



An
Bord
Pleanála

Inspector's Report PL26.248364

Development	Solar farm with photovoltaic panels laid out in arrays on ground mounted frames on 28.52 hectare site and all associated site works.
Location	Banoge, Tomsilla Upper and Tomsilla Lower, Gorey, Co. Wexford.
Planning Authority	Wexford Co. Council
Planning Authority Reg. Ref.	2017 0077
Applicant	Elgin Energy Services Limited
Type of Application	Permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant	Elgin Energy Services Limited
Observers	None
Date of Site Inspection	10/8/17
Inspector	Siobhan Carroll

1.0 Site Location and Description

- 1.1. The appeal site, which has a stated area of 28.52 hectares, is situated circa 2.8km to the west of Courtown, Co. Wexford. The M11 Motorway lies 764m to the north. The site is located to the eastern side of Banogehill lying between roughly the 40m-54m contour levels. The Banoge River lies 1.1km to the west and the Owenagvorragh River 640m to the south.
- 1.2. The site is served by a local road. A 370m access road is proposed from the local road to the location of the proposed solar array. The junction with the Regional Road R742 lies 500m to the east of the site access. There is a 110Kv ESB Substation located to the west of the appeal site.
- 1.3. The site comprises one large field, a smaller field adjoining it to the east and the access track from Fairy Lane to the east. The boundaries are formed by hedgerow. The closest residential properties adjoin the proposed access road and are located approximately 110m - 130m to the east, 280m to the south and 140m to the north and west of the locations of the proposed solar arrays.

2.0 Proposed Development

- 2.1. Permission is sought for a solar farm with photovoltaic panels laid out in arrays on ground mounted frames on 28.52 hectare site and all associated site works. Features of the scheme include;

- 15 no. single storey invertor units
- A single storey ESB terminal substation
- 4 no. steel storage containers
- 2.5m high security fencing
- 18 no. three metre high pole mounted CCTV
- Minor improvement works to existing Right of Way.

3.0 Planning Authority Decision

3.1. Decision

Permission was refused for the following reason;

1. Having regard to the permitted development of a solar PV farm on the adjacent site, insufficient information has been submitted regarding the potential for cumulative impacts on the landscape and on residential amenity arising from glint and glare. There is also a lack of guidance at national, regional and local level in relation to the appropriate location, scale and distribution of future proposals for solar power. Having regard to the scale of the proposed development, taken in conjunction with the adjacent permitted development, and its potential impacts on the rural character of the area, the visual amenity of the landscape and the amenities of residential property, the Planning Authority is not satisfied that the proposed development would not seriously injure the amenities of property in the vicinity, or that the proposed development would not be premature pending the adoption of national, regional or local guidance or strategy for solar power. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

3.2.1. Planning Reports

- It was considered that the proposed development taken in conjunction with adjacent permitted development could potentially impact upon the visual and residential amenities of the area. Insufficient information was submitted to assess the cumulative impacts on the landscape, and glint and glare.

3.2.2. Other Technical Reports

3.2.3. Environment Section – Further information requested in relation to toilet facilities during construction phase.

3.2.4. Area Engineer – no report received.

3.2.5. Chief Fire Officer – A fire safety certificate is required.

3.3. Prescribed Bodies

3.3.1. Transport Infrastructure Ireland – No observations.

Inland Fisheries Ireland – Recommendations provided in relation to the protection of the adjacent stream.

3.4. Third Party Observations

3.4.1. The Planning Authority received two submissions/observations in relation to the application. The main issues raised concerned the following;

- Status of the right of way.
- Impact on residential amenity due to proposed CCTV monitoring.
- Increase in traffic.
- Glint and glare.
- Visual impact.
- Impact of construction phase on existing residential amenities.
- Ecological impacts on flora and fauna.
- Impact on soil and water.

4.0 Planning History

None on site

Adjacent lands

Reg. Ref. 20161449 – Permission was refused by the planning authority for a solar farm comprising solar photovoltaic panels laid out in arrays on ground mounted frames on a site of approximately 11 hectares with all associated site works. This application is the subject of a current appeal (PL26.248364). The site is located 112m to the west of the appeal site

Reg. Ref. 20161217 – Permission granted by the planning authority for temporary (27 year) permission for ground mounted a solar photovoltaic panels farm on 10 hectares with all associated site works. The site comprises the two adjoining fields to the south.

5.0 Policy Context

5.1. Development Plan

The operative plan is the Wexford County Development Plan 2013-2019.

Chapter 11 – Energy

- Objective EN07

To encourage and favourably consider proposals for renewable energy developments and ancillary facilities in order to meet national, regional and county renewable energy targets and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy, subject to compliance with development management standards in Chapter 18 and compliance with Article 6 of the Habitats Directive.

