



An  
Bord  
Pleanála

## Inspector's Report PL09.249155.

### Development

Planning permission for a solar photovoltaic panel array consisting of the following up to an area of 92.400m<sup>2</sup> of solar panels on ground mounted steel frames within a site area of 31.24hectares; a fenced electricity substation compound to include 1 no electricity control building and hardstands for ancillary electrical equipment, 10 no inverter/transformer units; underground cable and ducts; internal access tracks and hardstanding areas; boundary security fence, CCTV and all associated site services and works, the existing access to the lands at the public road will be used for construction and operational purposes. Planning Permission is sought for a period of 10 years.

### Location

Townlands of Furryhill and Killeel Lower, near Killeel, Co Kildare.

### Planning Authority

Kildare County Council.

### Planning Authority Reg. Ref.

17/684

### Applicant(s)

Harmony Solar, Kildare Ltd.

### Type of Application

Permission.

### Planning Authority Decision

Refuse Permission

### Type of Appeals

First Party

**Appellants**

Harmony Solar, Kidare Ltd

**Observers**

None

**Date of Site Inspection**

5<sup>th</sup> December 2017.

**Inspector**

Bríd Maxwell.

## 1.0 Site Location and Description

- 1.1. The appeal site which has a stated area of 31.24 hectares is located within a rural setting within the townlands of Furryhill and Kilterteel Lower approximately 620m to the southwest of Kilterteel Village in County Kildare. Naas is located approximately 8km to the west and Kill 3km to the north. The M7 motorway is approximately 2.7km northwest of the site.
- 1.2. Access to the site is from local road L2018 from the southeast. The main body of the site is irregular in shape and is located within 13 agricultural field patterns currently in pasture. The Kill river, a minor tributary of the River Liffey flows along the northern boundary of the site. There is an area of woodland adjacent to the north east of the site and a recently planted orchard to the west of this. The woodland area provides somewhat of a visual a buffer between the site and Kilterteel village. A 38kv electrical transmission line traverses the centre of the site, connecting with Kilterteel 110kV substation approximately 1.5km north of the site. Two significant water mains also traverse the site at the north western and south-eastern extremities. There is a farmyard with several agricultural sheds located adjacent to the southeast boundary of the site. The closest residential properties are to the south east of the site, a residential cluster of dwellings fronting onto the Furryhill Road.
- 1.3. The wider area is characterised by a number of mixed uses including Arthurstown Municipal Landfill (now in a restoration and aftercare phase) which lies approximately 900m to the west of the site. Adjacent to this is a quarry site. An industrial and commercial area, Oldmill Industrial Estate and Oldtown Electrical substation lies approximately 900m to the north of the site. Casement Aerodrome, is approximately 8km from the site and Kilterteel village is within the approach to Casement runway 5.

## 2.0 Proposed Development

- 2.1 The proposal seeks permission for a solar photovoltaic installation panel array consisting of: up to an area of 92.400m<sup>2</sup> of solar panels on ground mounted steel

frames within a site area of 31.24 hectares; a fenced electricity substation compound to include an electricity control building and hardstands for ancillary electrical equipment, 10 no inverter/transformer units / stations (comprising 20 no transformers and up to 40 inverters); underground cable and ducts; internal access tracks and hardstanding areas; boundary security fence, CCTV (16 infra-red CCTV cameras placed on poles up to 4.5m in height and all associated site services and works. The existing access to the lands at the public road will be used for construction and operational purposes. Planning Permission is sought for a period of 10 years. The applicant requests that the development be granted permission for an operational period of 30 years from date of commissioning. It is expected that the overall installation and construction phase will have a three to five-month duration. The connection to the national grid is via Kiltel substation intended to be provide on-site.

2.2 The detail of the proposed development is set out in its detail in the reports accompanying the application including:

- Planning and Environmental Report
- Outline Construction and Environmental Management Plan CEMP
- Ecological Enhancement Report
- Archaeological Assessment
- Appropriate Assessment Stage 1 Screening report.
- Ecological Appraisal
- Glint and Glare Assessment.
- Landscape and visual assessment report.

2.3 It is intended that individual PV solar panels will be mounted on steel frames and arranged (typically) 3 modules in landscape orientation to create “tables” of solar panels which are installed in multiple rows throughout the site to form arrays. Inverter / transformer stations are located at various points throughout the site to serve the arrays. Transformers located at the stations will step up the voltage of the generated electricity which is then transmitted to the on-site substation via underground cable

which will be buried in ducts throughout the site following the access tracks. Inverter / transformer stations will typically comprise of a stone hardstanding with up to 4 no concrete plinths to support inverters, a distribution transformer and electrical switchgear and control equipment. From the on-site substation the power will be exported to the national grid via a buried grid connection cable. The substation is a three room masonry building and the substation compound also includes the concrete plinths to support the external electrical equipment. A security gate is proposed inside the entrance to the main body of the site and a 2m high security fence of timber post and wire construction is proposed inside the perimeter hedgerows with mammal access provided for every 100m. It is proposed that the fence will be 3m along the northern boundary to prevent access by deer known to reside in the adjoining forest.

