



An
Bord
Pleanála

Inspector's Report

PL14.246850

Development	10-year permission for a solar farm with an export capacity of approximately 4.2MVA and all associated works.
Planning Authority	Longford County Council
Planning Authority Reg. Ref.	16/81
Applicant(s)	Elgin Energy Services Limited.
Type of Application	Permission
Planning Authority Decision	Grant
Appellant(s)	Martin Finnan
Observer(s)	None
Date of Site Inspection	19 September 2016
Inspector	Patricia Calleary

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1.0 Site Location and Description

- 1.1. The appeal site, with a stated area of c.14.5 Ha is located within the townland of Lisnageeragh, c.1.5km north east of Edgeworthstown in County Longford. It comprises a collection of fields which are separated by internal drains and hedgerows. The site is relatively flat / gently undulating at an area of between 100 - 110m OD. On the day of my inspection, there were cattle grazing in one of the fields while other fields were not being grazed at the time. The site boundaries consist of mature hedgerows and trees. Overhead powerlines traversed an area to the rear (north). There is an extensive area covered in forestry to the north/north-east of the proposed site and a low lying stream located to the east.
- 1.2. There are four residential properties proximate to the site. Two lie c.50m to the east and north east of the site boundary. Another lies c.80m to the north east. A fourth lies c. 50m to the south west of the site boundary. There are other properties along the local road which are positioned to the west of the site in a N-S orientation but these are well separated from the site.
- 1.3. Current access is from a gated entrance off a local road on the northern boundary of the site, leading onwards to the N55 (to the south east of the site) or into Edgeworthstown and onto the N4 to the south. I have attached a context map showing the site and environs within the appendix to this report.

2.0 Proposed Development

- 2.1. The proposal would consist of a solar farm with an export capacity of c.4.2MVA. It would broadly comprise of the following:
- photovoltaic panels on ground mounted frames;
 - a terminal station along the northern boundary of the site (3m high, 34 sq.m area);
 - 4 no. single storey inverter stations (c. 3 m high and 18 sq.m in area with positions to be determined by the layout of the solar farm);

- Fencing (2.5m deer fencing type);
- 7 No. CCTV cameras;
- Improved access and internal access tracks;
- Site development works and landscaping.

2.2 It is stated that the number of solar panels would be governed by site and ground conditions and proximity to hedgerows and they would be laid out in arrays facing south, separated by a distance of between 2-6 metres within existing field boundaries. Mounting system for the array of panels would consist of galvanised steel posts which would be screwed or driven into the ground to a depth of c.1.5m as dictated by ground conditions. It is stated that no artificial lighting is proposed. It is also stated that during the lifetime of the operation, the appeal site would continue to be used for sheep grazing and at the end of operation all infrastructure would be decommissioned, removed off-site and the land returned to its current and sole agricultural use.

2.3 The Planning Application was accompanied by the following documents: Town Planning & Environmental Report, Landscape & Visual Impact assessment, Ecology report (including Appropriate Assessment Screening), Archaeological & Built Heritage assessment and a Glint and Glare assessment.

3.0 **Planning Authority Assessment**

3.1. **Decision**

The Planning Authority issued a decision to grant permission subject to 16 conditions, the following of note:

- Condition 2: Archaeological monitoring and preservation of any in situ remains;
- Condition 3: No groundworks to take place within 25m of the external perimeter of recorded monument No. LF015-051;
- Condition 4: Buffer zone of 15 metres from the solar panels to the perimeter hedgerow;

- Condition 6: Operation period of 25 years with reinstatement thereafter (unless further planning permission obtained);
- Condition 9: Landscaping;
- Condition 11: Cables shall be located underground;
- Condition 12: Reinstatement programme on full or partial decommissioning;
- Condition 14: Construction management plan.

3.2. **Planning Authority Reports**

The report of the area planner can be summarised as follows:

- Development description provided including details of the panel design, support infrastructure, fencing and CCTV;
- Visual impact report was considered comprehensive. Agrees with its findings;
- With sufficient screening, potential glint effects would not be significant;
- Considers the landscape and visual impacts would be modest and minimised through natural topography and screening;
- References UK Guidance (Planning Practice guidance for renewable and low carbon Energy July 2013 – Department for communities and local Government), Considers that the proposal meets the criteria set out in the guidance;
- Adequate sightlines achievable at the proposed entrance;
- Site lies outside any flood risk areas;
- Applicant has indicated that there is no risk to human health from electromagnetic fields from 20 kv underground electric connection cable;
- Suggestion of devaluation of property is without evidence;
- Proposed development has potential to deliver renewable energy without posing significant effects on residential properties in the area or impacting unduly on biodiversity, archaeological features or wider residential amenity;
- Proposal accords with the relevant development plan policies and relevant UK guidance;

A recommendation to **grant permission** issued.

3.3. Internal Technical Referrals

- Road Area Engineer – No response;
- Road Design - No objection subject to conditions;
- Water Services – No response;
- NRA Liaison Officer – No response;
- Environment – No response;
- Heritage Officer – No response;
- Chief Fire Officer – No response.

