



An  
Bord  
Pleanála

## Inspector's Report ABP-302681-18

### Development

Planning permission with a duration of 10 years for a solar pv farm with an operational lifespan of 35 years to export up to 50mw of electricity to the national grid.

### Location

Tullamore, Drombeg and Coolkeragh, Listowel, Co. Kerry.

### Planning Authority

Kerry County Council

### Planning Authority Reg. Ref.

18/720.

### Applicant(s)

Terra Solar II Ltd.

### Type of Application

Permission.

### Planning Authority Decision

Refuse

### Type of Appeal

First Party and Two Third Party

### Appellant(s)

1. Terra Solar II Ltd (First Party)
2. Tullamore Action Group
3. Peter Sweetman & Associates

### Observer(s)

1. Paudie Relihan
2. Liam Doyle
3. Declan Carty

4. Jermey Faley
5. Tullamore Action Group
6. Cllr. Toireasa Ferris & Others (Cllr Tom Barry and Cllr Robert Beasley)
7. John O'Sullivan

**Date of Site Inspection**

1<sup>st</sup> March 2019

## 1.0 Site Location and Description

- 1.1. The appeal site 99.2 ha is located in the townlands of Tullamore, Drombeg and Coolkeragh approx. 3.5 Km north of Listowel and 10.5 Km southwest of Tabert in north west County Kerry. It lies approx. 4 Km to the west of the N69 which connects Listowel and Tarbert and approx. 2 Km to the east of the R552 from Listowel to Ballylongford.
- 1.2. The topography of the site gently slopes towards the River Galey with some relatively flat areas. The Galey River is located to the south and south east of the lands outside of the site boundary. The river has an upstream catchment of approx. 184 KM<sup>2</sup> which is predominantly lands used for agriculture.
- 1.3. There are 3 significant land drains / watercourses (>3m deep) running through the site (perpendicular to the River Galey) which discharge to the River.
- 1.4. The L-1009 a narrow county road with a predominantly straight horizontal alignment and a sloped vertical alignment runs to the northwest of the proposed development. The width of the paved carriageway between its junction with the R552 and the proposed access to the subject site varies between 3.6m and 3.8m. There are elements of ribbon development located along the L-1009 with hardcore gravel or paved surfaces adjacent to the dwellings, which increases the overall paved cross section of the road.
- 1.5. The R552 travels between Listowel and Ballylongford. It is a Regional route that is a reduced single carriageway with a width between 5.8m – 6.0m in the vicinity of the junction with the L-1009. The horizontal alignment varies throughout the length of the route.
- 1.6. A set of photographs of the site and its environs taken during the course of the site inspection is attached. I would also refer the Board to the photographs and photomontages available to view throughout the appeal file.

## 2.0 Proposed Development

2.1. The proposed development comprises a ten-year planning application for:

- A solar pv farm with an operational lifespan of 35 years to export up to 50mw of electricity to the national grid.
- The development will comprise approx. 357,500 sq. m. of solar panels together with all ancillary cabling and electrical infrastructure including approx. 25 no. Combined inverter / transformer stations (with option to provide these as separate inverter transformer units);
- Provision of new access tracks and upgrading of existing agricultural access tracks; (approx. 5,936 m of internal access tracks)
- Landscaping;
- Temporary construction compound;
- Battery storage and control units;
- Boundary and security fencing; cctv security system on poles;
- New vehicular access point to the L-1009 (at site of existing agricultural gate to be used for construction and operational traffic);
- Approx. 4m telecommunications mast and
- All ancillary site development works all on a site of approximately 99.2ha.

A Natura Impact Statement (NIS) was submitted to the planning authority with the application.

2.2. The proposed development constitutes a solar farm with an export capacity of approx. 50 MW. The development will comprise primarily of solar panels arranged in arrays; or rows and associated electrical components. It also incorporates internal access tracks and an access point from the local public road. It is proposed that the solar farm will be served by an on-site substation to facilitate export of the collected energy to the local grid and a number of additional onsite electrical infrastructural components such as inverters. This substation and the loop-in infrastructure to the existing 110KV OHL on site will be subject of a separate application for permission from An Bord Pleanála, in the interests of a robust assessment, it is submitted that

the Flood Risk Assessment (FRA) and the planning drawings and documentation considers the full combined development at the site; both the subject proposal and the sub-station.

2.3. The additional elements which will be the subject of a separate application to An Bord Pleanála include:

- A 110KV substation close to the existing 110KV OHL
- Loop in proposal to the existing 110KV line crossing the site – this involves the provision of 2 no. new end towers at the location of the loop in;
- Construction compound adjacent to proposed 110 KV substation.

2.4. The application is accompanied with the following reports:

- Planning Report
- Report by RPS: Visual Inspection of a bridge adjacent to the R552 near Listowel
- Traffic and Transportation Assessment (TTA)
- Report by RPS: Flood Risk Assessment (FRA)
- Ecological Impact Assessment (EclA)
- Agricultural Report
- Glint and Glare Study
- Construction Methodology Report
- Landscape and Visual Impact Assessment
- Natural Impact Statement (NIS)

The planning authority note the unsolicited further information from the applicant, which it comments, reports on pre-application public consultation and the largely positive reaction received in relation to the project. However, having regard to third party submissions received by the Council, it is considered that local sentiment towards the development has changed.

## 3.0 Planning Authority Decision

### 3.1. Decision

3.1.1. Kerry County Council Refused Planning Permission for 3 number reasons summarised as follows:

1. Injurious to visual amenities of the area by reason of scale which would be unduly obtrusive on the landscape and would interfere with the rural character of the landscape, which is necessary to preserve, in accordance with Objective ZL-1 of the KCDP 2015 – 2021.
2. The proposed development would involve the use of an extensive area of productive agricultural land (99.2 ha) for a single solar power project of industrial scale. It is the policy of the Planning Authority to support the expansion of the agri-food industry and allow it to maximise its potential as stated in Section 4.1.5 of the KCDP 2015 – 2021. The proposed development would contravene objective ES-10 of the Plan to ‘Promote and support the sustainable growth of agriculture and related agri-development...
3. The p.a. is not satisfied on the basis of submissions made in relation to the application that the proposed development would not endanger archaeology of the area.

### 3.2. Planning Authority Reports

#### 3.2.1. Planning Reports

3.2.2. The Planners report considers the scale of the development and visual impact from same in a rural landscape is considered significant and would be detrimental to the visual amenities of the area. The loss of some 250 acres / 99.2 ha of agricultural lands is also noteworthy. Contrary to Objective EP-1 of the KCDP 2015 – 2020.

#### 3.2.3. Other Technical Reports

3.2.4. The **Listowel Roads Office – Roads Report** (27<sup>th</sup> August 2018) no objection to the scheme subject to conditions as outlined in their report. The developer to provide

120m sightlines in both directions of the proposed entrance to the site in accordance with details submitted on the 18/07/18, pre and post construction survey to be carried out, a bond is required in respect of the section of public road from the junction of the R-552/L-1009 to the proposed site entrance.

- 3.2.5. The **County Archaeologist** (30<sup>th</sup> July 2018) Further Information is recommended. The proposed development is located partly within the zone of archaeological potential / notification as outlined in the Record of Monuments and Places and the sites and Monuments Record, around recorded monuments Ke010025, a ringfort.
- 3.2.6. The **Biodiversity Officer** report concludes that no significant effects on the environment or on the integrity of a European site from the proposed development of the solar farm and associated works are considered likely.
- 3.2.7. The **Environment Report** (10<sup>th</sup> September 2018) has no objection to the scheme subject to conditions as outlined in their report.
- 3.2.8. **EHO:** Report recommends conditions in the event that planning permission is granted.
- 3.2.9. **Conservation Officer:** Report states: No observation.

### 3.3. Prescribed Bodies

- 3.3.1. **Department of Agriculture, Food and the Marine:** The report sets out no comments or observations.
- 3.3.2. **Department of Culture, Heritage and the Gaeltacht:** Report dated 06<sup>th</sup> December 2018. Report summarised as follows:
- Department notes that the Kerry County Archaeologist recommended that an Archaeological Impact Assessment, incl. archaeological testing be carried out as F.I. due to the scale of the development and in order to determine the full extent of Recorded Monument RMP No. KE101-025-(Ringfort)
  - Archaeological testing in the vicinity of this monument would also determine whether there are any subsurface archaeological features associated with, but external to, the monument (e.g. corn-drying kilns, outer enclosing elements, hut sites)

- The Department notes the desk assessment and filed survey carried out.
- The Department have no objection in principle to the proposed development.
- It is strongly of the view that archaeological testing is required in order to establish the full extent of RMP KE010-025---and to protect any features and/or subsurface archaeological deposits associated with the early settlement of the area.
- The Department recommends that archaeological testing be carried out across the site by way of further information as this will facilitate the establishment of an appropriate buffer zone around eth Recorded monument and the implementation of archaeological mitigation strategy should one be required.
- An archaeological monitoring condition will not suffice in this instance.
- Reiterates the recommended Archaeological F.I. Request

### 3.4. **Third Party Observations**

- 3.4.1. There are some 21 observations/objections recorded on the planning officers report. The issues raised are similar to those raised in the third party appeals and observations submitted to the Board and summarised in detail below.

## 4.0 **Planning History**

- 4.1. None of relevance

### 4.2. **Other Similar Developments**

- 4.2.1. The Board has considered appeals in respect of a considerable number of ground-based solar PV developments in recent years. Those which are considered of relevance to this appeal are larger in scale and include:

- **PL17.248146** Split Decision for the construction of solar farm at Duleek, Co. Meath to include 2 electrical substations, transformer, inverter station and storage modules, solar panels, access roads and associated site works. Permission was REFUSED for the eastern solar array at Downestown (18.92



ha) and Permission was GRANTED for the western solar array at Garballagh, Thomastown and Gillinstown (131.37 ha). (Decision date 01.03.2019)

- **ABP-300174-17** Ten-year Permission Granted a solar PV farm consisting of circa 36,950sq.m of solar panels on ground mounted steel frames, 1 no. substation, 3 no. inverter cabins, underground cable ducts and all associated works. The site of 12.8 ha, is located in the townland of Trienearagh, Duagh, approximately 4km south east of Listowel in County Kerry.
- **PL26.247217:** Permission refused for a solar PV energy development within a total site area of up to c.90 ha in County Wexford (2<sup>nd</sup> February 2017).
- **PL26.247366:** Split Decision for the development of a solar PV array on c. 31.28 hectares separated into two distinct plots located at Bridgetown, County Wexford with an estimated power output of 17 MW. The northern array (11.7 ha) was granted permission and the southern array (19.5 ha) was refused (23<sup>rd</sup> March 2017).
- **PL17.248028:** Permission Granted (March 2018) for a solar farm on a 43 ha site near Julianstown, Co. Meath.

## 5.0 Policy Context

### 5.1. International Guidelines

- 5.1.1. There is a range of UK Guidance. The main guidance notes are **Planning Practice Guidance for Renewables and Low Carbon Energy (DCLG 2013)** and **Planning Guidance for the development of Largescale Ground Mounted Solar PV systems (BRE 2013)**. Both refer to the desirability of preserving good agricultural lands and set out issues and mitigations. The BRE Guidance provides advisory information on planning application considerations including construction and operational works, landscape / visual impact, ecology, historic environment, glint and glare and duration of the planning permission. The document also provides guidance on the information which should be provided within a Landscape and Visual Impact Assessment. The document also provides guidance on EIA Screening procedures.

## 5.2. National Guidelines

### 5.2.1. The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015 – 2030', published in December 2015.

- The White Paper is a complete energy policy update, which sets out a framework to guide policy between now and 2030. The vision of the White Paper is to achieve a low carbon energy system that targets greenhouse gas (GHG) emissions from the energy sector that will be reduced by between 80% and 95%, compared to 1990 levels, by 2050, and will fall to zero or below by 2100.
- Paragraph 137 of the White Paper states '*solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. 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*'.

### 5.2.2. The National Spatial Strategy (NSS) 2002 - 2020

- This document states, "in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability" (page 114).

- Section 2.6, entitled ‘How to Strengthen Areas and Places’ 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 these rural areas, particularly in agriculture and food, marine, tourism, forestry, renewable energy, enterprise and local services.

