition 11 required no removal of hedgerows.

4.2. Planning Authority Reports

- 4.2.1. Planning Reports
 - Notes a number of other solar farms granted in the area, including 17/1440, 1 km to the south-west and 16/1285, 2 km to the southwest.

- Notes no objections but a number of recommendations from internal and external reports.
- Notes five submissions from local residents, four are objections, one requests a number of amendments/conditions.
- Outlines a number of relevant policies in the CDP 2016-2022, including EMP 17; AGR1; AGR2; Section 7.3, Solar Energy objectives CCE9; CCE10; CCE11. With regards to the latter, it is noted that there is no national guidance, but the Council has regard to UK guidance.
- Notes that the area is within the Southern Coastal Area 'Area of Outstanding Natural Beauty', with policies NH49; NH50, NH51 relevant. Notes a number of nearby identified 'Prospects', including Prospect 31, 33, and view 23.
- Policies relevant to Coastal Zone Management specifically CZM5 is noted, and Appendix 5 of the Plan on Landscape Assessment.
- In policy terms, the development is considered to be 'open to consideration' having regard to national policy on renewable energy.
- States that the TII has no objection, but states that 'on the side of caution' a refusal is recommended on the possible impacts of glint and glare on drivers on the M11.
- No identified issues with roads or access or noise.
- No significant issues on habitats/ecology or on water quality.
- No Recorded Ancient Monuments on the site.
- Refusal recommended for the reason of impact on the Coastal Area of Outstanding Natural beauty (Objective CZM5). This recommendation was changed to a request for further information (21/02/18).
- Following the FI request a second planners report stated that the additional information on visual impacts was not considered acceptable and refusal was recommended for similar reasons. A comment on the file noted and accepted this, but stated that a permission modified by condition would address the reason for refusal. Permission was recommended.

4.2.2. Other Technical Reports

District Engineers - no objection subject to conditions.

Roads Engineers – A construction management plan should be submitted, notes landscaping requirement to prevent glint and glare.

4.3. **Prescribed Bodies**

Department of Arts, Heritage and the Gaeltacht – recommends a number of conditions referring to the ecological impact statement submitted – these conditions relate to the conservation of mature trees and hedgerows, improvement of mammal passes and a bat and owl survey.

Inland Fisheries Ireland – no objections subject to conditions on the protection of watercourses and a 10 meter buffer zone around watercourses.

TII. No objection – requests that the planning authority have regard to Chapter 3 of the Spatial Planning and National Road Guidelines.

An Taisce – notes lack of national or regional strategy, requests that the planning authority have regard to optimum site suitability selection and the protection of biodiversity and other sensitive areas

4.4. Third Party Observations

Five submissions received from local residents. Four were objections for a wide variety of amenity and environmental grounds. One welcomed the proposal but requested additional planting to minimise visual impacts.

5.0 Planning History

There are no previous applications or appeals on the site – the planners report on file notes a number of permissions for solar farms in the south Wicklow area. There have been a number of recent appeals for solar farms in the south Wicklow area including **PL27.246527** near Avoca (grant), and **PL249025** near Rathnew (grant).

6.0 Policy Context

6.1. Development Plan

The appeal site is in open agricultural countryside without a zoning designation. The area is designated as 'Coastal Area of Outstanding Natural Beauty' in the 2016-2022 Wicklow County Development Plan. Policies NH49 and NH50 applies to these areas – in summary they are to require a Landscape/Visual Impact Assessment of any developments in these areas, to demonstrate that landscape impacts have been anticipated and recognise the sensitivity of the landscape. Policy NH51 states that no development which significantly or unnecessarily alter the natural landscape and topography shall be permitted. There are also identified Views and Prospects in the area (Policy NH52). Policy CCE9 on solar energy sets an objective to facilitate the development of solar energy in the Council.

6.2. Natural Heritage Designations

There are no designated EU habitats on or in the immediate vicinity of the appeal site. The closest designated habitat is the Buckroney/Brittas Dunes and Fen SAC, site code 000729. This site follows the coastline north starting at a point north-east of the appeal site and at its closest is about 100 metres from the boundary.