2.4 As regards grid connection an application has been lodged with ESB networks for a new connection through the Embedded generation procedure. The application Maximum Export Capacity MEC is 20MW. It is anticipated that the proposed connection will be established via the existing local ESB Networks substation at Old Mill Substation located at Old Mill industrial estate approximately 950m northwest of the site (5.04km) by road distance. The point of connection will be at the proposed on site DNO substation. Underground cabling is proposed using roadside cabling for 5,04km to Killeel substation. A possible alternative of direct overland route is noted however cannot be confirmed at present.

2.5 Once operational the solar farm will be remotely monitored for performance and security. Maintenance will comprise supplementary grass cutting (if sheep grazing does not suffice) maintenance of drainage features, reading of electricity metre replacement of any damaged panels and washing of panels if required maintenance of site security. At the end of the operational lifetime, the solar array components will be disassembled and removed from site and wiring and cables will be recovered. All above and below ground utility, conduit structures solar panels and fencing will be removed and site restored to agricultural practices.

### **3.0 Planning Authority Decision**

### **3.1 Decision**

By order dated 4<sup>th</sup> August 2017 Kildare County Council decided to refuse permission for the following reasons:

*1 “The proposed development by reason of its scale and nature and the location of the site in the East Kildare upland landscape of Furryhills on landscape designated as being of High Sensitivity in Chapter 14 of the Kildare County Development Plan 2017-2023 with a reduced capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to prevalent sensitivity factors. Furthermore, the proposed development would be located off a designated scenic route (no 22) in the Kildare County Development Plan 2017-2023. It is considered that the proposed development of a large scale solar farm, would seriously injure the visual amenities of this highly sensitive landscape area, would be contrary to the provisions of the Kildare County Development Plan 2017-2023 and lead to an undesirable precedent for similar developments in this sensitive landscape and area. The proposed development would therefore be contrary to the proper planning and sustainable development of the area and would be contrary to the provisions of Chapter 14 of the Kildare County Development Plan 2017-2023.*

*2. The proposed development would endanger public safety by reason of traffic hazard and obstruction of road users due to inadequate sightlines at the site entrance. The proposed development would be contrary to the proper planning and sustainable development of the area.”*

### **3.2 Planning Authority Reports**

#### **3.2.1 Planning Reports**

Planner’s report notes that while the development plan generally supports renewable energy projects there are concerns in regard to a national policy vacuum. Insufficient sightlines are of concern as is inadequate detail regarding decommissioning and site restoration. Findings of the AA screening report are accepted and ecological mitigation is considered acceptable. Additional viewpoints should be considered in

landscape assessment. Notably VP6 and VP2 rely on planting of mature trees along the southern boundary which would take years to take effect in terms of screening. Concern is expressed that the main criteria informing site selection is proximity to the grid and there is concern regarding significance of landscape change. Notably there have been numerous applications for solar farm developments in the County in the last 12 months. The visual impact and scale of the proposed development in an upland location is of concern. It has not been demonstrated that the site is optimal and there may be other potential sites within less sensitive landscapes to accommodate solar energy developments. Refusal recommended.

### **3.2.2 Other Technical Reports**

- Irish Water report indicates no objection subject to conditions.
- Environmental Health Officer - No objection subject to conditions re construction management plan and appraisal after 12 months in relation to glint and glare. Mitigation where necessary.
- Kildare Fire Service - no objection
- Transportation Department – Further information required regarding entrance - sightlines of 150m to be provided. Auto track analysis for HGVs entering and exiting the site entrance required. Mitigation necessary to prevent queuing of vehicles on the L-2018.
- Area Engineer – sightlines inadequate.

### **3.2.3 Prescribed Bodies**

- An Taisce submission asserts that a strategic national and regional strategy is required for solar array development. The Council should ensure optimum site suitability is selected protecting biodiversity sensitive areas, archaeological sites and good tillage.

## **3.3 Third Party Observations**

- Third party submission from William King. Objects to the proposal on grounds that the proposal effects a change of use of land from agricultural to industrial. East Kildare does not lend itself to such a change.

#### 4 Planning History

- None on the appeal site.
- Adjoining site to the south **11/140** Permission refused for single storey/ dormer dwelling on grounds of excessive concentration of development and negative impact on scenic route.
- The Board has considered appeals in respect of a considerable number of ground-based solar PV developments in recent years including:

**PL26.247366:** Split Decision in March 2017 for the development of a solar PV array on c. 31.28Ha separated into two distinct plots located at Ralphtown, Muchtown and Newtown Beg near Baldwinstown, County Wexford with an estimated power output of 17 MW. The northern array (11.7Ha) was granted permission and the southern array (19.5Ha) was refused.

**PL26.247179:** Permission granted in December 2016 for the development of a Solar PV development on a 19.9Ha site. Tomfarney, Clonroche, Co. Wexford (20160717)

**PL246527** Permission granted 18/8/2016.for Solar PV Energy Development on 13.76 hectare site at Ballycooleen, Avoca, Co Wicklow.

**PL26.248364:** Proposed solar farm on a 28 ha site near Gorey, Co. Wexford, which is currently on appeal to the Board.

**PL09. 248329:** Cardington site, Milltown, Athy, Co. Kildare (17/39) 27 year ground mounted solar photovoltaic (PV) farm. 10.6ha site. Currently before the Board.

**PL26.248364** Application at Banoge, Tomsilla Upper and Tomsilla Lower, Gorey, Co. Wexford. for Permission for proposed solar farm comprising solar photovoltaic



panels laid out in arrays on ground mounted frames on a site of approximately 28.52 hectares with all associated site works. Currently before the Board.