### 5.2.3. **Project Ireland 2040 The National Planning Framework, 2018**

The following are priorities of the NPF:

- Transition to a Low Carbon and Climate Resilient Society
- Sustainable Management of Water, Waste and other Environmental resources.
- A Strong Economy supported by Enterprise, Innovation and Skills
- Strengthened Rural Economies and Communities

## 5.3. **REGIONAL PLANNING GUIDELINES**

### 5.3.1. **The South-West Regional Planning Guidelines 2010 – 2022**

Demand for electricity in the region is expected to rise by 60% by 2025. Wave and wind technologies are expected to play a significant part in meeting additional demand with excess renewably generated power being exported through an enhanced transmission grid to other regions within the state.

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. National grid expansion is identified as important for ensuring adequacy of supply. This expansion will also provide a means for facilitating the development and connectivity of sustainable renewable energy resources at both a national and regional level.

It is an objective of the Regional Authority 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.

#### 5.4. Development Plan

- 5.4.1. The operative plan for the area is the **Kerry County Development Plan 2015-2021**. Chapter 3, Section 3.3 sets out Rural Development Policies. Section 3.3.2 deals with Amenity Areas and policies designed to protect the landscape of the county. The Plan identifies three types of rural landscape as follows:
- a) Rural General
  - b) Rural Secondary Special Amenity and
  - c) Rural Prime Special Amenity
- 5.4.2. The proposed site is located in an area zoned Rural General which is covered by Section 3.3.2.1 of the Plan. 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.
- 5.4.3. Chapter 12 deals specifically with Zoning and Landscape. Policy relating to areas zoned Rural General in Section 12.3.1 Rural (c) states that *“it is important that development in these areas be integrated into their surroundings in order to minimise the effect on the landscape and to maximise the potential for development”*. Policy ZL-1 states that *“it is policy to protect the landscape of the County as a major economic asset and an invaluable amenity which contributes to people’s lives”*.
- 5.4.4. Chapter 13 sets out the Development Management considerations – Standards & Guidelines’. It states: Renewable Energy, Wind Energy, Geo thermal, Biomass, Combined heat and Power and all other forms of renewable energy will be considered in accordance with the Renewable Energy Strategy adopted by Kerry County Council in 2012.
- 5.4.5. Chapter 7 Transport and Infrastructure
- Energy / Power Provision Aim: 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.

- Objective EP-1 Support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources whilst seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity.
- Objective EP-3 Facilitate sustainable energy infrastructure provision, so as to provide for the further physical and economic development of the County.
- Objective EP-7 Facilitate the sustainable development of additional electricity generation capacity throughout the region/county 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.

#### **5.5. Renewable Energy Strategy for County Kerry (KCC 2012)**

Map 7.1 – Existing and Permitted RE Development.

Map 7.2 – Natural, Waste Water and Ocean Resources

Map 7.3(a) – Ecologically Sensitive Areas

Map 7.3(b) – Ecologically Sensitive Areas

Map 7.3(c)- Ecologically Sensitive Areas

Map 7.3(d)- Ecologically Sensitive Areas

Map 7.3(e) – Ecologically Sensitive Areas

Map 7.4 – Wind Speed and Transmission Grid

Map 7.5 – LCA and Archaeological Landscapes

Map 7.6 – Wind Deployment Zones

SEA Statement

Appropriate Assessment Conclusion Report

LCA prepared for RES and Archaeological Landscapes

#### **5.6. Natural Heritage Designations**

- 5.6.1. The Lower River Shannon SAC (site Code 002165) is adjacent to the appeal site.
- 5.6.2. Moanveanlagh Bog SAC (site code 002351) is located 5.8Km distant. Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (Site No

004161) is located 9km distant. The River Shannon and River Fergus Estuaries SPA (Site No 004077) is located 5 km distant.

## 6.0 The Appeal

### 6.1. The Grounds of the First Party Appeal is summarised as follows:

#### Scale

- The scale of the proposed development is required in order to avail of the Renewable Electricity Support Scheme (RESS) subsidy and deliver solar energy to Ireland, all at minimum cost to the Irish taxpayer.

#### Suitable Topography

- The site is gently sloping which is suitable for panel siting

#### Landscape and Zoning Designations

- There are no sensitive landscape or amenity designations attached to the site

#### Landscape and Visual Impact

- The natural slopes and topography of this site combined with strong field boundary vegetation present, naturally assists in minimising visibility of the development from local residences. The site will also accommodate additional screen planting compatible with existing hedgerows on site which can further enhance the capability of the site to visually absorb the development.
- The area is not of any particular notable landscape quality importance, sensitivity or value.
- The landscape is not a designated amenity/view under the KCDP
- The landscape is not identified as important for scenery, tourism or recreation
- The landscape is not of national or county importance
- The solar farm is set well back from the L-1009 (350 – 400m in the most part) therefore potential for visibility from residents along the road is restricted.

- Potential visibility of the site is greater from areas to the south and southeast, from short and slightly elevated sections of local road to the southeast of the site at distances of around 1Km. These views consist of less than half (around 40%) of the panel array. Only 200m of the 11.4Km of surveyed road network surrounding the site has this degree of visibility.
- Only 32% of the surrounding local road network has any visibility of solar panels and none of the road sections with visibility has extensive views of the full array or even the majority of it.
- The visibility of solar panels will generally lie within the middle distance of a view rather than dominating or blocking views.
- The proportion of the development which will be visible from any one area will be increased in a few locations but this will be in locations more distant from the site where the potential impact will be diminished in wider landscape views.
- The fact the proposed solar farm would be visible from some parts of the surrounding landscape should not preclude it.
- The proposed development will be visible to a number of residents. However, it will appear as an alternative land use activity within the existing field pattern of the rural landscape.
- It will not detract significantly from visual amenities so as to alter the quality of people's lives.

#### Glint and Glare

- There are no major transport routes in the vicinity of the site.
- Any presence of glint and glare has been mitigated through design of layout combined with landscaping and screening.

#### Ecological Protection Designations:

- Low potential for impact on the nearby SAC
- The AA undertaken by Kerry County Council biodiversity officer concludes that the proposed development shall not have an adverse effect on the site integrity of a European Site (Lower Shannon cSAC)

### Settlement Pattern / Residential Amenity

- The site is located within a rural area with a relatively low population.
- There is little potential for impact other than visual impact which can be mitigated through design

### Site Ecology

- There are no ecological conditions or constraints on the site which would be incompatible with the development

### Hydrology

- The River Galey lies to the south of the site.
- The majority of the site lies within Flood Zone C, with none located in Flood Zone A. A very small portion lies in Flood Zone B with a small number of panels located in this area.
- Solar panel arrays and associated cabling are not considered highly vulnerable.
- There will be a negligible impact on flood risk and the floodplain as a result of the proposed development.
- No concerns in respect of flooding were raised in the planning officers report.

### Archaeological Heritage

- No identified archaeological constraints at the site

### Site Access

- The proposed site access is off a local road where suitable sightlines and turning radii for construction vehicles can be easily achieved
- The Road Department of KCC advised of conditions to be attached in the event pp is granted.
- No issues of concern identified.



## Agriculture Land Versus Support for Development of Renewable Energy

- There are no provisions within the Development Plan that suggest that the preservation of agricultural land should take priority above the policy support for renewable energy development.
- It is acknowledged that the subject site comprises of a relatively large site which is currently in agricultural use.
- It is unreasonable to suggest that the preservation of grassland (which is of plentiful supply within the County and the Country) should be pursued by KCC
- The land is suitable for grassland but is not suitable for growing of crops. This type of land is plentiful across the country.
- The scale of impact of the proposed development on the agri-food sector is considered minor or negligible when assessed against the scale of the industry in County Kerry and nationally.
- With 92.1% of the national agricultural lands currently comprising of grassland, the subject site is not a resource in short supply.
- The loss of 99 ha of grassland at this particular single site, is of negligible greater impact on the agri-food sector than such a loss would be if it were the cumulative result of a number of smaller separate sites.
- It is considered that the small negative impact on the agri-food sector as a result of the development is more than balanced by the significant benefits that will arise from the delivery of a 50MW renewable energy development.

## Archaeology

- The proposed application documentation has identified known and or visible archaeology on site by reason of a thorough desk study and site walkover survey.
- The application proposal has incorporated mitigation by design.
- The Archaeologists Report sets out that the proposed development is located partly within the zone of archaeological potential / notification, as outlined in the Record of Monuments and Places and the Sites and Monuments Record, around recorded monuments Ke010 025, a ringfort. The extent of this

recorded monument needs to be established and a 20m buffer zone put in place.

- A 20 m buffer zone is proposed around the ringfort, by site visit, and no works including fencing are proposed within this zone.
- The County Archaeologists report seeks further information relating to pre-development archaeological testing of areas of proposed ground disturbance.
- The third reason for refusal appears to have been included as the planning officer concluded that there was insufficient information provided with the application to be satisfied that the development would not endanger archaeology.
- This should have given rise to a further information request and not a refusal of planning permission
- The matters identified in the archaeologist's report could easily and should have more appropriately be mitigated by condition.
- It is agreed that pre-development testing is required at the site. The applicant is happy to comply with a condition for same.
- If any features are identified the layout and design of the solar farm can be amended as necessary.
- This approach is in accordance with the recommendations of the National Monument Service.

Appeal Accompanied with:

- Supplementary Landscape and Visual Statement by Macroworks
- Supplementary Statement by John Bligh & Associates
- Archaeological Rebuttal Reason 3 by Laurence Dunne Archaeology

## **6.2. The Grounds of the Two Third Party Appeals are summarised as follows:**

- It is not possible for the p.a. to find on the basis of the information submitted that mitigation measures proposed will with reasonable scientific certainty perform the desired function.

- The information submitted is inadequate and incomplete
- Opinion of Advocate General KOKOTT delivered on 7<sup>th</sup> August 2018 is of relevance.
- Any grant of permission based on current information would be unlawful in the context of EU law.
- A grant of permission would materially contravene NR27 of the Kerry County Development Plan.
- The wording of the AA carried out is meaningless and beyond comment
- The reasons for refusal by the p.a. are not strong enough
- The viewing points chosen for photomontages do not accurately reflect the views from residential homes.
- The omission of a viewing point from the Upper Bedford road is noted
- Visual impact on one resident in this area (P.J Sheehy) given ground levels and proximity would meet the criteria of very high.
- Accept that the lands are not used for higher value agricultural tillage activities but do not accept that that the lands are not intensively farmed
- Evidence attached of cows for sale and average milk yields per cow
- IFA fact sheet regarding average milk yields
- Facebook advertisements for the sale of heifers

#### Glint and Glare Assessment

- The developer openly admits that they do not know the table size or length of the solar panels and have no detailed design. How can they state in their conclusion beyond reasonable scientific doubt that ‘there will not be any hazard reflectance effects experienced along the surrounding roads nor will there be any substantial nuisance effects at the dwellings in the vicinity of the site...’

### Battery Storage and Control Unit

- Concern with respect to noise nuisance from the battery storage and control units. No details of acoustic sound installation provided

### Government Policy Regarding Solar Power Development

- The development will not provide any jobs locally
- No evidence it will support any economic development in the area
- Could potentially negatively impact economic development as it will remove viable agricultural land from the community.
- There is no stated need for this development in North Kerry
- Tullamore is already saturated with wind energy. In Kerry there are 411 wind turbines either built or permissioned.
- In north Kerry 270 of those turbines will produce two-thirds of North Kerry's RE or 14% of the national maximum daily demand for electricity.
- Within 9 Km north of the proposed site there is a cluster of 3 newly built wind farms, totalling 31 turbines (built or with planning) around Ballylongford.

### Planning and Sustainable Development

- This is an area with intense concentrations of existing renewable energy projects and therefore according to section 3.2 Geographic Scope of the Draft Renewable Electricity and Development Framework, Tullamore should be excluded from any further assessment.
- In conjunction with the already permitted wind energy development, this further development will completely disturb the cultural landscape.

### RESS Initiative

- The community were not engaged with and this is contrary to the RESS initiative.

### Impacts on Visual Amenity and Landscape character

- Granting planning permission in the absence of any strategic or policy guidance on the most appropriate locations for such a development would be contrary to the proper planning and sustainable development of the area.

#### Biodiversity and Habitats

- Seasonal habitat surveys are required over a two year period to comprehensively consider the seasonal species and their associated habitats.
- The p.a. report, Appendix A, page 5 under Habitats Directive Screening Report conclusion states: 'significant effects on one European site (Lower Shannon cSAC) could not be ruled out.
- Given the size and scale of this industrial development the likelihood of negative impacts on the cSAC are very real.
- With such diverse ecology and habitats, and lack of any comparable Irish solar development with regards size and scale, it cannot be proven beyond scientific doubt, that this development will not adversely affect the cSAC, associated species and habitats. The development should have been refused on such grounds.

