



An  
Bord  
Pleanála

## Inspector's Report PL17.248939

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<b>Development</b>	Ten year permission to develop a solar farm
<b>Location</b>	Grangegeeth, Slane, Co. Meath
<b>Planning Authority</b>	Meath County Council
<b>Planning Authority Reg. Ref.</b>	LB/170509
<b>Applicant(s)</b>	JBM Solar Developments Limited
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant
<b>Type of Appeal</b>	Third Party
<b>Appellants</b>	Peter & Irene Fleming and others
<b>Observers</b>	None
<b>Date of Site Inspection</b>	25 <sup>th</sup> October 2017
<b>Inspector</b>	Niall Haverty

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## 1.0 Site Location and Description

- 1.1. The appeal site, which has a stated area of 11 hectares, is located in Grangegeeth, c. 5km north of Slane, Co. Meath. The site is located on the northern side of a shallow valley, through which the River Devlin flows from west to east. The appeal site is roughly rectangular in shape, and is divided over three fields of varying sizes, which are well defined by hedgerows and trees. A small unnamed stream, which is a tributary of the River Devlin, forms the irregular eastern boundary of the site and a small but relatively deep gully and waterfall are located roughly half way along the eastern boundary of the site. The site is bounded to the north and west by agricultural lands, and to the south by the L-1605 local road. Grangegeeth crossroads is located to the east of the site, where the L-1605 and L-5603 roads cross. The L-5603 continues in a southward direction across the valley towards Slane.
- 1.2. A number of one-off houses and associated farm buildings are located in the vicinity of the appeal site, along the two local roads. There are also a number of large industrial type premises to the south west, on the southern side of the L-1605. An ESB substation is located c. 500m south of the site on the L-5603.
- 1.3. Due to the site's location on the northern side of the River Devlin valley, the land rises significantly from south to north, from an elevation of c. 85m AOD to c. 120m AOD, and the land continues to rise further to the north.

## 2.0 Proposed Development

- 2.1. The proposed development consists of a photovoltaic solar panel array with a total site area of up to 11 ha, including:
  - Solar panels on ground mounted steel frames;
  - Electrical substation;
  - Client side substation;
  - Inverter cabins;
  - Underground cable ducts;
  - A temporary site compound and ancillary facilities;

- Boundary security fencing;
- CCTV; and
- Associated site roads and site works.

2.2. Planning permission is sought for a period of 10 years and it is stated in the Environmental Report submitted with the application that the development would have an operational lifespan of 30 years. The Environmental Report also states that the installed capacity of the facility is expected to be up to 5 megawatts peak (MWp).

2.3. The proposed solar panels will be mounted on angled framework, with the upper edge of the panels at a height of 2.6m and the lower edge at a minimum height of 0.8m above ground level. The array will be orientated to the south, with a separation distance of 3 – 5m between each row of frames. The Environmental Report states that the frames will most likely be piled to a depth of up to 2m with concrete pad foundations sitting on top of the ground in areas where piling is not suitable.

2.4. The Environmental Report states that a grid connection application has been made to ESB Networks, with the closest grid connection option being a 38kV substation located c. 0.5km to the south of the appeal site. The grid connection does not, however, form part of the proposed development.

2.5. The proposed construction and operational access to the site is from the existing agricultural access along the L-1605 with 525m of new access track through the site.

2.6. The planning application was accompanied by an Environmental Report which addressed, *inter alia*: policy; socio-economic issues; flora and fauna; hydrogeology, hydrology and flood risk; landscape and visual impact; traffic; archaeological and built heritage; glint and glare; and noise. Associated appendices, an Appropriate Assessment Screening Report, a book of photomontages and various drawings were also submitted.

## 3.0 Planning Authority Decision

### 3.1. Decision

3.1.1. The Planning Authority issued a decision to grant permission subject to 21 conditions, of which the following are of note:

- C2: Remove all structures and reinstate site not later than 25 years from the date of commencement of the development. Restoration plan to be submitted.
- C3: Location of temporary compound, ESB substation and client substation not permitted. Structures to be relocated further north into the second field. Revised proposals to be submitted.
- C6: Environmental complaints register to be maintained.
- C11: CEMP to be updated and treated as a live document.
- C12: No external lighting.
- C13: Pre-development archaeological testing.
- C14: Construction warning signs to be erected at entrance, and advance notice to be given to Planning Authority prior to importation of panels to site.
- C16: Entrance gates to be recessed 10m from edge of road.
- C17: Panels to be fixed by way of driven pile or screw pile foundations only.
- C19: Each fencing panel to have minimum 300mm length with bottom edge 150mm from ground level to allow wildlife access.

### **3.2. Planning Authority Reports**

3.2.1. The Planning Officer's report can be summarised as follows:

- Proposed development does not require mandatory EIA, and is unlikely to have significant adverse effects on the environment.
- Proposed development is supported by national, regional and local planning policy.
- It is recommended that a condition be included to require space between the fence and field boundaries for ecological enhancement. Fencing to be max. 2m high.
- Transportation Dept. recommended conditions are considered reasonable.
- The Planning Authority is satisfied that none of the protected views would be impacted upon.

- The siting of the scheme is within a landscape character area that could absorb such a development.
- Applicant has not identified dwelling receptors for glint and glare. Recommended that temporary screens be provided until screen planting matures.
- Noise sensitive receptors, in particular residential properties, will not be negatively impacted by noise from the proposed development.
- Site is minimum 10m above the identified flood point and is acceptable from a flood risk perspective, subject to maintenance of drainage system.
- Soils are suitable for development of this nature.
- The proposed development will not have any impact on flora or fauna species and the implementation of the landscape mitigation measures will ensure an overall positive effect on ecology and biodiversity.
- No potential for significant adverse impacts on the ecology and qualifying interests of the SAC/SPA and Stage 2 AA is not required.

### **3.3. Other Technical Reports**

#### **3.3.1. Road Design Office**

- No objection, subject to conditions regarding trimming of verge and 10m set-back of gate from the road edge.

#### **3.3.2. Conservation Officer**

- No comments.

#### **3.3.3. Environment Section**

- No objection, subject to conditions.

### **3.4. Prescribed Bodies**

#### **3.4.1. Department of Arts, Heritage, Regional, Rural & Gaeltacht Affairs (now Dept. of Culture, Heritage and the Gaeltacht)**

- No objection subject to pre-development archaeological testing.

**3.4.2. Geological Survey Ireland (Division of Department of Communications, Climate Action and Environment)**

- There is a County Geological Site at Grangegeeth consisting of small rock exposures in a stream gully with a rich assemblage of marine fossil brachiopods, trilobites and other invertebrates.
- GSI would appreciate a copy of reports detailing any site investigations carried out.