## 5 Policy Context

### 5.1 Development Plan

#### 5.1.1 The Kildare County Development Plan 2017-2023 refers.

##### 5.1.1.1 Chapter 8 relates to Energy and Communications.

Section 8.7 deals with solar energy and sets out the key planning policies and objectives in relation to same.

**Policy SE 1** *“To promote the development of solar energy infrastructure within the county, in particular for on-site energy use, including solar PV, solar thermal and seasonal storage technologies. Such projects will be considered subject to environmental safeguards and the protection of natural or built heritage feature, biodiversity views and prospects.”*

**SE 2** *“To ensure that the assessment of solar energy proposals will have regard to*

- *site selection, by focussing in the first instance on developing solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value;*
- *where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays;*
- *the nature of solar farms as normally temporary structures. Decommissioning and site rehabilitation plans will be required providing for the land be restored to its previous use;*
- *the proposal’s impact through glint and glare on neighbouring uses and on transportation and aviation safety;*
- *the proposal’s visual and landscape impact and the potential to mitigate these impacts through, for example, screening with native hedges*

- *the guidance provided in relation to compatibility with landscape designations of Tables 14.3 and 14.4 of Chapter 14 of this plan;*
- *the need for, and impact of, security measures such as lights and fencing;*
- *the need to ensure that heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on protected views and scenic routes etc. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets, e.g. historic demesnes.*

*Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;*

- *the need to consider ecology so as to avoid or minimise damage on important species or protected habitats;*
- *the energy-generating potential, which can vary for a number of reasons including latitude and aspect;*
- *the design of the scheme needs to be carefully considered including layout, scale, land cover panel, height, landscaping, access roads, noise, cumulative impacts and the design of ancillary elements;*

#### **5.1.1.2 Chapter 5 Economic Development Enterprise and Tourism includes**

**Policy ECD 23** to *“Facilitate and encourage the development of the alternative energy sector and to work with the relevant agencies to support the development of alternative forms of energy where such developments are in accordance with the proper planning and sustainable development of the area.”*

**ECD 27** *“To support and facilitate sustainable agriculture, agrifood, horticulture, forestry renewable energy and other rural enterprise at suitable locations in the county.”*

#### **5.1.1.3 Chapter 14 Landscape Recreation and Amenity**

The site is located in the East Kildare Uplands Landscape Character Category. The Eastern midlands is identified as having a high sensitivity a mid-level 3 sensitivity to energy developments.

**Upland Character Areas** including East Kildare Uplands (Area of High Amenity)

It is the policy of the Council to: **LU 1** *“Ensure that development will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere with or detract from scenic upland vistas, when viewed from areas nearby, scenic routes, viewpoints and settlements. Ensure that consideration of landscape sensitivity is an important factor in determining development uses. In areas of high landscape sensitivity, the design, type and the choice of location of proposed development in the landscape will also be critical considerations.”*

**Designated Scenic Route 22** Views to the North-West of the Open Countryside; from Killeel Village to Rathmore Village Furryhill, Killeel Lower, Rathmore East.

**Scenic Routes SR 1** *“It is the policy of the Council to: Protect views from designated scenic routes by avoiding any development that could disrupt the vistas or disproportionately impact on the landscape character of the area, thereby affecting the scenic and amenity value of the views.”*

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

This is a research paper which was funded by the SEAI. It does not purport to be a policy document. The report contains a set of planning policy and development guidance recommendations, which it is suggested may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility Scale Solar Photovoltaic (USSPV) developments in Ireland.

It noted that over a hundred applications for USSPV developments have been lodged with planning authorities by October 2016 and that an estimated 594MW have been granted or are on appeal. The combined site area for these schemes is 1,331.9 hectares.

Recommendations include that the development plans set out policy objectives to support USSPV development and put in place development management standards

to control development. With respect to glint and glare assessments, it is recommended that a national standard for the undertaking of these assessments is developed. It is also recommended that the deployment of USSPV should not be prohibited in undulating landscapes and that a decommissioning statement should be included as a standard component of a planning application.

It is noted that four out of the seven developments refused planning permission (October 2016) have had glint and glare concerns cited as a ground of refusal. The sensitive receptors are loosely categorised as being: Residential dwellings, Historical Monuments/Heritage Landscapes, Road Networks and Aviation Infrastructure.

### **5.3 International Guidance**

#### ***Planning guidance for the development of large scale ground mounted solar PV systems BRE (Building Research Establishment 2013).***

In relation to glint and glare:

*“Glint may be produced as a direct reflection of the sun in the surface of the solar PV panel. It may be the source of the visual issues regarding viewer distraction. Glare is a 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 PV 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 be a consideration. 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. The potential for solar 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 of the materials used in the construction of the solar PV farm.”*

### **5.4 Natural Heritage Designations**

**The site** is not within a designated site. Those in the vicinity (within 15km) are:

- Wicklow Mountains SPA (Site Code 004040) 11.1km to the southeast.
- Poulaphouca Reservoir SPA and pNHA (Site code 004063) 5.8km to south.
- Red Bog cSAC and pNHA (Site code 000397) 3.2km to south.
- Glenasmole Valley cSAC (Site Code 001209) 10.7km to the south.
- Wicklow Mountains SAC (Site Code 002122) 8.2km to the south
- Rye Water Valley / Carton cSAC (Site Code 001398) 14.6km to the north
- Killeel Wood pNHA (001394) is located c 0.4km to the northeast of the site and forms a contiguous block with a broadleaved forestry plantation which abuts the site.
- Slade of Saggart and Crooksling Glen pNHA (Site Code 000211)
- Lugmore Glen pNHA (site code 001212) 9.3km to the northeast
- Liffey at Obserstown pNHA (Site Code 001395) 7.9km to the east
- Grand Canal pNHA (Site Code 002104) c 6kmn to northwest.