#### Bats and Bat Habitat

- In the KCC 'Technical Validation Procedure' section 3. Site Information, under the constraints study, states that there are no bat habitats.
- With such a large area and so many agricultural buildings, large trees and disused residential houses on the site this is queried.
- The constraints study states no bat habitats are present, but includes mitigating circumstances to deal with them if found. This is not acceptable under the 1995 section 2 National Heritage Act,
- All local evidence suggests that the area has a bat population

#### Aquatic Ecology

- Queries the relevance of the Aquatic Ecological Impact Assessment (EclA) and whether the submitted document is draft or the final document.

- There is no evidence in the EclA report that proves beyond scientific doubt that there are no freshwater Pearl Mussel in the Galey River.

#### Flooding

- Removal of the raised river bank along the line of the river has damaged the river bank and changed the profile of the land as the flood protective barrier has been removed.
- This work was carried out since the FRA was carried out

#### Aarhus Convention

- The current Landscape Character Assessment (LCA) for North Kerry is flawed and is something that is strongly opposed by the people of North Kerry.
- North Kerry is taking the weight of renewable energy development
- We owe an obligation to future generations
- If permission is granted a black industrial power station will cover the landscape.

#### Project Splitting

- Concern with respect to visual impact of solar panels and the sub-station
- The visualisations submitted do not take into account the substation
- There is no discernible image of the substation
- The LVIA only considers the solar farm, it is not adequate and relevant
- It is essentially project splitting as the solar farm and substation with associated grid connection have not considered their combined impact in a comprehensive manner, which is in breach of the EIA Directive.
- O Grianna v An Bord Pleanala is of relevance
- The connection to the national grid is fundamental to the whole project and therefore the cumulative effect of both phases must be addressed by an EIS in order to comply with the Directive.

#### Erroneous Naming of the Project

- Object to the idea that this proposed development is referred to as a 'farm'

## Public Health

- Concern of electromagnetic radiation from the proposed power plant
- Children are particularly at risk from EMF radiation
- Insomnia
- Anxiety
- Depression
- Brain fog
- Dizziness and vertigo
- Frequent illness
- HPA axis dysfunction
- Hormone Imbalances
- Cancer or increased cancer risk

## Property Devaluation

- Serious concern for the local community
- Auctioneers report cite property devaluation regard being had to visual impact, views and health concerns
- Scale of the project
- Properties would be devalued between 35 – 50 % should the development be granted.
- An Bord Pleanála Inspector agreed with the devaluation of properties in her report to PL08.247653

## In Stream Works

- The proposed new roadway as per construction plan 8/20 crosses the instream at point 'X' on the attached copy plan (Figure 10)
- No construction methodology on how it is proposed to cross the in-stream has been provided in any of the construction plans / reports lodged with the subject appeal.

- The in-stream is an important component of the hydrologic cycle on its journey to the Lower River Shannon c SAC
- The in-stream is much more than a field drain (as referred to in the Planners report).
- The location of the solar panels and all associated works, in close proximity to this in-stream is questionable should the panels be damaged by perimeter fence damage, ground erosion, transformer leakage, adverse weather conditions etc.
- The RPS – Stage 2 FRA 3.1 – Site Visit states that there are 3 significant land drains / watercourses (.3m deep) running through the site perpendicular to the River Galey which discharge to the River.
- The non – return valve referred to in the FRA provided by RPS requires further clarification.
- Who will be responsible for the maintenance of the pipework.
- Will access be readily available for inspection / maintenance purposes.

### 6.3. **Planning Authority Response**

- 6.3.1. Response from Kerry County Council sets out that the area planner agrees with the recommendations of The Department of Culture, Heritage, and the Gaeltacht.

### 6.4. **First Party Response**

- 6.5. Three number First Party Responses received, they are collectively summarised as follows:

#### Compliance with Article 6(3) of the Habitats Directive

- Recent opinion of Advocate General Knott (Case C-461/17). This opinion related to a variety of matters in respect of the EIA Directive and the Habitats Directive. The particular aspect of the opinion which the appellants refer to relate to a request from the High Court to the court of justice for a preliminary ruling on the following question:
  - ‘Whether it is compatible with the attainment of the objectives of the (Habitats Directive) that details of the construction phase (such as the



compound location and haul routes) can be left to post-consent decision, and if so whether it is open to a competent authority to permit such matters to be determined by unilateral decision by the developer, whether the context of any development consent granted, to be notified to the competent authority rather than approved by it.'

- The opinion of the AG as set out in para. 60 of the Opinion was that:
  - '...In the context of a development consent granted under Article 6(3) of the Habitats Directive, details of the construction phase may be left to unilateral decision of the developer only where every reasonable scientific doubt that the effects of such a decision will not be detrimental to the integrity of the site concerned has been dispelled.'
- The Opinion also stated as follows in respect of the same question:
  - '55. The assessment provided for in the first sentence of Article 6(3) of the Habitats Directive must therefore be free of lacunae. It must contain complete, precise and definitive findings capable of removing all reasonable scientific doubt as to the effects of the works on the protected site concerned.'
  - 56. consequently, a developer may only be left to make decision in respect of which there is no reasonable scientific doubt that their effects will be non-detrimental to the site concerned.'
  - 57. Such doubt may in particular be ruled out by sufficiently specific conditions of consent which lay down for those decisions a framework of such a kind as to ensure that they are not capable of adversely affecting the integrity of the site concerned.'
- River Galey and Flooding
  - A NIS was prepared
  - The location of each element of the proposed development was identified in the application and informed the findings of the NIS.
  - Potential impacts identified in the NIS included deterioration of the water quality of the receiving watercourses of the proposed site, which

supports connectivity with the Galey River and the Lower River Shannon SAC.

- The NIS sets out a series of mitigation measures incl. construction best practice measures and design to avoid the potential deleterious substances entering the receiving watercourses and in turn the lower River Shannon SAC.
- The NIS concludes that with the implementation of best practice and the recommended mitigation measures that there will be no potential for direct, indirect or cumulative impacts arising from the proposed solar farm.
- 110KV substation
  - The construction compound has not been designed, the substation has not been designed and the loop in proposal to the existing 110KV line has not been designed.
  - The proposed substation development is currently the subject of a request for pre- application consultation with ABP under Section 182E of the Planning and Development Act
  - There is significant precedent to suggest that the board is likely to confirm the application.
  - When that application is made to ABP the substation development proposal, loop-in and construction compound for the substation will all be subject of appropriate assessment.
  - The AA for same will in due course have regard to the potential cumulative impacts of the substation development and the solar farm development subject to the current application.
  - The substation, loop-in and construction compound for the substation do not form part of the current application and accordingly do not fall under the requirements of 6(3) for the current proposed solar farm development application.
  - The purpose for reference to same under the current application is for information purposes only.

- The consenting procedures for the solar farm are under section 34. The consent for the substation must be sought under Section 182A.
- Ref to the relevant case of the Apple Data Centre at Athenry and associated substation; and the Facebook Data Centre in Co. Meath and its associated substation; both of which followed dual consent routes
- Location of the construction compound for the current application has been identified adjacent to the location identified for the future substation application.
- Construction Environmental Management Plan
  - The purpose of the contractor updating the final CMP prior to construction is to provide for any potential conditions of the permission (which may require revisions to the proposal and / or to environmental mitigation, or for more detailed method statements of a specific aspect of the construction).
  - It is often the case that a final pre-construction CEMP be subject of agreement with the p.a. on foot of a condition of permission prior to development.
  - Refer to paragraph 57 of the Opinion of AG Kokott which noted that such doubt could be ruled out by sufficiently specific conditions of consent.
  - It is reasonable for the board to attach a condition confirming that a final CEMP would be submitted for the agreement of the p.a. incorporating and providing all mitigation and management measures provided for in the outline CEMP and updated in line with the permission and any detailed method statements as appropriate.
- Item 1 Conclusion
  - There are no gaps or unknowns in terms of current proposal or final CEMP details that could cast doubt on the conclusion of the NIS submitted.
  - Similarly for the conclusion of the L.A's AA

- Grant of Permission would be a material contravention of NR-27 of the Kerry CDP
  - There are no details of the construction of the development being left to the developer which would cast doubt on the findings of the NIS.
  - The NIS considered the potential for impacts of the development on fisheries insofar as they are relevant to the Article 6(3) requirements. With the mitigation measures specified in the NIS no residual impact on the SAC or its qualifying interests were identified.
  - The Aquatic Ecological Impact Assessment submitted had regard to the wider fisheries value of the River Gale. It predicted a neutral residual impact on aquatic ecology.
  
- Item 2 Conclusion
  - There are no grounds to suggest that adverse impacts may arise from some currently unknown construction details that would impact on the SAC and consequently on fisheries.
  - The final CEMP to be prepared by the Contractor must adhere to the provisions of the Outline CEMP
  - There are no grounds to suggest that the development would contravene NR-27
  
- AA by Kerry County Council
  - The appeal notes that the assessment identified potential for impact on the SAC due to potential impact on water quality.
  - It is noted that the AA states that: ‘the requirement for mitigation to be implemented will be the responsibility of the applicant / developer. This will be conditioned as part of any grant of permission and implemented / overseen on site.’
  - The appeal fails to note that the LA AA records that ‘detailed mitigation (is) provided in the NIS as informed by both the EclA but specifically the Aquatic EclA.’ The appeal also fails to note that the AA by the p.a. then gives its own summary of the mitigation.

- The suggestion by the appellant that some elements of the Construction detail is being left to the unilateral decision of the developer. This is clearly not the case.
- Responsibility for implementation of mitigation measures for any development are primarily the responsibility of the applicant / developer.
- Speculative Development
  - The application documentation submitted clearly provides information in respect of needs of the National Grid
  - The planning report submitted justifies the need and location of the proposed development.
  - The applicant is in receipt of a grid connection offer from EirGrid issued in July 2018
  - Letter enclosed from EirGrid which has previously been issued to ABP in respect of the Section 182E pre-application consultation request which confirms the offer. This letter also confirmed the proposed future connection method of a 110KV substation on site, which is not subject of a pre-application consultation process with the Board.
  - KCC and ABP has appropriate and sufficient knowledge of the requirement and need for the development to deliver renewable electricity to the National Grid.
  - Solar power is by its nature generated in daylight hours when demand for electricity is highest and accordingly is an appropriate source for enhancing security of supply on the grid.
- Refusal Reason One / Views
  - The appeal notes only the influence of site slope on visual impact and not matters of site vegetation and screening which are also identified by the BRE guidance as influencing factors on the nature and extent of visual impact.

- The appellants fail to record the distance across which the site level differences occur.
- Factoring in these distances clarifies that the slope across the site is no greater than 4-5% or 1:25
- The BRE guidance does not suggest that a site must be absolutely flat, but rather 'predominantly flat'.
- The site conditions at Tullamore incorporate good levels of screening by hedgerows and boundaries, the overall resulting visual impact is not significant.
- The Visual Impact Analysis by Macroworks concludes that the proposed development will not have a significant visual impact.
- No likely significant visual impacts on residential property will arise.
- The proposed development does not conflict with the BRE Guidance and in any case, it would not be appropriate to refer to BRE Guidance in any reason for refusal.
- 4 no. representative viewpoints were selected from local roads to the south and southeast of the site.
- The nature of visual impacts from Bedford Road are well represented in the assessments provided.
- The cross-valley views of which the Bedford Road forms part are acknowledged. Impact upon views are assessed as moderate light rather than as significant.
- Notwithstanding the appropriate extent of information and visual assessment already provided with the application and by way of the first party appeal submitted to An Bord Pleanála, the enclosed further submission by Macroworks also comments additionally on potential views from Upper Bedford Road.
- Refusal Reason Two / Existing Use of Land
  - The statement in the planning report was intended to explain that the lands do not support the highest value agricultural activity which is

agricultural tillage activities and in this manner, were not intensively farmed.

- It was not intended to suggest that the activities being undertaken were not in their own right productive.
- The lands could reasonably fall within category the UK agricultural land classification (ALC) Grade 3(b) which comprises 'moderate quality agricultural land' (UK Classification)
- The proposed site comprises of grassland which is the most common form of agricultural land
- The lands may be classified as of 'moderate quality agricultural land'.
- The use of the land for solar farm and continued use for sheep grazing would not give rise to a significant impact on the agricultural / agri-food sectors.
- The solar electricity generation use proposed would have a high productivity level and would deliver a significant contribution towards achieving national and international renewable energy targets.
- Glint and Glare Assessment
  - Refer the Board to the Glint and Glare assessment by Macroworks
  - Any micro-siting would only ever result in a negligible increase in row length, that any variation to glint and glare effects as presented in the assessment would be equally negligible and not warrant reassessment.
  - There is little scope for notable increase in row length in most parts of the site.
  - There is scope for micro-siting to potentially reduce row length to a greater degree this would result in a reduction in potential for glint and glare.
- Battery Storage and Control Units
  - It is not possible at the time of planning permission to be specific about the details of such units.