3.4. Prescribed body referrals

- DAHG – Recommends archaeological conditions in relation to providing a buffer area around recorded monument LF 015-051 and archaeological monitoring;
- Irish Water – No objection, standard conditions;
- An Taisce – States that a strategic national and regional strategy is required for solar array development;
- Irish Aviation Authority – No response;
- Commission for Energy Regulation – No response.

3.5. Third Party Observations

Third party submissions were received from 2 parties (Martin Finnan (c/o Sean Lucy & Associates) and Josephine & John McCabe. A representation on behalf of neighbouring farmers was also received from Cllr. Michael Carrigy. The principal grounds raised by third parties include environmental, archaeology, traffic and health concerns as well as concerns regarding impacts on zoned lands in Edgeworthstown, devaluation of property, loss of privacy and impacts on farming livestock. In addition, it is submitted that there is no directive from Government with regard to solar energy and the development is premature pending national guidance.

The Planning Authority makes reference to the planning issues raised by third parties stating that these were taken into account in the assessment of the application.

4.0 **Planning History**

4.1. There are no records of any planning history on the appeal site.

The following 4 Solar PV Energy planning applications decided by the Board on appeal are considered relevant:

- **PL26.244351** – Permission granted by the Board for a Solar PV Energy Development in County Wexford. (09.07.2016)
- **PL04.244539** - Permission granted by the Board for a Solar PV Energy Development in County Cork. (07.07.2015)
- **PL04.245862** - Permission granted by the Board for a Solar PV Energy Development in County Cork. (16.06.2016)
- **PL27. 246527** – Permission granted by the Board for a Solar PV Energy Development in County Wicklow. (18.08.2016)

5.0 **Policy Context**

5.1. **Ireland’s Transition to a low carbon Energy Future 2015-2030 - White paper on Energy policy (Department of Communications, Energy and Natural Resources) – Dec 2015**

This document is a complete energy policy update for Ireland. It sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95%, compared to 1990 levels, by 2050, falling to zero or below by 2100 with the following statements:

- **Paragraph 130** – Thus far, renewable electricity projects have typically been large scale. While there will continue to be an important role for larger projects, there will also be an increasing role for smaller, community-level projects. As new renewable energy solutions such as bioenergy, solar photovoltaic (PV) and offshore energy mature and become more cost effective they will be included in the renewable energy mix.

- **Paragraph 137** – Solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. Solar technology is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016.

5.2. **National Spatial Strategy 2002-2020**

- **Section 2.6 - How to Strengthen Areas and Places**

National and international evidence also demonstrates that rural areas have a vital contribution to make to the achievement of balanced regional development. This involves utilising and developing the economic resources of rural areas, particularly in agriculture and food, marine, tourism, forestry, renewable energy, enterprise and local services, while at the same time capitalising on and drawing strength from vibrant neighbouring urban areas.

- **Section 5.5 - Environmental Quality**

In economic development, the environment provides a resource base that supports a wide range of activities that includes agriculture, forestry, fishing, aquaculture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability.

5.3. **Regional Planning Guidelines for the Midland Region 2010-2022**

- **Goal 8:**

To promote the delivery of renewable energy particularly in the context of the existing energy infrastructure in the Midland Region.

- **3.4.6.1 - Renewable Energy**

The development of the renewable energy sector in the Midland Region will significantly contribute to the national target of generating 40% electricity from renewable sources by 2020.

5.4. **Longford Development Plan 2015-2021**

- **Policy RE3:**

The Council will consider the promotion of renewable energy and low energy/passive houses to be a high priority to help reduce global warming. The Council will support initiatives that encourage energy conservation and reduce reliance upon non-renewable sources of energy, including schemes for wind energy, biomass, photovoltaics, solar thermal installations, heat exchange, geothermal etc.

- **Section 5.5.2 – Renewable Energy Sources**

All methods of energy production have impacts on the environment, however, the need to adopt a more sustainable approach to energy production is acknowledged by the Planning Authority. A favourable approach will be taken towards applications for renewable energy developments provided they are environmentally sustainable and are in accordance with general planning criteria.

- **Section 5.5.2.3 – Alternative Energy Development**

Projects involving other indigenous sources of energy such as solar, landfill gas, biomass, energy crops, forestry waste, biogas from sewage sludge and farm slurry, will be assessed in a similar manner with the prime policy of the Planning Authority of permitting developments which are environmentally sustainable and in accordance with the proper planning of the area.

- **Section 6.1.1 – Landscape Character Assessment** - Landscape Policies relevant to the assessment include LCA 1, LCA 2 and LCA 3.
- **Section 4.4.1 – Agriculture Policies and Objectives** - Agriculture Policy AGR2 promotes rural industry and diversification which would be balanced with natural, architectural and archaeological heritage and landscape character of the county.
- **Section 6.2.1 – Archaeological Heritage; 6.2.2 – Natural Heritage and Biodiversity and 6.2.2.5 – Biodiversity.**
- **Appendix 1C Service Town – Edgeworthstown Zonings and Policy.** The site is located to the East of the Edgeworthstown Zoning Map, Longford CDP 2015-2021. The appeal site lies east of lands zoned for strategic residential reserve, i.e. to provide for the longer term housing requirements of the town.