## **6 The Appeal**

### **6.2 Grounds of Appeal**

6.2.1 The grounds of appeal submitted by Fehily Timoney and Company on behalf of the first party focus on the two reasons for refusal namely landscape impact and traffic safety and are summarised as follows:

- The existing site entrance as proposed in the application complies with TII standards and achieves adequate sightlines of 150m as required. In the event the Board considers this inadequate a modified entrance option is submitted which extends the site entrance opening to the north into lands under the control of the applicant. As a further alternative the applicant can amend the redline boundary to incorporate this area within the site.
- Location, layout design of the proposed solar farm has been prepared and informed by relevant national, regional and local planning policies as specified in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and Kildare County Development plan 2017-2023. In the formulation of the proposed

development specific regard was had to Chapter 14 landscape Recreation and Amenity in the County Development Plan.

- The detailed landscape and visual impact assessment concluded that residual impacts visual amenities will be imperceptible as medium and long range views are not affected. The existing screening minimises potential visibility to partial views of the solar farm.
- Residual visual impact after implementation of mitigation measures will have an imperceptible to not significant effect on the landscape quality of the area and will not alter or adversely affect the Eastern Uplands Landscape Character Area.
- Decision of Kildare county Council overstates the degree of visual impact.
- With an anticipated maximum export capacity of approximately 18.9 MW the scale of solar development (total site area of 31.2hectares and solar pv panels covering a ground area of up to 92,400m<sup>2</sup>) is not large rather is the norm for projects in Ireland.
- Note the Board's decision on PL27.246527 at Ballycooleen, Avoca, Co Wicklow where similarly landcape and visual impact was principal planning issue.
- Strongly disagree with the contention of there being an absence of policy direction. National, regional and local policy gives clear and unequivocal support for renewable energy projects and Kildare County Development Plan provides clear policy direction and guidance in the context of solar energy development.
- The site and local area has the capacity to sensitively absorb the visual effects of a solar farm.
- The site selection process addressed the key features of policy SE 2.
- A variety of environmental constraints were examined before setting out the layout design of the proposed development. Landscape character helped to inform the design process whereby a significant proportion of lands to the east of the site were omitted.
- Review by Macroworks, appended to the appeal concurs with the outcomes of landscape and visual assessment.

- Distinction between landscape impact and visual impact is noted. The site is located at the western periphery of the eastern uplands landscape character area close to the boundary with the eastern transition lands.
- The lowland landscape to the northwest of the Killeel ridge contains productive rural lands uses, industrial parks, quarry sites, Arthurstown Landfill and the significant settlement of Naas and the M7/N7. The character of the receiving landscape shares more characteristics similar to eastern transition lands LCA than the Eastern Uplands LCA. Judgement that the development would be without significant adverse effects on the appearance or character of the landscape is correct.
- As regards visual impact the development will be visible but is well screened and will not be a prominent feature in the landscape. The most sensitive visual receptors are the residents of the local dwellings lining the road in the vicinity and those travelling along the scenic route on the Local road L2017 between Killeel Village and Rathmore Village. ZTVI map shows limits of visibility.
- Visibility on the scenic routes is severely limited. Views afforded from scenic route 22 are broad panoramas over the Kildare lowlands and the proposed development although visible will not obstruct or unduly intrude on these board views due to setback from the road, low elevation and because it nestles into the existing hedgerow pattern. Mitigation will further assist the scheme in assimilating into its surroundings.

## **6.2 Planning Authority Response**

6.2.1 The Planning Authority made no comment on the appeal and referred to all internal reports on file.

## **7 Assessment**

7.1 Having examined the file, considered the prevailing local and national policies and having inspected the site and assessed the proposal and all submissions, I consider the key issues to be considered in the Board's assessment of the proposed development can be addressed under the following headings:

- Policy Compliance – Principle of Development
- Environment Impact Assessment
- Impacts on the amenities of the area. Landscape and visual, residential and rural amenity & cultural heritage
- Road Safety
- Ecological Impact.
- Appropriate Assessment.

### **7.2 Policy Compliance – Principle of Development.**

7.2.1 The appeal site is located on unzoned lands in rural county Kildare and is identified as the East Kildare Uplands Landscape Character Category. This area identified as high landscape sensitivity. In terms of likely compatibility with land use, the Landscape Areas (Table 14.3) of the Kildare County Development Plan 2017-2023 identifies that the Eastern uplands as having a medium compatibility with solar energy development.