- This can only be confirmed at the time of purchase of such units when the development is implemented.
- Battery storage does not generate noise nuisance.
- The unit is proposed over 400m from the closest dwelling
- Government Policy Regarding Solar Power Development
  - There has recently been a significant decrease in the cost of solar PV panels and this technology should offer some possibilities in Ireland in the medium term up to 2030
  - Government policy on renewables has changed in detail in recent years. It is inevitable given rapid advancement in technologies.
  - Solar generated electricity will support economic growth and jobs.
  - Security of electricity and increasingly of renewable electricity supply, is key to attracting, servicing and supporting economic enterprise. With a 50 MW capacity the current proposed development will contribute significantly.
  - Any economic loss at the site as a consequence of altered agricultural practices due to the new proposed use will be balanced out by the benefits to the economy of a 50 MW export capacity renewable energy generator.
- Planning and Sustainable Development
  - There is not currently a Draft of a renewable electricity policy and Development Framework published.
  - No policy grounds to suggest that the subject site should be excluded from consideration for a solar farm development.
- Renewable Electricity Support Scheme (RESS)
  - The RESS was approved in July 2018
  - The pre-planning and preparation of the current application commenced well in advance of this document.
  - Consultation was undertaken in good faith by the applicant.



- The applicant sought to engage with as many of the neighbours as possible.
- Impacts on Visual Amenity and Landscape Character
  - It is acknowledged that the Minister of Communications, Climate Action and Environment intends to prepare a Renewable Electricity Policy and Development Framework.
  - No provisions within the Planning Act that would empower a p.a. to refuse permission for a development on the grounds of the absence of, or prematurity pending the adoption of, national, regional or local guidelines or policy.
  - Legal precedent has established that lack of strategic or policy guidance relating to solar farm developments does not comprise a valid reason for refusal.
- Biodiversity and Habitats
  - The EclA incorporates a survey of all protected species by way of a walk over survey.
  - The need for targeted surveys of field boundaries for badger potential bat roosting habitat and breeding bird survey was identified and undertaken due to the potential for disturbance of these species from the development.
  - The actual land loss under the development footprint is relatively small and removal of hedgerows / treelines is limited to removal of small sections.
  - The loss of or disturbance to habitats that are of potential use by protected species will be minimal.
  - The ecology of the River Galey, which is part of the Lower River Shannon SAC was described and assessed in full in the Aquatic Ecological Impact Assessment and NIS
  - A desktop study was undertaken for the Aquatic Ecological Impact Assessment.

- Bats and Bat Habitats
  - Section 5.1.2 of the EclA details records held on the NBDC database for bats within 2 Km of the proposed site.
  - Section 5.1.3 then provides a description of the bat suitability index for the landscape the site is situated in.
  - The bat landscape association model suggests that the proposed solar farm site is part of a landscape that is less favourable for bats in general. However, the landscape model shows a moderate suitability for soprano pipistrelle and brown long-eared bats and there is potential for these species to forage and commute along the hedgerows and treelines present on site.
  - None of the trees or structures identified during the bat survey as potential roosting sites will be removed.
  - The sites landscape plan will enhance and increase hedgerow and treeline network at the site, providing greater foraging and commuting habitat and improving ecological connectivity.
  - The majority of hedgerows and treelines at the proposed site will remain in place
  - Measures proposed in the EclA to mitigate the potential loss of tree roosts.
- Aquatic Ecology
  - The labelling of the Aquatic Ecological impact Assessment Report as draft was an error and an inadvertent oversight.
  - Enclosed supplementary Aquatic Impact statement by Lauren Williams which addresses Freshwater Pearl Mussel.
  - The statement reiterates the evidence for currently extremely low potential for freshwater pearl mussel to be present in the Galey River.
  - The potential for pearl mussels to have redistributed from an undetectable (apparently absent) population source upstream and

survive under adverse conditions in the vicinity of, and downstream of, Tullamore townland is extremely now-to-nil.

- Flooding
  - Concern has been raised over removal of part of a raised bank adjacent to the River.
  - The flood mapping of the area identifying the 1:100 year and 1:1000 flood events are based on PFRA mapping which would not have provided for the detail of this bank in the first instance.
  - The extent of the flood plain as mapped from the PFRA remains valid.
- Aarhus Convention
  - Third party objection to a development proposal does not equate to the negation of rights under the Aarhus Convention.
- Project Splitting
  - Documentation forming part of the application considered both the solar farm development and also potential impacts likely from a proposed 110KV substation.
  - The photomontages submitted do include the substation to the extent to which it will be visible.
  - The fact the appellants have not identified the substation within the views confirms the fact that the substation does not appear as a dominant feature on the landscape.
  - The LVIA also addresses the substation as relevant throughout.
- Cumulative Effect of Solar Farm and Substation must be assessed by an EIAR
  - The solar farm development is not a class of development subject to EIA under the Directive.
  - The substation is currently the subject of a section 182E pre-application consultation request to An Bord Pleanála.

- Should the Board determine that the substation development does comprise of Strategic Infrastructure and also does require EIA, then an assessment of the impacts of the substation will be undertaken which will include a full assessment of the cumulative impacts of the solar development subject to the current application.
- This matter will be addressed under the separate consent procedures of section 182A.
- Erroneous Naming of the Project
  - Solar 'farm' common parlance for such a development and does not comprise a valid ground of appeal.
- Public Health
  - The closest property to the array (approx. 60m) is the one of the landowners adjacent to the north-western boundary of the site (at its northern end).
  - The closest inverter / transformer to this property is approx. 250m
  - The next closest property is the farmstead of a second landowner also close to the north-western boundary at the approx. midway point.
  - The property is approx. 70m from the array and approx. 260m from the nearest inverter / transformer.
  - Based upon research and Guidance Document there is no evidence that the proposed development could impact on health given the nature of the development and its distance to the closest neighbouring properties.
- Property Devaluation
  - When operational, a PV solar development has little potential to impact on surrounding areas.
  - The development is not predicted to have a significant impact in terms of visual matters.
  - There is no evidence that the proposed development could impact on human health.

- In-Stream Works
  - The reference in the application documentation to no in-stream works being required was an inadvertent error which arose from a design alteration shortly before lodgement of the application.
  - Confirm that there are minor works required to an existing stream which is crossed by the entrance track and which will be culverted below the access track.
  - Revised drawing submitted Drwg No. CP17033/P10012 Rev P02
  - This drawing also provides for a slight realignment of the access track to ensure that it does not impose on the stream.
  - The profile and capacity of the culvert shall match that of the existing channel to ensure that flow velocities and existing channel morphology are maintained.
  - Some localised bank protection works may be required to ensure that there is no erosion of soil as a result of heavy construction traffic.
  - A temporary short-term by-pass channel will be required for a few days to facilitate the placing of the culvert.
  - Works will be carried out July – September, when flows are likely to be lowest.
  - The supplemental aquatic impact assessment report by Lauren Williams clarifies that the in-stream works proposed are of a relatively minor nature, occurring within a small, previously drained and moderately impaired, field boundary stream.
  - The stream is of low sensitivity in terms of fisheries value and is not suitable for aquatic species that are Qualifying Interests of the Lower River Shannon SAC (Galey River)
  - The installation of a short 4m long culvert presents no potential for significant impacts on aquatic qualifying species or habitats of the Lower River Shannon SAC.
- RPS – Stage 2 Flood Risk Assessment 3.1 – Site Visit

- The river Galey was subject to arterial drainage works by the OPW and it is most likely the non-return valve referred to by the appellants was installed as part of these works.
- Confirm that the maintenance of the streams and channels crossing the site will be the responsibility of the solar operator for the lifetime of the project.
- Responsibility will revert to the landowner thereafter.
- Regular site inspections and maintenance works will be undertaken by the operator of the drainage crossing the site, including the valve.
- Archaeological Monitoring
  - In full agreement with DCHG that testing should be undertaken at the site prior to commencement of development.
  - Do not consider it necessary to undertake the testing as F.I. prior to issue of a permission.
  - A condition should be attached requiring testing, reporting and further agreement with NMS and or Kerry County Council prior to commencement of development.
  - The submission by DCHG sets out 4 steps of archaeological testing including reporting and agreement for further mitigation measures which are generally in line with the mitigation already proposed in the application.
  - The solar farm by its nature is flexible in design.
  - Acknowledge that the site is large but also that guidance recommends that blanket requests for testing as FI should not be based solely on the fact that the development is large-scale.
  - The identified ringfort RMP KE010-025 is the only verified feature on the site. This has already been surveyed.
  - In lieu of on-site testing a buffer of 20m has been provided outside of the extent of the ringfort.

- From the site walk over and desktop study no other verified archaeological features were identified.
- Refer the Board to the supplemental Archaeological Impact Statement by Lawrence Dunne
- However, in the event that the board does not agree and considers it necessary to undertake site wide testing prior to the issue of a decision to grant permission, we request that the board requests such further information if it is otherwise minded to grant permission.
- Lawrence Dunne Archaeology is in the process of preparing a licence application for testing and will submit same to DCHG as soon as possible.
- Mindful that the DCHG have no objection in principle, therefore archaeological testing results at this site should not form the basis for a refusal.
- Response Accompanied with:
  - Appendix A – Extract from ‘Questions and Answers Ground Mounted Solar Photovoltaic Systems’ published by Massachusetts Department of Energy Resources (DOER), the Massachusetts Department of Environmental Protection (MassDEP) and the Massachusetts Clean Energy Centre (MassCEC), 2012.
  - Supplementary Aquatic Impact Statement – Response to Third Party Appeal, prepared by Lauren Williams (2018)
  - Landscape and Visual Response to 3<sup>rd</sup> Party Appeals, by Macro Works, 2018

## 6.6. Observations

6.6.1. Seven observations received, observer’s names are set out in the introduction to this report. The issues raised are jointly summarised as follows:

- Visual Impact

- Absence of any refusal in relation to visual impact on the upper Bedford Road is noted.
- Observers house on the Upper Bedford road is at a level of 76.5 m and a distance of 1.42 Km from the proposed site.
- Photomontages submitted with the application do not reflect the visible impact of the proposed development on residences in the area. In particular from Knockane. Observers dwelling has a building floor level of 33.3 m and a distance to the proposed site of 0.53 Km
- The 6 m screening proposed at the southern end of the site will not be effective.
- This development will result in a high visual impact.
- Observers house in Coolaclarig has a building floor level of 40.1m and a distance to the proposed site of 1.1Km. elevation of approx. 12 m over the eastern part of the site, 6 m screening proposed at the southern end will not be effective.
- Observers house on Upper Bedford Road with FFL of 76.7 m and a distance to the proposed site of 1.44Km. Taking the higher end of the range of site contours levels, the building floor level of the observers house is 41.70 m above the proposed site. The magnitude for visual impact would be very high.
- The rural character of the area and the general rural landscape, the existence of a considerable amount of single one off rural houses and the effect on the landscape must be taken into account.
- Renewable Energy Strategy requires that proposals for solar farms demonstrate that within the constraints imposed by technical requirements the proposed disposition of structures and panels minimises visual impacts.
- The visual impact assessment does not take into account the residents that live in the area or the amount of time the residents will travel along the roads.



- Serious negative impact on the enjoyment of the rural landscape area by house dwellers who have been living in the area for many years.
- UK's PPG's suggest that solar farms development should be directed to brownfield sites, contaminated lands, industrial lands which already have development.
- The zoning and landscape designations in the Landscape Character Assessment for North Kerry is flawed and cannot be relied upon.
- Reduction of Carbon Emissions Versus Vibrant Local Rural Community
  - National aspirations by a solar farm company cannot with a flawed application use what's good for the country is good for the local community.
  - Protection of rural landscape is far more important than the provision of renewable energy sources in an unsuitable site.
  - The solar farm should be placed upon peat bogs no longer used / redundant by Bord and Mona
  - Scale of the proposed development is inappropriate.
  - Renewable energy sources must be placed in locations / areas that are suitable for them to be placed.
  - Government policy should be to encourage individual homes to install alternative means of heating without destroying landscapes.
- Policy EP-1
  - Policy Ep-1 is to support and facilitate the sustainable provision of a reliable energy supply in the County with emphasis on increasing energy supplies derived from renewable sources while seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity.
  - The scale of the proposed development is not capable of being integrated into the environment in a sustainable way.