**3.4.3. HSE Environmental Health Service**

- The applicant should identify, assess and evaluate any concerns or issues the public may have in relation to the development and clearly link how public consultation influenced decision making.
- Opportunities for community benefit should be fully explored.
- It is stated that landowners may graze sheep on the land in future. A management plan for the operation of the site including proposals to control vegetation and avoid overgrowth of noxious weeds should be submitted.
- Details of the Construction Environmental Management Plan should be submitted and agreed with the Planning Authority.

**3.4.4. daa**

- No comment.

**3.5. Third Party Observations**

3.5.1. Twelve third party observations were received. The issues raised were generally as per the appeal, as well as the following:

- Depreciation of property values.
- Health risk due to chemicals in solar panels.
- Impact on heritage and historical value of site.
- Land is zoned for agricultural use and would need to be changed to industrial zoning.



- Proximity to residential properties. Use of cameras and floodlighting is intrusive.
- Impact of proposed hedgerow planting on access to sunlight and views.
- Site was only chosen due to its proximity to a substation.
- No economic benefit from solar energy.
- Spacing between rows of panels would make it difficult to use machinery to maintain grassland for grazing of sheep. Who will graze sheep if site requires security fencing and monitoring for health and safety reasons.
- Impact on tourism.
- Impact on wildlife.
- Precedent for further such development.
- Construction phase impacts.

## 4.0 Planning History

### 4.1. Appeal site

- 4.1.1. **LB/160927:** Withdrawn application for solar farm of same size as that proposed.

### 4.2. Surrounding Area

- 4.2.1. I am not aware of any recent relevant planning history in the surrounding area.

### 4.3. Other Similar Developments

- 4.3.1. The Board will be aware of a number of solar farm applications which have been decided on appeal. Some recent examples include:
- **PL08.247778** – Permission granted for solar PV farm of up to 20,113 sq m at Killarney, Co. Kerry (09/05/2017).
  - **PL27.247714** – Permission refused for a solar PV Farm with a capacity of 19MWp in Blessington, Co. Wicklow (26/04/2017).

- **PL08.247653** – Permission granted for a solar PV farm of up to 30,072 sq m of panels at Listowel, Co. Kerry (26/04/2017).
- **PL03.247632** – Permission granted for solar PV farm on a site of 12.23 Ha in Ballymorris, Co. Clare (24/04/2017).
- **PL04.247521** – Permission granted for a solar PV farm with 20,000 solar panels in Kinsale, Co. Cork (06/04/2017).
- **PL26.247366** – Permission granted for a Solar PV Energy of up to 88,600 sq m of panels near Baldwinstown, Co. Wexford (23/03/2017);

4.3.2. There are a number of other solar farm applications currently on appeal with the Board including three in County Meath, near Julianstown (PL17.248028), Duleek (PL17.248146) and Kilbrew (PL17.248823).

## 5.0 Policy Context

### 5.1. EU Directive 2009/28/EC - Energy from Renewable Resources

5.1.1. 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. Ireland has set a non-legally binding target of 40% of renewable energy share for electricity by 2020 (from a 2012 position of 19.6%).

### 5.2. National Spatial Strategy for Ireland, 2002-2020 (NSS)

5.2.1. 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.

### **5.3. National Planning Framework (NPF)**

5.3.1. A new National Planning Framework is currently being developed to replace the National Spatial Strategy. The NPF is currently at pre-draft stage.

### **5.4. Ireland's Transition to a low carbon Energy Future 2015-2030**

5.4.1. This White paper on Energy policy published by the Department of Communications, Energy and Natural Resources in December 2015 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. It states that as new 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. The policy document recognises that solar photovoltaic (PV) 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.

### **5.5. National Renewable Energy Action Plan (NREAP) submitted to the EC in 2010.**

5.5.1. The NREAP was submitted to the European commission in 2010. It sets out Ireland's approach to achieving its legally binding targets, with a target of 40% of electricity consumption to be from renewable sources by 2020.

5.5.2. A third progress report on the NREAP was submitted to the European commission in April 2016 which detailed installed capacity of solar power to be 1.38 MW.

### **5.6. Food Wise 2025 (Department of Agriculture, Food and the Marine, 2015)**

5.6.1. This document sets out a 10-year vision for the Irish agri-food industry up to 2025. Subject to following actions identified in the strategy, the sector projections are:

- Increasing value of agri-food exports by 85%, Increasing value added in the agri-food, fisheries and wood products sector by 70%, Increasing the value of Primary Production by 65% and the creation of an additional 23,000 direct jobs in the agri-food sector.

To achieve the projections set out above, Food Wise 2025 identifies c.400 recommendations and actions to achieve sustainable growth.

## 5.7. Regional Planning Guidelines for the Greater Dublin Area (GDA) 2010-2022

### 5.7.1. Strategic Recommendations:

- **PIR26:** Development Plans and Local Authorities support, through policies and plans, the targets for renewable generation so that renewable energy targets for 2020, and any further targets beyond 2020 which become applicable over the duration of the RPGs, are met.
- **PIR27:** That low carbon sustainable renewable energy systems, bio-energy and energy conservation potentials are exploited to their full potential through the advancement of EU and national policy at regional level and the promotion of existing and emerging green technologies.

### 5.7.2. Strategic Policy:

- **PIP4:** That the ICT and energy needs of the GDA shall be delivered through the lifespan of the RPGs by way of investment in new projects and corridors to allow economic and community needs to be met, and to facilitate sustainable development and growth to achieve a strong and successful international GDA Gateway.

## 5.8. Meath County Development Plan 2013-2019

- 5.8.1. The appeal site and the surrounding area are not subject to land use zoning objectives under the Development Plan, although Grangegeeth is designated as a 'Graig' (rural node). The Development Plan includes a number of policies and objectives regarding graigs, although these generally relate to residential development.
- 5.8.2. Section 2.2 states that Core Principle 8 of the Strategic Planning Approach is to support agriculture and agricultural related development in Meath and strengthen the county as a hub for the vibrant agricultural and food sectors.
- 5.8.3. Chapter 8, 'Energy and Communications', sets out a number of Energy Policies and objectives, including:

- **EC POL 1:** To facilitate energy infrastructure provision, including the development of renewable energy sources at suitable locations, so as to provide for the further physical and economic development of Meath;
- **EC POL 2:** To support international, national and county initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which makes use of the natural resources of the county in an environmentally acceptable manner, where it is consistent with proper planning and sustainable development of the area;
- **EC POL 3:** To encourage the production of energy from renewable sources, such as from biomass, waste material, solar, wave, hydro, geothermal and wind energy, subject to normal proper planning considerations, including in particular, the potential impact on areas of environmental or landscape sensitivity and Natura 2000 sites;
- **EC POL 4:** To support the National Climate Change Strategy and, in general, to facilitate measures which seek to reduce emissions of greenhouse gases;
- **EC OBJ 3:** To investigate the preparation of a renewable energy strategy promoting technologies which are most viable in County Meath.