7.2.2 As regards national policy on renewable energy, the proposed development is in accordance with national and EU policies which seek to promote the reduction of greenhouse gases and the advancement of renewable energy resources. As noted above there are no specific national or regional planning guidelines relating to the locational aspects of Solar PV farms. At County level The Kildare County Development Plan 2017-2023 addresses Solar Energy at 8.7 and Policy SE 1 is *“To promote the development of solar energy infrastructure within the county, in particular for on-site energy use, including solar PV, solar thermal and seasonal storage technologies. Such projects will be considered subject to environmental safeguards for the protection of natural or built heritage features. Biodiversity, views*



*and prospects*". Key considerations are outlined in Policy SE 2. In relation to proposals for greenfield land, the policy seeks to ensure that (i) *the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land and (ii) the proposal allows for continued agricultural use where applicable and / or encourages biodiversity improvements around arrays*" On the basis of the foregoing it is evident that the provision of solar farms on suitable sites is acceptable in principle subject to normal proper planning and environmental considerations.

**7.2.3** In relation to site selection and locational justification, a significant factor in terms of the identification of the site by the applicant, is the site's proximity to Kiltel substation. It is outlined that this 110kv substation has significant capacity and is well located to facilitate the connecting infrastructure making the proposed solar link to the National Grid. The Kiltel / Kill area has significant provision of renewable energy in the form of Landfill Gas generators at Arthurstown Landfill, however as gas supply from the landfill is diminishing the ongoing decrease in generating export capacity from the landfill will free up additional grid capacity. Thus it is argued that the proposed development will ensure a sustained level of renewable energy capacity. I consider that the first party has provided a well-reasoned argument for justification of the proposed development at this location and therefore the specifics of the development should be assessed in the context of proper planning and sustainable development on its merit.

7.2.4 As regards the requested 10-year duration of permission, as solar farms are likely to continue to be dependent on both financial support from the government and access agreements with ESB networks, therefore there may be a significant delay in implementing the permission. On this basis I consider that a 10-year permission is reasonable within the current policy context. As regards a 30-year lifetime of permission, I consider that this to be appropriate.

### **7.3 Requirement for Environmental Impact Assessment**

7.3.1 Photovoltaic solar farms are not listed as a specific use category under Schedule 5 of the 2001 Regulations as amended and therefore EIA is not mandatory. In

considering the criteria for determining whether a development would or would not be likely to have significant effects on the environment, I consider that having regard to the characteristics of the proposed development and the location of the development and the characteristics of potential impacts, the proposal is not likely to have significant effects on the environment and therefore EIA is not required.

7.3.2 I note in relation to the submitted documentation the application includes a planning and Environment Report, an Ecological Appraisal, Ecological Enhancement Report, Archaeological Assessment, a Glint and Glare Assessment, Appropriate Assessment Screening and Landscape and Visual Assessment report which address in some detail the key planning and environmental considerations for the proposed development having regard to the receiving environment and the characteristics of the proposed development.

#### **7.4 Impact on the amenities of the area – Landscape and visual, residential and rural amenity, Cultural heritage.**

7.4.1 The landscape and visual assessment report addresses the landscape impact. The designation of the site within the Eastern Uplands Character Area is discussed in some detail as is location of the site is adjacent to scenic route Route No 22 views to the North West and Open Countryside from Killeel Village to Rathmore Village. The description notes that the route provides open and extensive views of the surrounding lowlands to the west, whilst views onto the hilltops are provided to the east. The undulating nature of the lowlands in this part of the County and the existing hedgerow with mature trees adds complexity to the vistas as well as partially screening views along the road. Scenic Route 11 provides views of the upland Areas on the Oughterard Road (L6018) c 4km from the site.

7.4.2 The assessment notes that in terms of the wider landscape context, the receiving environment is predominantly a working agricultural and rural landscape, a significant proportion of settlement, transport, industrial and recreational land uses are interwoven into the landscape around the site. Adjacent land uses include the village of Killeel, the large industrial area associated with pressure creosote timber

facility of PDM and Oldtown Electrical substation (c900m to the north west) the Old Mill Industrial Estate providing light industry and warehousing facilities and the quarry and now closed landfill at Arthurstown (c900m to the southwest). Adjacent to the site are electrical pylons associated with the 220kv line serving Oldtown substation and the 38kv line that runs through the site. The N7 carriageway is located approximately 2.7km to the northwest. The submission within the grounds of appeal argues that the character of the receiving landscape shares more characteristics similar to the eastern transition lands than the eastern uplands landscape character area/

7.4.3 In terms of the site itself the lands within the site slope east to west and lie on the eastern side of a low ridge. The site is c 200m from the L2018 and is downslope by approximately 20m below the elevation of the ridge. The zone of theoretical visibility prepared to aid assessment is set out in figure 1.7 and covers an area 5km from the site boundary. It demonstrates that the greatest potential for visibility is in the immediate vicinity to the north and west of the site. Notably the Killeel ridge and elevated ground at Killeel village restricts visibility to the north and east of Killeel. Arthurstown landfill and rising ground towards the village of Kill generally blocks views of the site from the south west. Undulating ground and hilly topography restricts view from the south. The placing of the solar farm below the curvature of the slope along the Killeel Rathmore road (L2015) causes topographic screening of much of the panel areas of the development. Lands around the site are heavily vegetated with road and field boundaries by mature hedgerows and tree lines which significantly restrict views.

Field work concluded that views of the application site are predominantly confined to glimpsed views from public roads. Ten representative locations were examined and five selected for detailed appraisal in viewpoints.