- Probably 75% of Kerry is zoned rural general and for this reason a solar farm of such magnitude should not be allowed on this particular site.
- There are clearly slopes on the lands. This site cannot without a large negative impact accommodate the solar farm.
- Glare and Glint Issues
  - Concern with respect to amenity value, quality of life, diminution of quality of life, residential devaluation and industrialisation of a rural area.
- Site Access and Local Roads Issues
  - Access for construction traffic onto the main Listowel / Ballylongford Road will create a traffic hazard at that junction.
  - Road network is narrow and unsuitable for wide loads and HGV's
- Detailed design of the solar panels
  - That the final arrangement would be subject to detailed design prior to construction is unacceptable.
  - Granting a 10 year permission does not allow the local community to object to alternative solar layouts likely to occur within that 10 year period.
  - Concern of technology advances
  - There are no planning guidelines of any substance for the location of solar farms.
- Flooding Issue
  - Removal of a flood barrier along the Galey River indicates that parts of the site are prone to flooding, this hasn't been taken into account in the Flood Risk Assessment carried out.
- Public Health Concerns
- Devaluation of Property
- Instream Works

- Instream is far in excess of a normal field drain
- Mitigation measures are inadequate to ensure that no adverse impacts will result, from surface water / storm water / flooding / drainage to the integrity of a European Site
- Possibility of flood waters washing through the installation into the SAC River Galley, EU protected Salmon River
- Planning and Sustainable Development
  - The extent of renewable energy and solar farms are clearly impacting on the rural landscape of north Kerry.
  - Government Policy on RE is flawed. Ireland has unwittingly become a large-scale electricity exporter without sufficient planning or thought.
  - It is reckless to continue to approve more renewable electricity planning applications without knowing how much capacity has been granted planning permission but not yet built.
  - The revised Wind Energy Development Guidelines will have a direct impact on the volume that onshore wind will be able to deliver.
  - Alarming issues of overcapacity.
  - Cumulative Impact and climate injustice in north Kerry needs to be considered.
  - North Kerry already has 270 wind turbines permitted, most have been built, incl. 225 sited within the EU 'protected' SPA region for the protection of the hen harrier
  - Scale of the proposal is inappropriate at this location
  - Agree we have to reduce dependence on fossil fuels. The recent decision by Bord Na Mona to close 17 of its 62 currently active bogs immediately and to end peat harvesting of 45 more within seven years, will free up vast areas of unproductive lands for the placement of solar farms and help Ireland to meet its carbon emission targets.

- Section 4.1.5 of the CDP which supports the expansion of the agri-food industry and objective ES-10 which promotes and supports the sustainable growth of agriculture need to be respected.
- Lack of Public Consultation
  - Observer resides in Coolaclarig, his house is 250m west of photomontage VP2. He received no visit or received no correspondence from the applicant.
  - Observer resides on the Upper Bedford Road and they submit that they received no communication or visit from the applicant.
- Observations accompanied with:
  - Photographs
  - Ger O Keeffe Consulting Engineers
  - Diarmuid O Sullivan Agricultural Consultants

## 6.7. Further Responses

A further response was received from John O'Carroll C/O Tullamore Action Group it is summarised as follows:

\*Note I do not intend to unduly repeat issues already raised in the third party appeal.

- A slope of 1:25 is very significant.
- Proposal does not comply with BRE Guidelines
- View from Upper Bedford Road not represented.
- It is not possible for proposed mitigation measures of 6m to screen the development.
- Agricultural lands should be preserved
- Concern of glint and glare impact
- Noise from battery storage and control units has not been dealt with
- The development will not provide any local jobs

- No Government Guidelines published that would provide the necessary structure to examine such a large scale industrial energy producing development.
- The scale of the development is industrial in nature and should not be allowed in a rural area not zoned for industrial development.
- Bat survey carried out by the appellants refutes evidence presented by the applicants.
- Fail to see how 357,500 sq. m of solar panels can be absorbed into the rural landscape.
- Property devaluation will occur of between 35% to 50%
- Negative impacts upon local property owners cannot be ignored.
- Do not agree that it was an inadvertent error that in-stream works, which arose from a design alteration shortly before lodgement, was not referred to by the applicant. Clear breach of non-disclosure.
- Response accompanied with:
  - Property valuations in respect of properties in north Kerry, impacts of solar farm development.
  - Glint and Glare Studies

## 7.0 **Assessment**

7.1. I consider the key planning issues relating to the assessment of the appeal can be addressed under the following general headings:

- **Principle and Planning Policy.**
- **Use of Agricultural Land.**
- **Landscape and Visual Amenity Impact.**
- **Residential Amenity.**
  - **Glint & Glare**
  - **Noise & Electric Magnetic Interference (E.M.I.)**

- **Health and Safety Issues**
- **Depreciation of Residential Property Values**
- **Impact Upon Ecology.**
- **Archaeology**
- **Surface Water Drainage and Flood risk.**
- **Requirement for Environmental Impact Assessment.**
- **Grid Connection / Project Splitting**
- **Appropriate Assessment.**

## 7.2. Principle and Planning Policy

- 7.2.1. Renewable energy projects are supported ‘in principle’ at national, regional and local policy levels, with the impetus at all policy levels being the need to reduce greenhouse gas emissions, reduce reliance on fossil fuels and combat climate change.
- 7.2.2. EU Directive 2009/28/EC sets a target of 20% of EU energy consumption from renewable sources and a 20% cut in greenhouse gas emissions by 2020. As part of this Directive, Ireland’s legally binding target is 16% energy consumption from renewable sources by 2020. The more ambitious national objective, as expressed in the NREAP, is for 40% of electricity consumption to be from renewable sources by 2020. The White Paper entitled ‘Ireland’s Transition to a low carbon Energy Future 2015-2030’ sets out a vision to reduce greenhouse gas emissions by between 80% and 95% compared to 1990 levels by 2050, and notes that solar photovoltaic technology is rapidly becoming cost competitive for electricity generation and that the deployment of solar power in Ireland has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs.
- 7.2.3. Chapter 12 of the Kerry County Development Plan 2015 – 2021 deals specifically with Zoning and Landscape. Policy relating to areas zoned Rural General in Section 12.3.1 Rural (c) states that “*it is important that development in these areas be integrated into their surroundings in order to minimise the effect on the landscape and to maximise the potential for development*”. Policy ZL-1 states that “*it is policy to*

*protect the landscape of the County as a major economic asset and an invaluable amenity which contributes to people's lives”.*

- 7.2.4. Chapter 7 Transport and Infrastructure, sets out the aim ‘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’. Objective EP-1, set out in section 7.6.2 ‘Energy Conservation’ in the County Development Plan 2015 – 2021, states that it is an objective of Kerry County Council to place *an emphasis on increasing energy supplies derived from renewable resources*. Further Objective EP-3 states that it is an objective of Kerry County council to *facilitate sustainable energy infrastructure provision, so as to provide for the further physical and economic development of the County*. Objective EP-7 seeks to ‘facilitate the sustainable development of additional electricity generation capacity throughout the region/county 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 principle the County Development Plan and the accompanying Renewable Energy Strategy are supportive of the development of ground based solar PV arrays.
- 7.2.5. The appellants contend that there is currently a policy vacuum with respect to solar farms and that the proposed development is premature pending the preparation of guidelines at national, regional and local level to ensure that plan-led development occurs. It is submitted that this area has already been subjected to intense concentrations of wind energy projects and therefore should be excluded from any further renewable energy projects.
- 7.2.6. The applicant contends that there is little evidence pointing to the timely delivery of any such guidelines, and that the planning code is sufficiently robust to facilitate the assessment of individual planning applications for solar farm developments.
- 7.2.7. While it is notable that the Board has decided upon a number of larger solar farm projects, in recent times, in the absence of Ministerial Guidelines, it is however of significance that the Minister has noted in his reference to keeping the matter under review that the spatial distribution and number of solar farm applications in recent

years are such that the issue of guidance must be considered a relevant planning consideration. Notwithstanding this, at the present time there is no evidence that Ministerial Guidelines under section 28 of the PDA will be forthcoming in the short-term, and I do not consider that the lack of such Guidelines is a reason for refusal in this instance.

- 7.2.8. I am satisfied that there is substantial policy support at national, regional and local level for renewable energy projects, including solar energy projects. The proposed development will make a contribution to Ireland's targets for electricity generation from renewable sources and for reductions in greenhouse gas emissions. The proposed site is located in an area zoned Rural General which is covered by Section 3.3.2.1 of the Kerry County Development Plan 2015 - 2021. 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. I therefore consider the proposed development to be acceptable in principle, subject to consideration of the key planning issues outlined in Section 7.1 above.

### **7.3. Use of Agricultural Land**

- 7.3.1. The second reason for refusal, in the draft notification by the planning authority Reg. Ref. 18/720, sets out that the proposed development would involve the use of an extensive area of productive agricultural land (99.2 ha) for a single solar power project of industrial scale. It is the policy of the Planning Authority to support the expansion of the agri-food industry and allow it to maximise its potential as stated in Section 4.1.5 of the KCDP 2015 – 2021. The proposed development would contravene objective ES-10 of the Plan to 'Promote and support the sustainable growth of agriculture and related agri development.'
- 7.3.2. The appeal site comprises agricultural lands that are currently used for dairy and grazing. In the absence of national guidance in Ireland around site suitability and locations for solar farms, I have noted UK guidance which is well developed on this issue. Generally, the UK guidance seeks to direct large-scale solar power developments to previously developed land and industrial land in the first instance, and then to more marginal agricultural lands, rather than highly productive lands. The appellants contend that this approach should be followed in this instance, and



argue that the appeal site comprises good quality agricultural lands which should be kept in agricultural use, and that there are more marginal lands (brownfield sites, contaminated lands, industrial lands) which would be more suitable for the proposed development.

- 7.3.3. It is submitted that the scale of the development is not capable of being integrated into the environment in a sustainable way. That up to 75% of Kerry is zoned rural general and for this reason a solar farm of such magnitude should not be allowed on this particular site. Concern is raised with respect to the level of approved renewable electricity projects and their appropriateness at this location in conjunction with issues of overcapacity.
- 7.3.4. I note that the UK, unlike Ireland, has a grading system for agricultural land, ranging from Grade 1 (most productive) to Grade 5 (most marginal). Since Ireland does not have such a grading system, there is no guidance or policy which would preclude the development of solar farms on agricultural land that are currently being used for dairy and grazing. Perhaps the most relevant existing strategy in this regard is the Government's agricultural strategic vision set out in Food Wise 2025, which seeks to increase the value of agri-food, fisheries and wood production sector by 70% and the value of food exports by 85%. I note that these are high level national targets and there is no evidence to suggest that the development of this solar farm on c. 99 hectares in north County Kerry would compromise the value of agri-food or the value of food exports at a national level. I also note in this regard that, should the development proceed, the appeal site can continue to be utilised for other agricultural practices such as sheep grazing, which is an area where Food Wise 2025 envisages further growth opportunities. The strategy includes a recommendation to develop on-farm diversification, which I consider would be consistent with a dual-use of the lands for energy generation and agriculture. I note that of the many recommendations and actions contained within Food Wise 2025, there are none which include reference to restrictions on land use.
- 7.3.5. In the case of ABP PL17.248146 the applicant argued that the energy intensity of solar farms is an order of magnitude greater than farming the equivalent area for biofuels, such as Miscanthus or Willow and that this is consistent with Food Wise 2025, which supports the development of technologies and processes that make more efficient use of limited resources. The Inspector in that case concurred with this

opinion and I too concur with this position, and consider that the dual-use of the lands will assist in meeting renewable energy targets without contravening agri-food policy as set out in Food Wise 2025.