5.5. **Solar PV Development Guidelines in the UK.**

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

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

This national guidance provides best practice planning guidance in respect of how large ground mounted arrays are developed setting out planning considerations and requirements. It provides advisory information on planning application considerations including construction and operational works, landscape / visual impact, ecology, historic environment, glint and glare and duration of the planning permission. Guidance is included on the information which should accompany a Landscape and Visual Impact Assessment and on EIA Screening procedures.

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

6.0 **The Appeal**

6.1. **Grounds of Appeal**

An appeal was received from Martin Finnan, c/o Sean Lucy and associates. The principal grounds of appeal can be summarised as follows:

- Proposal is premature pending national and local guidance;

- Irish Solar Energy providers have identified that the technology is emerging and that development of solar energy at the scale proposed will not be technically feasible until 2018. Therefore, the application is likely to be speculative in nature to take advantage of lack of planning control;
- Requirement of 14Ha to produce 4MW represents an inefficient use of technology. Project is not economically feasible;
- Site location is not compatible with the provision of adequate solar gain;
- Insufficient information is provided on the type or numbers of Solar PV panels proposed on the appeal site or of the Power Factor (PF);
- Location of site immediately bordering the zoned area, in conjunction with the 10-year permission and 25-year operation period represents an unnecessary and unwarranted imposition on future proper planning and sustainable development for Edgeworthstown;
- Site was chosen to suit its proximity to the nearby ESB substation;
- Property values will likely depreciate in the vicinity as a result of the development;
- References UK National Policy (Planning Practice guidance for renewable and low carbon energy. July 2013, Department for Communities and Local Government);
- Premature in the absence of a thorough reassessment of the EU EIA Legislation such as would require an EIA for solar windfarms above a stated threshold;
- Inadequate fencing proposed;
- Will impact on surface water runoff as solar panels are impermeable and flood risk should have been considered;

6.2. Planning Authority Response

None

6.3. First Party Response

A response to the third party appeal was received by the Board. At the outset, the first party states that the project is viable and that they have developed solar projects at more northerly latitudes than Edgeworthstown. The following specific points are included in their response.

- National and local planning policy supports renewable energy production, including the White Paper on Energy policy and Section 5.5.2 including Policy RE3 of the Longford County Development plan;
- Accepting that there is no national or local guidance for solar farms, considers that the planning system is sufficiently robust to assess development proposals of this nature particular where a comprehensive planning application addressing planning issues was submitted to Longford County Council. Planning application and proposal also meets the planning considerations set out in the UK's 'Planning Practice Guidance for Renewable and Low carbon energy document';
- c.95% of the site will remain viable for agricultural use thus representing a very efficient use of technology and a sustainable use of land;
- Eglin have a formal connection agreement of 4.2MVA and the output will not exceed the grid connection capacity;
- Proposal has been designed having regard to the site features, the existing environment, landscape and dwellings in the area and will not impact on the future development of Edgeworthstown;
- No evidence exists that solar farm development would result in property devaluation;
- The development is not subject to EIA as large solar PV arrays are not listed in Schedule 5 of the Planning and Development regulations 2001, as

amended, nor does it meet the sub-threshold EIA requirements outlined in Section 103 of the Regulations.

- Regarding surface water, the mounting structure allows for gaps between panels so that water can drain through these gaps. A sketch and photograph of the type of arrangement are shown (Figs 4.4 and 4.5 of applicant's response);
- Glint and glare report concludes that existing screening will eliminate majority of glint effects and that residual impacts will not be sufficient and no mitigation is required;
- National monument will be protected by an undeveloped buffer zone and archeologically monitoring will be carried out;
- Proposal will benefit from adequate solar gain. PV cells are driven by daylight rather than sunshine. Ireland has an advantage in the when seasonal intensity of visible light is at its peak, there are long hours of daylight;
- Proposal will have minimal landscape and visual impacts;
- Impact on designated sites and local habitats would be insignificant.

6.4. **Observations**

The Heritage Council, An Chomhairle Ealaíon and Fáilte Ireland were invited to comment on the application. No responses were received.

7.0 **Assessment**

7.1. **Introduction**

- 7.1.1. The harnessing of solar power is mainly achieved through photovoltaics (Solar PVs) which convert the radiation from the sun into electricity. In addition, solar thermal

heating can be delivered through heat collection from the sun and the use of a boiler to heat water. It is stated by the applicant that PV cells are driven by visible light rather than sunshine and that Ireland gains from long hours of daylight. It is also stated that solar PV cells respond to both direct radiation (from sunlight) and diffuse radiation (through clouds). By way of comparison, it is stated that Ireland's radiation levels are 78% of those in Madrid in Spain. Solar energy costs have fallen as technology improves having dropped by the order of c.42% since 2011. Planning applications for solar farms are becoming more common in Ireland, including 4 which have been decided on by the Board. There are no permitted solar farms constructed yet in the republic of Ireland. One has been constructed and opened on a 30-acre site in Crookedstone road, Co. Antrim, in or around June 2016. It produces 5MW of power from 20,000 photo-voltaic panels and it supplies Belfast International airport with 27% of its power needs.

7.1.2. Sustainable Energy Authority of Ireland has stated that solar energy could become an important part of the renewable energy mix in Ireland and it has called on Government to bring clarity as to what level of financial support it intends to offer the sector to help solar become more viable.