7.4.4 In terms of general visibility I consider that it has been demonstrated that the proposed solar farm will be generally obscured from public view by a combination of topography, existing and proposed vegetation. Full interrupted views of the site are not possible from any public location. Site infrastructure including the substation, temporary compound and inverter transformer station are positioned with existing structures and hedgerows as backdrops to the site to avoid visibility from public

roads. Overall visual impact will be negligible and no significant change is predicted to the character of the landscape. I would accept the submission of the first party that the wider landscape characterised by rural productivity and by virtue of topographical screening has the capacity to absorb the development without significant adverse landscape and visual impacts.

7.4.5 I note that the proposed solar farm will not require any significant excavation or alteration of the landform and landcover pattern of the site. Construction and maintenance tracks will be similar to farm tracks and storage and operations structures will be modest and incongruous and are sited in close proximity to existing agricultural sheds. I consider that the receiving landscape will retain its salient rural characteristics and will not have a sense of becoming industrialised. The solar farm will be substantially screened by terrain and vegetation. While clearly there will be some noticeable impact on landscape character due to the introduction of a new and relatively intense form of built development, as this is a working landscape in close proximity to significant settlement, commercial and industrial uses, the proposed solar farm will not conflict unduly with the prevailing landscape character. Mitigation will help to amalgamate the development within the existing landscape pattern. I consider that the conclusions to be reasonable and the visual impact of the development is not significant.

7.4.6As regards construction impacts, I consider that on the basis of the short term duration of installation period (3-5 months) and subject to mitigation measures including the provision of a traffic management plan, there will be no significant disruption in terms of construction and roads impact.

7.4.7 As regards cultural heritage the Archaeological Assessment by John Cronin and associates notes that there are no recorded archaeological sites within the lands comprising the proposed development area. However, within 1km there are a total of 14 recorded archaeological sites including the National Monument of Killeel Castle and Cross (National Monument Number 275). The potential for the presence of unrecorded sub-surface archaeological features and artefacts within the site is noted. Two features noted within the site an early 20<sup>th</sup> century stone pillar and a well

of unknown date. Both are to be preserved and a buffer zone adopted. Mitigation measures will include a programme of pre development archaeological testing to be undertaken at areas of the site where extensive subsurface excavation works are required. The report recommends that pre development testing be carried out in advance of main construction works in order to allocate adequate time to evaluation and recording of any features that may be revealed. If underground archaeology is found in proximity to the solar array, steel frames / concrete show supports will be utilised instead of earth piling or screws. I consider that based on the information provided the impact of the development on cultural heritage is not significant.

7.4.8 On the issue of glint and glare, this is assessed in Glint and Glare Assessment Completed by Aardvarc Ltd. The report found that no glint and glare impact on any receptor is likely to be greater than negligible and no impact is most likely for almost all receptors. There are 4 dwellings which may have some views of solar panels to the southeast of the site. Potential for negligible impact is predicted in relation to these 4 dwellings and no impact from solar reflections on any other receptors. There will be no road or air or other safety impact from solar reflections. Screening of the site is achieved by a convex slope near the receptors along the ridge to the southeast of the site and by trees and hedgerows between the site and receptors particularly on the north western slope of the ridge and along the road on either side. These features combined will effectively block views of most or all solar panels (and hence solar reflections) from most or all dwellings. I consider that the conclusions presented are reasonable with regard to the effects of glint and glare whereby it is determined that the impact on road receptors and residential receptors would be negligible and would not result in any significant nuisance or hazard.

## **7.5 Road Safety.**

7.5.1 The second reason for refusal was on the grounds that “*The proposed development would endanger public safety by reason of traffic hazard and obstruction of road users due to inadequate sightlines at the site entrance. The proposed development would be contrary to the proper planning and sustainable development of the area.*” I note however that as set out within the grounds of appeal the requisite sightlines are available from the proposed entrance and in my view this entrance is adequate. I

note the grounds of appeal provided for an alternative entrance option 2 which would involve the extension of the entrance to the north into lands within the control of the applicant. The first party further suggested an option to amend the site boundaries to incorporate this area. I note that the alternative entrance would involve the removal of additional trees and hedgerow and in my view is not necessary given that the requisite 150m sightlines are achieved by option 1. Given the short term duration of the construction period, I consider that traffic can be appropriately managed and mitigated. On this basis I consider that the proposal is acceptable from a road traffic and road safety perspective.

## **7.6 Ecological Appraisal**

7.6.1 The dominant habitat on site is improved agricultural grassland, hedgerows, treelines and drainage ditches. Scrub is present along field boundaries and along the margins of shallow depression in the northern part of the site. Hedgerows are of varying quality. No rare or protected species were recorded on site during survey and no habitats within the site conform to those listed under Annex I of the EU Habitats directive. In terms of impacts approximately 64 metres of hedgerow removal will be required at three separate locations. A drainage ditch will require a new crossing to facilitate access road construction. It is outlined that with the implementation of mitigation measures and enhancement measures the potential impact of the development on the habitats flora and fauna of the site will be imperceptible. The implementation of site enhancement measures for ecology will add to the ecological value of the study area locally I consider that the report presents an appropriate level of detail with regard to the ecological impact of the proposed development and based on the information submitted I consider that the impact on ecology does not present as a barrier to development of a solar farm on the site.