- 7.3.6. With regard to County level agricultural policies, I do not agree that the proposed development would contravene objective ES-10 of the Plan to 'Promote and support the sustainable growth of agriculture and related agri development.' I consider that the solar farm would support economic growth in the rural area through farm diversification, the County Development Plan acknowledges that there are significant opportunities in the area of energy production which is supported in the County Development Plan 2015-2021, particularly with respect to Policies EP-1 (facilitate the sustainable provision of a reliable energy supply with emphasis on increasing energy supplies derived from renewable resources) and EP-7 (facilitating the development and connectivity of sustainable renewable energy resources). The temporary duration and general reversibility of the development is also noted. While the loss, or partial loss, of agricultural land would occur for a long-term period of 35 years, it would not be a permanent loss.
- 7.3.7. In conclusion, I consider that the benefits of the scheme, which would make a significant contribution to national renewable energy provision, and which would allow for the dual-use of the lands for agricultural purposes is acceptable in principle on the appeal site and does not materially conflict with Food Wise 2025. Any economic loss at the site as a consequence of altered agricultural practice due to the new proposed use would be balanced out by the benefits to the economy of a 50 MW export capacity renewable energy generator. The scale of the proposed development is required in order to avail of the RESS subsidy.

#### **7.4. Landscape and Visual Impact**

- 7.4.1. I highlight that the planning authority has serious concern with respect to visual impact of the solar farm due to the significant scale of the development which spans an area of rural countryside of some 2 Km long and 99 ha in area.
- 7.4.2. The first draft reason for refusal set out in the notification of decision to refuse planning permission Reg. Ref. 18/720 considers that the proposal would be injurious to visual amenities of the area by reason of scale which would be unduly obtrusive

on the landscape and would interfere with the rural character of the landscape, which is necessary to preserve, in accordance with Objective ZL-1 of the KCDP 2015 – 2021.

- 7.4.3. The appellants and observers to the scheme have serious concern that photomontages submitted do not reflect the visible impact of the proposed development on residences in the area. In particular, from Coolaclarig, Knockane and Upper Bedford Road. It is contended that screening of 6m proposed at the southern end of the site will not be effective and that the development would result in a high visual impact. Concern is raised with respect to the zoning and Landscape designations in the Landscape Character Assessment (LCA) for North Kerry. It is strongly submitted that the LCA for North Kerry is flawed.
- 7.4.4. The proposed development is located on lands designated “Rural General” in the Kerry County Development Plan 2015 – 2021. Rural General in the Development Plan is described as lands having a higher capacity to absorb development than the other rural designation (e.g. Rural Prime Special Amenity and Rural Secondary Special Amenity). The lands are located within Area 4 ‘Inner River Plain’, as per the Renewable Energy Strategy – Landscape Character Assessment (RES-LCA), excerpt attached as Appendix to this report. The RES-LCA describes the quality of the landscape as follows: ‘This is a marginal area which is generally flat which results in the area not having any particular qualities.’ The potential landscape and visual impact of the scheme is considered in the Landscape and Visual Assessment that accompanied the application. The application is also accompanied with Photomontages LVIA Viewpoint locations setting out 9 viewpoints in terms of ‘existing view’, ‘post development view pre-mitigation’ and ‘post development with mitigation established’.
- 7.4.5. The applicant does not consider that the scheme is out of keeping with the scale and nature of the receiving landscape context. It is submitted that the site benefits from ample natural screening and the proposed layout in the main retains the existing mature hedgerows and trees in and around the site. Landscape Plan, drawing No. LD.TLM 1.1 is noted for details of proposed ‘whip vegetation’, ‘under planting’, ‘inter-planting’, new sections of hedgerow, proposed mitigation screen planting to be planted and maintained at a height of approx. 4m while hedgerow type 1 along the eastern and south-eastern boundaries of the site to be managed at a height of up to

6m, location of the 110 KV substation (subject to a separate application to ABP) is noted.

- 7.4.6. Once the relevant construction and associated works are complete (solar arrays have a proposed height of 2.6m, security cameras have a proposed height of 3.4m, security fencing has a proposed height of approx. 2.8m with satellite poles of some 4m). The screen planting in the southern and south east section of the site will be maintained at a level of up to 6m, to screen the development from cross valley views between the appeal site and upper Bedford Road / south east.
- 7.4.7. The first party submits that the proposed development is likely to be difficult to discern beyond approx. 5 Km and is not likely to give rise to significant landscape or visual impacts beyond approx. 2 Km. In the interests of a comprehensive appraisal, a 5 Km radius study area is used in this instance. However, a particular focus on receptors contained within 2 km, except where iconic or designated scenic viewpoints exists at greater distances out to 5 Km. no designated views or prospects occur within 5 Km of the appeal site.
- 7.4.8. Having inspected the site and surrounding area and having reviewed the viewpoint photographs and photomontages, I consider that the visual impact of the proposed development will be minimal due to the site topography, the extensive hedgerows and tree planting and the separation distances from roads and residential dwellings. The closest property to the array (approx. 60m) is the one of the landowners adjacent to the north-western boundary of the site (at its northern end). The closest inverter / transformer to this property is approx. 250m. The next closest property is the farmstead of a second landowner also close to the north-western boundary at the approx. midway point. The property is approx. 70m from the array and approx. 260m from the nearest inverter / transformer.
- 7.4.9. The proposed PV panels will not rise more than 3.0m above the underlying terrain and will therefore be considerably screened by surrounding hedgerow vegetation. The limited visual impact that will arise will have a slight impact upon installation of the panel arrays from Viewpoint 2 and Viewpoint 3, moderate only, but this will be mitigated by additional planting.
- 7.4.10. Should the Board agree with my conclusions on this matter and decide that planning permission should be forthcoming I recommend that conditions be attached to any

grant of planning permission which seek to protect the visual amenity of the area by ensuring that security fencing and inverter cabins be coloured dark green to assimilate into the surrounding vegetation. No CCTV cameras shall be directed towards adjoining properties or the public road and cables within the site will be located underground.

- 7.4.11. Following decommissioning of the proposed development, when the panel arrays and supporting infrastructure are removed, and the lands reinstated to agricultural use, I do not consider that there will be any significant residual landscape or visual impacts. I recommend that the Board attach a condition with respect to a detailed restoration plan being submitted to the p.a., for written approval, prior to commencement of development. Also that a bond is required by condition, to ensure satisfactory completion of the development (in accordance with plans, drawing, and environmental commitments made to the satisfaction of the p.a.) and its restoration.

## **Residential Amenity**

### **Glint and Glare**

- 7.4.12. Solar farms have the potential to result in glint and glare impacts on surrounding receptors, such as residential properties and road users. Glint results from reflection of the sun off the surface of the PV panel and is seen as a momentary flash of bright light, while glare is a continuous source of bright light resulting from the reflection of the sky around the sun. Since solar panels are designed to absorb light rather than reflect it, glint is most likely to occur in early morning and late evening when the sun is at its lowest in the sky.
- 7.4.13. The issues of glint and glare are dealt with in the Report by Macroworks 'Glint and Glare Assessment' that accompanied the application. It is noted that the proposed development does not include tracking panels and that the panels are instead fixed in one orientation, facing due south. The panels will maintain a maximum height above the terrain of 2.8m and will be tilted up to 30 degrees from horizontal towards the south. Solar PV panels, in order to be efficient, need to absorb the maximum amount of sunlight available. Light which is reflected is wasted light.

- 7.4.14. There are no major transport routes in the vicinity of the site. Regard is had to separation distances to roads and adjoining dwellings to in-situ landscaping, proposed landscaping and screening. I support the findings of the Glint and Glare Report that it is not considered that there will be any significant nuisance effects to surrounding dwellings or along surrounding roads from glint and glare generated by the proposed solar farm.
- 7.4.15. Nevertheless, in order to address any residual impact that may arise I recommend that, if the Board is minded to grant permission, a condition be included requiring the developer to provide detailed glint and glare surveys following commissioning and on an annual basis for a period of two years to the planning authority in order to confirm that no such glint or glare impact has taken place, and to provide such further mitigation measures as the planning authority may specify in writing to ensure that this is achieved.

## **7.5. Noise & Electric Magnetic Interference (E.M.I.)**

- 7.5.1. There is no evidence to suggest that solar panels and their mounting structures create noise disturbance and the argument made in relation to EMI has been successfully rebutted in preceding solar farm applications before the Board. Particularly in relation to electric magnetic fields produced being similar in nature to those which already exist in houses. The solar panels make no noise and the layers of existing and proposed vegetation screening surrounding the site will effectively shield the wind from the solar farm.
- 7.5.2. Regard is had to planning application 14/06644, relating to a 1 MW solar farm in County Cork. PL17.248146 / Reg. Ref. LB/160898 relating to a 60MW and 75MW solar farm in County Meath and ABP-300174-17/ Reg. Ref. 17/851 relating to a 4MW – 5.6MW solar farm in Listowel, Co. Kerry in which the reporting Inspector concluded that there was no credible evidence that suggests that noise is an issue with solar farms.
- 7.5.3. The appeal site is located in a rural area with a relatively low dispersed population. I do not consider that noise is likely to be a significant issue due to the nature of the development and the substantial set-back distances of the solar arrays, battery storage and control units, inverter / transformer station from dwellings. It is submitted

that the battery storage unit does not generate noise nuisance and is proposed over 400m from the closest dwelling. Nevertheless, in order to address any residual impact that may arise I recommend that, if the Board is mindful to grant permission, a condition be included requiring that noise monitoring measures are put in place and adhered to.

## **7.6. Health and Safety**

- 7.6.1. Based upon research and Guidance Document the first party submits that there is no evidence that the proposed development could impact on health and safety given the nature of the development and its distance to the closest neighbouring properties.
- 7.6.2. The inspector's report's in recent planning applications, as referred to in the preceding section of this report, also trusts that the probabilities of panels being damaged and chemicals leaking into the ground are unlikely. CCTV will be provided around the perimeter of the site, as there is no requirement for permanent staff presence, CCTV will be used to monitor the development. The cameras will be monitored on a continual basis using infrared lighting as the facility will be unlit at night-time.
- 7.6.3. I agree that the proposed development does not pose any health or safety issues for members of the public. Nevertheless, in order to address any residual impact that may arise I recommend that, if the Board is mindful to grant permission, a condition be included requiring that pollution control measures are put in place and adhered to.

## **7.7. Depreciation in adjoining residential Property Values.**

- 7.7.1. I note the third-party concern raised regarding the depreciation in adjoining residential property values. However, given the nature of the development, measures proposed to be put in place in terms of environmental controls, landscaping, security, separation distances from dwellings and set back from local roads I do not consider that the proposed development would devalue residential dwellings in the surrounding rural area.

## 7.8. Impact Upon Ecology

- 7.8.1. Third party concern is raised regarding the effects of the proposed development on the biodiversity of the area, in particular, habitats, bats and the ecology of the River Galey, which is part of the Lower River Shannon SAC. It is submitted that clear evidence / surveys have not been submitted to determine that the proposal would not impact upon possible freshwater pearl mussel population of the River Galey. It is also submitted that clear evidence has not been submitted that the proposal which incorporates in-stream works (to construct the access track) and solar panels in close proximity to the in-stream, perimeter fencing damage, ground erosion, transformer leakage, adverse weather conditions etc would not impact upon the Lower River Shannon cSAC.
- 7.8.2. Third parties submit that with such diverse ecology and habitats and lack of any comparable Irish solar development with regards size and scale, it cannot be proven beyond reasonable doubt that this development will not adversely affect the cSAC associated species and habitat. It is argued that the mitigation measures proposed will not with reasonable scientific certainty perform the desired function.
- 7.8.3. The proposed development is accompanied by a Planning Report, a EclA (including an Aquatic Ecological Impact Assessment) and NIS. A substation Pre-Planning Construction Methodology and Substation Drainage Scheme Planning Report are also submitted.
- 7.8.4. The possibility of the solar farm to impact on aquatic insects that may form a food supply for annexed species is assessed in the NIS (as informed by the aquatic EclA). It notes that due to the ecology and life cycle of aquatic insects recorded in nearby watercourses which predominantly disperse via drift as opposed to flight, no impacts on the species are likely from the solar farm and / or the associated substation proposed to loop-in to an existing overhead 110KV line.
- 7.8.5. The footprint of the proposed development consists of agricultural grassland surrounded by mature hedgerows and drainage ditches. The EclA incorporates a survey of all protected species by way of a walk over survey.
- 7.8.6. The need for targeted surveys of field boundaries for badger potential, bat roosting habitat and breeding bird survey was identified and undertaken due to the potential for disturbance of these species from the development. It is submitted that the actual



land loss is relatively small and removal of hedgerows / treelines is limited to removal of small sections. Section 5.1.2 of the EclA details records held on the NBCD database for bats within 2 Km of the proposed site. Section 5.1.3 then provides a description of the bat suitability index for the landscape the site is situated in.

