



An
Bord
Pleanála

Inspector's Report PL10.247979.

Development	10-year permission for solar photovoltaic energy development within a site area of 10.6Ha, with all associated site works.
Location	Derrynahinch, Knocktopher, Co.Kilkenny.
Planning Authority	Kilkenny County Council
Planning Authority Reg. Ref.	16/445
Applicant(s)	Highfield Solar Ltd.
Type of Application	Permission
Planning Authority Decision	Permission subject to conditions
Type of Appeal	Third Party vs. Grant
Appellant(s)	James Madigan
Observer(s)	None
Date of Site Inspection	19 th April 2017
Inspector	Ciara Kellett

1.0 Site Location and Description

- 1.1. The appeal site is located near Knocktopher in Co. Kilkenny. It is located c.1.5km north-east of Ballyhale village. It is c.1km east of the R448 road and c.3.6km east of the M9 Motorway. It is c.6km south-west of Thomastown. The area is primarily in agricultural use with some tracts of forestry.
- 1.2. The site consists of 10.6ha of land currently in grassland for the grazing of stock and laid out as four fields that are generally well screened, surrounded by mature hedgerows and trees. The topography of the overall site is gently undulating and slowly rises from west to east. There are three dwellings surrounding the proposed site. A single track railway line (Dublin to Waterford line) forms the eastern boundary of the site and an existing entrance to the site lies just to the west of the railway track and level crossing. This road is a narrow country road and in poor condition in parts. Two overhead powerlines traverse the site from north to south. Derrynahinch House, a 17th Century house (SMR Number KK032-053), lies to the south of the site.
- 1.3. Appendix A includes maps and photographs of the area.

2.0 Proposed Development

- 2.1. It is proposed to install a Solar Photovoltaic (PV) energy generation scheme which includes one single storey electrical substation building, electrical transformer/inverter station modules, solar PV panels ground mounted on steel support structures, access roads, fencing and associated electrical cabling, ducting and ancillary infrastructure.
- 2.2. The Maximum Export Capacity (MEC) is expected to be between 4.0MW and 5.4MW. The PV modules will be mounted onto galvanised metal racks which will form rows (arrays) running east to west across the site and will be south facing. The metal framework will be direct-driven into the soil. The panels will be fixed at an angle of approximately 22-30 degrees to the horizontal. The lower edge of the array will be c. 0.7m and the upper edge will be c.3.2m above ground.
- 2.3. It is proposed to use an existing entrance at the south-east of the site for construction and operational access as well as two other entrances. Approximately 750m of site track is required. The site will be fenced in and monitored with CCTV

equipment. CCTV cameras will be located on poles up to 5m in height and shall be angled to overlook the solar site. Motion activated security lighting will be in place at the substation location.

- 2.4. The application was accompanied by a Planning Report, a Stage 1 Appropriate Assessment Screening Report, an Ecological Impact Assessment, an indicative grid connection route, a Landscape and Visual Impact Assessment, a Glint and Glare study, and an Archaeological assessment. A 10-year permission was requested and the operational life is expected to be 30 years.
- 2.5. Following a request for Further Information, the substation was relocated towards the central part of the site – further away from the dwelling to the west.

3.0 Planning Authority Decision

3.1. Decision

The planning authority granted permission subject to 20 conditions. Condition no.3 permitted the operational life of the development to 25 years and required a detailed restoration plan prior to commencement. Condition no.10 requires the developer to provide annual glint surveys for the first two years following operation and should further mitigation be required the Planning Authority shall require the developer to carry this out. Condition no.17 prohibits use of site access no.2 and no.3.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planner's Report is the basis for the Planning Authority decision. It includes:

- Considers that recent An Bord Pleanála decisions have granted operational lives of 25 years and considers that 25 years is appropriate.
- Notes there are no protected views in the vicinity of the site and refers to the Parks Department comments that the well-established hedgerows and mature trees assist in the reduction of any potential negative visual impact on the landscape.

- Considers the storage and operations structure of modest scale and following decommissioning there will be little evidence that the solar farm ever existed, and therefore the proposal will not be incongruous to the overall landscape.
- Considers that the Glint and Glare study does not assess the impact on nearby residences or upon road safety or railway safety, and considers this should be re-examined.
- Notes that an AA screening was carried out and concluded that there will not be any significant effect on European sites.
- A request for Further Information was issued relating to *inter alia*: site access arrangements and sightlines, the poor condition of the road, provision of passing bays on the road, details of proposed development traffic; glint and glare studies locally including a requirement for a letter from Iarnrod Eireann; and, noise impact assessment at nearest noise sensitive receptor to the substation.
- The applicant responded with a Glint and Glare study and a letter from Iarnrod Eireann, as well as an amended location for the substation towards the centre of the site to remove any concerns from nearest noise sensitive receptor.
- Clarification of Further Information was requested by the Roads Section and the Environment Section in relation to site access and removal of trees for sightlines, and revised stormwater proposals.
- Following the response by the applicant, the planner recommended granting permission subject to conditions.