- Objective EN10

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).

- Section 11.3.5 refers to Solar Power

Solar Photovoltaic Systems use daylight to convert solar radiation into electricity; the greater the intensity of light, the greater the flow of electricity.

- The area in which the site is located is within the ‘Lowland’ landscape which areas are deemed to have a higher capacity to absorb developments.

- Objective L04

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.

- 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.

5.2. National Policy

- 5.2.1. The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015 – 2030', published in December 2015. The White Paper is a complete energy policy update, which sets out a framework to guide policy between now and 2030. The vision of the White Paper is to achieve a low carbon energy system that targets greenhouse gas (GHG) emissions from the energy sector that will be reduced by between 80% and 95%, compared to 1990 levels, by 2050, and will fall to zero or below by 2100. Paragraph 137 of the White Paper states 'solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. 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.
- 5.2.2. The National Spatial Strategy 2002 – 2020 This document states, "in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to

ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability” (page 114).

5.3. **International Guidance**

5.3.1. ‘Planning Guidance for the development of large scale mounted solar PV systems’ prepared by BRE National Solar Centre (UK).

- This guidance document provides advisory information on planning application considerations including construction and operational works, landscape / visual impact, ecology, historic environment, glint and glare and duration of the planning permission.
- The document also provides guidance on the information which should be provided within a Landscape and Visual Impact Assessment.
- The document also provides guidance on EIA Screening procedures.

5.4. **Natural Heritage Designations**

5.4.1. Slaney River Valley SAC (Site code 000781) is 5.6km to the west of the appeal site.

5.4.2. Kilpatrick Sandhills SAC (Site code 001742) is 11km to the north-east of the appeal site.

5.4.3. Cahore Marshes SPA (Site code 004143) is 11.2km to the south of the appeal site.

5.4.4. Cahore Polders and Dunes SAC (Site code 000700) is 11.8km to the south of the appeal site.

6.0 **The Appeal**

6.1. **Grounds of Appeal**

A first party appeal was submitted by Mott MacDonald limited on behalf of the applicant Elgin Energy Services Ltd on the 20th of April 2017. The main issues raised can be summarised as follows;

- In response to the refusal issued by the Planning Authority the appeal addresses the potential for Cumulative Impacts arising from glint and glare and general cumulative impacts.
- A Glint and Glare Assessment was carried out by Glint and Glare Specialists Macroworks Ltd. The Assessment calculated the potential glint and glare impacts associated with the proposed solar PV farm upon surrounding housing and roads.
- The assessment addressed potential hazards and nuisance effects of glint and glare in relation to sensitive receptors around the site.
- It was concluded in the assessment that apart from one residential property to the west of the development (receptor H2) that the magnitude of reflectance effects at all other residential and road receptors is 'very low' or 'none'.
- The occupiers of the dwelling (receptor H2) made observations to the Planning Authority and raised concerns regarding glint and glare. In response to their concerns it is stated that it is not geometrically possible for the property to be impacted apart from early morning glint and glare. This is because the dwelling is orientated to the west of the proposed solar farm.
- In relation to cumulative glint and glare effects therefore it is only (receptor H2) which should be considered.
- The granted solar farm is located to the south and the solar farm under appeal is also to the south of the subject appeal site and receptor H2. Therefore, it is not geometrically possible for cumulative glint and glare effects to occur at this property.
- The Glint and Glare Assessment states that there would be some impacts from panel reflectance but that it would be 'very low' or in some cases there would be 'none' and particularly once proposed mitigation screen planting is accounted for.
- A digital surface model (DSM) was used to address the reason for refusal which refers to glint and glare.
- With specific reference to receptor H2 it was concluded that the maximum minutes per day of reflectance would be reduced from 24 minutes to 18

minutes once the existing and proposed mitigation planting is included. It was also concluded in the report that the average minutes per day of reflectance would be reduced from 12.8 minutes to 7.3 minutes when the existing and proposed mitigation planting is factored in.

- As the maximum reflectance period per day would be reduced to less than 20 minutes but is greater than 15 minutes the magnitude of glint and glare effect can be classified as 'low'.
- Furthermore, it is noted that glint and glare can only occur when weather conditions allow for direct sunlight to hit the photovoltaic panels. It is noted that the Met Eireann website states that Irish skies are completely covered by cloud for well over 50% of the time.
- In relation to mitigation measures the applicants have submitted an undated Landscape Mitigation Plan. The additional screen planting will reduce the extent of reflectance from the panels.
- Regarding the potential impact on the rural character of the area and the visual amenity of the landscape it was concluded in the Landscape and Visual Impact Assessment submitted with the application that *"the proposed development at Banoge is not considered to give rise to significant residual impacts. Aside from one moderate visual impact in the immediate vicinity of the site, landscaping and visual effects are generally in the 'Slight' to 'Imperceptible range beyond the immediate locality of the scheme."*
- As with Glint and Glare effects it is property H2 that is the most affected in terms of visual impact. The additional mitigation screen planting proposed as part of the appeal will reduce potential glint and glare effects and also mitigate potential visual impact at property H2.
- The mitigation screen planting is proposed to bolster the periphery hedge up to 6m. The introduction of a central north-south hedgerow through the centre of the site will further reduce the visual impact.
- View point 8 is the view which most clearly reflects the view afforded from the property H2 with the proposed new screen planting it would reduce the area of panels that are visible.

