

Inspector's Report PL08.247778

Development	Permission for a solar PV Farm consisting of 20,113m ² of solar panels, 2 inverter cabins, substation / control building, entrance, underground services. Coolcorcoran & Coolgarriv, Killarney,
Location	Co. Kerry
Planning Authority	Kerry County Council
Planning Authority Reg. Ref.	16/689
Applicant(s)	Terra Solar Ltd
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	Multiple Appeal including First and Third Party
Appellant(s)	1. Terra Solar Ltd
	2. Cian & Finola Long & Others
Observer(s)	None
Date of Site Inspection	9 th March, 2017
Inspector	A. Considine

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1.0 Site Location and Description

1.1. The subject site lies approximately 2km to the north east of the town of Killarney in the townlands of Coolcorcoran and Coolgarriv. The area is located in a rural area and lies to the east of the National Road, the N22, the Killarney to Tralee road. The lands contained within the proposed development site are currently agricultural lands used for cattle grazing. There are a number of one off houses in the vicinity. The site has a stated area of 8.8ha and comprises a large field as well as part of a second field. To the east of the site lies the Coolcorcoran 38kV substation which provides a potential connection point to the national grid.

2.0 **Proposed Development**

- 2.1. Permission is sought, as per the public notices for a ten-year permission for a solar PV farm consisting of up to 20,113m² of solar panels on ground mounted steel frames, 2 no. inverter cabins, 1 no. single storey substation / control building, access tracks, boundary fencing, CCTV stands, new site entrance, undergrounds services, temporary construction compound and all associated ancillary development works at Coolcorcoran and Coolgarriv, Killarney, Co. Kerry.
- 2.2. The development of the PV solar panels will generate electricity from sunlight and will export this electricity to the national grid as a clean, quiet and renewable source of electricity. The solar panels will be connected to inverter cabins by trenched cables, where the electricity will be converted from direct current (DC) to alternating current (AC). This AC will then be fed to the Coolcorcoran substation where it will be exported to the national grid. It is anticipated that, while the development would provide for an installed capacity of up to 5MW, the array will have a maximum export capacity of approximately 4MW.
- 2.3. The infrastructure associated with the proposed development will include a number of elements including:

Solar panels and mounting system – the panels will be mounted to the steel frames and tilted up to 30 degrees. The individual panels are approximately 1.65m x 0.95m in size and are made of specialist materials which maximise the absorption of natural light. The panels will be mounted between approximately 0.8m at the lowest level and 2.8m at the highest level and will be laid out in rows with a distance of 6-9m between the rows.

Inverter cabins – the inverters are used to convert the direct current electricity to alternating current in order to be fed into the national grid. The development proposes 2 inverter cabins measuring 6.06m long x 3.4m high which will be located along the proposed track to the south of the proposed development site.

Trenched electrical cabling – the cabling will be laid in shallow trenches, approximately 1m deep, that will run parallel to the solar panels and will link the panels to the inverter cabins.

Substation and switchgear – A substation is to be located to the south eastern area of the site and will have an overall footprint of 53.47m² with an overall height of 4.65m. The ESB room, switchgear room and control room will be housed within this structure. It is proposed that the substation will connect to the national grid via the adjacent 38kV Coolcorcoran Substation while lies adjacent to the subject site. The plans present an indicative connection route in this regard.

Security CCTV and fencing – the site will be bound by a 2.8m high close welded mesh panel fence, with a buffer of 5m proposed between the fence and existing hedgerows. The fencing will be designed to maintain an adequate gap between the ground and the bottom of the fencing to ensure that small animals can access and egress the site. All existing trees and hedgerows will be retained and existing boundaries will not be altered. CCTV units will be orientated towards the site to maintain privacy outside the site boundary and will be activated by motion sensors.

Internal access track – the use of access tracks will be kept to a minimum.

Site entrance – the design of the access to the site provides for an adequate width to accommodate the movement of construction and service vehicles and the provision of adequate sight lines.

Landscaping – a detailed landscaping and visual impact has been prepared in support of the proposed development. Details of screening proposals and additional planting is provided.

Temporary construction compound

The planning application was accompanied by a number of documents including the relevant plans and particulars, photomontages and a Planning & Environmental Report. The Planning & Environmental Report seeks to provide a description of the proposed development from construction through to decommissioning and also seeks to demonstrate that the proposed solar farm is proper and sustainable development.

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority granted planning permission for the proposed development, subject to 17 conditions including the following:

3. Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to the value of €50,000.00 to secure the reinstatement of public roads that may be damaged by the transport of materials to the site, coupled with an agreement empowering the local authority to apply such security or part of thereof to the satisfactory completion of any part of the development.

Reason: To ensure the satisfactory completion of the development.

4. Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to the value of €100,000.00 to secure the satisfactory reinstatement of the site on cessation of the project, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development.

Reason: To ensure the satisfactory completion of the development.

5. The permission shall be for a period of 10 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.

 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.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planning report considers the proposed development in terms of national, regional and local policy and guidelines which support the development of renewable energy schemes. Reference is also made to UK guidance on solar PV developments. The report also considers the submissions of internal departments and third party submission. Screening for AA was carried out and the initial report considered that further information was required with regard to three issues including archaeological issues, traffic issues and photomontage issues.

Following receipt of the response to the further information request, the planning report considered that all issues had been adequately addressed and that the proposed development was acceptable subject to conditions.

3.2.2. Other Technical Reports

Kerry National Road Design Office:Notes that the site of the proposed development has an access onto the National Primary Road, N22 and notes

that it is unclear what part this access will play in the proposed development. The report further requests that the development should comply with Section 13.2 of the County Development Plan. It is requested that the application be referred to the TII and to the Planning Section of Operations, Health & Safety of Kerry County Council.

EP Conservation: Advises no objection to the proposed development

Building Control Officer: Advises no objection to the proposed development but advises regarding the requirements to obtain a Fire Safety Certificate and a Disability Access Certificate.

County Archaeologist: The report noted that the site contains the recorded monument Ke066-166 listed as an enclosure in the RMP but as a redundant record in the SMR. Pre-development testing is required, under licence.

Biodiversity Officer: The report notes no objection to the proposed development subject to best practices in the construction works.

Environment Section: Report notes no objection to the proposed development subject to compliance with conditions.

3.3. Prescribed Bodies

Commission for Energy Regulation (CER): Acknowledged receipt of the planning application

TII: Report considers that the development is at variance with official policy in relation to the control of development on/affecting national roads.

Inland Fisheries Ireland: The submission requests that a grant of permission would ensure that site development does not give rise to silt contaminated runoff during site construction works. Watercourses bounding the site should be protected with a 10m plus riparian area

3.4. Third Party Observations

Five objections were received by Kerry County Council in relation to the proposed development from the following parties:

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Declan O'Mahony & Marjorie Mannix

Donal O'Connor & Breffni O'Connor

Cian & Fiona Long (submission includes file note of meeting held with residents of Three Arches and Rep of Terra Solar Ltd.)