5.8.4. Section 8.1.3 states that Meath County Council is committed to developing a more diverse range and combination of energy sources including wind energy, micro hydro power, solar energy, biofuels, geothermal (deep and shallow), anaerobic digestion and combined heat and power in order to deliver on the targets set down in the National Renewable Energy Action Plan Ireland.

5.8.5. Section 11.15.1 states that, in the assessment of individual proposals for renewable energy projects, Meath County Council will take the proper planning and sustainable development of the area into account and will consider the environmental and social impacts of the proposed development.

5.8.6. Section 10.8.1, 'Employment in Agriculture', notes that to sustain rural communities, farm diversification and new employment opportunities will be required. Section 4.4.2, 'Biofuels and Renewable Energy', of the Plan also recognises renewable energy generation as a growing sustainable industry that can supplement the

development of the rural economy of Meath. This is reflected in the following Policies:

- **ED POL 6:** To recognise the contribution of rural employment to the continued and sustainable growth of the economy and to promote this continued growth by encouraging rural enterprise generally, especially those activities that are resource dependent, including energy production, extractive industry, small scale industry and tourism in a sustainable manner and at appropriate locations.
- **ED POL 19:** To recognise the contribution of rural employment to the overall growth of the economy and to promote this growth by encouraging rural enterprise and diversification generally and to promote certain types of rural enterprises, especially those activities which are rural resource dependent, including renewable energy production, food production / processing and the extractive industries.

5.8.7. Section 9.8.6 relates to Landscape Capacity, and the following Objective is noted:

- **LC OBJ 1:** To seek to ensure the preservation of the uniqueness of all landscape character types, and to maintain the visual integrity of areas of exceptional value and high sensitivity.

5.8.8. Section 9.10 relates to Views and Prospects, and the following Objective is noted:

- **LC OBJ 5:** To preserve the views and prospects and the amenity of places and features of natural beauty or interest listed in Appendix 12 and shown on Map 9.5.1 from development that would interfere with the character and visual amenity of the landscape.

5.8.9. Appendix 7 includes a Landscape Character Assessment and the appeal site is located at the boundary between the North Navan Lowlands (LCA 3) and Rathkenny Hills (LCA 4). LCA 3 is described as having a moderate landscape value and moderate landscape sensitivity, while LCA 4 is described as having a very high landscape value and high sensitivity.

5.8.10. Section 9.7.7 of the Development Plan relates to Geological Heritage and states that:

“The Department of Arts, Heritage and the Gaeltacht and the Geological Survey of Ireland (GSI) are currently drawing up a list of sites of nationally important geological sites. As part of this process, in 2007 the GSI assessed the geological heritage of County Meath and produced a report entitled The Geological Heritage of Meath in which they identified sites of geological importance (see Appendix 13). Some of these sites may be designated in due course, as Natural Heritage Areas (NHAs) because of their geological interest from a national perspective. In the interim the Council will seek to maintain the geological heritage value of these sites.”

5.8.11. This is supported by Policy NH POL 12: To have regard to the geological and geomorphological heritage values of County Geological Sites listed in Appendix 13 and avoid inappropriate development, through consultation with the Geological Survey of Ireland. ‘Grangegeeth’ is included as County Geological Site number 4 in Appendix 13 of the Plan.

## 5.9. Solar PV Development Guidelines in the UK

5.9.1. While there are currently no planning guidelines for the development of solar PV in Ireland, guidance is well-developed in the UK and can be considered useful as a reference source for good practice.

### 5.9.2. PPG for Renewables and Low Carbon Energy (DCLG 2015)

This guidance includes advice on planning considerations relating to specific renewable technologies, including solar power. It advises against inflexible buffer zones or separation distances. It includes the following points:

- Encourage use of brownfield land and where agricultural land is used, it should allow for continued agricultural use;
- On greenfield sites, poorer quality land should be used in preference to higher quality land;
- Consider visual impacts and the impacts of glint and glare on the landscape, local residents and aircraft safety and the potential to mitigate these impacts for example through screening with native hedges.

**5.9.3. Planning Practice Guidance for renewable and low carbon energy (BRE National Solar Centre (UK) 2013)**

This UK national guidance provides similar advice to the PPG, but also includes advice on Environmental Impact Assessment in relation to solar farms. It also provides advisory information on planning application considerations.

**5.9.4. Renewable Energy Planning Guidance Note 2 – The Development of large scale (>50 kW solar PV arrays) – Cornwall (UK) 2012**

- Landscape / visual recognised as one of the most significant impacts;
- Provides specific guidance on planning considerations.

**5.9.5. Devon Landscape Policy Group Advice Note No.2 – Accommodating Wind and Solar PV Developments in Devon’s Landscape – LUC Environment Planning Design and Management – January 2013**

The guidelines recommend siting solar PV developments on lower slopes or within folds in gentle undulating landscapes or on flat plateau sites rather than upper slopes or coastal headlands, and in landscapes with a sense of enclosure.

**5.10. Natural Heritage Designations**

- 5.10.1. The appeal site is not located in or adjacent to any designated Natura 2000 sites. The closest Natura 2000 sites are the River Boyne and River Blackwater SPA (Site Code 004232) and SAC (Site Code 002299), c. 4.5km to the south of the appeal site. The next closest site is the Stabannan-Braganstown SPA (Site Code 004091) which is located c. 14.8km to the north.
- 5.10.2. There are no pNHAs or NHAs in the immediate vicinity of the site. The closest such sites are Boyne Woods pNHA, which is located c. 4.5km to the south of the site and Mellifont Abbey Woods pNHA, which is located c. 5.2km to the north east of the site.
- 5.10.3. A Geological Survey of Ireland (GSI) proposed NHA and County Geological Site (CGS) is also partially located within the site. This is described as “an overgrown depression which may have been quarried or maybe a natural head of stream gully and waterfall” with the geological feature of interest being fossiliferous exposures of sandstone within a stream gully.