7.1.3. The following assessment covers my considerations on the key planning issues which arise in this appeal and also encapsulates my de novo consideration of the application. I consider the key issues are as follows:

- Principle of the Development
- Landscape and Visual Amenity Issues
- Glint and Glare
- Impact on Residential Amenity
- Surface Water Drainage and Flood Risk
- Ecology
- Soils
- Archaeology and Built Heritage

- Traffic and Access
- Zoning and future development of Edgeworthstown
- Requirement for EIA/EIS
- Appropriate Assessment Screening
- Other
 - Fencing
 - Landtake and Landuse
 - Grid Connection
 - Decommissioning
 - Development Contribution

I outline my considerations on each of those issues as presented under.

7.2. Principle of the Development

7.2.1. Solar photovoltaic (PV) development is very new in Ireland. Nonetheless, the principle for its development is strategically supported by national and regional policy. Par 130 of Ireland's 'Transition to a low carbon Energy Future 2015-2030 - White paper on Energy policy' has an objective to reduce carbon emissions. It recognises that solar energy will become more cost effective as technology matures and that it will be an integral part of the mix of renewables going forward. Section 2.4 of the National Spatial Strategy recognises the contribution rural areas have in achieving balanced regional development and developing economic resources including renewable energy. Goal 8 of the Regional Planning Guidelines for the Midland Region 2010-2022 seeks to promote the delivery of renewable energy in contribution to the national target of 40% electricity from renewable sources by 2020. The Longford County Development Plan 2015-2020 has stated policy in support of solar energy development (photovoltaics) as well as having an overriding strategy to encourage the provision of renewable energy sources. Specifically, policy RE3 states that *'the Council will support initiatives which reduce the reliance on non-*

renewable sources of energy, including schemes for wind energy, biomass, photovoltaics, solar thermal installations, heat exchange, geothermal etc.'

7.2.2. The appellant's argument that the development is premature pending national guidance in relation to the location of solar pv arrays cannot be sustained. While such guidance would be of assistance and will likely emerge, there is no statutory requirement to refuse development where no national guidance exists. In the absence of national guidance, UK guidance referenced in Section 5 above has been informative and useful in the assessment of this development proposal as it provides insight on the issues which need to be considered in both the preparing and assessment of planning applications for Solar PV development proposals.

7.2.3. The appeal has been assessed against relevant national, regional and local policy which are supportive of development of renewable energy. It is clear that the proposal for a solar PV energy farm is supported by national and local planning policy and the principle of the development is acceptable. However, other planning and environmental considerations arise and these are now considered under the respective headings, directly below.

7.3. **Landscape and Visual Amenity Issues**

7.3.1. The UK Guidelines '*Planning Guidance for the development of large scale mounted solar PV systems*' state that the landscape / visual impacts of a solar farm are likely to be one of the most significant impacts which would result. I would agree that the same applied in the Irish context.

7.3.2. The proposed development would be sited on gently sloping agricultural land located north of Edgeworthstown in County Longford. It would be generally low lying. The appeal site lies within a landscape character unit identified as 'Landscape Unit 4 - Central Corridor' within the Longford County Development Plan 2015-2021. The sensitivity of this landscape unit is considered to be generally low except areas of

medium to high which have been identified in the vicinity of protected woodlands, riverbanks and in the vicinity of the Aquifer. Within the development plan, an opportunity has been identified for 'high capacity for absorption of additional development' for this character type.

7.3.3. There is little doubt but the development of an array of solar PV panels across a large 14 Ha site would alter the established landscape which currently exists. The industrial character of large areas of free standing solar PV panels means they can increase the perceived human intervention on the landscape and impact on the intrinsically rural character. However, while a large array would result, the height of the structures would be low, reaching a maximum height of c.2.8m above ground level.

7.3.4. A Landscape and Visual Impact Assessment accompanied the planning application. The study area was first determined using theoretical modelled ZTV mapping. The ZVT found that large portions of the study area would not experience views of the development and that scattered variable visibility is predicted for elevated lands to the south-west and north-east. Visibility is predicted beyond 5km to the south east based on the modelling but based on a site survey, it is expected that these views would be reduced by trees and hedgerows along field and roadside boundaries. To assist with the visual impact analysis, 6 No. viewpoints were selected proximate to the site and environs to illustrate and predict the impact of the development on the visual amenities. 4 of the viewpoints predicted no effect. 2 viewpoints (located south and south east on a minor road) predicted minor and not significant post additional planting.

7.3.5. Having attended the site and environs and considered the photomontages included with the application together with the landscape character and relevant policy, I would agree with the findings of the Landscape Visual Impact Assessment that the impacts would be constrained to land within and close to the site and that the

remainder of the Central Corridor landscape unit would be without significant impacts. I had particular regard to the existing mature field boundaries and the proposals to strengthen these further in my consideration of this aspect.

