



An
Bord
Pleanála

Inspector's Report PL02.248710

Development	Solar Farm on 14.7 Ha with an export capacity of approximately 4.2MVA.
Location	Carricklane, Finea, Co. Cavan.
Planning Authority	Cavan County Council
Planning Authority Reg. Ref.	16/443
Applicant(s)	Elgin Energy Services Ltd.
Type of Application	Permission
Planning Authority Decision	Grant permission
Type of Appeal	Third Party
Appellant(s)	Declan and Linda Sheridan
Observer(s)	None.
Date of Site Inspection	15th September 2017.
Inspector	Patricia Calleary

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1.0 Site Location and Description

- 1.1. The appeal site with a stated area of 13.7 Ha is located at Carricklane, Finea in south east of County Cavan, close to the Longford border. It is currently accessed off the R194 regional road. The town of Finea in County Westmeath is located c.2km to the south.
- 1.2. The site contains a number of individual fields which are currently in agricultural use evidently for grazing purposes. There is an existing dwelling and farmyard complex centrally located within the site but outside the redline boundary, both of which are stated to be owned by the applicant. The dwelling is unoccupied. Overall the site is relatively flat and rises gently towards the rear. It is bounded by mature trees and hedgerows. There are a number of houses located some distance away, with the four closest of these ranging in distance from between c.185m east to 223m west of the appeal site.
- 1.3. The wider area is characterised by agricultural lands and individual houses.

2.0 Proposed Development

- 2.1. As described on the public notices, the proposed development would consist of a solar farm with an export capacity of approximately 4.2MVA comprising photovoltaic panels on ground-mounted frames, an enclosed single-storey electricity terminal station, a single-storey switchgear enclosure and storage container, 4 no. single-storey inverter stations, ducting and underground electrical cabling, perimeter fencing, 11 no. mounted CCTV cameras, provision of a new access from the R194 regional road (and internal access tracks) and all associated site development and landscaping works.
- 2.2. A new access point is proposed to be formed off the R194, c.180m north west of the current access to provide access to the site at a point on the south-eastern end of the site, close to the proposed terminal compound.
- 2.3. The planning application was accompanied by a Town Planning and Environmental report, a Landscape and Visual Assessment (LVIA), an Ecological Report (including Appropriate Assessment screening), a Glint and Glare Assessment, Traffic projections and an Archaeological report.

2.4. Significant further information was received by the Planning Authority during consideration of the application, which included some revisions to the layout, access and proposals for the removal of panels from the south eastern field.

Notwithstanding the changes proposed, the development as amended would remain a 4.2MVA export capacity project. The information submitted at further information stage also included a residential impact assessment, an updated LVIA assessment, a panel verification report and a land management plan.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. The Planning Authority issued a decision to grant permission subject to 16 conditions, including the following:

- C4 – Permits a project life of 25 years from the date of commissioning after which time the site is required to be restored;
- C5 – Construction Management Plan to be submitted to the Planning Authority prior to commencement of the development;
- C6 – Stage 1 / 2 Road Safety Audit to be carried out and a subsequent Stage 3 Road Safety Audit post completion of the development;
- C8(b) – Additional screening to be provided to ensure no glint impact on adjoining houses. Upon commissioning of the development and for 2 years after, glint surveys are to be carried out with further mitigation measures as the Planning Authority may specify.
- C15 – Archaeological monitoring of site investigations and excavation works.

3.2. Planning Authority Reports

3.2.1. Planning Reports

3.2.2. The Planning Officer's initial report is summarised as follows:

- Development is broadly acceptable and supported by national and local policy;

- No significant visual impacts would arise. Impacts on the landscape character would be largely restricted to the land within the site boundary and in close proximity. Seven houses are identified as having minor visual impacts and one with minor to moderate impacts. The area in the most northern part of the site raises concerns around visual impact (as it is on a ridge line). The area to the south eastern part of the site also raises visual concerns and glint and glare concerns as this area is adjacent to the regional road;
- 30 no. residential properties identified in a 500m radius and no residential impacts predicted;
- No drainage issues raised by the area engineer;
- Design will safeguard and retain the natural habitat filled boundaries by maintaining mature vegetation;
- No noise or fire risk issues arise;
- Grid connection to Bracklagh substation proposed but does not form part of this application;
- Archaeological testing recommended in archaeological assessment;
- Road design engineer recommends a road safety audit, no details presented in relation to the transportation of the solar arrays.