Michael & Kathleen Griffin

Ruth & Martin Moloney

The objections raise similar issues and these objections are summarised as follows:

- The development is likely to have adverse impacts of the development on the property values of local residents by reason of the scale of the development proposed.
- There was insufficient consultation with local home owners and given the scale of the development, there is an obligation on the promotors to proactively make sufficient information available to all local property owners.
- Visual impact associated with the proposed development raised as a concern, particularly in relation to Killarney's status as the Number One Tourist Town in Ireland. It is submitted that there are alternative locations available to locate this industrial type project.
- Concerns raised in relation to the proposed ground works and the potential for flooding.
- Glint and Glare issues arising from the proposed solar panels which will all face the houses within the Three Arches residential development.
- The development will cause disturbance to local flora and fauna and no study to consider the local impact of the solar farm has been carried out.
- Concerns raised regarding entitlement to privacy, particularly with regard to the proposed use of CCTV and the potential to attract undesirable activity.
- Potential health and safety issues given the relatively new and untested concept of solar farms in this country.

3.5. Other:

3.5.1. The First Party submitted, by way of unsolicited further information, a response to the observations. The submission seeks to clarify the issues raised by the third parties and is summarised as follows:

The topics of most concern relate to traffic and transport impacts, community consultation, visual impact, glint and glare and impacts on flora and fauna. The P&E Report and AA Screening Report provides a detailed assessment of each of these issues.

Traffic & Transportation Impacts:

Section 2.4.7 of the P&E Report notes that the volume of construction traffic is expected to be a maximum of 2 HGV deliveries per day. During the operational phase, there will be 1 or 2 car / van type vehicles per month.

Community Consultation:

A door to door consultation for the proposed development was carried out in April 2016 to houses within 500m of the site. Further consultation with local residents took place on two occasions in May 2016. The concerns raised at these meetings were taken on board and the applicant made revisions to the proposal to alleviate these concerns, including the setting back of the development and the omission of 7,000m² of solar panels.

Visual Impact:

Section 8 of the P&E Report addresses the visual impact associated with the proposed development. Visual impacts were assessed at 9 receptor locations from a variety of distances. The highest level of visual impact is considered to occur in respect of two properties adjacent to the south east of the site. Mitigation planting is proposed and will result in the solar farm being scarcely visible once established.

Glint & Glare:

Section 9 of the P&E Report deals with Glint & Glare. Solar panels are designed to absorbed the maximum amount of sunlight available and The Federal Aviation Administration of the USA has issued technical Inspector's Report Page 8 of 48

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guidance for the design of solar farms in proximity to airports. The surface of the panels is similar to black asphalt and water in that they are considered to reflect less than 10% of sunlight.

Flora & Fauna:

The impacts on flora and fauna were assessed and evaluated by a qualified ecologist and submitted in the form of an Ecological Impact Assessment (EcIA) Section 6 of the P&E Report refers. No species of rare or protected flora were identified as a result of the surveys. The main potential negative impacts identified relate to disturbance to fauna during the construction phase. The loss of habitat will have an imperceptible impact on terrestrial fauna species and will be confined to the area of improved agricultural grassland habitat. Once construction is completed, it is likely that all terrestrial fauna will continue to utilise the site.

4.0 Planning History

- 4.1.1. There is no relevant planning history associated with the subject site.
- 4.1.2. Similar type Solar PV Energy developments have been determined by the Board as follows:

PL26.244351 – Permission granted by the Board for a Solar PV Energy Development in County Wexford. (09.07.2016)

PL04.244539 - Permission granted by the Board for a Solar PV Energy Development in County Cork. (07.07.2015)

PL04.245862 - Permission granted by the Board for a Solar PV Energy Development in County Cork. (16.06.2016)

PL27. 246527 – Permission granted by the Board for a Solar PV Energy Development in County Wicklow. (18.08.2016)

PL14.246850 – Permission granted by the Board for a Solar PV Energy Development in Co. Longford. (07.11.2016)

4.1.3. There are a number of current appeals with the Board.

5.0 Policy Context

INTERNATIONAL GUIDELINES

5.1. Solar PV Development Guidelines in the UK.

There are a number of guidance documents available in the UK. While they do not have a statutory basis in the Irish context, they are useful in informing the planning and environmental issues which arise.

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

This national guidance provides best practice planning guidance in respect of how large ground mounted arrays are developed setting out planning considerations and requirements. It 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. Guidance is included on the information which should accompany a Landscape and Visual Impact Assessment and on EIA Screening procedures.

5.3. Other UK Guidance relevant to the appeal include:

- 5.3.1. Planning practice guidance for renewable and low carbon energy Department for Communities and Local Government July 2013.
- 5.3.2. Renewable Energy Planning Guidance Note 2 The Development of large scale (>50kW solar PV arrays) Cornwall (UK) 2012
- 5.3.3. Devon Landscape Policy Group Advice Note No. 2 Accommodating Wind and Solar PV Developments in Devon's Landscape – LUC Environmental Planning Design and Management – January 2013.

NATIONAL GUIDELINES / POLICY

- 5.4. Ireland's Transition to a low carbon Energy Future 2015-2030 White paper on Energy policy (Department of Communications, Energy and Natural Resources) – Dec 2015
- 5.4.1. This document is a complete energy policy update for Ireland. It sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95%, compared to 1990 levels, by 2050, falling to zero or below by 2100 with the following statements:
- Paragraph 130 Thus far, renewable electricity projects have typically been large scale. While there will continue to be an important role for larger projects, there will also be an increasing role for smaller, community-level projects. As new renewable energy solutions such as bioenergy, solar photovoltaic (PV) and offshore energy mature and become more cost effective they will be included in the renewable energy mix.
- Paragraph 137 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. Solar technology is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016.
- 5.4.2. The White Paper also sought to publish a Renewable Electricity Policy and Development Framework (with a spatial dimension) to underpin the proper planning and development of larger scale renewable electricity generation

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development on land. It is envisaged that such a plan will give guidance to those seeking development consent and to planning authorities in relation to larger-scale onshore renewable electricity projects.

5.5. National Spatial Strategy 2002-2020

- 5.5.1. Section 2.6 of the Strategy deals with 'How to Strengthen Areas and Places' and states that 'National and international evidence also demonstrates that rural areas have a vital contribution to make to the achievement of balanced regional development. This involves utilising and developing the economic resources of rural areas, particularly in agriculture and food, marine, tourism, forestry, renewable energy, enterprise and local services, while at the same time capitalising on and drawing strength from vibrant neighbouring urban areas.'
- 5.5.2. Section 5.5 of the strategy deals with Environmental Quality and states that 'in economic development, the environment provides a resource base that supports a wide range of activities that includes agriculture, forestry, fishing, aquaculture, 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.'

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

5.6.1. The Draft Scoping report was published in early 2016. The consultation phase has ended but the final document has not yet been published. This document outlines a process which seeks to identify potentially suitable land areas for the large scale generation of renewable energy (over 50MW), which would in future inform any revised NSS and/or regional and local planning policy. It is stated that up to 4,000MW of renewable energy generation capacity will be required to allow Ireland to meet its 40% renewable electricity needs by 2020. It is stated that 'A Progress Report on the NREAP was issued in January 2012, showing that 3,900MW of renewable energy grid connection offers had been made. Not

all of these projects have planning permission and it is likely that a significant number will not be developed.'