7.3.6. I consider that following delivery of the landscape mitigation strategy, the site can accommodate the proposed development without causing unacceptable visual intrusion beyond its immediate location. I note and agree with the findings that the development would not result in significant landscape or visual impacts on the nearby Edgeworthstown House historic gardens and designated landscape. Regarding the scenic views in the County, the LVIA has concluded that these would not experience significant visual impacts as a result of the proposed development. Having reviewed the location on scenic views within the County Development Plan, I concur with this conclusion. In relation to the adjoining urban area of Edgeworthstown, it is predicted that the magnitude of impact would bring about no change. The LVIA included views from the N4, N55 and the R395 which it states would be negated by intervening vegetation and topography with no significant visual impacts predicted for road users. In the wider area, views of the proposed development site would be generally screened by existing intervening hedgerows and trees.

7.3.7. In conclusion, having regard to the mature and enclosed nature of the landscape setting, the low lying nature of site of the proposed development and the absence of any landscape designations, I am satisfied that the proposal would not adversely impact on the landscape setting or the visual amenities of the area. Accordingly, I consider the proposal is acceptable with regard to landscape and visual amenities of the area.

7.4. **Glint and Glare**

7.4.1. Glint and glare can result from the reflection of the sun from solar panels as either diffuse (scattered) reflection or specular reflection where the light is reflected at a

single angle. Specular reflection can result from momentary flash of reflected light known as glint. A more prolonged reflection over a greater area is referred to as glare.

7.4.2. A comprehensive Glint and Glare assessment report was submitted as part of the planning application. While both effects are considered, they are deliberately referred to collectively as Glint within the study. The study was carried out over an area of 5km of the site, beyond which glint effects would be negligible as they would form a very small part of the overall view. Of the 335 residential receptor points analysed, the findings of the assessment predicted that 92 may experience glint effects of which 75 are eliminated when intervening vegetation and buildings are taken into account. Of the 17 receptors remaining, it is predicted that 13 of these would experience glint for no more than 2 minutes either during early morning between 6.18 to 6.38 am or evenings between 1.25 and 6.48 pm. Given the short duration and the time of occurrence, these glint effects on properties are not considered to be significant. The study predicts that 4 houses may experience glint for a longer period, up to 8 minutes in the early morning (between 6.17 and 6.39 am). These houses are largely screened by existing vegetation and as such the glint effects are not considered to be significant. The study concludes that glint effects for road receptors would be negligible.

7.4.3. Overall, having studied the drawings and documentation on the application and appeal file and having attended the site and environs, I am satisfied that the existing natural screening strengthened by proposed additional landscaping (presented in Drawing No.1660.5.01) can eliminate glint effects at the majority of the receptor points analysed and I further consider that residual effects on residential properties would be negligible. Accordingly, I do not consider the proposal should be refused on the basis of glint and glare.

7.5. Impact on Residential Amenity

7.5.1. The site is located on unzoned lands outside of the development envelope of Edgeworthstown. Two lie c.50m to the east and north east of the site boundary. Another lies c.80m to the north east. A fourth lies c. 50m to the south west of the site boundary. There are other properties along the local road which are positioned to the west of the site in a N-S orientation but these are well separated from the site. While there are no national guidelines on separation distances, the above dwellings all lie beyond the 22m separation distance considered appropriate in the assessment by An Bord Pleanála's inspector who reported on a solar farm under PL26.244351. UK guidelines - Planning practice guidance for renewable and low carbon energy – (referenced in Section 5 above) explicitly recommend that Planning Authorities should not rule out otherwise suitable renewable energy development through inflexible rules on buffer zones or separation distances.

7.5.2. Solar farms are passive in nature as the panels are fixed and do not follow the sun. There is no noise associated with the panels. The transformer can emit a hum which is only audible at close proximity and would be inaudible from any properties. The panels are angled to the sun and reach a maximum height of 2.8m in height, less than a greenhouse or a single storey house. They give off no odour. The solar farm would have no onsite employees and noise or nuisance from traffic generated from maintenance would be minimal.

7.5.3. In relation to privacy, I note that the operational phase of the development would be essentially un-manned and self-operational, apart from occasional maintenance and repair visits. CCTV cameras are proposed as a defence mechanism to prevent crime. These are intended to serve the site itself and would not overlook neighbouring properties.

7.5.4. In relation to matters raised on devaluation of property, I note that property values are a function of a variety of factors, including, among others, location, economy,

proximity to services, transport and demand. There is no evidence that a solar farm would cause devaluation of property in the area. For the reasons stated above and in the absence of evidence otherwise, I consider that the development would not cause any change to property values in the adjoining area or to zoned or agricultural land and as such the third party's argument in relation to devaluation of property values cannot be sustained.

7.5.5. There is some potential for the construction activities to have an impact on residential amenities along the local road in relation to noise, dust, traffic and general disturbance. I would consider that these impacts to be minor and temporary in nature and can be appropriately dealt with through adequate construction management. I consider it appropriate that a construction management plan be required to be submitted for agreement with the Planning Authority by way of a planning condition.

7.5.6. Overall, having regard to the foregoing, particularly the passive nature of the development when in operation, I consider the development would not have an unacceptable impact on residential amenities of the area.

7.6. **Surface Water Drainage and Flood Risk**

7.6.1. The appellant raises concern that the development would likely result in greater run-off due to the impermeable nature of the solar panels across a wide area which could give rise to flood risk on neighbouring lands and roads in the area. The applicant disputes this assertion stating that the panels would be sited such that they would not form any large impermeable surfaces and that there would be spaces between the panels to allow rainwater to pass and infiltrate evenly. Figures 4.4 and 4.5 on Page 22 in the response to the appeal show how rain would flow from the panels.