- It is now considered that the visual impact is reduced from 'High medium' to 'Medium' and the overall significance of visual impact is reduced from 'Moderate' to 'Moderate-Slight'.
- Property H2 has a buffer of 175m of open field to the edge of the site. The proposed development would not obstruct or intrude on the vista towards the sea from the eastern part of the that property.
- Regarding the cumulative landscape and visual impact assessment, there are two potential solar developments in the vicinity of the subject solar development.
- Gorey solar farm is located immediately to the south and has been granted permission. The proposed Steacy solar farm is located a short distance to the south-west. It was refused permission by the Planning Authority and is on appeal.
- Macroworks conducted a Cumulative Landscape and Visual Impact Assessment. The photomontages were provided from VP5, VP6 and VP8 and an additional view point from Boleany Bridge.
- From VP5 the local road to the south it is stated that Steacy Solar Farm would not be visible. Some closer range views of Gorey Solar Farm would be visible. The proposed Banoge Solar Farm would be barely discernible.
- From VP6 the local road east of Boleany crossroads the proposed Banoge Solar farm can be seen in conjunction with the permitted Gorey Solar Farm and the Steacy Solar farm on appeal.
- The proposed Banoge Solar farm is the furthest away and would have a relatively flat profile on the ridge to the east of Banoge Hill. Gorey Solar farm lies to the south and is not discernible due to the nature of the terrain and screening.
- The western end of Gorey Solar farm is visible rising up the slope towards the substation on Banoge Hill. From this view point Steacy farm is the most prominent. All the proposed schemes are clearly contained within the existing field network and therefore it will not impose on the prevailing landscape

pattern. It is considered that the contribution of the proposed Banoge Solar farm to the cumulative impact is low.

- From viewpoint 8 the local road to the west of the site, the proposed Banoge Solar farm would be visible. The eastern half of the permitted Gorey Solar farm would be visible. The Steacy Solar farm currently on appeal would not be visible from this viewpoint due to the terrain and vegetation. The cumulative impact at VP8 is deemed to be low-negligible.
- From viewpoint NV1 at the local road at Boleany Bridge, the Steacy Solar Farm would be visible rising up the mid-slope fields of Banoge Hill. It is flanked to the east by the western end of Gorey Solar Farm. That Solar Farm would be screened by existing planting. The proposed Banoge Solar Farm would be partially visible through the existing hedgerows. A narrow horizontal profile on a broad section of the ridge running east from Banoge Hill would be visible.
- The cumulative impact relates to the combined extent of the developments. Taken separately it is considered that the proposed Banoge Solar Farm makes the least contribution to the overall cumulative impact of the three schemes when viewed from this view point. Therefore, it is considered that Banoge Solar farm would give rise to a Low-negligible cumulative impact in conjunction with the Steacy and Gorey solar farms.
- The proposed mitigation screen planting submitted with the appeal will allay the concerns raised by the Planning Authority. The proposed Banoge Solar Farm will not give rise to any significant landscape and visual effects on its own or in combination.
- Regarding the lack of guidance at National, Regional and Local level for solar energy which was cited in the refusal issued by the Planning Authority it is noted in the appeal that this matter was not cited in the refusal issued by the Planning Authority for the solar development on the adjacent Steacy site, Reg. Ref. 20161449 & PL26.248210.
- The first party cited a number of appeals which the Board have determined regarding solar farm development. Under Reg. Ref 20160689 & PL26.247176 where permission was granted for a scheme at Enniscourthy,

Co. Wexford. The reasons and considerations cited regional and national policy objectives in relation to renewable energy. Under Reg. Ref. 20140392 & PL26.244351 permission was granted by the Board for a solar farm at Ballycullen, Co. Wexford. The reasons and considerations cited regional and national policy.