- 7.8.7. The bat landscape association model suggests that the proposed solar farm site is part of a landscape that is less favourable for bats in general. However, the landscape model shows a moderate suitability for soprano pipistrelle and brown long-eared bats and there is potential for these species to forage and commute along the hedgerows and treelines present on site.
- 7.8.8. None of the trees or structures identified during the bat survey as potential roosting sites will be removed. The sites landscape plan will enhance and increase hedgerow and treeline network at the site, providing greater foraging and commuting habitat and improving ecological connectivity. The majority of hedgerows and treelines at the proposed site will remain in place.
- 7.8.9. With respect to aquatic ecology the first party submits that the labelling of the Aquatic Ecological Impact Assessment Report as draft was an error and an inadvertent oversight. The response to the appeals and observations includes a supplementary Aquatic Impact Statement, by Lauren Williams, which addresses Freshwater Pearl Mussel. The statement reiterates the evidence for currently extremely low potential for freshwater pearl mussel to be present in the Galey River. It is concluded that the potential for freshwater pearl mussels to have redistributed from an undetectable (apparently absent) population source upstream and survive under adverse conditions in the vicinity of, and downstream of, Tullamore townland is extremely now-to-nil.
- 7.8.10. In terms of in-stream works, it is acknowledged that minor works are required to an existing stream which is crossed by the entrance track and which will be culverted below the access track. It is submitted that some localised bank protection works may be required to ensure that there is no erosion of soil as a result of heavy construction traffic. A temporary short-term by-pass channel will be required for a few days to facilitate the placing of the culvert. Works will be carried out July – September, when flows are likely to be lowest. The supplemental aquatic impact assessment report submits that the in-stream works proposed are of a relatively

minor nature, occurring within a small, previously drained and moderately impaired, field boundary stream. The stream is of low sensitivity in terms of fisheries value and is not suitable for aquatic species that are Qualifying Interests of the Lower River Shannon SAC (Galey River). It is contended that the installation of a short 4m long culvert presents no potential for significant impacts on aquatic qualifying species or habitats of the Lower River Shannon SAC.

- 7.8.11. The proposed development is located adjacent to the Lower River Shannon cSAC. While the works proposed do not involve any direct loss of annexed habitat, Stage 1 screening concludes, on the basis of information provided with the application (18/720), that significant effects cannot be ruled out on one European Site – Lower River Shannon cSAC, due to hydrological connectivity and proximity of the development to the River Galey. The River Galey is designated for water dependent annexed habitats and species and it is concluded that the development individually or in combination with other plans / projects is likely to have possible impacts specifically at construction stage.
- 7.8.12. The NIS report submitted and the Biodiversity Officer both conclude that subject to mitigation proposed in the NIS, no adverse effects on the integrity of a European Site is considered likely. AA is considered further in a separate section of this report. The proposed development is not within a European Site therefore no direct impacts are considered likely on annexed habitats or species. It is noted that watercourses are buffered from the development due to the layout of the site and local topography. Furthermore, the nature of construction works involves piling frames into the ground and excavation of relatively shallow trenches for cabling and associated infrastructure. Further to the mitigation outlined in the NIS that accompanies the application a pollution event is considered low risk. Adverse effects on the integrity of a European site from indirect impacts on water quality are not considered likely further to the implementation of the comprehensive mitigation proposed.
- 7.8.13. Having regard to the nature of the proposed development, I concur with the applicant's ecologist that the potential impacts on ecology are primarily related to loss or fragmentation of habitats, construction-related disturbance and contamination of surface water. As a result of the installation methodology for the panels, only a very small area of ground will be made inaccessible for plants and animals. The majority of existing hedgerows are to be retained and strengthened, with gaps

infilled, although the access tracks will require openings to be inserted in a number of hedgerows. I recommend that if the Board is mindful to grant permission, that a condition be included requiring the retention of all existing hedgerows, other than where gaps are required to facilitate access track routes.

7.8.14. In conclusion, recent opinion of Advocate General Knott (Case C-461/17) is noted. In particular the opinion of the AG as set out in para.60 of the opinion relating to details of construction phase being left to unilateral decision of the developer only where every reasonable scientific doubt that the effects of such a decision will not be detrimental to the integrity of the site concerned has been dispelled. I consider that subject to compliance with all identified mitigation measures, the preservation of all hedgerows, and the agreement of a Construction Management Plan with the Planning Authority, the proposed development will result in an improvement to the biodiversity of the appeal site and will not have a significant adverse ecological impact.

## 7.9. Archaeology

7.9.1. Refusal reason number 3, of the draft decision to refuse planning permission, sets out that the planning authority is not satisfied on the basis of submissions made in relation to the application that the proposed development would not endanger archaeology of the area. The report of the Kerry County Archaeologist recommending further information incl. archaeological testing be carried out as further information due to the scale of the development and in order to determine the full extent of the Recorded Monument RMP NO. KE101-025-(Ringfort) is noted. As is the report of the Department of Culture, Heritage and the Gaeltacht which while in principle has no objection to the proposed development supports the decision of the planning authority and recommends that archaeological monitoring will not suffice in this instance and reiterates the Kerry County Archaeologist request for further information with respect to archaeological testing and implementation of archaeological mitigation strategy should one be required.

7.9.2. The first party submit that they are in full agreement with DCHG that testing should be undertaken at the site prior to commencement of development. However, they do not consider it necessary to undertake the testing as F.I. prior to issue of a permission. The submission by DCHG sets out 4 steps of archaeological testing

including reporting and agreement for further mitigation measures which are generally in line with the mitigation already proposed in the application.

- 7.9.3. It is acknowledged that the site is large, however, following a thorough desk study and site walkover the identified ringfort RMP KE010-025 is the only verified feature on the site.
- 7.9.4. It is argued that guidance recommends that blanket requests for testing as FI should not be based solely on the fact that the development is large-scale. I agree with the first party that the solar farm by its nature is flexible in design. I note that a buffer of 20m is proposed outside of the extent of the ringfort. I also highlight that the first party is in full agreement with DCHG that testing should be undertaken at the site prior to commencement of development. The applicant submits that they are in the process of preparing a licence application for testing and will submit same to DCHG as soon as possible.
- 7.9.5. I am mindful that the DCHG have no objection in principle to the proposed development. I am of the opinion that archaeological testing results at this site should not form the basis for a refusal. If any features are identified the layout and design of the solar farm can be amended as necessary.
- 7.9.6. I recommend that a condition should be attached requiring testing, reporting and further agreement with NMS and or Kerry County Council prior to commencement of development.
- 7.9.7. However, in the event that the Board does not agree and considers it necessary to undertake site wide testing prior to the issue of a decision to grant permission, I recommend that the Board requests such further information if it is otherwise minded to grant permission.

#### 7.10. **Surface Water Drainage and Flood risk.**

- 7.10.1. The River Galey lies to the south and south east of the site. The river has an upstream catchment of approx. 184 Km sq. which is predominantly land used for agriculture. There are three significant land drains / watercourses (>3m deep) running through the site (perpendicular to the River Galey) which discharge to the river. It is submitted that the drains within the development site will be maintained and their capacity will not be restricted as a result of the proposals.

- 7.10.2. A site-specific Flood Risk Assessment (FRA) has been carried out to establish the potential flood risk. It is concluded that there is low flood risk. The majority of the site lies within Flood Zone C, with none located in Flood Zone A. A very small portion lies in Flood Zone B with a small number of panels located in this area. This area is identified as being at risk of fluvial flooding during a 1 in 1000 year return period event (0.1%AEP)
- 7.10.3. The appellants question the extent of the flood plain relative to the proposed development on the grounds of the removal of part of a raised bank adjacent to the river.
- 7.10.4. The flood mapping for the area identifies the 1:100 year and 1:1000 flood events are based upon PFRA mapping which would not have provided for the detail of the bank in the first instance. It is therefore submitted that the extent of the flood plain as mapped from the PFRA remains valid.
- 7.10.5. The appellants refer to the presence of a non-return valve on one of the River Galey tributary streams crossing the site, as identified in the FRA submitted with the application. The River Galey was subject to arterial drainage works by the OPW and it is submitted that it is most likely that the valve was installed as part of these works.
- 7.10.6. It is also submitted that the maintenance of the streams and channels crossing the site will be the responsibility of the solar operator for the lifetime of the project. Thereafter responsibility will revert to the landowner as per the current situation. Regular site inspections and maintenance works will be undertaken by the operator of the drainage crossing the site, including the valve. In the event of any works being required to this valve the operator will liaise with the OPW.
- 7.10.7. The proposed drainage system conforms with the principles of Sustainable Urban Drainage Systems (SUDs) and provides for a reduction in the rate of the run-off from the proposed hardstanding areas to match the pre-development rates of greenfield run-off. This will result in the proposed surface water drainage system mimicking the response of the greenfield situation. Therefore, the proposed drainage network for the substation area should not result in an increased risk of flooding to the subject site, nor to the adjacent third-party lands.
- 7.10.8. The proposed solar farm development will require a sub-station which will be the subject of a separate application to An Bord Pleanála. The 110 KV substation is

proposed to be located towards the centre of the subject site. The fluvial flood risk to the substation is considered to be very low. The substation is located within Flood Zone C.

7.10.9. The proposed layout of the solar panels has been developed, in as much as possible, to avoid providing panels in the areas identified as being at risk of fluvial flooding. Where this cannot be avoided, the solar panels can sit within and above flooded areas with no adverse impacts to the panels. As the panels are placed at a level elevated above the ground, the provision of these panels will not result in the removal of any existing flood water storage available within the site. The panels are proposed to be fitted directly into the greenfield lands via frame legs and hence the ground conditions below will not be changed. The existing capacity to store flood waters as currently indicated on the PFRA mapping will remain post-construction of the proposed development. No dedicated surface water drainage system is proposed to be provided for the solar panels.

7.10.10. Access tracks will be permeable and will allow rainwater to infiltrate through the stone structure to the subsoil below thus mimicking the existing flow paths for rainfall.

7.10.11. Solar panel arrays and associated cabling are not considered highly vulnerable. No concerns in respect of flooding were raised in the planning officers report which states that the 'proposed works are located outside the flood plain of the Galey River'. I agree that there will be a negligible impact on flood risk and the floodplain as a result of the proposed development.

#### **7.11. Requirement for Environmental Impact Assessment (EIA)**

7.11.1. Solar photovoltaic electrical generation is not a form of development that is listed in Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended. While specific forms of energy-related development are listed in Schedule 5, such as wind power and hydroelectric, there is no mention of solar energy development. With regard to other potential classes of development, I have had regard to the following in particular:

- Class 3(a) of Schedule 5, Part 2: Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.
- Class 10(dd) of Schedule 5, Part 2: All private roads which would exceed 2000 metres in length

7.11.2. I consider that the proposed development does not fall within Class 3(a), as the use of the word 'and' rather than 'or' indicates that the development type relates to a form of combined heat and power plant.

7.11.3. With regard to 'private roads', I note that the definition of 'road' utilised in the Planning and Development Act 2000, as amended, is that set out in the Roads Act 1993:

- (a) any street, lane, footpath, square, court, alley or passage,
- (b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge, flyover, carriageway (whether single or multiple), pavement or footway,
- (c) any weighbridge or other facility for the weighing or inspection of vehicles, toll plaza or other facility for the collection of tolls, service area, emergency telephone, first aid post, culvert, arch, gully, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hardshoulder, island, pedestrian refuge, median, central reserve, channelliser, roundabout, gantry, pole, ramp, bollard, pipe, wire, cable, sign, signal or lighting forming part of the road, and
- (d) any other structure or thing forming part of the road and—
  - (i) necessary for the safety, convenience or amenity of road users or for the construction, maintenance, operation or management of the road or for the protection of the environment, or
  - (ii) prescribed by the Minister.

7.11.4. The proposed development includes the construction of 5,936m of new internal access tracks and new vehicular access point to the L-1009. The Board may wish to consider whether the structures described as access tracks would fall within the abovementioned definition of a road. The proposed tracks are 4m wide, with a compacted stone surface, and their intended use is stated to be for the purpose of construction, maintenance and ultimate decommissioning of the development. The

purpose of the tracks is not for the conveyance of people and vehicles, *per se*, except as necessary in connection with the construction, maintenance and decommissioning of the development. On that basis, I therefore consider that the 'access track' proposed is materially different from a 'road' as defined in legislation.

7.11.5. I therefore conclude, as was concluded in the case of PL17.248146 / Reg. Ref. LB/160898 and was accepted by the Board, that the proposed development does not fall within Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and I therefore concur with the applicant's submission that an Environmental Impact Assessment is not required.