7.0 The Appeal

7.1. Grounds of Appeal

BNRG Neoen Holdings Limited (first party)

- Appeals conditions 2 and 11.
- It is stated that in accordance with the FI request by the Council and the requirements of the Development Plan, the developers followed a 'rigorous methodological process' in assessing the visual impacts of the proposed development.

Condition 2:

- It is argued that the removal of panels from field no's 1 and 8 represents an 'abundance of caution' by the planning authority and that this will have no significant impact on the visual qualities of the area. It is acknowledged that the removal of panels on Field no. 6 would lead to a noticeable reduction in visual impacts along the R725 coast, although it is submitted that this would be relatively minor.
- It is argued that the assessment of the Planner in the report is at odds with the submitted evidence and visualisations – reference is made to the photomontages and visualisations submitted. The applicants stand by the arguments and assessments submitted that all impacts will be negligible or minor.
- With regard to Glint and Glare, it is noted that the Roads Section were satisfied with the proposals.
- An analysis of the removal of Field 6 is submitted (with photomontages). It is argued that the benefits of removing this element are minor, as the impacts are rated 'Slight' to 'Perceptible'.
- It is requested that the Board revises this condition or omits it.

Condition no.11

- This condition states that all existing mature hedgerows and trees shall be retained, specifically hedgerows HR1 and HR2.
- It is emphasised that a comprehensive study and plan was submitted, and Hedgerows HR1 and HR2 were identified as being of poor quality with poor connectivity. It is argued that removing these hedges facilitates an optimum layout, maximises land use, without compromising the Councils objective to retain existing mature hedgerows. An assessment of these hedgerows is attached.
- It is argued that removing these hedgerows provides for visual and ecological gain by allowing the enhancement and strengthening of the remaining higher value hedgerows through layering and planting of further native species

(refers to Table 7.18 and Figure 7.6 of the Planning and Environmental Report).

• It is requested that the Board revises or omits this condition.

Joe and Carrie Kelly of Johnstown North, Wicklow (third party)

- It is submitted it will lead to an 'industrialised' landscape in an attractive rural area and would thus be contrary to the coastal AONB designation.
- The ambiguity in the planners report about the decision is noted, with regard to the recommendation of conditions rather than a recommendation to grant.
- It is argued that the planning authority had a confused rationale for their decision with the planner's report recommending a refusal initially.
- It is queried as to why the planning authority are favouring a developer, not the landowners.
- The issues highlighted in the original report, most notable the size and scale of the proposed development, the loss of agricultural land, the visibility of the site from surrounding areas and from the road network, and the removal of natural hedgerow are highlighted, with specific regard to policy CZM5 of the Development Plan.
- It is noted that the Senior Engineer also recommended refusal for visual reasons.
- It is claimed that the community was not adequately consulted about the proposed development. The Board is requested to refuse permission.

Johnstown Residents Group (third party)

- Requests that the Board refuse decision, or at a minimum uphold Conditions
 2 and 11 (as appealed by the applicant).
- It is argued that the proposed development is unacceptable in visual terms within the overall designated 'Coastal Area' AONB. It is noted that this designation covers the entire coast north of the urban area of Arklow and recognises the importance of the coast for both biodiversity and recreation and its visual qualities. It is also noted that there are identified views and prospects in the vicinity, all of which are protected in the development plan.

- It is argued that the proposed development is contrary to a number of stated CDP objectives, most notably NH50; NH51 NH52 and CZM5.
- It is argued that the panels will be highly visible notwithstanding the proposed screening and landscaping plans. It is noted that the photomontages submitted assume the mitigation screening has thrived and matured. It is also questioned as to whether the photomontages represent a true assessment of potential impacts.
- It is argued that there will be serious adverse impacts from a number of long distance views (photos attached).
- It is questioned whether the AA Screening is adequate it is argued that it has not been demonstrated that it does not adversely affect the Brittas Sand Dunes and Fen SAC.
- It is argued that the proposed development would have a cumulative negative impact with other similar developments in the area, most notably solar farms in application 16/1128 (granted permission) and the current application 17/1497.
- It is argued that the area is a significant tourist/visitor amenity and the proposal would thus have negative economic impacts. The 'industrialised appearance' of the proposed development is highlighted.
- It is noted that the Executive Planner recommended refusal and this recommendation was supported in comments on the file by the Senior Engineer.