## 6.0 The Appeal

### 6.1. Grounds of Appeal

6.1.1. A third party appeal was received from Peter and Irene Fleming, Pauline Hanratty, Colm Kealy, Andy Drew, Tom and Mary Elliott, Joe and Anne Groome, Susann and Paul Duff and Seamie Devin against the Planning Authority's decision to grant permission. The grounds of appeal can be summarised as follows:

- There are no national, regional or local guidelines for the development of solar farms and until such guidelines are drawn up and implemented no permission should be granted.
- There are no provisions for solar farms in the County Development Plan.
- Due to the elevated nature of the site, the development will have a major negative impact on the visual landscape. The development will be highly visible in late Autumn, winter and early Spring.
- Elevated site creates concern for traffic safety due to glint and glare and visual distraction for drivers, particularly those travelling north along L-5603.
- Development is more suited to marginal or poorer land as in the case of UK guidelines. This site is prime agricultural land.
- Site is in the Boyne Valley and Ireland's Ancient East tourism area and close to tourist attractions such as Slane and Newgrange. Large-scale industrial development will severely impact the landscape character and visual amenity of the area.
- Ground underneath the solar panels may not be able to absorb the water and the breakdown of existing drains due to the insertion of anchors may cause flooding on the lower part of the site and onto the road.
- Noise from inverters, cooling fans and around metal posts may affect people and animals.
- Vegetation overgrowth if the site is not properly maintained.

## 6.2. First Party Response

6.2.1. A response to the appeal was received from Jennings O'Donovan Consulting Engineers on behalf of the applicant and can be summarised as follows:

- While there is no Irish guidance on solar photovoltaic developments, there are UK guidelines.
- Proposed development is supported by policy including: Directive 2009/28/EC; Government White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030'; Regional Planning Guidelines; National Spatial Strategy; and SEAI research paper 'Planning and Development Guidance for Utility Scale Solar Photovoltaic Schemes in Ireland 2016'.
- Minister for Housing, Planning, Community and Local Government stated in January 2017 that the planning code is sufficiently robust to facilitate the assessment of individual applications for solar farm developments and that the preparation of guidance is currently not envisaged.
- There is precedent for the granting of planning permission for solar farms, with permission granted for some 44 applications.
- Policies EC POL 3 and EC POL 4 of the Meath County Development Plan 2013-2019 support the proposed development.
- LVIA was undertaken, with eight receptor locations chosen. Worst case pre-mitigation impacts are considered to be Moderate at two locations (VP 3 and VP4), reducing to Moderate Slight once mitigation planting becomes established. Residual visual impact at other viewpoints ranges between slight and imperceptible.
- Low order range of visual impact is due to existing screening, retention of hedgerows and proposed screen planting. Development will not be visible from the highly sensitive receptors at Bru na Boinne or Slane Hill.
- Landscaping plan includes maintenance and reinforcement of existing hedgerows in accordance with a landscaping plan. This includes deciduous and evergreen planting to consolidate the screening throughout the seasons.

- Appellants reference to the site being 100 feet above sea level is irrelevant in this inland landscape context. The relevant context is the mid-slopes of the upper Devlin Valley, where the it is well contained amongst mature tree lined hedgerows.
- Glint and glare assessment addressed impact on local road L-5603. Due to orientation, glint and glare is only possible at two points on the road for limited periods in the late evening. This section of road is enclosed by mature vegetation and the reflectance periods are only during times of the year that the trees will be in leaf. Additional landscaping planting will reinforce this and ensure no glint and glare effects occur on the L-5603.
- Solar PV provides a form of income diversification for farmers and allows for the continued agricultural use of the lands.
- The land will benefit from being allowed to regenerate naturally and from additional landscaping and wildflower planting which will enhance biodiversity. Option to graze sheep on the site will remain, and following decommissioning, the site will revert to its current state.
- Proposed development will not impact significantly on the scenic beauty of the wider area of on views from Boyne Valley heritage features. Site is located within a fairly typical rural area between the North Navan Lowlands (LCA 3) and the more sensitive Rathkenny Hills (LCA 4). Landscape character impacts are no greater than Moderate within 500m of the site, reducing to Slight and Imperceptible beyond this.
- ZTV demonstrates how localised and contained visual impacts from the proposed development will be, even in a bare ground model. In reality, visual impacts will be more contained due to enclosure by vegetation.
- Sustainable Drainage System design approach will limit surface water runoff to pre-development levels and is designed for up to a 1 in 100 year event.
- Only 0.11% of the site will be impermeable, and all structures will have a suitably sized soakaway.
- Alterations to the design layout were made based on consultation with local residents.

- PV panels contain no moving parts and will not generate noise. Inverters contain cooling fans which will only be audible immediately adjacent to the unit, as will transformers.
- Predicted noise limits will be below EPA Guidelines for low background noise (35dBA) and WHO night-time guidance.
- Landscaping will be maintained during the operational period of the solar farm. Clearance between panels will allow vegetation to be maintained with the option of sheep grazing within the enclosure.

### 6.3. **Observations**

6.3.1. None

### 6.4. **Planning Authority Response**

6.4.1. The Planning Authority is satisfied that all matters outlined in the appeal were considered in the course of its assessment.

## 7.0 **Assessment**

7.1. I consider that the key issues in determining the appeal are as follows:

- Principle and planning policy.
- Use of Agricultural Land.
- Landscape and visual impact.
- Glint and glare.
- Access and traffic.
- Noise.
- Archaeology.
- Geological heritage.
- Surface Water Drainage.
- Ecology.

- Other issues.
- Requirement for Environmental Impact Assessment.
- Appropriate Assessment.

## 7.2. Principle and Planning Policy

- 7.2.1. The appellants contend that there are no national, regional or local guidelines for the development of solar farms and that, until such guidelines are drawn up and implemented, no permission should be granted. They also contend that there are no provisions for solar farms in the County Development Plan.
- 7.2.2. 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.
- 7.2.3. 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.
- 7.2.4. At a local level, the Meath County Development Plan 2013-2019 contains a number of Policies to support reductions in greenhouse gas emissions and to facilitate and encourage renewable energy projects, subject to normal planning criteria. Policies EC POL 1, EC POL 2 and EC POL 3 are of particular relevance in this regard.
- 7.2.5. I note that Objective EC OBJ 3 states that it is an Objective of the Planning Authority “to investigate the preparation of a renewable energy strategy promoting technologies which are most viable in County Meath”. The renewable energy

strategy does not appear to have been prepared to date, and I note in this regard that the Objective seeks to ‘investigate the preparation’ of a renewable energy strategy, rather than stating that it is an Objective to prepare such a strategy within the lifetime of the Development Plan. The non-specificity of Objective EC OBJ 3 in terms of both the delivery of a strategy, and the timeline for any such strategy should be considered with reference to the Development Management Guidelines for Planning Authorities 2007, which states at Section 7.16.1 that prematurity should only be used as a reason for refusal if there is a realistic prospect of the strategy or plan being completed within a specific stated time frame. Since Objective EC OBJ 3 only states that it is an objective of the Planning Authority to investigate the preparation of the strategy (rather than to prepare the strategy), and since no time frame is specified, I therefore do not consider that the issue of prematurity arises in this instance.