## **7.12. Grid Connection / Project Splitting**

7.12.1. It is proposed that the solar farm will be served by an on-site substation to facilitate export of the collected energy to the local grid and a number of additional onsite electrical infrastructural components such as inverters. The substation and the loop-in infrastructure to the existing 110KV OHL on site will be subject of a separate application for permission from An Bord Pleanala, in the interests of a robust assessment, it is submitted that the Flood Risk Assessment (FRA) and the planning drawings and documentation both consider the full combined development at the site; both the subject proposal and the sub-station.

7.12.2. As set out above the solar farm development is not a class of development subject to EIA under the Directive. The consenting procedures for the solar farm are under section 34. The consent for the substation must be sought under Section 182A.

7.12.3. The substation is currently the subject of a section 182E pre-application consultation request to An Bord Pleanala. The additional elements which will be the subject of a separate application to An Bord Pleanala include:

- A 110KV substation close to the existing 110KV OHL
- Loop in proposal to the existing 110KV line crossing the site – this involves the provision of 2 no. new end towers at the location of the loop in;
- Construction compound adjacent to proposed 110 KV substation.



7.12.4. Should the Board determine that the substation development does comprise of Strategic Infrastructure and also does require EIA, then an assessment of the impacts of the substation will be undertaken which will include a full assessment of the cumulative impacts of the solar development subject to the current application. This matter will be addressed under the separate consent procedures of section 182A of the Planning and Development Act 2000, as amended, as it would comprise electricity transmission development by virtue of the 110kV voltage.

7.12.5. Section 182A(1) of the PDA states that:

“Where a person...intends to carry out development comprising or for the purposes of electricity transmission...the undertaker shall prepare, or cause to be prepared, an application for approval of the development under section 182B and shall apply to the Board for such approval accordingly.”

7.12.6. Section 182A(9) of the PDA states that:

“‘transmission’, in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of—

(a) a high voltage line where the voltage would be 110 kilovolts or more, or

(b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.”

7.12.7. Section 2(1) of the Electricity Regulation Act 1999 defines transmission as follows:

“‘transmission’, in relation to electricity, means the transport of electricity by means of a transmission system, that is to say, a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board.”

7.12.8. Having reviewed the planning application documentation and drawings, I am satisfied that the connection of the solar farm to the grid does not form part of the proposed development and is subject of a separate section 182E pre-application consultation request to An Bord Pleanála. I am therefore satisfied that the proposed development can be assessed on its merits as it comes before the Board as a third party appeal under section 37 of the PDA and does not comprise project splitting. I consider that the nature of any such application, and whether it comprises strategic infrastructure development, is dependent on the form of connection proposed and can be considered at that time. If the Board is mindful to grant permission, I recommend that a condition be included to clarify that the 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.

### **7.13. Appropriate Assessment (AA)**

- 7.13.1. As stated above in the Ecology Section of this report, the proposed development is accompanied by a Screening for Appropriate Assessment and Natura Impact Statement. In addition to a Planning Report and a EclA (including an Aquatic Ecological Impact Assessment). A substation Pre-Planning Construction Methodology and Substation Drainage Scheme Planning Report was also submitted.
- 7.13.2. The appeal site is not located within any designated Natura 2000 site and therefore does not involve any direct loss of annexed habitat. The Lower River Shannon cSAC (site Code 002165) is adjacent to the appeal site. The Moanveanlagh Bog SAC (site code 002351) is located 5.8Km distant. Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (Site No 004161) is located 9km distant. The River Shannon and River Fergus Estuaries SPA (Site No 004077) is located 5 km distant.
- 7.13.3. Of the Natura 2000 sites listed above one site is considered likely to be affected by the proposed development. The Lower River Shannon cSAC (adjacent). All the other Natura sites are either a considerable distance away or are not hydrologically connected to the development site. The main effects are likely from indirect impacts on fresh water dependent annexed species and habitats in the cSAC due to impacts on water quality at construction stage. The Qualifying Interests of the Lower River Shannon SAC as set out in the npws.ie website include:

- 1029 Freshwater Pearl Mussel *Margaritifera margaritifera*
- 1095 Sea Lamprey *Petromyzon marinus*
- 1096 Brook Lamprey *Lampetra planeri*
- 1099 River Lamprey *Lampetra fluviatilis*
- 1106 Atlantic Salmon *Salmo salar* (only in fresh water)
- 1110 Sandbanks which are slightly covered by sea water all the time
- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 \*Coastal lagoons
- 1160 Large shallow inlets and bays
- 1170 Reefs
- 1220 Perennial vegetation of stony banks
- 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts
- 1310 *Salicornia* and other annuals colonizing mud and sand
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- 1349 Bottlenose Dolphin *Tursiops truncatus*
- 1355 Otter *Lutra lutra*
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)
- 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
- 91E0 \*Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

7.13.4. The Conservation Objectives for the Lower River Shannon cSAC as set out in the npws.ie website include:

- To restore the favourable conservation condition of Freshwater Pearl Mussel in the Lower River Shannon SAC,

- To restore the favourable conservation condition of Freshwater Pearl Mussel in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Sea Lamprey in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Brook Lamprey in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of River Lamprey in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Salmon in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Sandbanks which are slightly covered by sea water all the time in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Estuaries in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Coastal lagoons in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Large shallow inlets and bays in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Reefs in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Perennial vegetation of stony banks in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Vegetated sea cliffs in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Vegetated sea cliffs in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the Lower River Shannon SAC,

- To restore the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Bottlenose Dolphin in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Otter in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey-silt laden soils (*Molinion caeruleae*) in the Lower River Shannon SAC,
- To maintain the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey-silt laden soils (*Molinion caeruleae*) in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) in the Lower River Shannon SAC,
- To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) in the Lower River Shannon SAC,

7.13.5. The NIS identifies each of the site-specific conservation features (14 no Annex 1 habitats and 7 no. Annex II species) of the Lower River Shannon SAC. No impacts are predicted on the 14 no. habitats. Potential for impact however on 5 number species was identified during construction. These are Atlantic Salmon, River Lamprey, Brook Lamprey, Sea Lamprey and Otter.

7.13.6. The project involves the construction of a solar farm development and associated works (as described under section 2.0 of this report above). Elements of the works during the construction phase with potential to result in impacts on Natura 2000 sites include the following:

- Site preparation works including excavation works
  - Erecting security fencing (mammal – friendly)
  - Screwing support frames into the ground
  - Affixing panels to mounting frames
  - Trenching for cables to approx. depth of 1 m and laying cables
  - Installation of inverters and transformer cabinets
  - Connecting cables and backfilling trenches
- Emissions to surface and ground water such as silt laden run off, hydrocarbons or other pollutants during construction phase
- Erection of solar panels.

7.13.7. The appeal site is hydrologically connected to the Lower River Shannon cSAC via field drains that run from the site to the Galey River. Stage 1 screening concludes, on the basis of information provided with the application (18/720), that significant effects cannot be ruled out on one European Site – Lower River Shannon cSAC. The River Galey is designated for water dependent annexed habitats and species, and it is concluded that the development individually or in combination with other plans / projects is likely to have possible impacts specifically at construction stage.

7.13.8. The possibility for adverse effects on a European site therefore relate to the potential for a pollution event to occur at construction or operational phase and impact on designated waterbodies. Following identification of mitigation measures, however, it

is contended by the first party that all potential impacts have been avoided or ameliorated resulting in no potential for direct, indirect or cumulative impacts arising from the proposed Solar Farm at Tullamore, Co. Kerry either alone or in combination with any other plans or projects.

7.13.9. The Biodiversity Officer of Kerry County Council concludes in her assessment that ‘if the mitigation measures are undertaken, maintained and monitored as detailed in the NIS adverse impacts on the integrity of a European site will be avoided.’

7.13.10. I consider that the information submitted in the NIS is sufficient to allow the Board to carry out an AA. I am of the opinion that proposed development would not adversely affect the integrity of the Lower River Shannon cSAC in view of the sites Conservation Objectives and that no reasonable scientific doubt remains as to the absence of adverse effects on the site. A detailed construction environmental plan shall be put in place which will include prevention of pollution control measures. Should the Board decide to grant planning permission a robust CEMP should be subject to condition of any grant of planning permission.

7.13.11. Contrary to third party opinion I consider it is reasonable for the board to attach a condition confirming that a final CEMP would be submitted for the agreement of the p.a. incorporating and providing all mitigation and management measures provided for in the outline CEMP and updated in line with the permission and any detailed method statements as appropriate.

7.13.12. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site Lower River Shannon cSAC, or any site’s Conservation Objectives.

## 8.0 Recommendation

8.1. I recommend that permission be **Granted** subject to the conditions set out below.

## 9.0 Reasons and Considerations

- 9.1.1. Having regard to the provisions of national and regional policy objectives in relation to renewable energy, to the “Rural General” designation of the area in the current Kerry County Development Plan 2015 – 2021, the nature and scale of the proposed development, the continued agricultural use and improved biodiversity which would result and the proximity of a potential grid connection, it is considered that, subject to compliance with the conditions set out below, the development would support national and regional renewable energy policy objectives, would not conflict with the provisions of the Development Plan, would not seriously injure the residential amenities of property in the vicinity, would not have unacceptable impacts on the visual amenities of the area, would not result in a serious risk of pollution, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, 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 ten years from the date of this Order.

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



3. (a) All structures including foundations hereby authorised shall be removed not later than 35 years from the date of commissioning of the development, and the site reinstated unless planning permission has been granted for their retention for a further period prior to that date.

(b) Prior to commencement of development, a detailed restoration plan, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority. On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

(c) Following commissioning of the development detailed glint and glare surveys shall be carried out and submitted to the planning authority on an annual basis for a period of two years. The surveys shall confirm that no such glint or glare impact has taken place, and to provide such further mitigation measures as the planning authority may specify in writing to ensure that this is achieved.

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

4. In the event of complains being received regarding alleged noise nuisance from the development to which this permission relates and, upon investigation by Kerry County Council, such complaints are found to be justifiable the applicant shall, upon written receipt of notification from the planning authority, retain services of an acoustic specialist to establish the cause of the noise or nuisance and the remediation measures required in order to abate said nuisance. The applicant shall ensure that all such measures are fully implemented and shall be liable for all costs incurred therein.

**Reason:** In the interest of residential amenity

5. 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.

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

**Reason:** To protect the environment.

7. (a) The landscaping proposals shall be carried out within the first planting season following commencement of construction of the solar PV array. All existing hedgerows (except at access track openings) shall be retained. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted.

(b) Additional screening and/or planting shall be provided so as to ensure that there is no glint impact on adjoining houses as a result of the development. Upon commissioning of the development and for a period of two years following first operation, the developer shall provide detailed glint surveys on an annual basis to the planning authority in order to confirm that no such glint impact has taken place, and shall provide such further mitigation measures, as the planning authority may specify in writing, to ensure that this is achieved.

**Reason:** To assist in screening the proposed development from view and to blend it into its surroundings in the interest of visual amenity, and to mitigate any glint impact from the proposed development upon adjoining residential amenities.

8. The inverter/transformer stations, battery storage and control units and all fencing shall be dark green in colour.

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

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

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

(c) Each fencing panel shall be erected such that for a minimum of 300 millimetres of its length, its bottom edge is no less than 150 millimetres from ground level.

(d) The solar panels shall have driven or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission.

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

**Reason:** In the interest of clarity, of visual and residential amenity, to allow wildlife to continue to have access to and through the site, and to minimise impacts on drainage patterns and surface water quality.

10. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:
  - a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
  - b) Employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

- c) A 20m buffer zone shall be preserved around the recorded monument Ke010025 (Ringfort). The buffer zone shall be measured from the outer edge of the feature.
- d) The buffer zone shall be security fenced during construction works on the site.
- e) No storage of materials, excavation or traffic of machinery shall be permitted within the buffer zone.

The assessment shall address the following issues:

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

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

**Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

11. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste. The plan shall also include a construction method statement to ensure the avoidance of impacts on bats, badgers and otters.

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

12. Water supply and drainage arrangements including the attenuation and disposal of surface water shall comply with the requirements of the planning authority for such works and services.

**Reason:** In the interest of environmental protection and public health.

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 upgrading of the section of public road from the junction of the R-552/L-1009 to the proposed site entrance and 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. (a) 120m sightlines shall be provided in both directions of the proposed entrance to the site in accordance with details submitted to the planning authority on the 18/07/2018.

(b) A pre and post construction road survey shall be carried out and submitted to the planning authority.

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

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 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.

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.

---

**Fiona Fair**

**Planning Inspector**

**3<sup>rd</sup> April 2019**