7.2. Applicant Response

The applicant responded to the third party grounds of appeal as follows.

- It is denied, as set out in the third party appeals, that the area is a 'residential neighbourhood' in character, but is rural in character.
- It is denied that a solar farm represents an 'industrialised' landscape, but it is acknowledged that it will increase the intensity and extend of built form within the overall landscape.

- With regard to the AONB designation, it is emphasises that over half of County Wicklow is so designated. It is stated that the applicant has addressed all the required steps set out in relevant policies to identify and minimise impacts on the landscape and visual qualities of the area.
- The planners comments on file are noted, but it is argued that the applicants addressed all key issues raised in the FI.
- It is argued that, contrary to the arguments submitted, the proposed development represents a sustainable form of land-use, as the loss of agricultural lands is not significant and following decommissioning the lands can return to agricultural use – it is also noted that sheep can graze on the land even during the operational period.
- It is argued that the appellants have not provided justification as to why the proposed development contravenes the objectives quoted (NH51, NH52; CZM5, etc). It is argued that the design addresses all the issues raised with regarded to the stated policy objectives.
- It is argued that the points raised about the choice of photomontage viewpoints are incorrect – it is submitted in some detail that all chosen viewpoints represent an accurate and representative selection and are generally a 'worst case scenario'.
- It is emphasised that viewpoints were chosen independently by Macro Works Ltd, and were not chosen to be advantageous to the developer.
- It is argued that the viewpoints chosen by the appellants are not an accurate representation – Figure 4 in the appeal document is set out in support of this argument.
- With regard to AA, it is submitted that a full and accurate Screening took place. It is stated that only Buckroney-Brittas Dunes and Fen SAC is in proximity to the site or connected hydrologically. It is argued that the application was screened adequately as there are no likely adverse effects.
- It is argued that cumulative impacts were fully addressed in the submission and the assessment by the planning application.

- With regard to tourism and visitors, it is argued that there would be no significant adverse impacts for the reasons set out above.
- It is requested that the Board uphold the decision to grant permission, but omit conditions 2 and 11.

7.3. Planning Authority Response

The planning authority did not respond to the grounds of appeal.

7.4. Observations

None

8.0 Assessment

Having inspected the site and reviewed the file documents, I consider that the proposed development can be addressed under the following broad headings.

- EIAR
- Appropriate Assessment
- Nature and scale of the proposed development
- Principle of development
 - > National Policy
 - > Regional Policy
 - > Development Plan
 - > Other decisions
- Visual impact
 - > Landscape
 - Views and prospects
 - ➢ Glint and glare
 - > Conclusions
- Tourism/Economics
- Flooding and Drainage

- Cultural Heritage
- Traffic impacts
- Construction Impacts
- Other issues

8.1. EIAR

The proposed development consists of a photovoltaic solar farm extending over some 39 hectares. It is estimated as having up to 22 MW output. There are a number of other proposed and permitted solar farms in the general area, and the site is within sight of two windfarms – one the off-shore Arklow Bank Scheme. I note that the plans submitted with the appeal indicate that a grid connection will be via a substation within the site and would connect with the grid via underground cabling generally following roads to the south.

Photovoltaic solar farms are not listed as a specific use category under Schedule 5 of the 2001 Regulations as amended. Under Part 1, Article 2(a) relevant developments include:

A thermal power station or other combustion installation with a heat output of 300 megawatts or more.

The proposed development is for photovoltaics, so is not by any reasonable definition a 'thermal' power station and does not involve combustion, and will be of far lower capacity than 300 MW. I do not consider that any other categories under Part 1 apply.