5.6.2. Reference to solar power is made in Section 5.1.3 where it is stated that 'The 2010 NREAP does not envisage solar power making a contribution to Ireland's 2020 renewable electricity targets. However, it is noted that there has recently been a significant decrease in the cost of solar PV panels and that this technology should offer some possibilities in Ireland in the medium term up to 2030. The recently published Green Paper on Energy Policy in Ireland, May 2014, DCENR, raises the question of the future role of solar energy. The contribution made in 2014 by solar power on the island of Ireland is shown in Table 1. This indicates that out of a total of 3,194MW of renewable capacity, 5.6MW was contributed by solar power.'

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

5.7.1. This is a research paper which was funded by the SEAI. It sets out the policy framework for renewable energy, including reference to relevant targets, and provides information on the achievements to date. It is noted that at the beginning of October 2016, planning applications for over 100 utility scale solar PV (USSPV) developments had been submitted to planning authorities across the state. It was estimated that, if implemented, these would contribute at least 594MW of renewable electricity. However, it was also noted that there is currently no REFIT scheme to subsidise the generation of electricity from USSPV sources. The document also provides guidance on the assessment of proposed solar farm developments. It is suggested that this guidance 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 in due course.

REGIONAL POLICY/GUIDELINES

5.8. The Southwest Regional Planning Guidelines, 2010-2022

- 5.8.1. While there is no specific reference to solar farms in the Regional Guidelines, the guidelines identify that the demand for electricity in the region will rise by approximately 60% by 2025 (Section 5.6.30) and it is anticipated that the additional demand will be met through a variety of sources including wind and wave. It is an objective of the guidelines to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the transmission network. The expansion of the network will also facilitate the development and connectivity of sustainable energy resources at both national and regional levels.
- 5.8.2. It is an objective of the Regional Authority, RTS-09, 'to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network. National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.' In addition, it is an objective 'to ensure that future strategies and plans for the development of renewable energy and associated infrastructure development, will promote the development of renewable energy resources in a sustainable manner.'

LOCAL POLICY

5.9. Kerry County Council Development Plan 2015-2021.

- 5.9.1. The Kerry County Development Plan is the relevant policy document and identifies the subject site as being located within an area zones 'Rural General' and in this regard, section 3.3.2.1 is relevant and states that 'these areas constitute the least sensitive landscapes throughout the County and from a visual impact point of view have the ability to absorb a moderate amount of development without significantly altering their character.'
- 5.9.2. Chapter 7 of the Plan deals with Transport & Infrastructure and section 7.6 deals with Energy / Power Provision. It is the aim of the Plan 'to support and

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provide for the sustainable development of indigenous energy resources, with an emphasis on renewable energy supplies, in the interests of economic progress and the proper planning and sustainable development of the county.'

5.10. Kerry County Council Renewable Energy Strategy 2012

- 5.10.1. The Strategy advises that solar power is generally split into thermal solar energy and photovoltaic solar energy. Thermal solar energy in the form of solar panels provides both water and space heating. Photovoltaic (PV) Solar Energy is the creation of electricity from light. Photovoltaic systems use daylight (not necessarily direct sunlight) to convert solar radiation into electricity. The light which shines on the PV cells creates an electric field causing electricity to flow.
- 5.10.2. Section 7.4.2.5.6 of the RES deals with Solar and states that 'there is significant potential to generate heat from solar energies such as Passive Solar Design and Solar Thermal Water Heating. The use of passive solar design will reduce carbon emissions while solar water heating will generate carbon free heat. It is the intention of Kerry County Council to facilitate the use of passive solar design and solar water heating in new developments and in retrofitting buildings. The technology for Active Solar (Photovoltaics) is not yet fully advanced and it is unlikely that electricity from solar will contribute to electricity generation in the life time of this strategy. This technology, however, is rapidly advancing and it is expected that Active Solar will be used to generate electricity post 2020.'
- 5.10.3. Section 7.4.8 of the RES deals with Solar Energy and is included for the Boards information. Objective NR 7-56 is relevant and states that 'the Planning Authority will support and facilitate the development of solar energy where proposals comply with the requirements set out above, the application requirements and development management standards set out in Section 7.4.11 of this document, and the provisions of the Kerry County Development Plan 2009 - 2015.'

5.11. Natural Heritage Designations

The site itself is not located within any designated site but is within 0.5km of elements of the Killarney National Park SAC, The Deenagh River, which is located to the south of the site. The primary habitat within the subject site is improved agricultural grassland, with some hedgerows and tree boundaries.

6.0 The Appeal

6.1. Appellants

6.1.1. This is a multiple appeal against the decision of Kerry County Council, including the first party and a third party as follows:

Cian & Finola Long & Others against the decision of Kerry County Council to grant planning permission for the proposed development

Terra Solar Ltd, the applicant, against the decision of Kerry County Council to include 3 particular conditions in its decision to grant planning permission for the proposed development.

6.2. Grounds of Appeal

- 6.3. Cian & Finola Long:
- 6.3.1. The grounds of appeal are similar to those objections raised during the PAs assessment of the proposed development and are summarised as follows:
 - Likely adverse impact of the development on property values
 - Insufficient consultation with local home owners
 - Visual impact
 - Potential impact of flooding
 - Glint & Glare
 - Disturbance to local flora & fauna
 - Concerns as to entitlement to privacy
 - Potential health & safety issues

- General issues including protection of the natural country side, precedent potential and potential impacts on Killarney.
- 6.4. Terra Solar Ltd:
- 6.4.1. The grounds of appeal relate to the inclusion of three specific conditions, conditions 3, 4 and 5, and are summarised as follows:
 - Condition 3 states as follows;

Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to the value of €50,000.00 to secure the reinstatement of public roads that may be damaged by the transport of materials to the site, coupled with an agreement empowering the local authority to apply such security or part of thereof to the satisfactory completion of any part of the development.

Reason: To ensure the satisfactory completion of the development.

- It is considered that the amount of the bond required is disproportionate to the level of impact on the local road network and is unnecessarily high having regard to the nature of the construction activities that will be required on the site.
- It is considered that the impact of the construction phase of the proposed development will be minimal on the N22 and slight on the L3018 over the rail bridge and local road to the site.
- The applicant proposes to undertake a condition survey of the roads and bridges along the haul route both before and after construction, in agreement with the Planning Authority.
- It is considered that a bond of €10,000 is reasonable and is reflective of similar bond requests for similar developments in the state.
- > A suggested wording for Condition 3 is provide.
- Condition 4 states as follows:

Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, a bond of an insurance company, or other security to the value of €100,000.00 to secure the satisfactory reinstatement of the site on cessation of the project, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development.

Reason: To ensure the satisfactory completion of the development.

- While the applicant is agreeable to the imposition of a bond for the above, it is considered that the amount is much higher than other bonds imposed by other County Councils for similar type developments.
- The Finance Model for Solar Farms is based on the decommissioning and resale value of scrap materials from the site including copper, aluminium and zinc.
- It is submitted that €20,000 is a reasonable bond request for the development.
- Condition 5 states as follows:

The permission shall be for a period of 10 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.

- Condition 5 restricts the operational duration of the project to 10 years, while the application was for 25 years, which appears to have been included in error.
- There is precedent within permissions from Kerry County Council for longer periods.