It is clearly evident that given the sloped and above ground positioning of the panel array and the gaps between panels, that surface water flows would continue to reach

and infiltrate the ground. I might have some concerns if the site was steeply sloping but this is not the case as the site is relatively flat. There may be some minor changes to the journey of rain fall to the ground but having regard to the rural agricultural context, this would be minimal and would have little or no impact on the infiltration rate. In terms of the addition of unbound stone tracks, c.3.5m wide, these would be constructed of washed stone which would not reduce infiltration significantly.

7.6.2. I note that the Planning Authority were satisfied that the proposed site does not lie within a flood risk area as it lies outside of the 1/100 year and 1/1000-year flood plain.

7.6.3. Having regard to the above, I do not consider that the surface water regime would be significantly altered or that the development would result in any increase in flood risk. Accordingly, I am satisfied that the development should not be refused for issues of surface water drainage or flood risk.

7.7. **Ecology**

7.7.1. Issues of ecology have been addressed in the ecological report which accompanied the application. The report states that existing records do not indicate the presence of any protected species on site. The report concludes on residual impact that the 'residual impact on designated sites, local habitats and their associated wildlife is considered to be insignificant'.

7.7.2. The development would not be very hugely intrusive as there would be no changes to existing levels or ground cover and no removal of field boundaries (save at the entrance onto the local road to improve sightlines). It is stated that the panels would be mounted on posts which will be driven into the ground, without a requirement for foundations.

7.7.3. The appeal site is not located within any ecologically designated area nor a proposed area of conservation. It is currently in active use for agricultural purposes. There are existing hedgerows on site and such are to be retained and additional hedgerow planting of native species is proposed. I would consider that given the nature of structures and low level of hard surfacing proposed, the development would not significantly alter the characteristics of the site so as to adversely impact existing ecology. I would also consider that the surrounding lands similar in character and use adjoining the site would mean that any species which might be displaced would have suitable habitats in the immediate vicinity.

7.7.4. I am of the opinion that the proposal would have no significant or adverse impact on existing aquatic habitats in the area due to the lack of a significant connection between the site and such habitats in the vicinity. In conclusion, I consider that subject to good construction management regarding dust suppression, chemical/fuel storage and surface water drainage, that the proposal would not adversely impact on the ecological environment.

7.8. **Soils**

7.8.1. It is stated in the application that mounting system for the arrays of panels would consist of galvanised steel posts screwed or driven into the ground to a depth of c.1.5m (dependent on ground conditions). This type of mounting is the preferred 'light touch' system so as to minimise the disturbance of the ground area and allowing for reversal at the end of the life of the solar farm. In relation to the earthworks, the applicant states that no site levelling works or cut and fill are required for the solar farm itself.

7.8.2. Some earthworks would be required for access tracks along the south and east perimeter of the site as well as trenches for cabling and bases for the terminal (substation) and inverter stations but these would not be heavily intrusive in terms of

excavation. Once appropriately managed on site, no issues regarding soil movement or related geotechnical impacts on soils sub-soils would likely arise.

7.9. Archaeology and Built Heritage

7.9.1. The area within which the site is located has high archaeological potential and is an area known to be rich in the presence of ringforts. RMP (LF015-051) is located within the appeal site, around which an exclusion area of 25m has been conditioned by the Planning Authority noting the requirements of the DAHG. Should permission be granted by the Board, I recommend that this condition should be repeated together with the DAHGs requirement for archaeological monitoring.

7.10. Traffic and Access

7.10.1. It is stated that the construction period would be c.12 weeks with 120 large vehicle movements to and from the site over the period including a crane for unloading of materials when they arrive to the site. Additionally, there would be light goods vehicles for construction workers. No abnormal loads are proposed. The Road Design section of Longford County Council had no objection to the development subject to conditions.

7.10.2. For the operational period, the level of traffic would reduce to minimal movements associated with occasional repair and maintenance activities whereby a site engineer would arrive in a car or a van. In addition, there would be some agricultural related traffic movement.

7.10.3. Sightlines are proposed to be improved at the access point onto the local road. Having regard to the information on file and based on engineering judgement, I am satisfied that the existing road network would be capable of facilitating the construction traffic likely to be generated. Noting the low level of traffic at operational stage, I concur with the applicants that traffic impacts at operational stage would be

imperceptible. Overall, I am of the opinion that the traffic which would likely be generated during construction and operation phase, would not constitute a traffic hazard.

7.11. Zoning and future development of Edgeworthstown

7.11.1. The third party contends that the site, bordering an area of zoned land represents an unwarranted imposition on the future proper planning and sustainable development for Edgeworthstown. The first party disagrees noting the function of Edgeworthstown as a service town with a low population and with just 3 hectares (including 50% headroom) of land required for housing up to 2022. It is submitted that there would unlikely be pressure for development on lands in the outer zoning which is reserved for medium to long term development. Having reviewed the zoning map for Edgeworthstown, I note that the site lies outside but immediately adjacent to zoned lands on the outer edge of the development boundary. It is deemed to be agricultural use, supported by Policies AGR1 and AGR2 within the current Longford development plan.