Under Part 2, Article 3(a) includes: *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.* My interpretation of 3(a) is that EIA may apply for power plants of a thermal design independent of the source of energy – i.e. if they produce '*electricity, steam* **and** (my emphasis) *hot water*'. I note that other nonthermal types of electricity generation such as hydroelectricity and wind power, are specifically included in other subsections. Photovoltaics are **not** included. As the proposed development is for the production of electricity by way of direct solar power using photovoltaics and does not involve the production of heat or hot water, I conclude that it is does not come within this category. In any event, total output will be far below the 300MW threshold and so would be sub-threshold if 3(a) applied. I conclude therefore that a photovoltaic (non-thermal) power station such as that proposed does not require a mandatory EIAR as it does not come within any category in either Part 1 or Part 2 of Schedule 5 of the 2001 Regulations as amended.

The site is close to an SAC – discussed in the AA assessment below. Otherwise, while in an attractive area of countryside close to the coast there are no designated habitats or other features of special interest on or adjoining the site. There are no other features of particular sensitivity on the site or the immediate vicinity. The construction of solar farms is generally not a type of activity likely to result in severe disruption or impacts. I would therefore consider that the likely significant effects are minor.

The applicant submitted a non-statutory Environmental Report which broadly follows the layout and criteria of an EIAR, but its screening concludes that one is not required (the screening determination is in section 5 of this report). I would consider the Report to be comprehensive and generally provides a good overview of the likely significant effects and I would concur with the conclusion of the Screening that by way of the proposed solar farms nature and scale and the characteristics of the local area, it would not meet the requirements of Schedule 7 for sub-threshold developments. I therefore conclude that EIAR is not required.

8.2. Appropriate Assessment

The applicant submitted an AA screening report (attached at the back of the Planning and Environmental Report). This report sets out the local context, including the possible cabling routes (shown in Figures 3.1 and 3.3 of the Screening Report). Figure 3.1 of this report indicates the results of a habitat survey of the site – this shows one small wetland area, a small pond, and a watercourse that discharges directly to the sea – this watercourse runs along the northern boundary. There are no EU designated sites within the site. Figure 3.2 of the AA Screening shows EU sites within 15 km of the site and the report outlines the details of all these sites. However, only one is within close proximity, and with a possible pathway for pollution, the Buckroney-Brittas Dunes and Fen SAC, site code 000729, which is likely in hydraulic continuity with the appeal site lands.

This SAC is designated for the following features of interest:

Annual vegetation of drift lines [1210]	
Perennial vegetation of stony banks [1220]	
Mediterranean salt meadows (Juncetalia maritimi) [1410]	
Embryonic shifting dunes [2110]	
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	
Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150]	
Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170]	
Humid dune slacks [2190]	
Alkaline fens [7230]	

I note that the fen features are located to the north of the designated area, not close to the appeal site – the features of interest close to the site are the various dune habitat types. The stream that runs along the northern part of the appeal site is separated from the closest dune by a house site and about 100 metres of beach. The Screening Report addresses this in Table 3-2, where the hydraulic linkage (both ground and surface waters) is acknowledged, but it is stated that the habitats close to this point do not have the potential to be impacted upon by sedimentation or other run-off from the site. From my observations during my site visit, I would be satisfied that this is the case. It is also noted that there is the potential for the spread of invasive species, specifically the winter heliotrope due to construction activities. Construction details are outlined in the submitted documents to prevent this occurring.

I would note that in other solar farm proposals the issue has been raised of the potential for interference with some species of birds, specifically waterbirds that theoretically can confuse solar panels with waterbodies. In this regard I note that there are no SPA's within 15 km of the site.

The AA Screening outlines potential impacts with other designated habitats, but due to their distance and the absence of direct pathways there are no likely impacts.

I consider the Screening Report submitted to be comprehensive and accurate and I concur with the conclusion that there are no likely impacts on any of the designated sites. I note that there are other proposed solar farms in the vicinity, but I do not consider that there are any likely cumulative or indirect impacts arising from these proposed developments. I further note that the site has relatively low habitat value at

present and there is no evidence that a solar farm would significantly reduce the habitat value of the lands if the hedgerows are maintained and agricultural activities carry on at a low intensity level.