- 7.2.6. The applicant, in their response to the appeal, references the abovementioned renewable energy policy, and notes that while there are no Irish guidelines for solar developments, there is UK guidance as well as the SEAI research paper ‘Planning and Development Guidance for Utility Scale Solar Photovoltaic Schemes in Ireland 2016’ which sets out development guidance recommendations. The applicant also notes the considerable number of planning permissions that have been granted to date for solar farms, and makes reference to a statement in January 2017 by the then Minister for Housing, Planning, Community and Local Government that the planning code is sufficiently robust to facilitate the assessment of individual applications for solar farm developments and that the preparation of guidance is currently not envisaged.
- 7.2.7. In my opinion the cumulative scale, 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, as noted by the then Minister in his reference to keeping the matter under review. Notwithstanding this, at the present time there is no evidence that Ministerial Guidelines under section 28 of the PDA are under preparation or will be forthcoming in the foreseeable future, and I do not consider that the lack of such Guidelines is a reason for refusal in this instance.
- 7.2.8. In conclusion, I am satisfied that there is substantial policy support at national, regional and local level for renewable energy projects, including solar energy

projects, and I do not consider that the lack of Ministerial Guidelines or a renewable energy strategy for County Meath should be a reason for refusing permission in this instance. The proposed development will make a contribution to Ireland's targets for electricity generation from renewable sources and for reductions in greenhouse gas emissions and 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 appeal site comprises agricultural lands that are currently used for 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 prime agricultural lands and that the proposed development is more suited to more marginal or poorer lands elsewhere.
- 7.3.2. 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 is currently being used for 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. 11 hectares in County Meath 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.

- 7.3.3. With regard to County level agricultural policies, I consider that the solar farm would support economic growth in the rural area through farm diversification which is supported in the Meath County Development Plan 2013-2019, particularly with respect to Policies ED POL 6 (encourage rural enterprise including energy production) and ED POL 19 (promote rural enterprise including renewable production). 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 30 years, it would not be a permanent loss.
- 7.3.4. In conclusion, I consider that the benefits of the scheme, which would make a 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.

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

The appellants have expressed concerns regarding the impact of the proposed development on the landscape character and visual amenity of the local area, as well as the wider impacts on the Boyne Valley, Slane, Newgrange and the 'Ireland's Ancient East' tourism area.

- 7.4.1. In terms of Meath County Council's Landscape Character Assessment, the appeal site is located at the boundary between Landscape Character Area 3, 'North Navan Lowlands', and Landscape Character Area 4, 'Rathkenny Hills'.
- 7.4.2. LCA 3 (North Navan Lowlands) is described as having a moderate landscape value and moderate landscape sensitivity and is described as follows:

"A large area of agricultural land to the north of Navan contained in the east and west by the Rivers Blackwater and Boyne respectively and to the north by a more complex hilly landscape along the north Meath border (LCA 1). Overall this landscape character area is in a degraded condition. It comprises of a mixture of pasture and arable fields that have been enlarged by loss or



removal of traditional boundaries, now often consist of post and wire or timber fences and drainage ditches along road corridors.”

7.4.3. The Landscape Character Assessment notes that this LCA has high to medium potential capacity to accommodate overhead cables, masts and substations around urban fringe where built development is more common and low potential capacity in rural areas and around smaller settlements, where landscape character is of higher value. The LCA is identified as having medium potential capacity to accommodate the development of wind farms and individual turbines because there are few long range views except to the adjacent LCA. The number of viewers of such development would be relatively high but their proximity to several large urban areas is likely to lower their sensitivity. The presence of buried archaeology and upstanding historic features is a potential constraint on the location of wind turbines.

7.4.4. LCA 4, Rathkenny Hills, is described as having a very high landscape value and high sensitivity and is described as follows:

“This is a small area of rolling hills, which wrap around the north of Slane. It is predominantly a smooth textured agricultural landscape with large fields attached to estate farms. Fields are mostly pastoral but there are some arable fields. Built development consists of loose groups of detached dwellings along road corridors and large estate houses set within walled grounds or at the ends of avenues. Slane is located beyond the southern boundary of this LCA and is a very attractive and historically rich settlement with strong visual links to this LCA.”

7.4.5. The Landscape Character Assessment notes that this LCA has low potential capacity to accommodate new overhead cables, masts or substations because a major existing pylon line runs from east to west through the centre of this LCA and is a prominent and visually detractive feature. It would be difficult to accommodate and mitigate against the adverse effects of further development of this type. The LCA is also identified as having low – medium potential capacity to accommodate wind turbines depending on the location. The setting of Slane is very important so sensitive views of wind turbines from this part of the LCA should be avoided.

7.4.6. Having inspected the appeal site and surrounding area, I consider its character to be more typical of the moderately valuable and sensitive LCA 3, rather than LCA 4. The

site is located on the northern slopes of the River Devlin valley which runs in an east-west direction. The surrounding rural landscape includes agricultural lands, conifer plantations, wind turbines to the north, scattered one-off housing to the east and south, as well as a number of large industrial type premises immediately to the south. Having consulted aerial photography and mapping, it appears that the appeal site comprised five fields until relatively recently, which have now been amalgamated to form three medium sized fields which are well defined by mature hedgerows and trees.

- 7.4.7. While Grangegeeth is designated as a 'grraig' (i.e. a rural node) in the Development Plan, the closest sizable settlement is Slane, c. 5km to the south of the appeal site. Slane is a designated heritage town, and the Hill of Slane is an important heritage site which features the ruins of Slane Friary and a Norman Motte and Bailey and from which panoramic views of the surrounding landscape can be obtained.
- 7.4.8. A Landscape and Visual Impact Assessment (LVIA) and Landscape Mitigation Plan was submitted with the application. A Zone of Theoretical Visibility (ZTV) map submitted with the LVIA indicates that the potential visibility of the proposed development is limited, due to its location within a river valley. This potential visibility is limited to c. 1km to the north, 2 km to the south and 4km to the east and west, along the valley. I note that the ZTV map is based on a bare ground model that does not take account of the extensive hedgerows and vegetation that further limits views in the area.
- 7.4.9. Having inspected the site and the surrounding area, I consider that the LVIA generally provides a reasonably thorough assessment of the landscape and visual baseline and that the viewpoints selected for the photomontages are characteristic of views available of the appeal site, including protected views in the Development Plan.
- 7.4.10. With regard to landscape impacts, the proposed development is extensive in scale and will entail the installation of uniform parallel arrays of blue/black solar panels over a large area, which has the potential to significantly change the landscape character of the area. The LVIA considers the magnitude of the landscape impact to be Medium within 500m, reducing rapidly with increasing distance thereafter. Having regard to the Medium sensitivity of the landscape, the predicted significance of the

impact is no greater than Moderate, reducing to Slight or Imperceptible for most of the 5km study area. Having regard to the topography of the surrounding area, with the appeal site located within a river valley in a wider landscape of gently rolling hills which serves to reduce visibility in the wider area, and having regard to the extent of mature hedgerows and trees within and surrounding the appeal site which provide a high degree of enclosure, and noting the presence of large industrial premises to the south, I would concur with the assessment set out in the LVIA and consider that the proposed development will not have a significant adverse effect on landscape or rural character.