6.5. Applicant Response

The first party has submitted a response to the third party appeal. The response is summarised as follows:

- With regard to the perceived impact on property prices, no evidence to substantiate this claim has been submitted.
- With regard to public consultation, it is submitted that the application was made in accordance with the P&A Regulations, and that representatives of the applicant company visited residents in the area to discuss the proposed development, with further meetings held in May 2016. Based on these meetings, the development was amended and reduced in scale to increase separation distance and reduce visual impact.
- In terms of visual amenity, it is submitted that based on the landscape and visual impact judgements provided throughout the assessment of the proposed development, the proposed solar farm is not considered to give rise to any significant impacts.
- With regard to the issue of flooding, as raised by the third party appeal, it is submitted that there are no streams or watercourses within the site and having regard to the construction methods, the solar panels will naturally drain to the existing ground. The solar farm will have no significant impact on the existing drainage regime.
- In terms of the issue of Glint & Glare, it is submitted that the main issue for Solar PV developments relate to glint, which occurs where there is sunlight. It is not associated with excessive distraction or nuisance for motorists or pilots provided it is infrequent and fleeting. It is not anticipated that the proposed development will present any detrimental impact on the surrounding area in terms of glint.
- The Third Party appeal has raised concerns in terms of the impact of the development on ecology. In response, the applicant submits that the field surveys did not identify any protected habitats or species using the area. The construction and operation of the Solar PV farm will have no significant ecological residual impacts on flora or fauna in the area.

- In terms of the potential impact on Bats, the third party submits that the development has been designed with a 5m buffer between the panels and treelines which is considered appropriate.
- In terms of the impact of the development on the deer population, it is submitted that there is no evidence of deer utilising the subject development site. The development will incorporate 'mammal friendly' fencing which will permit the unimpeded access to the site for foraging and commuting ground mammals, while excluding larger mammals including deer. It is submitted however, that there is similar habitat in the vicinity and the development is not likely to have any impact on the species.
- With regard to the impacts on privacy, the first party submits that the CCTV system is proposed such that they will not overlook onto neighbouring properties.
- In terms of health and safety, it is submitted that it is not envisaged that EMFs pose a health risk.
- With regard to the general concerns raised, the applicant submits that the proposed development is a clean, quiet and renewable source of electricity generation. The project has the potential to power 1,200 homes and has the potential to displace 1,687 tonnes of carbon emissions every year, and aligns with both national and local policy pertaining to renewable energy.

It is requested that the decision of Kerry County Council be upheld.

6.6. Planning Authority Response

The Planning Authority has not responded to this appeal.

6.7. Observations

There are no further observations noted in relation to this appeal.

6.8. Further Responses

There are no further responses noted in relation to this appeal.

7.0 Assessment

7.1. Introduction

7.1.1. Having inspected the site and examined the associated documentation, the following are the relevant issues in this appeal.

- Principle of Development
- Landscape / Visual Impact
- Impact on Residential Amenity
 - o Visual Impact
 - o Privacy
 - o Noise
 - o Devaluation of property
 - o Glint & Glare
- Traffic and Access
- Ecology
- Surface Water Drainage
- Conditions & First Party Appeal
- EIS Screening
- AA Screening
- Other Issues

7.2. The Principle of the proposed development

7.2.1. In considering the principle of a proposed solar panel development it is appropriate that the Board have regard to both national and regional policy provisions and site specific objectives. It is notable that since the publication of the 2009 Renewable Energy Directive (2009/28/EC) that Ireland has a target objective requiring that 16% for all energy comes from renewable sources by 2020. This Directive is enshrined into national policy objectives. I refer the

Board to Par 130 of Ireland's 'Transition to a low carbon Energy Future 2015-2030 - White paper on Energy policy', which was published in December, 2015 and which includes an explicit objective to reduce carbon emissions. In this regard, the development of solar photovoltaic systems is both support by policy and is considered an integral part of achieving this objective. In addition, the National Spatial Strategy, 2002 – 2020, recognises the importance of renewable energy as it is stated that the aim should be to ensure that resources such as energy is used in sustainable ways.

- 7.2.2. There is currently no national guidance in relation to solar panel developments in Ireland but in the absence of same, I have considered the content of the UK Guidelines '*Planning Guidance for the development of large scale mounted solar PV systems*'. These guidelines 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.
- 7.2.3. In terms of regional policy, I would refer the Board to the South West Regional Planning Guidelines, 2010 – 2022. Paragraph 5.6.32 of these Guidelines refers to renewable energy and it is stated that it is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the region will promote the development of renewable energy resources in a sustainable development. In principle, I am satisfied that the development as proposed generally accords with the requirements of both national and regional policy as it relates to the development of renewable energy developments.
- 7.2.4. In terms of local policy, the Kerry County Development Plan, 2015 2021, is the relevant policy document. The Plan identifies the subject site as being located within an area zoned 'Rural General' and in this regard, section 3.3.2.1 is relevant and states that 'these areas constitute the least sensitive landscapes throughout the County and from a visual impact point of view have the ability to absorb a moderate amount of development without significantly altering their character.'

- 7.2.5. Chapter 7 of the Plan deals with Transport & Infrastructure and section 7.6 deals with Energy / Power Provision. It is the aim of the Plan 'to support and provide for the sustainable development of indigenous energy resources, with an emphasis on renewable energy supplies, in the interests of economic progress and the proper planning and sustainable development of the county.'
- 7.2.6. The Kerry County Council Renewable Energy Strategy 2012, advises that solar power is generally split into thermal solar energy and photovoltaic solar energy. Thermal solar energy in the form of solar panels provides both water and space heating. Photovoltaic (PV) Solar Energy is the creation of electricity from light. Photovoltaic systems use daylight (not necessarily direct sunlight) to convert solar radiation into electricity. The light which shines on the PV cells creates an electric field causing electricity to flow.
- 7.2.7. Section 7.4.2.5.6 of the RES deals with Solar and states that 'there is significant potential to generate heat from solar energies such as Passive Solar Design and Solar Thermal Water Heating. Section 7.4.8 of the RES deals with Solar Energy and Objective NR 7-56 is relevant in that it states that 'the Planning Authority will support and facilitate the development of solar energy where proposals comply with the requirements set out above, the application requirements and development management standards set out in Section 7.4.11 of this document, and the provisions of the Kerry County Development Plan 2009 2015.'
- 7.2.8. In principle, I am satisfied that there is a presumption in favour of alternative energy projects, including solar PV energy, and this is acknowledged at National, Regional and County level. In this regard, I am satisfied that, in principle, the development can be considered as acceptable. That said, there are site specific issues which are required to be considered and addressed prior to a positive decision issuing. These issues are considered further below.

7.3. Landscape / Visual Impact

7.3.1. The subject site is located within an area of Co. Kerry which has been zoned 'Rural General' and in this regard, section 3.3.2.1 is relevant and states

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that 'these areas constitute the least sensitive landscapes throughout the County and from a visual impact point of view have the ability to absorb a moderate amount of development without significantly altering their character.'