7.11.2. Based on the drawings and documents submitted with the application and appeal, it is further noted that the lands would continue to occupy agricultural use in parallel to the principal use of energy generation through a solar farm. Of significance, it is not located on zoned lands within Edgeworthstown and would not I suggest diminish the delivery of orderly development on the zoned lands. Accordingly, I consider the development should not be refused on the basis of impacting on the potential of the orderly and sustainable development of Edgeworthstown.

7.12. Requirement for EIA/EIS

7.12.1. Solar farms are not listed as a class of development under Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, whereby a mandatory EIA and the submission of an EIS would be required. I note that there are

some projects under No. 3 of Part 2, 'Energy Projects' which relate to energy production. I consider that none of these projects would be applicable to a solar farm as proposed. In reaching this conclusion I had have regard to the most recent solar farm developments decided by An Bord Pleanála, under reference No.s PL04.244539, PL26.244351 and PL04.245862 and PL04.246527 where a similar conclusion was reached in each case.

7.12.2. Article 92 of the Planning and Development Regulations, 2001, (as amended). defines sub-threshold development, i.e. 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. As I am satisfied that the solar panel development is not a development set out in Schedule 5, then I am also satisfied that the subject development is a not 'sub-threshold development' for the purpose of EIA.

7.12.3. I note the third party's point that the EIA legislation has not caught up with the technology yet and that it would be premature to permit a solar farm in the absence of a thorough reassessment of the EU EIA legislation. This may be so but under current planning legislation, an EIA is not required for the development now before the Board. I have also had particularly regard to the level of detail provided on the application on environmental matters through the various environmental assessments and reports submitted. I consider the information provided to be comprehensive and adequate to assess the environmental aspects of the development outside of a formal EIA/EIS process.

7.13. **Appropriate Assessment Screening**

7.13.1. Article 6 (3) requires of The EU Habitats Directive (92/43/EEC) requires that 'any plan or project not directly connected with or necessary to the management of the (European) site, but likely to have a significant effect thereon, either individually or in

combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in light of its conservation objectives’.

7.13.2. A Stage 1 Screening Assessment was included as an appendix to the ecology report submitted with the application. It listed Garriskil Bog SAC/SPA, Lough Iron SAC/SPA and also Lough Ree SAC/SPA. In addition, I have considered others which lie within a 15km radius of the development boundary. These are presented in Table 1 below which also includes a summary of the qualifying interests and conservation objectives. No conservation designation applies directly to the appeal site.

Table 1: Natura 200 sites.

Site and Code	Distance and direction	Natura 2000 qualifying interests (summary)	Conservation Objectives
Garriskil Bog SAC (Site Code 000679)	11 km south east	Active and degraded raised bog. Depressions on peat substrates of the Rhynchosporion	To restore the favourable conservation condition of Active raised bogs in Garriskil Bog SAC.
Ardagullion Bog SAC (Site Code 002341)	5 km north east of site	Active raised bogs Degraded raised bogs Depressions on peat substrates of the Rhynchosporion	To restore the favourable conservation condition of Active raised bogs in Ardagullion Bog SAC.
Garriskil Bog SPA (Site Code 004102)	11 km south east	Greenland White-fronted Goose	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Lough Iron SPA (Site Code 004046)	12 km south east	Whooper Swan Wigeon Teal Shoveler	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for

		<p>Coot</p> <p>Golden Plover</p> <p>Greenland White-fronted Goose</p> <p>Wetland and Waterbirds</p>	<p>this SPA.</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Lough Iron SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p>
Lough Derravaragh (Site 004043)	14km south east	<p>Whooper Swan</p> <p>Pochard</p> <p>Tufted Duck</p> <p>Coot</p> <p>Wetland and Waterbirds</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA;</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Lough Derravarragh SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p>
Lough Kinale and Derragh Lough SPA (Site Code 004061)	14 km north east	<p>Pochard</p> <p>Tufted Duck</p> <p>Wetland and Waterbirds</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Lough Kinale and Derragh Lough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p>
Glen Lough SPA (Site Code 004045)	6 km south	<p>Whooper Swan</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p>

- 7.13.3. The possible effects of the proposal on the conservation status of the designated site include loss/reduction of habitat, disturbance of key species, habitat or species fragmentation, reduction in species density and decrease in water quality and quantity.
- 7.13.4. It is noted that the development (source) is remote from the designated sites and there is no direct or indirect pathways or links to the site including any hydrological link. There are no significant earthworks required to facilitate the development. Control to reduce risks of suspended sediment entering a watercourse are set out within Section 1.2.2 of the Ecology report and can be reinforced through an appropriate planning condition regulating the construction management. Overall, the proposal would not result in any habitat loss or reduction in the quality of the habitat and subsequently the conservation status of the designated sites. I would also consider that the project would not have any likely effects in conjunction with other plans or projects on any designated Natura 2000 sites.
- 7.13.5. In this regard it is reasonable to conclude that on the basis of information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have effects on any designated European site and that a Stage 2 Appropriate Assessment (and submission of an NIS) is not therefore required.