## **7.7 Screening for Appropriate Assessment**

7.7.1 The obligation to undertake appropriate assessment derives from Article 6(3) and 6(4) of the Habitats Directive. Essentially it involves a case by case examination for a Natura 2000 site and its conservation objectives. Appropriate Assessment involves

consideration of whether the plan or project alone or in combination with other projects or plans will adversely affect the integrity of a European site in view of the site's conservation objectives and includes consideration of any mitigation measures to avoid reduce or offset negative effects. This determination must be carried out before a decision is made or consent given for the proposed plan or project. Consent can only be given after having determined that the proposed development would not adversely affect the integrity of a European Site in view of its conservation objectives.

7.7.2 The Appropriate Assessment, Stage 1 Screening Report dated May 2017 is prepared by Fehily Timoney and Company Ltd. The report examines the likely effects of the proposed solar energy development both alone and in combination with other projects on the conservation objectives of Natura 2000 sites within the zone of likely influence, that is within 15km of the proposed solar farm and considers whether any possible impacts on the conservation objectives of any Natura 2000 sites can be characterised as significant.

7.7.3 In terms of step 1 of **Stage 1 Screening**, the European Sites which could potentially be affected using the Source-Pathway-Receptor model are identified as the six Natura 2000 sites within a 15km radius of the proposed solar farm site and the associated grid connection route, namely:

Site Name	Site Code	Distance
Wicklow Mountains SPA	Site Code 004040	11.1km to the south east
Poulaphouca Reservoir SPA	Site Code 004063	5.8km south
Red Bog SAC	Site Code 000397	3.2km south
Glenasmole Valley SAC	Site Code 001209	10.7km south of solar farm site

		9.1km south of cable route
Wicklow Mountains SAC	Site Code 002122	8.2km south
Rye Water Valley / Carton SAC	Site Code 001398	14.6km north of solar farm site 12.8km north of cable route

Notably the Rye Water Valley Carton cSAC is hydrologically connected with the proposed cable route at three points along its length.

#### 7.7.4 Step 2: Identify the Conservation Objectives for these sites.

7.7.4.1 The Wicklow Mountains SPA under the E.U. Birds Directive, is of special conservation interest for the following species: Merlin and Peregrine. The Wicklow Mountains SPA is of high ornithological importance as it supports nationally important populations of Merlin and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive. Part of Wicklow Mountains SPA is a Statutory Nature Reserve.

7.7.4.2 The qualifying interest for the Wicklow Mountains SAC are

Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110]

Natural dystrophic lakes and ponds [3160]

Northern Atlantic wet heaths with *Erica tetralix* [4010]

European dry heaths [4030]

Alpine and Boreal heaths [4060]

Calaminarian grasslands of the *Violetalia calaminariae* [6130]

Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]

Blanket bogs (\* if active bog) [7130]

Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110]



Calcareous rocky slopes with chasmophytic vegetation [8210]

Siliceous rocky slopes with chasmophytic vegetation [8220]

Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]

Lutra (Otter) [1355]

7.7.4.3 The qualifying interest for the Poulaphouca Reservoir SPA is of conservation interest for the following species: Greylag Goose and Lesser Black-backed Gull.

7.7.4.4 The qualifying interest for Red Bog cSAC is Transition mires and quaking bogs [7140]

7.7.4.5 The qualifying interest for Glenasmole Valley cSAC are

Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (\* important orchid sites) [6210]

Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]

Petrifying springs with tufa formation (Cratoneurion) [7220]

The qualifying interest for Wicklow Mountains SAC are:

Oligotrophic waters containing very few minerals of sandy plains

Natural dystrophic lakes and ponds

Northern Atlantic wet heaths with Erica tetralix

European dry heaths

Alpine and Boreal Heaths

Calaminarian grasslands of the Vioeletalia calaminariae

Eous rocky

Blanket bogs

Siliceous scree of the montane to snow levels

Calcareous rocky slopes with chaspophytic vegetation

Siliceous rocky slopes with chasophytic vegetation

Old sessile oak woods with ilex and Blechnum in the British Isles

Lutra.

7.7.4.6 The qualifying interest for the Rye Water Valley (Carton SAC) are Petrifying springs with tufa formation, *Vertigo angustior* (Narrow mouthed whorl snail) and *vertigo moulisiana* (Desmoulin's Whorl Snail)

**7.7.5 Step 3. Identify the potential a) likely and b) Significant effects (direct or indirect) of the project along on the European sites solely within the contexts of the sites conservation objectives**

7.7.5.1 The potential impacts with reference to the Natura 2000 sites' conservation objectives at various stages of the process include emissions to surface and ground water, run off, silt laden run off, hydrocarbon and other pollutants, fuels, construction materials to watercourses, loss of habitat for fauna, avoidance and disturbance.

7.7.5.2 I note that the the Red Bog cSAC and Glenasmole Valley cSAC are not linked hydrologically with the appeal site of the proposed development and no impacts to either of these sites in terms of their qualifying interests is envisaged therefore they do not require further consideration.

7.7.5.3 No direct impacts are predicted on any Natura 2000 site. The hydrological link between the proposed site and cable route watercourse and crossings Rye Valley Carton SAC are remote with instream distances between the site and watercourse crossings being greater than 26km. The connections ultimately feed into the River Liffey of which the Ryewater River is a tributary, as such any potential emissions from the development and cable route will not enter the Ryewater River or Rye Water Valley / Carton cSAC. Thus there is no potential for significant effects.