- Under Reg. Ref. 20160811 & PL26.247366 the Board issued a split decision in relation to the solar scheme. The Board acknowledged the lack of guidance at national, regional and local level in relation to the appropriate location, scale and distribution of future proposals for solar array.
- In the absence of national guidance the first party note that the Board have previously made reference to the UK document Planning Practice for Renewable to low Carbon Energy Development.
- The first party provided responses to the issues raised in the observations made to the Planning Authority in relation to the application.
- Regarding the Right of Way the proposed development will utilise an existing Right of Way along an existing farm access track. No alterations are proposed to the existing entrance. A letter of consent from the landowner is included with the application.
- In relation to the proposed CCTV monitoring it is stated that the cameras will only be focused on the site to avoid any possibility of monitoring of any neighbouring properties.
- Regarding the issue of devaluation of property as cited by observers to the application, it is submitted that property values are a function of many different factors such as national and regional GDP, the local economy as well as buyers and sellers needs and desires. It is stated that there is no evidence to date of property devaluation in Ireland or the UK as a result of solar farms.
- The construction period for the solar farm is expected to be 12 weeks which would generate approximately 215 large vehicle trips providing a total of 430 movements to and from the site. Once operational the proposed solar farm will be unmanned. Therefore, any traffic movements associated with the operational phase will be incidental.

- Regarding radiation and electromagnetic field it is submitted that there is no risk to human health as a result of (EMF) from the low voltage electrical connection cables which will be installed underground along the access road and will connect the terminal station of the solar farm to the adjoining Banoge substation.
- In relation to potential construction impacts, all manufacturing will be pre-fabricated and take place off site. The applicant is satisfied that the undulations of the site will not require earthworks for the positioning of the solar panel frames. During the installation of the solar panel arrays there will be some temporary noise generated.
- Regarding potential impacts on barn owl populations the 28 hectare site which is improved agricultural grassland represents less than 0.8% of typical Barn Owl home range. 75% of nesting occurs between March and August inclusive. The timing of works will not commence between the 1st of March and the 31st of August to ensure no disturbance to nesting Barn Owls.
- Regarding impact to soil, water and air resources and potential for pollution it is stated that the construction phase will be temporary and short term approximately four months. A detailed Construction Environmental and Management Plan will be implemented.
- A temporary construction compound will be provided with site offices, site canteen and a chemical toilet. There is no requirement for permanent welfare facilities on site.
- It is submitted that the proposed development will not pose a significant risk to wintering birds. The proposed development will not result in any net loss of hedgerows and treeline around the site.
- Regarding issues raised by Inland Fisheries Ireland (IFI). The survey carried out on site did not note the presence of any tributary of the Owenagvorragh River Catchment. The main potential impact during the construction phase is the risk of sediment being flushed downstream via drainage channels. The proposed development has been designed to ensure that a minimum of 5m buffer is maintained around existing hedgerows and drainage channels. These measures will reduce the potential of contamination downstream.

6.2. Planning Authority Response

- The Planning Authority note the additional assessment on glint and glare and the mitigation measures proposed to reduce reflectance from panel on receptor H2.
- The additional viewpoints and cumulative visual impact assessment carried out in response to the refusal is noted. The Planning Authority is of the opinion that the proposed development when taken in conjunction with the adjacent permitted development (Reg. Ref. 20161217) and the current application also under appeal (Reg. Ref. 20161449 and PL26.248210) would have a significant cumulative visual impact when viewed from the surrounding roads to the south.
- The location of the site adjacent to Banoge substation is noted. However, the proposed development when taken in conjunction with the adjacent permitted development and the application currently on appeal would have a combined area of approximately 50 hectares. The Planning Authority is not satisfied that the proposal, taken in conjunction with the adjacent permitted development and development on appeal would not be premature pending the adoption of national, regional and local guidance or strategy for solar power with regard to the appropriate location, scale and distribution of future proposals for solar power.
- It is stated in the application that no site levelling works are proposed. Having regard to the undulating nature of the site and the proposed layout of the panels in linear rows, it is not clear how a certain amount of site levelling works can be avoided. It is considered that this may alter the visual impacts of the proposed development and affect the restoration of the land.

7.0 Assessment

Having regard to the above, and having inspected the site and reviewed all documents on file, the following is my assessment of this case. Issues to be considered in the assessment of this case are as follows:

- Planning policy and need for the development
- Visual amenity and landscape character
- Residential Amenity
- Environmental Impact Assessment
- Appropriate Assessment

7.1. Planning policy and need for the development

- 7.1.1. Section 14.4 of the Wexford County Development Plan 2013-2019 refers to landscape. The appeal site at Bannoge, Tomsilla Upper and Tomsilla Lower, Gorey, Co. Wexford is located within the 'lowlands' Landscape Character Unit. It is stated in the Plan that the landscape in lowland areas have characteristics which have a higher capacity to absorb development.
- 7.1.2. The proposed development a solar photovoltaic farm is supported by national, regional and local policies in terms of renewable energy. Objective EN07 of the Development Plan refers to renewable energy developments and states that it is policy to encourage and favourably consider proposals for such developments subject to compliance with development management standards set out in Chapter 18 of the Development Plan and subject to compliance with Article 6 of the Habitats Directive.
- 7.1.3. 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. There is currently no national guidance in relation to solar panel developments in Ireland however I would note that the UK Guidelines 'Planning Guidance for the development of large scale mounted solar PV systems' recommend that when solar panels are located in agricultural land there is a preference to locate them in poorer or more marginal agricultural land as opposed to fertile agricultural land.