- 7.3.2. The subject site covers an area of 8.8ha and the landscape is gently undulating. There are a number of one off houses in the vicinity of the site to the south and the N22 is located to the west and northern area of the site, and just beyond the Tralee to Killarney railway line. The existing 38kV Coolcorcoran Substation bounds the site to the east. The predominant use of the lands is agriculture and it lies approximately 2km to the north of the town of Killarney. The site benefits from considerable hedgerow and treeline cover. There are few views towards the site from the surrounding public roads due to the presence of these features. In support of the proposed development, the applicant submitted a Landscape and Visual Impact Assessment, Chapter 8 of the submitted Planning & Environmental Report. The Board will note the intention of the applicant to retain existing hedgerows within and abounding the site as well as proposals to reinforce the existing site boundaries with further planting to ensure continued screening of the site.
- 7.3.3. In support of the proposed development, the applicant included a series of photomontages and in terms of impacts on the landscape, the Landscape and Visual Impact Assessment report concludes that the magnitude of landscape impact is medium in the immediate vicinity of the site, within 500m of the site, and that this magnitude is likely to reduce to medium-low from this distance to approximately 1-2km. Thereafter, it is likely to reduce rapidly to low and negligible. The overall significance therefore, is considered to be no greater than moderate slight. In terms of the visual impact, the report assessed the development from nine receptor locations from a variety of distances, angles and viewing contexts. The Board will also note that as part of the PAs further information request, an additional VRP was included in the overall assessment. The report concludes that at the majority of these receptors, the visual impact is consider to be medium or low, prior to the establishment of mitigation, reducing to low and imperceptible once mitigation screening becomes established.
- 7.3.4. The highest level of visual impact arises to the south of the subject site, and immediately adjacent to the residential properties. The existing houses
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currently do not have rear boundaries which would restrict the extended views over the countryside and subject application site. It is clear that the introduction of hedgerow boundaries in itself will represent a change for the residents, but undoubtedly, the proposed development will alter the existing perspective while the new boundary is establishing. Indeed, the third party appellants raise this issue as part of the appeal against the decision of the planning authority to grant planning permission in this instance. While I empathise with the submission of the third party in this regard, there is no inherent rights to views over third party lands within the planning code. I accept that while the proposed new boundary is establishing, there will be views over the proposed development but do not consider that this is reason enough to refuse permission for a development which otherwise might be considered acceptable and appropriate as well as complying with national and local policies for the provision of renewable energy developments. I also note that following decommissioning, the visual impact of the development will be entirely removed.

7.3.5. Further to the above, the development will be visible from the N22 from a very small extent of the public road, at the railway overpass. The proposed development includes for additional planting in this area also and as such, I am satisfied that the development is acceptable in terms of landscape and visual impact.

7.4. Impact on Residential Amenity

7.4.1. Visual Impact:

One of the primary concerns associated with the proposed development as raised in the third party appeal relates to the impact of the development on the existing residential amenities of properties in the area. In particular, the development will be visible from two of the properties to the south of the site. I have discussed this issue above.

7.4.2. Privacy:

The third party appellant has raised concerns regarding the impact of the development on privacy. There is potential for impacts on the established

residential amenity of the area during the construction phase of the development, but it must be acknowledged that this period will be short and temporary in nature. It is submitted by the applicant that once operational, there will be no permanent personnel located on site and the site will be visited by maintenance personnel occasionally.

The issue of the intention to use CCTV to monitor the site following the completion of the development works is also raised as a concern. The use of CCTV cameras is a common and important feature of solar PV farms and they are used in the interest of crime prevention. I refer the Board to the UK Guidelines '*Planning Guidance for the development of large scale mounted solar PV systems*' in this regard as they include a consultation with the police service who recommend a CCTV system as a defence mechanism. The CCTV system would be a deterrent to crime in the general area and would not, in my opinion, interfere with privacy. The site layout plan identifies that 8 cameras will be erected around the perimeter of the site and that the cameras will be erected to overlook the site only. I am satisfied that the proposed development would not significant impact on the residential amenities of residents in the area, including their privacy.

7.4.3. Noise:

It is submitted that the proposed construction phase of the development will take approximately 12 weeks, and the working hours will be 7am to 7pm Monday to Friday and 7am to 1pm on Saturday, with no working on Sundays or Bank Holidays. The need for extended working hours will be discussed with the Local Authority should it arise. A workforce of up to 60 people will be employed during the construction phase and the Planning & Environmental Report details the list of construction plant and machinery to be used. It is noted that given the location of the subject site, and other than the noise from road traffic associated with the N22 in places, the ambient background noise is low. As such, it is likely that the construction phase of the development will have an impact, albeit a temporary impact. I am satisfied that the noise levels generated during the construction of a condition in any grant of planning permission to limit the working hours and compliance with the recommended EPA noise emission limits.

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In terms of operational noise, the Board will note that the nature of the development would indicate that there is no significant operating noise. The primary noise sources would be from the cooling fans associated with the inverter boxes and transformers in the control cabins. Overall I would consider that operational noise from the proposed development is not a significant issue.

7.4.4. Devaluation of Property

The third party appellants submit that the proposed development will devalue their property. These claims, however, are not substantiated with any documentary evidence or empirical studies. I am satisfied that the proposed development, in principle, is acceptable in terms of policy requirements and subject to the implementation of the mitigation measures, would not devalue properties in the local area.

7.4.5. Glint & Glare

The issue of glint and glare arises in certain conditions when the sun is low and light can be reflected from the solar panels to ground based receptors, and can cause nuisance as well as having an impact on established amenities in the local area. Glint only occurs when the sun is shining and it is submitted that a fixed receptor will be subjected to glint once per day over two periods per year either side of the summer solstice. The proposed PV panels, the subject of this appeal, will be fixed in one orientation, facing due south, and will not track the sun. The Board will note that in the previous appeals in relation to similar type developments, the inspectors appear to agree that the issue of glare is not particularly relevant to solar panels and this was the same conclusion reached in the submitted Planning and Environmental Report in the current appeal before the Board.

As such the primary issue for assessment and consideration is whether glint from the proposed development would have any adverse impact on local amenities. Section 9.2 of the submitted Planning and Environmental Report seeks to address the effects of glint as a result of the proposed development and advises that the solar panels are designed to absorb the maximum amount of sunlight available. Light which is reflected is wasted light and serves to impact negatively upon the overall efficiency of the panel. The panels

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themselves are much darker than normal glass and are close to black in colour. The surface of a panel may be treated in a certain way, incorporating an antireflective coating to maximise the amount of light captured and to scatter any reflected light as opposed to causing specular reflections. In addition, the report submits that the PV modules are considered to reflect less than 10% of sunlight. The submitted Planning and Environmental Report states that glint is not associated with excessive distraction or nuisance for motorists or indeed pilots with large scale Solar PV developments in the UK and USA constructed in close proximity to airports.

In addition, I would consider that vegetation will also mitigate against any glint impacts in the wider area. This matter has been addressed by way of mitigation measures proposed and in particular along the southern boundary of the site, immediately adjacent to the existing houses. A condition should be included in any grant of planning permission that the mitigation planting, particularly along the southern boundary of the site, occurs in the first planting season following a grant of planning permission, should the Board be so minded to grant permission for the proposed development. Overall, I am satisfied that given the low potential occurrence of glint from the proposed development as outlined by the applicant, the sparsely populated local area and the nature of the landscape that the proposed development will not have any significant impacts on the surrounding area in relation to glint and glare.

7.4.6. Conclusion

I am satisfied that subject to compliance with appropriate conditions, the proposed development will be acceptable in terms of impact on residential amenity.