7.7.5.4 In relation to the otter a qualifying interest of the Wicklow Mountains SAC, these could potentially forage in the stream adjacent to the site. The lack of hydrological connection between the site and the cSAC reduces likelihood of otter foraging however there is potential for overland movement. No signs of otter were observed during ecological surveys and best practice construction methodology (buffer zones silt taps bunding and designated wash out and re-fuelling zones will be employed during the construction phase. Thus no significant effect on otter is predicted. The

ornithological interest for which Wicklow Mountains SPA has been designated (peregrine falcon and merlin) could potentially hunt within the site and in the vicinity of the proposed cable route, however are unlikely to rely on areas surrounding the site and cable route therefore no significant impact on the interest of the SPA is envisaged.

7.7.5.5 The qualifying interests for the Poulaphouca Reservoir SPA (004063) are greylag goose and lesser backed gull. Lesser black backed gull were recorded within the vicinity of the site and cable route surrounding the area. The species could use the site for foraging however the site is not of particular importance to the species due to the fact that similar habitats are present within the wider area, and that wetland habitats including lakes, freshwater marshes and coastal and estuarine habitats including mudflats, sandflats and saltmarshes are preferred. Therefore, no significant impact on lesser black-backed gull as a qualifying interest of the Poulaphouca Reservoir SPA due to the proposed development.

7.7.5.6 Greylag geese were not recorded within the site but has been recorded within a number of 10km grid squares surrounding the site. Greylag goose has a preference for agricultural land where standing water is present. They were not observed during site survey and no significant impact on greylag goose is envisaged.

7.7.5.7 Ecological mitigation will provide for a buffer zone of 10m around watercourses to be implemented and excavation for cable laying will be excavated and infilled in short sections to minimise area of exposed soil and stored spoil present at any time. Spoil heaps will be surrounded by silt fences to ensure negligible to non-existent silt inputs to drainage networks.

7.7.5.8 Based on the information submitted I consider that it has been demonstrated that there will be no direct, indirect or cumulative significant impacts to the six European sites within 15km of the proposed development. It is reasonable to conclude that on the basis of the information on file which I consider adequate in order to issue a screening determination, that the proposed development individually or in combination with other proposed development would not be likely

to have a significant effect on the Wicklow Mountains SPA ((Site Code 004040), the Poulaphouca Reservoir SPA (Site Code 004063), Red Bog cSAC (Site Code 000397), Glenasmole valley cSAC (Site code 001209), Wicklow Mountains cSAC (Site code 002122) and Rye Water Valley / Carton cSAC (site code 001398) or any other European Site in view of the sites' conservation objectives and a stage 2 appropriate assessment and submission of an NIS is not warranted.

## **8 Recommendation**

I recommend that planning permission should be granted, for the reasons and considerations as set out below.

## **9 Reasons and Considerations**

Having regard to the provisions of the Kildare County Development Plan 2017-2023, and the nature and scale of the development proposed, the suitability of the aspect and topography of the site, the pattern of development in the area, it is considered that subject to compliance with the conditions set out below, the proposal would not seriously injure the amenities of the area and would not detract from the visual amenities of the area, would not endanger public safety by reason of traffic hazard and would be in accordance with the proper planning and sustainable development of the area.

### **Conditions**

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

**Reason:** In the interest of clarity.

2. The period during which the development hereby permitted may be carried out, shall be 10 years from the date of this Order, and the permission shall be for a period of 30 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 having regard to the circumstances then prevailing and in the interest of orderly development.

3. Entrance shall be provided in accordance with Option 1, as detailed on drawing P0760-001-0013 submitted to the Board on 31 August 2017. Details of road signage, warning the public of the entrance shall be submitted and agreed in writing with the planning authority prior to the commencement of development.

**Reason:** In the interest of traffic safety.

4. Prior to commencement of development, a detailed restoration plan, providing for removal of all structures, foundations and access roads to a specific timescale shall be submitted to the planning authority for written agreement. 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, shall be dismantled and removed from the site. The site (including all access roads) shall be restored in accordance with the said plan and all decommissioned structures shall be removed within three months of decommissioning.

**Reason:** In the interest of orderly development.

5. No works shall commence without the submission for the approval of the planning authority final details for the chosen solar panels.

**Reason:** In the interest of clarity.

6. No external artificial lighting shall be installed or operated on site, unless otherwise authorised by a prior grant of planning permission.

**Reason:** In the interest of visual amenity and residential amenity.

7. Cables from the solar arrays to the inverters and substation shall be located underground.

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

8. The site shall be landscaped in accordance with a comprehensive scheme of landscaping, details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

**Reason:** In the interest of residential and visual amenity.

9. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the Planning Authority. This shall be facilitated through the provision of mammal access gates every 100m along the perimeter fence and in accordance with standard guidelines for provision of mammal access (NRA 2008).

**Reason:** To allow wildlife to continue to have access across the site.

10. The developer shall facilitate an 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.

11. 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 noise management measures and off-site disposal of construction/demolition waste.

**Reason:** In the interests of public safety and residential amenity.

12. 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.

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:** To ensure 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. The contribution shall be paid prior to the 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 the Board to determine the proper application of the terms of the Scheme.

**Reason:** It is a requirement of the Planning and Development Act 2000 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.

---

Bríd Maxwell  
Planning Inspector

15<sup>th</sup> December 2017

---