- 7.1.4. The Wexford County Development Plan 2013-2019, has no strategy or guidance in relation to larger solar panel developments but does have objectives that support to solar energy development as well as having an overriding strategy to encourage the provision of renewable energy sources. I note that it is an objective of the Development Plan (EN10) to prepare a Renewable Energy Strategy for County Wexford during the lifetime of the plan however no such strategy is currently in place.
- 7.1.5. Therefore, I would consider that the proposal is acceptable in principle and the nature of use would not be contrary to the objectives and policies either nationally or under the County Development Plan. Accordingly, I consider that the proposal is acceptable in principle subject to all other relevant planning issues being satisfactorily addressed, including visual impact on the landscape taking into account the siting, scale and layout of the proposed solar panel development, impact on local residents and the amenities of the area and environmental issues.
- 7.2. Visual amenity and landscape character
- 7.2.1. Permission was refused by the Planning Authority on the basis of concerns regarding visual impact in the landscape and impact upon the rural character of the area and the amenities of residential property. The selection of a site within the Lowland landscape is noted and the absence of protected views is also noted.
- 7.2.2. A Landscape and Visual Assessment was prepared by Macroworks and was submitted with the application. It outlines the description of the site and landscape character as well its context in relation to Development Plan policy. To assess visual impact a zone of theoretical visibility (ZTV) was generated with a radius of 5km from the centre of the site. The assessment identified visual receptors within 5km of the site. Nine viewpoints were identified to the north, south, east and west of the site.
- 7.2.3. Viewpoint no. 1 is taken from Tara Hill to the north-east over 5km from the site. The proposed development would be barely discernible from this location. Accordingly, the magnitude of the effect of the development upon the visual amenity at this location is low. Viewpoint no. 2 is taken from Ask Hill circa 4.3km to the north of the appeal site. The visual presence of the proposed solar farm in the landscape when viewed from this location would be minimal.

- 7.2.4. Viewpoint no. 3 is taken from the M11 slip road 0.7km to the north of the appeal site. The proposed solar farm would not be visible from this location due to the terrain and the existing planting. Viewpoint no. 4 is taken from the R742 regional road to the north-east of the appeal site. It may be possible to glimpse sections of the rear of some panels. However, due to the existing and proposed planting the magnitude of effects is deemed negligible.
- 7.2.5. Viewpoint 5 is taken from the local road circa 0.17km to the south of the site. From this viewpoint intermittent glimpses of the proposed solar array would be possible. However, following the establishment of mitigation screen planting to bolster the existing hedgerows around the site the development would be almost completely screened. Viewpoint 6 at the local road at Ballydane to the east of Boleany crossroads is located 1.2km to the south of the site. The western end of the proposed solar farm is visible from this location as it rises with the terrain towards Banoge Hill. It is set out in the Landscape and Visual Assessment that the magnitude of the visual impact would be low.
- 7.2.6. Viewpoint 7 from the R741 regional road to the south of Gorey is 1.75km from the site. The proposed solar farm will not be visible from this viewpoint due to the terrain and dense screening. Viewpoint 8 is at the local road 0.15km to the west of the site. From this viewpoint the proposed solar farm would occupy several fields in the lower fore to middle ground and it would form a dominant feature.
- 7.2.7. Viewpoint 9 is from the local road at Creagh Lower which is 4.25km to the north-west. The view of the proposed solar farm from this location would be negligible and with the provision of mitigation planting the scheme would not be discernible at all.
- 7.2.8. In order to address the refusal issued by the Planning Authority the first party submitted a Cumulative Landscape and Visual Impact Assessment prepared by Macroworks. Additional photomontages indicating the potential cumulative impact were taken from four viewpoints. Viewpoint 5 is from the local road to the south of the site. There would be views of the granted Gorey solar farm, however the proposed Banoge solar farm would not be visible from this location.
- 7.2.9. Viewpoint 6 is from the Ballydane Road to the east of Boleany crossroads. The submitted photomontage indicates the potential cumulative impact of the three solar developments. The proposed Steacy solar farm to the west of the appeal site would

be highly visible from this location. The upper section of the subject site the proposed Banoge Solar farm would also be highly visible. This in conjunction with the other proposed solar farm would cover a significant section of the landscape to the south and east of Banoge Hill. Therefore, I would consider it may be appropriate to omit the proposed upper section of the solar array in order to protect the visual amenities of the area.