I therefore consider that it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 000729, or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

8.3. Nature and scale of the proposed development

The proposed development is as described in the site notice. I note that the application is for a duration of 10 years (i.e. the duration of the permission, not the period for which it will be operational). The solar farm, on gently undulating land, would involve the existing farm being substantially covered with steel frame mounted panels, with some 1.8 km of internal trackways, along with associated infrastructure. The site would be surrounded with 2 metre perimeter fencing, including mammal access ang gates and CCTV cameras. 3.6 hectares has been allocated for new hedgerow and biodiversity enhancement (a total of 334 metres of hedgerow would be removed). It is estimated that the total capacity would be up to 22 MW. The preferred route for the connection to the grid would run south of the site (Figure 3.1 in the application documents) and would involve a medium voltage (10-20kV) underground line running along existing infrastructure. A second option is also outlined, also running along existing roads.

With regard to the '10 year' duration of the permission, I note that with regard to the possible timelines for approval for such developments the Board has granted such a time period in a number of similar developments.

8.4. Principle of development

8.4.1. National Policy

National policy (within the EU context) on renewable energy is set out in the **National Renewable Energy Action Plan (NREAP)** submitted under Article 4 of Directive 2009/28/EC, which sets out targets for increasing the proportion of

renewable energy in the national energy mix. This sets out (Section 3.1) a target of 16% of all energy from renewable sources of 16% by 2020 (up from 3.1% in 2005). It does not provide specific target figures for solar PV. In addition, the 2015 White Paper '**Irelands Transition to a low carbon energy future 2015-2030**' sets out targets for the further development of the renewable energy sector. This White Paper notes the potential importance of PV technology (paragraph 137), but does not provide specific targets. There are no specific national or regional planning guidelines relating to the locational aspects of solar PV farms.

The **Sustainable Energy Authority of Ireland** have a best practice guide for solar electricity and the grid, but it does not address locational or planning aspects in detail.

8.4.2. Regional Policy

The area falls within the **Greater Dublin Regional Planning Guidelines** area. Policy PIR26 of the regional guidelines 2016-2022 states:

PIR26 Development Plans and Local Authorities support, through policies and plans, the targets for renewable generation so that renewable energy targets for 2020, and any further targets beyond 2020 which become applicable over the duration of the RPGs, are met.

There are no specific objectives relating to solar energy in the **Guidelines**.

8.4.3. Development Plan policy

Policy on Solar energy is set out in Chapter 9 'Infrastructure' of the Wicklow County Development Plan 2016-2022 as follows:

2) Solar Energy

The principal application of solar energy is use in heating. Therefore this aspect of solar power is addressed in Section 5 to follow. However, as technology advances, solar power is increasingly being used to generate electricity through the use of photovoltaic (PV) cells. Photovoltaic systems use semiconductor materials to convert light into electricity. This technology is widely used in consumer products such as solar calculators, watches or garden lights, and is increasingly used as a cost-effective solution in Ireland for stand-alone applications where a grid connection is

too expensive (e.g. parking meters, caravans or remote holiday homes). Solar PV can also be used to provide free solar electricity to houses as well as for commercial and industrial applications. It is now possible to connect solar PV systems to the grid, opening up a new era for solar PV in Ireland. Applications are also being made for commercial scale ground mounted solar PV 'Solar Farms' and such developments are supported, subject to suitable locations being selected and environmental criteria being satisfied.

Solar Energy Objectives

CCE9 To facilitate the development of solar generated electricity.

CCE10 To positively consider all applications for the installation of building mounted PV cells at all locations, having due regard to architectural amenity and heritage.

CCE11 To support the development of commercial scale ground mounted solar PV 'Solar Farms' subject to compliance with emerging best practice and available national and international guidance.