7.5. Traffic and Access

7.5.1. In support of the proposed development, the applicant included details on the construction phase traffic that will arise within the Planning & Environmental Report. Included were the likely haul and delivery routes, which will be via the national and primary roads, and over less than 1km of local roads to be used to access the site. It is submitted that there will be no abnormal loads and during the peak construction phase, a maximum of 2 HGV trips per day are expected. A total of 30 extra cars will be utilising the local road network during a six-week period. Following a request for further information, further details were submitted to the Planning Authority confirming that there will be no access to the site via the N22.

- 7.5.2. The response presented a Traffic Impact Assessment where it is submitted that the development trip generation during the construction phase will generate approximately 50 HGV movements to and from the site with a maximum of 2 occurring in any one day. Table 2.5 of the FI response presents the background traffic levels on the study network, together with additional traffic generated during a busy construction day, and results in a 0.8% increase in HGV movements on the N22 and a 0.5% increase in all other vehicle types. On the local road, the L3081, the corresponding increases are forecast to be 5.8% in terms of HGVs and 3.4% in terms of all vehicle types. It is noted that the above figures will relate to the busiest 6-week period and on the remaining construction weeks, the traffic impact will be less.
- 7.5.3. Having considered all of the information presented, I consider that the construction traffic, over a limited period of time, would not result in a significant level of traffic generation and would not cause significant disruption on the local road network. The Board will also note that the applicant has indicated that they will conduct a road condition survey, with the Council's engineer, prior to the construction of development, and will reinstate any roads damaged caused by the proposed development and is prepared to lodge a cash deposit with the local authority as security. I would accept, based on the information available, that the applicant has adequately demonstrated that the delivery route would be adequate to accommodate the proposed construction traffic.
- 7.5.4. In terms of the concerns of local residents in the area, I am satisfied that the traffic generated by the proposed development, during both construction and operational phase, would not adversely impact on the established road network.

7.6. Ecology

- 7.6.1. Chapter 6 of the Planning & Environmental Report deal with ecological impact assessment and seeks to address the potential impacts arising from the proposed development. The applicants undertook desk top and field surveys in 2016 to establish a baseline ecological assessment, and notes that the footprint of the proposed solar farm lies entirely within improved agricultural grassland (GA1) habitat. The proposed site does not interact with or occur in the proximity of watercourses or field drains and the Deenagh River, a component of the Killarney National Park SAC flows approximately 500m south of the site while the Glanooragh River, a component of the site.
- 7.6.2. The surveys carried out found no evidence of rare of protected flora, habitats or fauna within the proposed development site, and while it has been determined that the proposal site is unsuitable for roosting bats, nevertheless, it has the highest bat suitability index due to the presence of suitable linear features utilised by foraging and commuting bat species. In terms of birds using the site, the surveys identified the presence of Meadow pipit, a Red listed species, robin, an Orange listed species and six green listed species, with a further 21 species having previously been recorded in the 2km grid square (V99R). It is concluded that the proposed development site would not offer suitable habitat for Annex 1 species due to the exposed and open nature of the agricultural grassland, although there was evidence of one to two barn swallow pairs nesting in the disused manmade building that occurs in the north west of the site.
- 7.6.3. In terms of potential impacts, the proposed development is to occupy less than 1% of the land area, and that a 5m buffer will be maintained between the development area and the site boundary. The proposed grid connection to the existing Coolcorcoran 38kV substation will be agreed with ESB Network. The perimeter fence proposed will rise to a maximum of 2.8m and will have a 200mm gap underneath to accommodate commuting and foraging ground mammals. The maintenance of the grassland beneath the solar panels will be facilitated by the grazing of sheep. The existing hedgerows and treelines on site

are to be retained and additional hedgerow planting of native species is proposed.

7.6.4. Overall, I consider that the ecological impact of the development as proposed is acceptable and that given the nature of built structures proposed, it would not significantly alter the characteristics of the site. The Board will also note that the site will be wholly reinstated quite easily following the decommissioning of the solar PV farm. The site is located where there is extensive areas of similar lands and habitats in the vicinity of the site which could easily accommodate any potentially, although unlikely, displaced species. I would also consider that the proposal would have no significant or adverse impact on existing aquatic habitats in the area due to the lack of a significant connection between the site and the proposed works to such habitats in the vicinity. I am satisfied that with adequate construction management in regards to dust suppression, chemical/fuel storage and surface water drainage, that the proposal would be acceptable in this regard.

7.7. Surface Water Drainage

7.7.1. The applicant has noted that the subject site is not bound by any water courses and that there are no water courses traversing or affecting the subject site. In addition, there is no hydrological connections from the site to the proximate rivers which are components of Natura 2000 sites. The proposed development will result in very little interference with the existing drainage systems of the site. While I accept that the proposed development will result in additional hard surface, including the provision of tracks and the temporary site compound, the nature of the panels, which are raised off the ground, will not generate any significant additional surface waters. I am satisfied that the development is acceptable in terms of surface water drainage, subject to compliance with an appropriate condition to be included in any grant of permission.

7.8. Conditions & First Party Appeal

7.8.1. Condition 3 requires that a cash deposit, a bond of an insurance company, or other security to the value of €50,000.00 to secure the reinstatement of public roads that may be damaged by the transport of materials to the site, be lodged with the Planning Authority. The first party considers that the amount of the bond required is disproportionate to the level of impact on the local road network and is unnecessarily high having regard to the nature of the construction activities that will be required on the site. It is further submitted that the impact of the construction phase of the proposed development will be minimal on the N22 and slight on the L3018 over the rail bridge and local road to the site.

The applicant proposes to undertake a condition survey of the roads and bridges along the haul route both before and after construction, in agreement with the Planning Authority. It is submitted that a bond of \leq 10,000 is reasonable and is reflective of similar bond requests for similar developments in the state. I have looked at a number of other applications for similar developments in the state and would note that in most cases, the bond amount required for the reinstatement of public roads that may be damaged by the transport of materials to the site, is indeed, less than \leq 50,000, and generally between \leq 10,000 to \leq 15,000. However, I also did note that Cork County Council applied the amount of \leq 50,000 in their decision to grant permission for a similar development at Coachford, Co. Cork. It is also to be noted that the actual nature of those roads however may be significantly different to the current road networks in Co. Kerry, and therefore, may not be comparable.

I note that there is no indication of a figure from the Roads Section of Kerry County Council, nor has the Planning Authority offered any calculations in arriving at the figure of €50,000. Should the Board be minded to grant planning permission in this instance, I would consider that following the undertaking of a joint condition survey of the roads and bridges along the haul route before the construction of the solar PV farm, clearer costings should be available. Unless the Board considers otherwise, I suggest that the standard condition requiring the lodging of a bond with an unspecified amount, will suffice until the completion of the condition survey and the input of the Roads Engineers of Kerry County Council.

7.8.2. Condition 4 requires that the developer lodge a cash deposit, a bond of an insurance company, or other security to the value of €100,000.00 to secure the satisfactory reinstatement of the site on cessation of the project. Again, and while the applicant is agreeable to the imposition of a bond for the above, it is considered that the amount is much higher than other bonds imposed by other County Councils for similar type developments. The appellant advises that the Finance Model for Solar Farms is based on the decommissioning and resale value of scrap materials from the site including copper, aluminium and zinc. It is submitted that €20,000 is a reasonable bond request for the development.