- 7.2.10. From viewpoint 8 the local road 0.15km to the west of the site as illustrated on the revised photomontage it is the proposed Banoge solar farm which would be visible from this location.
- 7.2.11. A new location was provided for the photomontages indicating the cumulative effect. From this new viewpoint NV1 at Boleany Bridge the proposed Steacy Solar Farm would be highly visible. The western end of the permitted Gorey Solar Farm is also visible from this location. The upper section of the proposed Banoge Solar Farm would also be highly visible from this location.
- 7.2.12. The application has submitted proposed mitigation screen planting as indicated on Drawing No: LMP01. While the proposed mitigation screen planting will serve to address views of the proposed solar farm from some viewpoints. The site particularly the upper section is notably prominent and elevated. Consequently, the proposed solar array to the upper section of the site would be highly visible. Accordingly, I am not satisfied that the proposed mitigation screen planting would reduce the potential visual impact to an acceptable degree when viewed from viewpoint 6 and viewpoint NV1 to the south and south-west of the site. In order to address this matter, I consider that it would be appropriate to refuse permission for the upper section of the proposed solar array from the proposed central hedgerow to the northern site boundary.
- 7.2.13. I am satisfied that the lower section of the proposed solar array can be integrated successfully into the landscape subject to the provision of the mitigation screen planting.

7.3. Residential Amenity

- 7.3.1. There are a number of existing dwellings located along the local road network to the north-west, east, west and south of the appeal site. The closest residential properties are situated to the east between 110m and 120m from the location of the

proposed solar array. The closest residential property to the south is situated 280m from the site and the granted solar farm lies between the appeal site and that property. The closest dwellings to the west and the north-west are situated between 140m and 150m from the location of the proposed solar array. There are a number of potential impacts from the proposed development in terms of residential amenity.

- 7.3.2. In relation to noise impact I would consider that the main noise impact would be during the construction phase with the nature of the use and operation generating very little noise impact.
- 7.3.3. Regarding the matter of glint and glare, the solar farm is to be situated on land ranging between approximately 40m and 54m above mean sea level (amsl). All of the solar panels will be fixed at 20 - 30 degrees above the horizontal and orientated in a southward direction. The panels will be mounted up to a maximum height of 2.8m above ground level and set out in linear arrays. Glint can be defined as a momentary flash of bright light and glare a continuous source of bright light. I note that there are no specific guidelines in Ireland in relation to glint and glare and their impact on residential amenity and road users.
- 7.3.4. A Glint and Glare Assessment was carried out by Glint and Glare Specialists Macroworks Ltd. The assessment is contained within the Main report accompanying the application. A total of 20 no. neighbouring dwellings were assessed. It was concluded that glint and glare is theoretically possible at 11 no. dwellings. However, it was found that the proposed solar array would have a medium magnitude effect on only one dwelling (House 2). It was noted that because the dwelling is orientated to the west of the proposed solar farm that reflectance could emanate from the central portion of the site from the 10th of March to the 20th of September between 6.00am – 8.30am for a maximum of 24 minutes per day and an average of 12.8 minutes per day.
- 7.3.5. Regarding glint and glare effects upon road users it was concluded it was only theoretically possible along a small section of the R742 to the east and Fairly Lane to the south and east. However due to the presence of mature planting it was considered that it would only be possible along a very limited section of Fairly Lane and intermittently. Once mitigation is provided to bolster all hedgerows within and around the site reflectance along that section of the road would be eliminated.

- 7.3.6. The reason for refusal issued by the Planning Authority referred to potential for cumulative impacts on the landscape and on residential amenity arising from glint and glare. The applicant has sought to address potential cumulative impacts.
- 7.3.7. For a cumulative assessment they reviewed the planning applications for solar farms within the immediate surrounding area (either permitted, awaiting permission or under construction, or operational), to determine the visibility of the developments to surrounding receptors and to determine whether there could be an 'in combination' or 'in sequence' glint and glare impact. Under Reg. Ref. 20161217 for a 10 hectare solar farm on adjacent lands to the south. That site comprises two fields adjoining the public road which is well screened.
- 7.3.8. There is a concurrent appeal (Reg. Ref. 20161449 & PL26. 248210) for a 11 hectare solar farm on the adjacent lands to the west of the appeal site. In relation to cumulative glint and glare effects it was concluded in the assessment that it is only (receptor House 2 - H2) which should be considered. The solar farm granted permission under Reg. Ref. 20161217 is located to the south of the subject site and the solar farm under appeal is also to the south of the subject appeal site and receptor H2. Therefore, it was considered that it would not be geometrically possible for cumulative glint and glare effects to occur at this property.
- 7.3.9. A digital surface model (DSM) was used by Macroworks Ltd to address glint and glare. In relation to House 2 (receptor H2) it was concluded that once the existing and proposed mitigation planting is included the maximum minutes per day of reflectance would be reduced from 24 minutes to 18 minutes. This would also equate to a reduction from an average reflectance of 12.8 minutes to 7.3 minutes when the existing. It was concluded that as the maximum reflectance period per day to receptor H2 would be reduced to less than 20 minutes but is greater than 15 minutes the magnitude of glint and glare effect can be classified as 'low'.
- 7.3.10. In relation to proposed mitigation measures the applicants have submitted an undated Landscape Mitigation Plan in Appendix C of the appeal. The revised plan indicates that it is proposed to maintain the hedging along the entire western boundary of the site at a height of 6m. A new central section of hedgerow which would run north-south for circa 650m the full length of the site is also proposed. The additional screen planting will serve subdivided the overall area where it is proposed