- 7.4.11. With regard to visual impacts, the LVIA assesses the impact on 8 viewpoints, which I consider to be relatively representative of the various receptor types and views within the study area. Photomontages illustrating the proposed development have been prepared for these viewpoints showing the proposed development both pre and post-mitigation planting establishment.
- 7.4.12. 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 on sensitive receptors and at protected viewpoints will be limited due to the site topography, the extensive hedgerows and tree planting and the separation distances from roads and residential dwellings. The visual impact will be most pronounced upon installation of the panel arrays, but will be mitigated by additional planting, albeit that this will take a number of years to become established and provide effective screening. I consider that the greatest potential visual impact arises at residential properties in the immediate vicinity of the site, as well as along the L-5603 local road on the southern side of the River Delvin valley, although the existing and proposed planting allied with the containment of the development within existing field boundaries and nestled within an undulating landscape will serve to mitigate the impact.
- 7.4.13. With regard to protected views from the top of Knowth Tomb (closest of the three megalithic tombs within the Brú na Bóinne World Heritage Site) and the Hill of Slane, photomontages demonstrate that the proposed development will not be visible due to the presence of an intervening vegetated ridgeline which serves to fully screen the proposed development.

7.4.14. Following decommissioning of the proposed development, when the panel arrays, inverters etc. are removed, and the lands reinstated to agricultural use, I do not consider that there will be any significant residual landscape or visual impacts.

7.4.15. In conclusion, I consider that the proposed development is acceptable from a landscape and visual impact perspective, and that its impact would not be so significant as to outweigh the benefits of providing a significant renewable energy source.

## 7.5. **Glint and Glare**

7.5.1. The appellants have expressed concern regarding the potential glint and glare impacts arising from the proposed development, particularly with regard to the impact on traffic safety for motorists travelling north on the L-5603 local road. Chapter 10 of the Environmental Report includes a glint and glare assessment, and in responding to the appeal, the applicant contends that, due to orientation, glint and glare is only possible at two points on the L-5603 road for limited periods in the late evening. The applicant further contends that this section of road is enclosed by mature vegetation, that the reflectance periods are only during times of the year that the trees will be in leaf, and that additional landscaping planting will reinforce this and ensure no glint and glare effects occur on the L-5603.

7.5.2. The term 'glint' refers to a momentary flash of bright light, while 'glare' is a continuous source of bright light. Both glint and glare are essentially the unwanted reflection of sunlight from reflective surfaces. Since solar panels are designed to absorb light rather than reflect it, their level of reflectance is stated as being similar to water or plastic mulch in an agricultural context, and much lower than glass, steel or snow.

7.5.3. The glint and glare assessment addresses the potential impact at 50 metre intervals along the L-1605 local road (i.e. the road that runs in an east-west direction along the southern boundary of the site) and the L-5603 local road (i.e. the road that runs in a north-south direction to the east of the appeal site) in the absence of any site screening.

7.5.4. With regard to local road L-1605, the assessment found that only two points on the roadway at the south west and south east corners of the appeal site could potentially

be affected by reflectance for a maximum of 14 minutes in the early morning per year and 82 minutes in the late evening per year, respectively. In both cases, the impacts would only arise in Spring or Summer months. When the existing vegetation is considered, the impact is classified as 'very low', reducing to 'none' once the landscape mitigation planting is established.

- 7.5.5. With regard to local road L-5603, the assessment found that only two of the thirty-nine points on the roadway could potentially be affected by reflectance, equating to the final 100m of roadway before it reaches Grangegeeth crossroads. This was for a maximum of 2 minutes per day in the late evening during Spring or Summer months. When the existing vegetation is considered, the report considers that no impact will occur, and that the landscape mitigation planting will reinforce this lack of impact.
- 7.5.6. I note that the residential properties in the vicinity of the appeal site have not been identified as receptors for the purposes of the assessment. While this is regrettable, I consider that having regard to the orientation and layout of the proposed development relative to the roads and nearby properties, the impacts identified for the worst case receptor locations identified on the local roads L-5603 and L-1605 would be comparable to the residential receptors in the vicinity.
- 7.5.7. In light of this, and considering the presence of dense mature hedgerows surrounding the constituent fields that make up the appeal site, the additional planting proposed, and noting the relatively low number of residential properties in the vicinity, I do not consider that glint or glare is likely to result in a significant adverse impact on residential receptors or road users.
- 7.5.8. Notwithstanding this conclusion, 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.

## 7.6. Access and Traffic

- 7.6.1. The appellants' principal concerns in relation to traffic were the potential glint and glare impacts on vehicles, which I have addressed above.
- 7.6.2. I note that the estimated construction period of 10 weeks is very short relative to the size of the appeal site. The number of Autotrack drawings submitted in Appendix D of the Environmental Report demonstrate that sightlines of 90m in each direction can be achieved at the existing site entrance at a 3m set-back, albeit with some trimming back of hedgerows.
- 7.6.3. With regard to construction phase traffic generation, the Environmental Report states that the construction of the solar farm is expected to give rise to 154 HGV deliveries over the 10 week construction period, with a maximum of 8 HGV deliveries (i.e. 16 HGV movements) per day. A maximum of 15 light vehicles per day (i.e. 30 movements) are also predicted. During the operational phase, the traffic generation would be very low, with c. 80 – 85 trips per year predicted for servicing, monitoring and upkeep of the site.
- 7.6.4. The Road Design Office of the Planning Authority had no objection to the proposed development, subject to a number of conditions, including the trimming back of hedgerows to achieve sightlines of 160m and the setting back of the entrance gate 10m from the edge of the road to allow for a HGV to pull-in when the gates are closed. I consider these conditions to be reasonable and appropriate, and having inspected the site I consider that the trimming of the hedgerows to provide the required 160m sightlines can be achieved without having to remove the majority of the mature planting. I therefore recommend that if the Board is minded to grant permission, that this requirement be included as a condition.
- 7.6.5. In conclusion, having regard to the relatively low level of construction-related traffic, the short duration of the construction period and the very low level of operational traffic, I am satisfied that the proposed development will not give rise to a significant degree of traffic congestion or give rise to a traffic hazard, subject to compliance with the condition outlined above.