7.14. **Other**

7.14.1. Fencing

The third party contends that the fencing is inadequate to protect the boundaries of the site from cattle. I note the fencing proposed comprising of a deer fence 2.5m high made of high pressure timber posts at 6m centres and high tensile galvanised wire. A typical detail is presented in Figure 4.4 of the Planning / Environmental report

which accompanied the application. I consider is in keeping with the agriculture area without causing undue impact on the visual amenities of the area and would offer adequate security to protect cattle from straying onto the site.

7.14.2. Landtake and Landuse

The appellant considers that the proposed development would represent an inefficient use of technology and land. This is disputed entirely by the applicant who put forward arguments that solar farms have the potential for multi-purpose land use as they can facilitate continued agricultural activity. I accept there is a large ratio of landtake to energy output. However, the panels would be angled and elevated and the land around and underneath the panels would continue in agricultural use, for grazing of sheep. This dual use of lands would result in a more efficient use of the agricultural land, than currently exists for part grazing only.

7.14.3. Grid Connection

The project proposes the solar farm to connect from the proposed new terminal substation to an existing 38 kV substation by means of c.750m of underground cabling. In the response to the appeal, it is stated that the applicant has secured and formally accepted a connection agreement (grid connection) with ESB networks for 4.2 MVA. The grid connection has not been included as part of the planning application but it is stated that the proposed route along the public road was considered in the relevant assessments which accompanies the planning application. I note and am satisfied with this approach.

7.14.4. Decommissioning

The proposed solar pv energy farm has an expected operation life of 25 years. It is stated by the applicant that panels would be removed from the site and it would be returned to its pre-construction state. I consider that it would be appropriate and reasonable to attach a condition requiring the submission of a restoration plan

following full or partial decommissioning of the solar array ensure the satisfactory reinstatement of the site on full or partial cessation of the proposed development.

7.14.5. Development Contribution

The S.48 Development Contribution scheme for County Longford does not include a category for solar farms. I note that the Planning Authority applied development contributions based on the category 'wind farm developments/turbines' at a rate of €7110 per MW ($€7110 \times 4.2 = €29,862$). I cannot agree that it is appropriate to apply contributions to the development as the adopted scheme does not provide for solar power within its list of development types. Solar power is a different method of power generation to wind and there is nothing in the current adopted scheme that allows for such an alternative development type to be applied outside of the adopted scheme.

There is a statutory requirement that contributions are applied to development in accordance with the adopted scheme. Accordingly, I consider that no contributions are applicable in this case.

8.0 **Conclusion and Recommendation**

Further to the above assessment of matters pertaining to this appeal, including the consideration of the submissions made in connection with the appeal and based on information gathered during my site inspection, I recommend that permission be **granted** for the reasons and considerations outlined in the following draft order.

Reasons and Considerations/ Reasons

Having regard to the provisions of the current Development Plan for the area and of national renewable energy policy, to the nature and scale of the proposed development, the suitability of the aspect and topography of the site, the proximity of the site to the grid connection and to the pattern of development in the vicinity, it is considered that, subject to compliance with the conditions set out below, the

proposed development would not seriously injure the residential amenities of property in the vicinity, and would not detract from the landscape character or visual amenities of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

In reaching its decision, the Board noted and concurred with the Inspector's view that the Environmental Impact Assessment was not required in respect of the development and that the development would not be likely to have a significant impact on the environment. The Board also noted and concurred with the Inspector's analysis under the heading of Appropriate Assessment and agreed with the Inspector that, having regard to the separation distance between the subject site and the nearest European sites and to the lack of potential for connectivity with those sites, the proposed development would not be likely to have significant effects on these European Sites.

CONDITIONS

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

Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this Order.

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

3. The permission shall be for a period of 25 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

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

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

Reason: In the interest of clarity.

5. The external walls of the proposed terminal station shall be finished in a neutral colour such as grey or off-white; the roof shall be of black tiles/slates. The 4 no. inverter stations shall be dark green in colour.

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

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

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

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

Reason: In the interest of visual and residential amenity.

8. Cables within the site shall be located underground.

Reason: In the interest of visual amenity.

9. (1) Existing field boundaries, including trees and hedgerow, shall be maintained save as is required to achieve improvements to sightlines at the site entrance.

(2) All landscaping shall take place in the first planting season following commencement of development and in accordance with the scheme submitted to the planning authority by way of further information. The landscaping and screening shall be maintained at regular intervals. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

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

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

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

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

11. No groundworks shall take place within at least 25 metres of the external perimeter of Recorded Monument LF-015-051 (ringfort). The monument and its buffer area shall be fenced off during construction works, to prevent ground disturbance being caused by machines.

Reason: In order to conserve the archaeological heritage of the area

12. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:-

- (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

- (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues: -

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

A report, containing the results of the assessment, shall be submitted to the planning authority and the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and, arising from this assessment, the developer shall agree

in writing details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

13. The development shall be carried out so as to ensure that any existing services are not compromised, damaged or built over.

Reason: In the interest of public safety.

14. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, the management of construction traffic and off-site disposal of construction/demolition waste.

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

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 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.

16. 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.

Patricia Calleary

Senior Planning Inspector

29/09/2016

Appendix:

Extracts of National, Regional and Local Policy

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

Maps, Photographs, Planning Policy and links to relevant web sites.