to locate the solar array and it would reduce the extent of reflectance from the panels.

- 7.3.11. Accordingly, in conclusion in relation to the matter of glint and glare I am satisfied having regard to the separation distances provided to the closest neighbouring properties and the existing screen planting and proposed contained in the Landscape Mitigation Plan that it would mitigate risk of glint and glare to an acceptable degree.

7.4. Environmental Impact Assessment

- 7.4.1. Schedule 5 of the Planning and Development Regulations, 2001 (as amended), sets out Annex I and Annex II projects which mandatorily require an EIS. Part 1, Schedule 5 outlines classes of development that require EIS and Part 2, Schedule 5 outlines classes of developments that require EIS but are subject to thresholds. The proposed development falls below the threshold levels in Schedule 5 of the Regulations in relation to EIA, and does not involve potential impacts on any sites or areas of specific environmental sensitivity. Having regard to the limited nature of the development, the absence of any nature conservation designation in the immediate area, the absence of any emission from the development and the absence of any connection to watercourses, it must be concluded that the development will not have a significant impact on the environment. Overall it is considered that the proposed development does not come within the scope of the classes of development requiring the submission of an EIS as set out in Schedule 5 of the Planning and Development Regulations 2001-2011. The submission of an environmental impact statement is not required.

7.5. Appropriate Assessment

- 7.5.1. The EU Habitats Directive (92/43/EEC) Article 6 (3) requires 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.
- 7.5.2. There are four Natura 2000 sites within 15km of the appeal site. They are Slaney River Valley SAC (Site code 000781) which is 5.6km to the west of the appeal site. Kilpatrick Sandhills SAC (Site code 001742) which is 11km to the north-east of the

appeal site. Cahore Marshes SPA (Site code 004143) which is 11.2km to the south of the appeal site and Cahore Polders and Dunes SAC (Site code 000700) which is 11.8km to the south of the appeal site.

- 7.5.3. In relation to determining the effects of a development on a European site are likely and whether or not the effects are significant in light of the Conservation Objectives for the site. It should also be determined if there are cumulative effects with other projects. The Planning Authority carried out a screening for Appropriate Assessment. A Stage 1 Screening Assessment was carried out in regard to the potential for the proposed development to impact upon the integrity of each of the designated Natura 2000 sites identified within 15km of the site. In the screening report it was stated that there were no likely direct, indirect or secondary impacts from the proposed development. It was concluded in the screening report that the Planning Authority was of the opinion that having regard to the location and separation distance from the subject site to the closest designated sites that there is no potential for significant effects to Natura 2000 sites.
- 7.5.4. Kilpatrick Sandhills SAC, Cahore Marshes SPA and Cahore Polders and Dunes SAC lie over 11km from the appeal site. Having regard to the separation distances between the appeal site and these Natura 2000 sites and based on the concept of source-pathway-receptor, there is no pathway/linkage between the designated sites and the appeal site. The proposal would not result in any habitat loss or reduction in the quality of the habitat and subsequently the conservation status of these designated sites.
- 7.5.5. The Slaney River Valley Special Area of Conservation (Site code 000781) is the closest Natura 2000 site to the appeal site as it lies 5.6km to the west. The conservation and qualifying interests and species and features of interest of the Slaney River Valley SAC include freshwater pearl mussel (*Margaritifera margaritifera*), sea lamprey (*Petromyzon marinus*), brook lamprey (*Lampetra planeri*), river lamprey (*Lampetra fluviatilis*), allis shad (*Alosa alosa*), twaite shad (*Alosa fallax fallax*), salmon (*Salmo salar*), estuaries, mudflats and sandflats not covered by seawater at low tide, Otter (*Lutra lutra*), water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation, old sessile oak woods with *Ilex* and *blechnum* in British Isles, alluvial forests with *alnus glutinosa* and *fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).