## **7.7. Noise**

- 7.7.1. The appellants have expressed concerns that noise from inverters, cooling fans and around metal posts may affect people and animals.
- 7.7.2. I note that the solar PV panels do not contain any moving parts and therefore will not create any noise emissions. The only elements of the proposed development with the potential to create noise impacts during the operational phase are therefore the two inverter stations, their associated transformers and the on-site substation, although there will be no noise during hours of darkness when no electricity is being generated. The cumulative noise level from the operation of the solar farm at the worst-case receptor is calculated as 32 dBA. This predicted impact is below the guidelines for low background noise as set out by the EPA (35dBA for night-time) and within the WHO night-time noise guidance. In light of this, I am satisfied that there will be no significant noise impact on sensitive receptors during the operational phase of the proposed development.
- 7.7.3. With regard to construction stage noise, typical noise levels at any residence are predicted to be no more than 50 – 55 dBA. A number of construction stage mitigation measures are proposed, including proper maintenance of machinery, avoidance of unnecessary revving of machinery and close supervision by the project engineer. Having regard to the short construction period associated with the proposed development, I consider that it is not likely to result in a significant noise impact during the construction phase, but I recommend that suitable conditions be imposed to limit hours of construction and to ensure that noise mitigation and monitoring proposals form part of an agreed Construction Environmental Management Plan.

## **7.8. Archaeology**

- 7.8.1. While the appeal is primarily concerned with the visual impact on the wider cultural heritage of the County, which I have addressed in Section 7.4 above, I note from the Archaeological and Built Heritage Assessment submitted with the application that the site appears to have archaeological potential. While I do not consider that the proposed development will directly impact on any recorded or protected archaeological features, with the nearest such feature being a church and graveyard located c. 300m south of the appeal site, I note that geophysical surveys undertaken

in connection with the assessment found evidence of a number of potential unrecorded sub-surface archaeological features.

- 7.8.2. The applicant has submitted a copy of the National Monuments Service ‘Solar Farm Developments – Internal Guidance Document’ (November 2016). This outlines the NMS’s approach in considering planning applications for solar farms and notes, inter alia, that solar farms have potentially low levels of ground impact and potential flexibility to avoid impacts. The applicant proposes to undertake a programme of pre-development archaeological testing, and I note that the Department of Arts, Heritage, Regional, Rural & Gaeltacht Affairs (now Dept. of Culture, Heritage and the Gaeltacht) had no objection to the proposed development, subject to such testing.
- 7.8.3. Therefore, having regard to the nature of the proposed development which results in relatively limited ground disturbance and the construction methodology which serves to reduce the requirement for extensive earthworks, I am satisfied that there is unlikely to be a significant impact on unrecorded sub-surface archaeological features. However, having regard to the archaeological potential of the area, I recommend that the condition proposed by the Department of Culture, Heritage and the Gaeltacht be included to ensure the proper identification, recording and protection of any unrecorded subsurface archaeological features.

## 7.9. **Geological Heritage**

- 7.9.1. A Geological Survey of Ireland proposed Natural Heritage Area and County Geological Site is partially located within the appeal site. This is described as “an overgrown depression which may have been quarried or maybe a natural head of stream gully and waterfall” with the geological feature of interest being fossiliferous exposures of sandstone within a stream gully.
- 7.9.2. I note from the submission made by the GSI at planning application stage, and the pre-application correspondence provided by the applicant, that the GSI has not objected to the proposed development, and that their primary interest appears to be in obtaining access to the site if required, and obtaining copies of site investigation reports.
- 7.9.3. Since the geological feature is located within the buffer area along the stream, the works associated with the proposed development will not directly affect the feature,



or involve the removal of the vegetation that surrounds the area. The solar farm is c. 30m from the stream at its closest point, and in my opinion, this separation distance allied with the relatively limited extent of ground works and excavations associated with the proposed development will ensure that any impacts on geological heritage are not significant.

## **7.10. Surface Water Drainage**

- 7.10.1. The appellants contend that the ground underneath the solar panels may not be able to absorb the water and that the breakdown of existing drains due to the insertion of anchors may cause flooding on the lower part of the site and onto the road. The applicant's response to this issue is that a sustainable drainage system design approach has been followed to ensure that surface water runoff is limited to the pre-development rate and that there is no change to the natural drainage of the site or existing flow pathways.
- 7.10.2. The appeal site is divided into three fields, with hedgerows and drainage ditches separating each field. These ditches run to the east and discharge into the small unnamed stream which runs along the eastern boundary of the site. The stream runs southward and is a tributary of the River Devlin, which itself is a tributary of the River Boyne. As a result of site topography, I consider that the majority of the overland flow from the appeal site is likely to enter this stream.
- 7.10.3. I consider the construction process outlined for the solar farm to be relatively low-impact from a geotechnical perspective, with significant earthworks only occurring for the access tracks, substations, inverter stations and cable routes. The metal uprights supporting the solar arrays will be driven into the soil, without any separate foundations. There will therefore be no significant changes to the topographical profile of the site or to the characteristics of the soil that would affect drainage patterns. With regard to changes to permeable and impermeable areas, the proposed access tracks will be of permeable compacted stone construction, and the impermeable areas created by the substations, inverter stations and other structures amount to c. 0.11% of the overall site area. The applicant is proposing to install soakaways adjacent to each of these structures to discharge rainwater from their roofs to ground.

- 7.10.4. While the site coverage of the solar panel arrays is high, I consider that having regard to the installation methodology for the arrays, the separation distance between rows of arrays, the retention of existing site topography and grassland ground cover that precipitation will continue to infiltrate naturally to ground, with no significant change to overland flow rates. With regard to the potential for silt-laden run-off to enter the stream during construction works, I have addressed this issue in the Ecology section below.
- 7.10.5. In conclusion, taking into account the mitigation measures proposed, I am satisfied that the proposed development would not negatively impact on current drainage patterns or result in a significant increase in flood risk elsewhere. Therefore, having regard to the above, I am satisfied that the development should not be refused on the basis of surface water management or flood risk.

#### **7.11. Ecology**

- 7.11.1. Chapter 5 of the Environmental Report submitted with the planning application addresses flora and fauna, and an Appropriate Assessment Screening Report was also submitted, which is addressed in Section 7.14 below.
- 7.11.2. The appeal site is not situated either within, or in close proximity to any SAC, SPA or NHA/pNHA. The main habitat type on the appeal site is species-poor improved grassland. Other habitat types along field boundaries include hedges, scrub and ditches, with the stream along the eastern boundary classified as lowland river.
- 7.11.3. With regard to notable species, the survey found no evidence of badger or otter activity. Having regard to the species-poor nature of the grassland site and the similar nature of surrounding lands, the ecologist considers that any use of the site by bats, tree-nesting or ground-nesting birds is unlikely to be of importance at more than the level of the site. The river Devlin to the south of the site is identified as an important salmonid spawning and nursery river for Atlantic Salmon and Brown Trout.
- 7.11.4. Having regard to the nature of the proposed development, I consider that the potential impacts on ecology are primarily related to construction-related disturbance and contamination of surface water. During the operational phase only a very small area of ground will be made inaccessible for plants and animals and the majority of

existing hedgerows will be retained and strengthened, with additional planting which will serve to enhance the biodiversity of the site.