The decision was in accordance with the Planner's recommendations.

3.2.2. Other Technical Reports

- **Environment Section** – Following response to Further Information no objection subject to conditions.
- **Roads Section** – Requested that applicant provide a detailed drawing of the proposed site access arrangement showing the required sightlines. Notes road is narrow and exhibiting signs of failure and requests applicant to submit proposals for provision of passing bays. Notes applicant proposes

underground cables as part of the grid connection along the public road – requests that trench reinstatement details are provided. Following the response by the applicant, requests clarification of details of accesses. Considers that access no.2 is on to a private road and the hedgerow is on much higher ground – sightlines will require the removal of significant hedgerow to achieve gradients and sightlines. Acknowledges that sightline at access no.1 towards railway is restricted, but considers this acceptable due to presence of the level crossing which reduces approach speeds. Considers that access no.1 alone is acceptable. Following response to Further Information and Clarification of Further Information, no objection subject to conditions.

- **Parks Section** – No objection subject to conditions.

3.3. Prescribed Bodies

- **Department of Arts, Heritage and Gaeltacht** – Notes location of Derrynahinch House and recommends that Archaeological Testing and Monitoring be carried out - No objections subject to conditions.
- **Irish Aviation Authority** – Requested Further Information. Following referral of applicant's response, no further response received.
- **Iarnrod Eireann** – No objections.

3.4. Third Party Observations

Three objections were received. Issues include glint and glare on local dwellings, cumulative impact with other solar farms in the area, sightlines, poor condition of road, public consultation, project splitting, proximity of panels to dwelling, landscape character and visual amenity, security and night time lighting, fire and abandonment.

4.0 Planning History

There is no planning history associated with the site itself. A number of planning applications for agricultural and domestic dwellings and extensions have been submitted in the immediate locality.

KCC Reg. Ref. 16592, ABP ref. PL10.247616 – permission refused by the Council in October 2016 for a solar PV installation up to 26,100sq.m in the townland of Ballyhale and Kiltorcan c.1.5km south-west of the subject site. The reasons for refusal by the Council include that it would represent an unacceptably dominant visual feature within a landscape designated as “Upland Area”, and as such would detract from and injure the visual amenity of this rural area, and would come to dominate this rural landscape and town entrance visually as it fails to integrate with its physical surroundings.

The application is currently on appeal with the Board.

5.0 Policy Context

5.1. Development Plan

The site is subject to the policies and objectives of the Kilkenny County Development Plan 2014 – 2020. Chapter 6 refers to Rural Development, Chapter 8 refers to Heritage, Chapter 10 to Renewable Energy Strategy and Chapter 12 to Requirements for Developments. Appendix H refers to Protected Views and Prospects.

Chapter 6 states that the strategic aim of the Council is to manage rural change and guide development to ensure vibrant and sustainable rural areas whilst conserving and sustainably managing the environment and heritage.

Figure 8.2 in Chapter 8 identifies that the site is located in the Upland Landscape Character Type and that there are Protected Views in the vicinity of Thomastown.

The Strategic Aim as stated in Chapter 10 is: *To promote and facilitate all forms of renewable energies and energy efficiency improvements in a sustainable manner as a response to climate change.* Section 10.8.3 of Chapter 10 refers to Solar Electricity. It is noted that the main impact from the installation of solar energy technologies is visual. Objectives are listed – however they relate mainly to the development on houses and commercial buildings.

Section 12.12.1 refers to agriculture zoned areas. It is noted that uses open for consideration include uses not contrary to the proper planning and sustainable development of the area.

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 notes 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 1331.9 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**

There are a number of guidance documents produced including the *Planning guidance for the development of large scale ground mounted solar PV systems* BRE (Building Research Establishment 2013). This provides information with respect to Planning Application Considerations, which includes Site Levelling works, Development in relation to Current Land Use, Assessment of impact on agricultural land, ground maintenance, construction compound, soil stripping, storage and replacement, Access Tracks, Security fencing and lighting, Ecology, Drainage,

surface water run-off and flooding, Glint and glare and Community involvement and gain.

With respect to glint and glare it states:

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 River Barrow and River Nore SAC (Site Code 002162) is located just to the west of the site c.1km away and to the east of the site c.5km away. The River Nore SPA (Site Code 004233) is located to the north c.5km away. Hugginstown Fen (Site Code 00404) is to the south-west of the site c.5.5km away.

6.0 The Appeal

6.1. Grounds of Appeal

A third party appeal has been submitted by the neighbour living in the dwelling to the north of the site. In summary, it states:

- Appellant has no objection in principle to the proposal.

- Concerned about proximity of development to his farmyard and dwelling house which bound the development site.
- The panels are situated c.12m from the common hedgerow and 40m from a building.
- No alterations were made as part of the response to the request for Further Information to take cognisance of the appellant's concerns.
- Considers that the distance is below that which may be acceptable, particularly given the scale of the development.
- No condition was imposed by the Council to increase the separation distance.