3.2.3. The Planning Officer recommended seeking further information on matters relating to landscape and visual, glint and glare, risks of breakages or leakage, site topography, access, road safety, details of transportation of the solar arrays to the site, details of the solar panels and a land management plan required for the operation phase.

3.2.4. The additional assessment in the Planning Officer's second report following receipt of further information is summarised as follows:

- Response on Landscape and Visual impacts from viewpoints of Houses No's. 7,8,10,11,13, 15, 26, 32 is that no properties would experience any effect above 'minor' which is considered acceptable;
- Glint and glare response noted that only one property can experience such effects, and this is an unoccupied property owned by the landowner. Layout

is revised and additional planting proposed to reduce anticipated impacts on road users. Considered this to be acceptable;

- Response states that risk of breakages / leakage are remote which addresses concerns raised in relation to risk to human health;
- Response noted in relation to the development following the natural contours of the site. Minimal amount of excavation required, which is considered acceptable;
- Revised drawings addressing traffic and road safety issues, including access and sightlines noted. Details of transportation journeys also received and noted. Information received considered acceptable;
- Information received on the number of solar panels stated to not exceed 28,000, which would be dark blue in colour and considered acceptable;
- Landscape management plan submitted and details considered acceptable.

3.2.5. The Planning Officer concludes that the development is considered acceptable and recommends a grant of planning permission.

3.3. **Other Technical Reports**

- A/Senior Executive Scientist – No objection subject to conditions;
- Municipal District Engineer – No objection;
- Road Design Office – Concerns with new entrance onto regional road network. Recommends conditions.

3.4. **Prescribed Bodies**

- Department of Culture, Heritage and Gaeltacht (DCLG)–Requests archaeological pre-development testing would be included in any grant of permission.

3.5. **Third Party Observations**

3.5.1. A third-party observation was received by the Planning Authority from Declan and Linda Sheridan which contained a number of signatures by others attached. The issues raised are largely similar to those issues referred to in the grounds of appeal.

4.0 Planning History

4.1. Appeal site

4.1.1. There is no recent planning history associated with the appeal site.

4.2. Similar developments

4.2.1. The Board will be aware of a number of solar farm applications which have been decided on appeal, many of which are in the south east of the country. Some recent examples include:

- **PL14 .246850** – Permission granted by the Board for a solar farm with an export capacity of approximately 4.2MVA and all associated works at Lisnageeragh, Edgeworthstown, Co. Longford. (07.11.2016);
- **PL27. 246527** – Permission granted by the Board for a Solar PV Energy Development in County Wicklow on 13.76 Ha. (18.08.2016);
- **PL04.245862** - Permission granted by the Board for a Solar PV Energy Development in County Cork. (16.06.2016);
- **PL08 .247653** – Permission granted for a solar PV Farm on a site of 12.1 Ha site with an export capacity of c.4MW at Ballygrennane, Listowel, Co. Kerry (26.04.2016).

4.2.2. There are a number of other solar farm applications currently on appeal with the Board.

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

5.2.1. This **White paper on Energy policy** (Department of Communications, Energy and Natural Resources – Dec 2015) provides a complete energy policy update for Ireland. It sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95% by 2050, compared to 1990 levels, falling to zero or below by 2100. 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.

5.3. **Strategy for Renewable Energy, 2012 – 2020**

5.3.1. This Strategy reiterates the Government's position that 'the development and deployment of Ireland's abundant indigenous renewable energy resources, both onshore and offshore, clearly stands on its own merits in terms of the contribution to the economy, to the growth and jobs agenda, to environmental sustainability and to diversity of energy supply.'