Having regard to policy objective CCE11 I would consider that there is a general policy presumption in favour of the proposed development, subject to considerations relating to landscape and ecological and heritage protection in the area. I would note that there are general restrictions under the 'AONB' designation for most of the coastal lands in this part of Wicklow.

8.4.4. Other decisions

There is no planning history for the site on file. There are two planning permissions for solar farms within 2 km – these are of some significance given the possible cumulative impact on the local landscape. These sites will be visible from high ground to the west of the M7, but there are no roads or other public areas likely to be within the visual envelope of more than one of these sites.

8.5. Visual impact

8.5.1. Landscape

The site is within the lowland plain next to the coast. The area is dominated by the uplands to the west, with the prominent hill (indicated as Ballymoyle Hill on some maps) of 270 metres height overlooking the coast. At this point, the coast is marked by low cliffs and stony beaches. The M11 is the most prominent manmade feature. The site is about 1500 metres south-east of the hill, and between the M11 and the coast, with a narrow strip of fields between it and the R750 coast road. The site drops around 10 metres from west to east and is on very gently undulating topography, apparently mostly on deep well drained gravel beds. The number of unkempt hedgerows in the area gives the landscaped a relatively enclosed feel, except for east of the R750 where there are occasional very fine views over the sea.

The applicant has set out a detailed landscape assessment in Section 11 of the submitted report, along with several appendices with visualisations from viewpoints identified in Figure 11.10. I note the comments made by the appellant with regard to the accuracy and choice of these viewpoints, but having inspected the site and area I am satisfied that they provide a generally accurate indication of the impacts, although I would note that there are other potential views of the site from public areas – most notably from a point north of 'VP5' where the R750 goes up a slight ridge about 100 metres north of the site, providing some views for south-bound traffic or walkers/cyclists towards the site.

I could identify no views from the third class road which loops around the north-east side of the hill, eventually joining with the service road parallel to the M11. Some intermitted views over the road are possible from the junction of this road with the service road next to the M11 (view VBP3 on Figure 11.10).

Another higher viewpoint is VP9 (as indicated on Figure 11.10), from Ballyvoyle Hill, but this is largely obscured by vegetation, but from some points there would be clear views, and in good weather conditions (especially when the angle of the sun would reflect off the panels), it would be quite visible and intrusive. However, I would note that this series of walks is informal and does not appear to be widely used and is not indicated on any tourism or leisure maps. The quality of the view will reduce as the woodland grows, although if it is harvested there will be far clearer views from a stretch of elevated forest road.

From the M11, the site is visible, but there are trees and hedges all along, I would consider that the proposed panels would only be intermittently visible – the application includes for strengthening of hedgerows to reduce this. There is a slight rise in the topography along the section of the R750 north of the site, but the level of vegetation does not give particularly clear views towards the site. One possible view towards the site from a public area is from an overpass on the M11 about 2.5-km to the north, although due to the distance I would consider it unlikely that any panels would be discernible. There would also be quite clear views from a large period dwelling at Ballyrichard to the west, accessed via a 500 metres long private road – I note however that this dwelling is oriented to the south, so the site would not be immediately visible from most of its main windows.

The closest public views of the site are from the R750 coastal road and the minor third class road running along the south (including the cul-de-sac) and the dwellings on the latter roads (there are no dwellings within clear view along the R750, although there may be some very minor intrusion from dwellings to the south-east and a holiday cottage along the R750 to the north).

The site is within a landscape area designated as 'coastal' and 'AONB' in the CDP and as such is quite sensitive – the overall area, especially to the south of the site, has been eroded through a gradual ribbon of housing running north from Wicklow Town. Such coastal lands are generally considered to be vulnerable to intrusion. However, having regard to the overall topography and vegetation, I would consider the chosen site to be quite robust, as there are few clear views over it from the public road, so notwithstanding the designation, I do not consider that this precludes the development of the lands for solar farms.