The Board will note the extensive area of the site the subject of this proposed development, and while I accept that the impact of the development on the existing ground can be considered minimal, I would be of the opinion that sufficient funds should be set aside to ensure the full reinstatement of the site following the decommissioning of the solar farm. Again, the Board will note that there is no indication as to how the figure of €100,000 has been reached, however, I would consider that the amount of €20,000 would seem quite low, given the area of the site. I would consider that a figure of no less than €50,000 should be considered, or alternatively, the Board may be minded to include a condition with an unspecified amount, to be agreed between the parties, or by the Board should there be no agreement.

7.8.3. Condition 5 of the grant of permission provides that the permission shall be for a period of 10 years from the date of the commissioning of the solar array. This condition restricts the operational duration of the project to 10 years, while the applicant submits that the application was for 25 years. The public notices require permission for ten years for the development of a solar PV farm, which may have caused the confusion in this instance. The construction period of the development can be up to 10 years, with the operational period being 25 years. I would have no objection to the amending of this condition, should the Board be minded to grant planning permission in this instance.

7.9. EIS Screening

- 7.9.1. 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. Solar farms are not listed as a class of development under either Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and therefore, I conclude that a mandatory EIA and the submission of an EIS is not required. I note that there are some projects under No. 3 of Part 2, 'Energy Projects' which relate to energy production, but suggest that none of these projects would be applicable to a solar farm as proposed. The Board will note that a similar conclusion has been reached in relation to their recently decided solar farm developments including references PL04.244539, PL26.244351 and PL04.245862 and PL04.246527.
- 7.9.2. In accordance with the 'EIA Guidance for Consent Authorities regarding Sub-threshold Development', 2003, the following is stated "there is a requirement to carry EIA where competent/consent authority considers that a development would be likely to have significant effects on the environment". The guidelines advise the criteria to be considered for the need for sub-threshold E.I.S. and this includes (i) characteristics of the proposed development, (ii) location of the proposed development, and (iii) characteristics of potential impacts. Schedule 7 of the Planning and Development Regulations, 2001 (as amended), sets out criteria for determining whether a sub-threshold development is likely to have significant effects on the environment and therefore would require an EIS.
- 7.9.3. Article 92 of the Planning and Development Regulations, 2001, (as amended) defines sub-threshold development, as 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. In light of the above, the Board will note that I have determined that the solar PV

farm development is not a development set out in Schedule 5 and therefore, I do not consider that the subject development is a 'sub-threshold development' for the purpose of EIA.

7.10. AA Screening

- 7.10.1. 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 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.
- 7.10.2. While the subject site does not have any conservation designation applying to it, given that a number of Natura 2000 sites are located within 15km of the site, the Board will be required to consider the potential effects of the proposed development on the identified European Site. Arising from the requirements of Articles 6(3) and 6(4) of the Habitats Directive, the Board as the competent authority is required to carry out an appropriate assessment using a 4 stage process where the outcome of each stage determines whether the next further stage is required. The site must be subject to AA regarding its implications for the Natura 2000 site in view of the site's conservation objectives *"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects"* (EC, 2006). In other words, where doubt exists about the risk of a significant effect, an Appropriate Assessment must be carried out.

7.10.3. An Bord Pleanala, as the competent authority is responsible for obtaining the information necessary to enable an AA screening to be
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undertaken, and if required, obtain from the proponent, a Natura Impact Statement. Integral to the AA process, is the consideration of alternatives. The purposes of AA screening will determine whether appropriate assessment is necessary by examining:

- whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and
- the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives, and considering whether these effects will be significant.

The Board will note that a Stage 1 Appropriate Assessment Screening Report was submitted by the applicant in support of the proposed development. It identified five Natura sites within 15km of the proposed development including Killarney National Park, Magillycuddy's Reeks and Caragh River Catchment SAC (site code 000365) located 0.5km to the south, Killarney National Park SPA (site code 004038) located 1.7km to the south west, Castlemaine Harbour SAC (site code 000343) located 3.4km to the north west, Sheheree Bog SAC (site code 000382) located 4.6km to the south east and Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (site code 004161) located 15km to the north east.

7.10.4. AA Stage 1: Screening:

- a. Description of the project and local site: This is an application for the development of a solar PV farm, located approximately 2km to the north of Killarney. The development will involve an area of 8.8ha, including two large agricultural fields and the development will have a maximum export capacity of up to 5MW of electricity. The application is accompanied by a Planning & Environmental Report.
- b. Is the proposed development directly connected with or necessary to the nature conservation management of a Natura 2000 site: No.
- c. Identification of relevant Natura 2000 sites, within 15km of the subject site: Within 15km of the subject site, 5no. key Natura 2000 sites have been identified.
- d. Existing expert reports, advice or guidance:
 - Planning & Environmental Report submitted as part of the planning application which included a Screening for Appropriate Assessment Report.
 - Ecological Impact Assessment submitted under Chapter 6 of the Planning & Environmental Report submitted as part of the planning application.
 - Report from the Kerry County Council Biodiversity Officer, who concurred with the findings of the applicants Ecological Impact Assessment.
- e. The potential for significant impacts on Natura 2000 sites, having regard to potential significance indicators and to qualifying interests and conservation objectives for the site. Where doubt exists, it should be assumed that effects could be significant. In terms of the relevant Natura 2000 sites in this instance, the Conservation Objectives are stated as follows:
 - Killarney National Park, Magillycuddy's Reeks and Caragh River Catchment SAC (site code 000365) located 0.5km to the south. It is the objective for this site to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

Habitats:

- [3110] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
- [3130] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea

- [3260] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- [4010] Northern Atlantic wet heaths with *Erica tetralix*
- [4030] European dry heaths
- [4060] Alpine and Boreal heaths
- [5130] *Juniperus communis* formations on heaths or calcareous grasslands
- [6130] Calaminarian grasslands of the Violetalia calaminariae
- [6410] *Molinia* meadows on calcareous, peaty or clayey-siltladen soils (Molinion caeruleae)
- [7130] Blanket bogs (* if active bog)
- [7150] Depressions on peat substrates of the Rhynchosporion
- [91A0] Old sessile oak woods with *llex* and *Blechnum* in the British Isles
- [91E0] Alluvial forests with *Alnus glutinosa* and *Fraxinus* excelsior (Alno-Padion, Alnion incanae, Salicion albae)*
- [91J0] *Taxus baccata* woods of the British Isles*

* denotes a priority habitat

Species:

Code	Common Name	Scientific Name
1024	Kerry Slug	Geomalacus maculosus
1029	Freshwater Pearl Mussel	Margaritifera margaritifera
1065	Marsh Fritillary	Euphydryas aurinia
1095	Sea Lamprey	Petromyzon marinus
1096	Brook Lamprey	Lampetra planeri

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1099	River Lamprey	Lampetra fluviatilis
1106	Salmon	Salmo salar
1303	Lesser Horseshoe Bat	Rhinolophus hipposideros
1355	Otter	Lutra lutra
1421	Killarney Fern	Trichomanes speciosum
1833	Slender Naiad	Najas flexilis
5046	Killarney Shad	Alosa fallax killarnensis

Killarney National Park SPA (site code 004038) located 1.7km to the south west. It is the objective for this site to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

Bird Code	Common Name	Scientific Name
A098	Merlin	Falco columbarius
A395	Greenland White-fronted Goose	Anser albifrons
		flavirostris

Castlemaine Harbour SAC (site code 000343) located 3.4km to the north west. It is the objective for this site to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