- 7.5.6. The possible impact of the proposal on the conservation status of the designated site include loss/reduction of habitat, disturbance of key species, habitat or species fragmentation, reduced species density and decrease in water quality and quantity. It is noted that the appeal site is remote from the designated site and there is no direct or indirect links to the site including a hydrological link. It is therefore concluded that there are no direct, indirect or cumulative impacts on the designated site and that a Stage 2 Appropriate Assessment is not required.
- 7.5.7. In conclusion, 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 the Slaney Valley SAC Site Code (000781), or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment is not therefore required.

8.0 Recommendation

- 8.1. I have read the submissions on file and visited the site. Having due regard to the provisions of the Development Plan, together with all other issues arising, I recommended that I recommend that a split decision be issued.
- 8.2. I recommend that permission be granted for the solar array to the southern section of the site in accordance with the draft reasons and considerations marked (1) under and subject to the conditions set out below,
- 8.3. I recommend that permission should be refused for the proposed solar array to the upper section of the site in accordance with the draft reasons and considerations marked (2) under.

9.0 Reasons and Considerations (1)

Appropriate Assessment

Having regard to the Appropriate Assessment Screening Report submitted with the application, the report of the Inspector, the nature, scale and location of the proposed development, and the separation distances to European Sites, the Board is satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have significant effects on European Sites in view of their conservation objectives. The Board accepted the assessment of the Inspector on this matter, and shared her conclusions.

Environmental Impact Assessment

Having regard to the nature, characteristics, scale and location of the proposed development, and to the characteristics of its potential impacts, the Board is satisfied that the proposed development would not be likely to have significant effects on the environment, either by itself or in combination with other development in the vicinity, including other permitted solar arrays, and concurred with the overall analysis set out in the Inspector's report. The Board, therefore, concluded that the submission of an environmental impact statement was not required.

Conclusions on proper planning and sustainable development

Having regard to the nature and scale of the proposed development, the suitability of the topography of the site, the proximity of a grid connection, the pattern of development in the vicinity, the planning history of the area, including the solar array permitted under Reg. Ref. 20161217, the provisions of the Wexford County Development Plan 2013 – 2019, and of regional and national policy objectives in relation to renewable energy, it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the residential amenities of property in the vicinity, would not have unacceptable impacts on the visual amenities of the area, would not result in a serious risk of pollution, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars received by An Bord Pleanála on the 20th day of April, 2017, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The proposed development shall be amended as follows: -
 - a) The proposed solar array to the upper section of the site from the proposed central hedgerow to the northern site boundary shall be omitted from the scheme.

Revised drawings showing compliance with these requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interests of visual amenity

3. 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.

Reason: To enable the planning authority to review the operation of the solar array in the light of the circumstances then prevailing.

4. This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

Reason: In the interest of clarity.

5. The proposed development shall be undertaken in compliance with all environmental commitments made in the documentation supporting the application.

Reason: To protect the environment.

6. a) New planting shall be undertaken in accordance with the plans submitted.

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 residential amenities of property in the vicinity.

7. 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 tiles.

Reason: In the interest of the visual amenity of the area.

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

Reason: In the interest of the amenities of the area and of property in the vicinity.

9. Cables within the site shall be located underground.

Reason: In the interest of visual amenity.

10.

a) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, shall be submitted to, and agreed in writing with, the planning authority.

b) On full or partial decommissioning of the solar array, or if the solar array ceases operation for a period of more than one year, the site, shall be restored and structures removed in accordance with the said plan within three months of decommissioning/cessation, to the written satisfaction of the planning authority.

Reason: To ensure the satisfactory reinstatement of the site on full or partial cessation of the proposed development.

11. 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 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.

12. 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:

- (a) details of site security fencing and hoardings,
- (b) details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site,
- (c) measures to obviate queuing of construction traffic on the adjoining road network,
- (d) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
- (e) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
- (f) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,
- (g) details of on-site re-fuelling arrangements, including use of drip trays,
- (h) details of how it is proposed to manage excavated soil, and
- (i) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses.

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

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

13. 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 upon 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: In the interest of orderly development and visual amenity and to ensure the satisfactory reinstatement of the site.

14. 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 the permission.

11.0 Reasons and Considerations (2)

It is Council policy under Objective L04 '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'. Having regard to the open, exposed and elevated nature of the northern section of the site from the proposed central hedgerow to the northern site boundary on the ridgeline of Banoge Hill, it is considered that this section of the proposed solar farm would form a prominent and obtrusive feature in the landscape, which would be highly visible in views from roads to south and south-west and which would adversely impact on the rural character of the area. The proposed development would seriously injure the visual amenities of the area and would conflict with this development plan objective which seeks to protect the landscape. The proposed development would, therefore be contrary to the proper planning and sustainable development of the area.

Siobhan Carroll
Planning Inspector

18th of August 2017