In overall terms, I would consider the landscape, having specific regard to the impact of the M11 next to it, and to the pattern of hedgerows, to be quite robust and capable of absorbing the proposed development (along with other proposed and permitted solar farms in the area), subject to the strengthening of the hedgerows around it, especially on the eastern side. The overall topography ensures there are no clear views, and reflections from the panels are unlikely to be an issue outside the direct bounds of the site. I note in this regard its past history of quite intensive pasture agriculture.

8.5.2. Views and prospects

One scenic view identified in the CDP is to the north of the site – this is Scenic view 23 – visualisation VP3 in the submitted documents shows the view from here. However, due to the slightly elevated nature of the M11, I am satisfied that the solar panels would not be intrusive from this point.

The R750 is a designated scenic route, but as I have outlined above, the key views are of over the sea – the panels will be visible from various points, but I would consider that the views would be intermittent and generally would not have a particularly serious impact.

8.5.3. Glint and glare

The planning authority initially had concerns about glint and glare, with specific reference to the potential impact on traffic safety on the M11, which runs in a north-south alignment immediately west of the site. A Glint and Glare study was submitted with the application with revised details at further information stage.

There is no published Irish guidance on this issue, but the UK guidance document 'Renewable Energy Planning Guidance Note 2 – The Development of large scale (>50kW) solar PV arrays – Cornwall (UK) 2012' states (page 26):

Glint may be produced as a direct reflection of the sun in the surface of the PV solar panel. It may be the source of the visual issues regarding viewer distraction. Glare is the continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint.

Solar panels are designed to absorb, not reflect, irradiation. However the sensitivities associated with glint and glare, and the landscape/visual impact and the potential impact on aircraft safety, should not be underestimated. In some instances it may be necessary to seek a glint and glare assessment as part of a planning application. This may be particularly important if 'tracking' panels are proposed as these may cause differential diurnal and/or seasonal impacts. Discussions are ongoing with airport operators in Cornwall regarding the potential impact of large scale solar PV development.

The potential for PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all the materials used in the construction of the solar farm.

The key issue with regard to this appeal is the potential impact on traffic safety on the M11. The TII had no objection to the proposed development, referencing the planning authorities general obligations under planning guidelines on transport. I am aware of many examples of solar farms immediately adjacent to busy roads in Europe and the US without any apparent safety problem. With the proposed strengthening of the hedgerows I do not consider that it would represent a traffic hazard.

I note that there are no aerodromes or airfields in the vicinity, so there is no reason to consider aircraft safety to be an issue – the closest is a small training aerodrome at Newcastle, to the north.

I therefore conclude that subject to the provision of appropriate landscaping glint and glare would not be a significant safety issue with the proposed development.

8.5.4. Landscape conclusions

I would conclude that while the proposed panels would be visible from a number of publicly accessible areas, including from the designated Scenic Route along the R750, with the appropriate mitigation set out in the application documents the impacts would generally be negligible to quite minor. The reduction in area of panels set out in the planning authorities conditions would reduce some intermittent views from the R750, but I would concur with the arguments submitted by the applicant that the impacts are minor to the extent that they do not justify such a significant reduction in scale, and having regard to the overall support for solar energy in national and local plans, I do not consider that this condition was justified and I do not recommend that it be repeated.

8.6. Tourism/Economics

The site is close to the coast and a popular area for second houses, but it is not a core tourism area for the region. There are no hotels or related businesses in the vicinity. I do not consider that there would be any quantifiable impact on tourism.

The proposed development would lead to a loss of area of agricultural land. The land mostly appears to be quite low-quality grazing land, now largely used by sheep. There is no evidence on file that this land represents a significant loss of good quality agricultural land with consequent economic impacts.

8.7. Flooding and Drainage

The site is low-lying, but there are no watercourses and no indications of past flooding on or in the vicinity. The site appears to be on deep permeable gravel deposits. Two small watercourses run through the site (Figure 6.2 of the Environmental Report).

There is no evidence that flooding would impact on the operation of a solar farm, as all the panels will be raised significantly above ground level, and I assume that all electrical apparatus will be appropriately protected. The available information indicates that panels do not significantly reduce run-off from land, although in other decisions the Board has recommended a SUDS type approach to ensure there is no significant increase in run-off to surrounding watercourses.