7.11.5. Having regard to the measures incorporated into the design of the scheme, including the retention of hedgerows, minimum 10m buffer zone from the stream and 30m distance from the nearest solar panel to the stream, the surface water management and good practice pollution control measures outlined in the Construction Environmental Management Plan, and the landscaping proposals, I consider that the proposed development will result in an improvement to the biodiversity of the appeal site and will not have a significant adverse ecological impact.

## 7.12. Other Issues

7.12.1. I note that condition 3 of the Planning Authority's decision states that the location of the temporary compound, ESB substation and client substation are not permitted and that revised proposals are to be submitted for the relocation of the structures further north into the second field. Having regard to the small scale of the substations, which are c. 5m high with floor areas of c. 12 sq m and 28 sq m, respectively, their design with simple rendered walls and pitched tile roofs, and the 32 m separation distance from the nearest house, I do not consider that it is necessary to relocate them further north into the second field. The substations will not result in a significant noise impact on residential receptors, and I consider the lower field to be more appropriate and visually discreet than the higher middle field.

7.12.2. Similarly, with regard to the temporary compound, I consider that it is more appropriate to locate this in the lower field, to limit the distance that HGVs have to traverse the site when delivering materials and to mitigate the construction phase visual impacts. I note, however, that the landscaping drawing shows the temporary compound *in situ*, and in the interests of clarity I recommend that a condition be included in any grant of permission to ensure that the compound is removed following completion of construction and the resultant area covered with topsoil and reseeded.

### **7.13. Requirement for Environmental Impact Assessment**

7.13.1. Solar farms (i.e. photovoltaic electrical generation) are not a class 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.

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

7.13.3. I therefore conclude 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.

### **7.14. Appropriate Assessment**

7.14.1. The appeal site is not located in or adjacent to any designated Natura 2000 sites. The closest Natura 2000 sites are the River Boyne and River Blackwater SPA (Site Code 004232) and SAC (Site Code 002299), c. 4.5km to the south of the appeal site. The next closest site is the Stabannan-Braganstown SPA (Site Code 004091) which is located c. 14.8km to the north.

7.14.2. An Appropriate Assessment Screening Report was submitted with the application, and the Report considers the potential impacts of the proposed development on the River Boyne and River Blackwater SPA and SAC, but considers that the Stabannan-Braganstown SPA can be excluded from consideration due to the separation distance and the nature of the proposed development. Having regard to the nature of the receiving environment and proposed development, the construction process and

the potential impacts that could occur during construction or operation, I consider this approach to be reasonable.

7.14.3. The sole qualifying interest of the River Boyne and River Blackwater SPA is the Kingfisher (*Alcedo atthis*), while the qualifying interests of the SAC are as follows:

- River lamprey (*Lampetra fluviatilis*)
- Atlantic salmon (*Salmo salar*)
- Otter (*Lutra lutra*)
- Alkaline fens
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*.

7.14.4. The conservation objectives for the SAC and SPA are to maintain or restore the favourable conservation condition of the relevant habitats/species.

7.14.5. The site and surrounding area generally comprises improved agricultural grassland, with hedgerows and trees along field boundaries. There are also a number of one-off houses in the vicinity and a number of industrial units to the west of the appeal site. A small unnamed stream runs from north to south along the eastern boundary of the site and flows into the River Devlin c. 420m to the south of the appeal site. The River Devlin is a tributary of the River Boyne.

7.14.6. The AA Screening Report considers that the improved grassland and hedgerow habitats present within the appeal site are not forms of habitat for which the SAC has been designated, and neither do they provide suitable breeding or wintering habitat for Kingfisher, which is the sole bird species for which the SPA is designated. I therefore consider that the primary potential impact that could occur is through the contamination of surface water during construction.

7.14.7. The proposed solar panel development is located a minimum of 30m from the small stream along the eastern boundary, with a minimum 10m buffer zone maintained between the fence and the stream. A series of good practice construction measures are outlined in the submitted Construction Environmental Management Plan and SUDS report, such as silt fences, soakaways and buffered outfalls, and I consider that these construction methods can be considered to be an intrinsic part of the work

to be carried out. I consider that these good practise measures will be sufficient to ensure that there will be no impact on the stream, or any downstream waterbodies.

7.14.8. In conclusion, it is reasonable to conclude that on the basis of the 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 a significant effect on the River Boyne and River Blackwater SPA (Site Code 004232) and SAC (Site Code 002299), or any other European site, in view of the sites' Conservation Objectives, and a Stage 2 Appropriate Assessment and submission of a NIS is not therefore required.

## **8.0 Recommendation**

8.1. I recommend that planning permission should be GRANTED for the reasons and considerations set out below.

## **9.0 Reasons and Considerations**

9.1. Having regard to the provisions of national and regional policy objectives in relation to renewable energy, the provisions of the Meath County Development Plan 2013 – 2019, 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 proposed 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 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. (a) All structures including foundations hereby authorised shall be removed not later than 30 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.

**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. (a) The proposed entrance gates shall be recessed 10 metres from the edge of the adjoining public road.

(b) The hedgerow along the southern boundary of the site shall be trimmed to provide sightlines of 160 metres in each direction.

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

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.

(c) The construction compound shall be removed at the end of the construction phase and the resultant area covered with topsoil and reseeded.

**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 and all fencing shall be dark green in colour. The external walls of the proposed substations shall be finished in a neutral colour such as light grey or off-white; the roof shall be of black tiles/slates.

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

9. (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. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

**Reason:** In order to safeguard the amenities of property in the vicinity.

11. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –

- (a) engage the services of a suitably qualified archaeologist (licenced under the National Monuments Acts 1930-2004) to carry out pre-development testing at the site to include the potential archaeological geophysical anomalies identified together with areas where topsoil is to

be stripped. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent.

- (b) The archaeologist is required to notify the Department of Culture, Heritage and the Gaeltacht in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work
- (c) The archaeologist shall carry out any relevant documentary research and may excavate trenches at locations chosen by the archaeologist, having consulted the proposed development plans.
- (d) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and the Department of Culture, Heritage and the Gaeltacht.
- (e) Where archaeological material is shown to be present, avoidance, preservation *in situ*, preservation by record (excavation) and/or monitoring may be required and the Department of Culture, Heritage and the Gaeltacht will advise the Developer with regard to these matters.
- (f) No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the Department of Culture, Heritage and the Gaeltacht.

**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.

12. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including but not limited to, hours of working, noise and dust management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste.

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

13. 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.

14. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the 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.

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.

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Niall Haverty

Planning Inspector

17<sup>th</sup> November 2017