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

5.4.1. 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. **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.

5.5. **National Spatial Strategy 2002-2020 (NSS)**

5.5.1. Section 3.7 – Energy - Prime considerations in terms of spatial policies relating to energy include developing energy infrastructure on an all-island basis to the practical and mutual benefit of both the Republic and Northern Ireland strengthening energy networks in the West, North West, Border and North-Eastern areas enhancing both the robustness and choice of energy supplies across the regions, through improvements to the national grids for electricity and gas.

5.5.2. 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.

5.6. **National Planning Framework**

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

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

5.7.1. This is a research report prepared by Future Analytics and funded by the Sustainability Energy Authority of Ireland (SEAI). The report contains a set of planning policy and development guidance recommendations, which it is suggested may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility-Scale Solar Photovoltaic (USSPV) developments in Ireland. It notes that over a hundred applications for USSPV developments have been lodged with planning authorities and that an estimated 594 MW have been granted or were on appeal at the time of publishing (October 2016). The combined site area for these schemes at the time of the study is stated as being 1331.9 hectares. This constitutes 0.03% of the area of land available for agriculture.

5.7.2. Recommendations include that development plans set out policy objectives to support USSPV development and put in place development management standards. Clear policy guidance can alleviate public concerns. Agricultural lands are listed amongst the list of types of locations where such development is particularly suited.

5.8. **Border Regional Planning Guidelines 2010-2022**

5.8.1. Section 5.5 (Renewable Energy in the Border Region) - The development of more sustainable, competitive, diverse and secure supplies of renewable energy

generation to support economic and social development is a key priority for the region.

5.8.2. Renewable Energy Policy – Policy INFP24 – Promote and support an optimal mix of renewable energy generation within the region.

5.8.3. Section 1.8 – Agriculture and Rural Development - It is considered that the region possesses a number of inherent advantages within emerging economic drivers and, in particular, renewable energy, agri-food industries where value is added, clean energy, tourism and services. Sustainable vibrant rural communities are critical for the region.

5.9. **The Cavan County Development Plan 2014-2020**

5.9.1. **Section 4.7.3 Renewable Energy** - It is an objective of the Planning Authority to encourage and facilitate renewable forms of energy production. The main sources of renewable energy are from wind, **solar** (the sun), hydro (water), geothermal (heat from the earth) and biomass (wood and energy crops).

Note: While there is support for the use of solar energy in buildings, there are no specific policies or objectives in relation to PV solar power in the development plan.

5.9.2. **Section 8.7 Landscape Categorisation** – Analysis of County Cavan –

5.9.3. **Character Areas** -There are five main Landscape Character Areas within the County. The appeal site is located within the landscape character area identified as Lake Catchments of South Cavan within the Cavan County Development Plan. It is located within a local landscape character type identified as ‘Undulating Agriculture’.

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

5.10.1. 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. The following guidance is considered relevant:

5.10.2. 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.

5.10.3. 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.

5.1. Natural Heritage Designations

5.1.1. The site is not located within the boundary of any statutory or non-statutory designated (Natura 2000) sites, however there are three designated sites within close proximity of the site including Lough Sheelin SPA (Site Code 004065) located 1.1km south east of the site, Moneybeg and Clareisland Bogs SAC (Site Code 002340) located 1.3km south east and Lough Kinale and Derragh Lough SPA (Site Code 004051) located 1.2km south west.

5.1.2. Lough Kinale and Derragh Lough NHA (Site code. 000985) is located c.1.1km to the southwest of the appeal site.

5.2. Cultural Heritage

5.2.1. There is no recorded archaeology or architectural heritage sites within the appeal site. The applicant's Cultural Assessment report identified nine archaeological sites located between 210m to 680m of the appeal site.