6.2. Planning Authority Response

The Planning Authority commented on the appeal. In summary it is noted:

- The building noted as being 40m from the nearest solar panel is an agricultural building and the dwelling is further away.
- It is considered that this distance is adequate such as not to have a negative impact on the appellant.
- The Glint and Glare survey carried out following a request for Further Information concluded that no solar reflection is geometrically possible on the appellant's dwelling house.
- From a visual perspective, there is an established hedgerow boundary between the sites.
- The substation is located 220m from the nearest noise receptor.

6.3. Further Responses

In response to the appeal the applicant submitted a response. In summary, it states:

- Applicant contends that a solution was provided to take cognisance of the appellant's concerns at Further Information stage, by way of providing additional planting along the common hedgerow boundary.

- Photographs are provided indicating that the building closest to the site is a farm building and not a dwelling.
- Additional evergreen trees will be planted to ensure year round screening – the Council decision included a condition for a landscaping plan to be provided.
- Any visibility through the hedgerow that may be experienced while the planting is maturing will be to the rear of the panels due to the fact that the view is due south.
- The applicant understands that the common boundary is >100m from non-agricultural buildings and is >150m from the appellant's existing residence.
- Reference is made to the Planner's Report which summarises the third party submission that says the distance from the solar farm to the house is below acceptable standards, but no further recommendations are put forward by the Planner.
- Consider that the significant existing screening and the additional landscaping measures to be undertaken can provide no reasonable justification for an increase in separation distance.

7.0 Assessment

The main issues in this appeal are those raised in the grounds of appeal and I am satisfied that no other substantive issues arise. Having regard to the policies of Kilkenny County Council, the site location and topography, and the existing screening, I consider the principle of development in this location to be acceptable. The issue of appropriate assessment also needs to be addressed. The issues can be dealt with under the following headings:

- Residential and Visual Amenities.
- Appropriate Assessment.

7.1. Residential and Visual Amenities

Three dwellings surround the proposed location of the solar scheme – to the north, south and west. The appellant lives in the dwelling to the north and is concerned with the proximity of the solar panels themselves to his dwelling and farm. He has no objection in principle to the development.

The four fields where the solar panels are to be placed are irregular in shape but are surrounded by mature hedgerows and trees. It is proposed to provide additional planting between the northern boundary and the appellant's farm.

The solar panels are a distance of 40m away from the nearest building which is a farm building and not a dwelling. The panels will be facing towards the south and therefore there is no possibility of glint and glare affecting the farm or the dwelling. I have visited the site and am of the opinion that the screening existing, and improvements in planting proposed, will virtually eliminate any views of the solar farm.

The appellant's dwelling is single storey and there are farm buildings and a public road between it and the nearest field, so it is unlikely that there will be any views from the dwelling towards the fields with the solar panels.

I am satisfied that the solar panels are sufficiently well screened and there are unlikely to be any views from the appellant's dwelling and the surrounding areas, and consider that the proposal will not be seriously injurious to residential amenities.

The proposal will be visible from passing trains along the Dublin – Waterford line. However, this will be a fleeting view of the development and will not give rise to a serious visual impact. I consider the development to be in accordance with the proper planning and sustainable development of the area.

7.2. Appropriate Assessment

Having regard to the nature and scale of development proposed and to the nature of the receiving environment, no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

8.0 Recommendation

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

9.0 Reasons and Considerations

Having regard to the provisions of the Kilkenny County Development Plan 2014 - 2020, the nature and scale of the development proposed, the suitability of the screening and topography of the site, the pattern of development in the area, and that the proposed development would not cause a traffic hazard or be prejudicial to public health, 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 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 submitted on the 18th October 2016 and 12th December 2016, 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 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 having regard to the circumstances then prevailing and in the interest of orderly development.

3. 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.

4. No external artificial lighting shall be installed or operated on site, with the exception of the motion activated security lighting for the substation, unless otherwise authorised by a prior grant of planning permission.

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

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

Reason: In the interest of visual amenity.

6. Details of the materials and external finishes of all the buildings and fences shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of visual amenity.

7. Surface water from the site shall not be permitted to drain onto the public roads.

Reason: In the interest of traffic safety.

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. This scheme

shall provide a screen along all boundaries which shall ensure the proposed development is visually screened from the farmyard to the north and dwelling to the west. 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.

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

10. CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property, the railway line or the public road.

Reason: In the interest of residential amenity and traffic safety.

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 and proposed access routes.

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. Proposed site access no.2 and no.3 shall be omitted from the development due to the adverse impact on the existing trees and hedgerows. Access no.1 shall serve both the construction and operational phase of the development.

Reason: In the interest of traffic safety.

14. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that 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,

(b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and

(c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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 site and to secure the preservation and protection of any remains that may exist within the site.

15. 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.

16. 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.

Ciara Kellett
Inspectorate

24th April 2017