Habitats:

[1130]	Estuaries
[1130]	Estuaries

- [1140] Mudflats and sandflats not covered by seawater at low tide
- [1210] Annual vegetation of drift lines
- [1220] Perennial vegetation of stony banks
- [1310] Salicornia and other annuals colonizing mud and sand
- [1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
- [1410] Mediterranean salt meadows (Juncetalia maritimi)

- [2110] Embryonic shifting dunes
- [2120] Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")
- [2130] * Fixed coastal dunes with herbaceous vegetation ("grey dunes")
- [2170] Dunes with Salix repens ssp. argentea (Salix arenariae)
- [2190] Humid dune slacks
- [91E0] * Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)
- * indicates a priority habitat under the Habitats Directive

Species:

[1095]	Sea lamprey Petromyzon marinus
[1099]	River lamprey Lampetra fluviatilis
[1106]	Atlantic salmon (Salmo salar) (only in fresh water)
[1355]	Otter Lutra lutra
[1395]	Petalwort Petalophyllum ralfsii

- f. Potential significance indicators¹:
 - Causing interference with, reduction, erosion or fragmentation of the Natura 2000 site: Not likely
 - Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site: Not likely
 - Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity): Not likely

¹ Using the Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DoEHLG, 2009 I consider that the potential significant indicators should include as presented. There is no defined list of indicators, with each site potentially generating a different list.

- Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site: Not likely
- Interfering with mitigation measures put in place for other plans or projects: Not likely
- Causing a cumulative impact and other impacts: Not likely.
- 7.10.5. Assessment of likely effects direct, indirect and cumulative undertaken on the basis of available information as a desk study or field survey or primary research as necessary: The possible effects of the proposed development on the conservation status of the designated sites in the vicinity of the subject site include loss/reduction of habitat, disturbance of key species, habitat or species fragmentation, reduction in species density and decrease in water quality and quantity. The Board will note that the site is remote from any designated sites and there is no direct or indirect pathways or links to the site including any hydrological link. Overall, there are no significant earthworks required to facilitate the development and the proposal will not result in any habitat loss or reduction in the quality of the habitat.
- 7.10.6. Screening Statement with conclusions: The safeguards set out in Article 6(3) and (4) of the Habitats Directive are triggered not by certainty but by the possibility of significant effects. Thus, in line with the precautionary principle, it is unacceptable to fail to undertake an appropriate assessment on the basis that it is not certain that there are significant effects. Given the nature and scale of the proposed development on an existing greenfield site, and having considered the above potential significance indicators I consider that the development, if permitted, is likely to have little or no impact, either alone or in conjunction with other plans or projects on any designated Natura 2000 sites.
- 7.10.7. In this regard it is reasonable to conclude that on the basis of 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 effects on any designated European site and that a Stage 2 Appropriate Assessment (and submission of an NIS) is not therefore required.

7.11. Other Issues

7.11.1. Archaeology

The subject site contains the recorded monument Ke066 166, which is listed as an enclosure in the Record of Monuments & Places, but as a redundant record in the Sites & Monuments Record. The site is also partially located within the zone of potential for recorded monument Ke006 041 a souterrain. Further information required that pre-development archaeological testing be carried out to assess the potential of the site and that a buffer zone around the area of the souterrain be established. In response to the request, archaeological testing was carried out at the site, under licence.

The results of the testing were archaeologically negative. Together with the Archaeological Impact Assessment submitted in support of the proposed development, the collective overall results demonstrate that there will be no archaeological impact by the proposed development on either the souterrrain or the redundant record of the Cropmark Enclosure. The report concludes that there are no archaeological reasons why the proposed solar farm should not be permitted. The Board will note the final report from the County Archaeologist which accepts the findings of the report and advises that no further archaeological mitigation is required. I am satisfied that the issue of archaeology has been adequately dealt with.

7.11.2. Public Consultation

It is considered by the third party appellants that insufficient consultation with the affected home owners was undertaken by the project promoters. The applicant has submitted that the application has been conducted in accordance with the requirements of the Planning & Development Act, 2000 and the Planning & Development Regulations, 2001 as amended, in terms of public notification of the proposed development. In addition, a public consultation was undertaken as well as the preparation of information leaflets for local residents. Two meetings were held in homes to the south of the site also. I am wholly satisfied that the planning application has been lodged in accordance with the requirements of the relevant legislation as it relates to public consultation.

7.11.3. Health & Safety

The third party appellants raise concerns in terms of the proposed development by reason of the relatively new and untested concept in this county and there are concerns as to what health and safety issues may arise. In particular, concern is raised in terms of the ESB substation being operational to near full or full capacity as a result of the proposed power generating project. The proximity of the project to houses is also a concern.

The primary health concern in relation to solar farm developments is from the inverter, which is a device that takes the electricity from the panels and turns it into alternating current (AC) and puts it out on the electric grid. The inverter generates electromagnetic fields. The first party response to the third party appeal notes that the two inverter cabins are located 150m from the nearest residential dwelling to the south, but there is a third party property located approximately 75m from the inverter cabins. I would consider that this dwelling is located a sufficient distance from the inverters to prevent any health impacts.

8.0 **Recommendation**

8.1. It is recommended that planning permission be granted for the proposed development for the following stated reasons and considerations and subject to compliance with the following conditions.

9.0 Reasons and Considerations

Having regard to the nature and scale of the proposed development, the suitability of the aspect and topography of the site, the proximity of the grid connection, the pattern of development in the vicinity, the provisions of the Kerry County Development Plan 2015-2021 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 visual amenities of the area or the residential amenities of property in the vicinity, would not be likely to have significant effects on the environment, or the ecology of the area. The proposed development 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, 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.

Reason: Having regard to the nature of the proposed development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.

3. The permission shall be for a period of 25 years from the date of the commissioning of the solar farm. The solar farm 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 container, inverters, and fencing shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as grey or off-white; the roof shall be of black tiles.

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

- 6. Prior to commencement of development, proposals for the following shall be submitted to, and agreed in writing with, the planning authority:-
 - (i) infra-red lighting in lieu of artificial security lighting, or,

(ii) motion-sensor controlled lighting, which shall be directed onto the site and away from adjacent property and roads; such lighting shall be directed and cowled such as to reduce, as far as possible, light scatter in the vicinity.

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

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

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

Reason: In the interest of the amenities of the area.

- Cables within the site shall be located underground.
 Reason: In the interest of visual amenity.
- Each fencing panel shall be erected such that its bottom edge is no less than 200 millimetres from ground level.

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

- Existing field boundaries, including trees and hedgerow, shall be maintained save as is required to achieve improvements to sightlines at the site entrance.
 - (2) All landscaping shall take place in the first planting season following commencement of development and in accordance with the scheme which shall be submitted to, and agreed in writing with, the planning authority. The landscaping and screening shall be maintained at regular intervals. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within 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 the visual amenities of the area.

- 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.
 - (2) 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 site, including access roads, 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.

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 hours of working, noise management measures, the

management of construction traffic and off-site disposal of construction/demolition waste.

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

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 reinstatement of public roads that may be damaged by construction transport coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the reinstatement of public roads that may be damaged by construction transport.

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

Reason: To ensure satisfactory reinstatement of the site.

15. 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.

A. ConsidinePlanning Inspector16/03/2017