I would consider that flooding is not a risk from the site, and I would recommend a condition such that run-off levels would not exceed that expected from grassed pasture.

8.8. Cultural Heritage

There are no recorded ancient monuments within the site, or visible archaeological remains or buildings of heritage value. The application (Section 10 of the Environmental Report) includes a cultural heritage assessment – a field survey was carried out as part of this report (findings summarised in Table 10.3). No remains of significance were identified, and it is noted that much of the site had been ploughed for tillage in recent years. But having regard to the number of known remains within 1-km, a programme of pre-development archaeological testing is recommended – I would recommend that this be confirmed by way of condition.

I note that while there are a number of older farmhouses in the general area, there are no protected structures or buildings on the NIAH on or close to the site.

8.9. Traffic impacts

The site is next to the M11. The closest access to the site is via an underpass that leads to the service road running parallel and on the western side of the motorway

(see figure 4-1 in the Environmental Report). It is proposed that all materials will be brought in via this overpass, and into the site via a cul-de-sac road that appears to be part of the road system that underlies the relatively new partially elevated motorway structure. This route runs past two dwellings, located on the cul-de-sac and between that road and the M11. While traffic use would be very intense during the construction period, the proximity of the junction 20 on the motorway and the relatively good quality road links should be adequate, and longer term traffic impacts would be light and consistent with related agricultural uses and I do not consider would have any significant impacts on the area.

8.10. Construction Impacts

Section 3 of the submitted Environmental Report contains an outline Construction and Environmental Management Plan for the proposed works. This includes the proposed construction sequence and methodology, in addition to the overall construction management plan including proposals for managing water run-off, noise and dust, soil management, waste, traffic and transport proposals, and decommissioning works.

There are a number of dwellings close to the site, most notably the pair of dwellings to the south-west, opposite the 'cul-de-sac' entrance. These will be most impacted by the works, but I would consider that the management details set out will minimise impacts and ensure that these are largely contained within the landholding. In any event, the works will be relatively short-term.

I would recommend a condition for controls during construction, but having regard to the nature of the works and the area I do not consider that any specific conditions or other controls are required.

8.11. Other issues

I do not consider that there are other planning issues raised in this appeal.

9.0 **Recommendation**

I recommend that the Board grant permission for the proposed solar farm for the reasons and considerations set out below.

10.0 Reasons and Considerations

Having regard to the provisions of the current Wicklow Development Plan for the area, and to regional and national policy, it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual or residential amenities of the area, would be acceptable in terms of traffic safety on the M11 Motorway, would not negatively impact upon the ecology or cultural heritage of the area and would not be prejudicial to public health. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 Conditions

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

Reason: In the interest of clarity

2. The permission shall be for a period of 25 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.

(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.

 (a) Existing field boundaries shall be retained, notwithstanding any exemptions available and new planting undertaken in accordance with the plans submitted to the planning authority.

(b) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of biodiversity, the visual amenities of the area, and the amenities of dwellings in the vicinity.

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

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

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

(d) The inverter/transformer stations shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black slate or tiles.

Reason: In the interest of clarity, visual and residential amenity and to minimise impacts on drainage patterns and surface water quality.

5. Prior to commencement of development, the developer shall submit for the written agreement of the planning authority, details of a SUDS drainage management system, including ponds and swales if necessary, to ensure that stormwater runoff does not exceed that for normal for grassed agricultural lands.

Reason: In the interest of clarity, visual and residential amenity and to minimise impacts on drainage patterns and surface water quality.

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

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site (including archaeological testing) and monitor all site development works. The assessment shall address the following issues:

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

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

archaeological excavation) prior to commencement of construction works.

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

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

7. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including but not limited to, hours of working, noise and dust management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste.

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

8. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination

Reason: To ensure the satisfactory reinstatement of the site.

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

application of the terms of the Scheme.

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

Philip Davis Planning Inspector

17th January 2019