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. The grounds of the appeal received from Declan and Linda Sheridan are summarised as follows:

- Solar farms in urban and rural locations should be controlled by policy;
- Visual impact assessment viewpoints presented do not correspond to the area in which the solar farm would be sited or in the areas / properties which would be affected;
- Road analysis by applicant is deficient;
- Glint and glare requires further evaluation and future audit may be flawed;

- Case studies of PV systems (including in Italy) illustrate potential fire hazards associated with the panels and polyurethane coverings and safety procedures should have formed part of the application;
- No information submitted regarding noise, water or air pollution;
- Dust from traffic is expected to increase and could affect health including asthma.

6.1.2. The appeal also included an article published in the local newspaper based on an interview with the appellants as well as annotated photographs provided by the appellants. The appeal was also accompanied by what appears to be a print out of a news article. It refers to two solar farms in Wexford which are stated to have been refused planning permission by Wexford County Council.

6.2. Applicant Response

6.2.1. A response to the appeal was received from RPS Planning and Environmental on behalf of the applicant. It was accompanied by a copy of the Site Layout and a map which contained the LVIA viewpoint locations. The main points in the response are summarised as follows:

- Proposals are compliant with national, regional and local planning policy;
- 10 representative viewpoints were selected for the LVIA. No significant visual impacts were predicted as a result of the development. It was determined that views of the development from the regional roads would generally be negated by intervening vegetation and localised topographical changes. Minor impacts are predicted for a short stretch of the R194 directly adjacent to the development. Protected views, scenic routes and river/lakeside amenity areas would experience no significant visual impacts as a result of the proposed development;
- No Glint and Glare impacts would arise as a result of the proposed development and any concerns would be mitigated through additional screening / planting proposals;
- Solar farms are not considered to be a significant fire risk. Components of the solar farm are designed and manufactured in accordance with Irish and EU fire safety legislation. A number of mitigation measures are proposed;

- Noise is not an issue, however, noise management measures will be addressed within the Construction Management Plan (CMP) which will be submitted to the Planning Authority prior to the commencement of development;
- The CMP will detail measures for the protection of the water environment during construction and will include a pollution prevention plan (PPP) and emergency response plan;
- Construction phase will not have a significant impact on the air quality, however, dust management measures will be addressed within the CMP;
- Health and safety of staff during construction will be the main concern and the client will appoint a suitably qualified and experienced Construction, Design and Management co-ordinator to assist in the delivery of health and safety measures.

6.3. **Planning Authority Response**

- No response

6.4. **Observations**

- None

6.5. **Invited Responses**

- 6.5.1. Responses were invited from the DAU / DCHG, An Taisce and The Heritage Council. No responses were received.

7.0 **Assessment**

7.1. **Introduction**

7.1.1. I have read the contents of the planning application and appeal file. I have also visited the site and environs and have considered relevant planning policy. I consider that the key issues in determining the application and appeal before the Board are as follows:

- Policy Context
- Traffic and Access

- Landscape and Visual
- Glint and Glare
- Hydrology including Flood Risk
- Fire Safety
- Other (Grid connection, noise and air pollution, cultural heritage)
- Appropriate Assessment Screening
- Requirement for Environmental Impact Assessment

7.1.2. My considerations of each of the above issues are set out under the respective headings below.

7.2. Policy Context

7.2.1. Solar photovoltaic (PV) development is relatively new in Ireland. Nonetheless, the principle for its development is strategically supported by national and regional policy. 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.

7.2.2. Section 2.4 of the National Spatial Strategy recognises the contribution rural areas make to the achievement of balanced regional development and developing economic resources including renewable energy.

7.2.3. Cavan is one of eight counties located within the Northern and Western Regional Assembly. At the time of preparing the Border Regional Authority Planning Guidelines 2010-2022, Cavan was located within the Border region. Section 5.5 of those guidelines support the development of renewable energy which is sustainable, competitive, diverse and secure to support economic and social development in the region. Within the current County Development Plan for Cavan, Section 4.7.3 outlines support for renewable energy, including from solar.

7.2.4. The research paper on USSPV prepared by Future Analytics on behalf of the SEAI indicates that 594MW of solar energy capacity has been permitted or is on appeal. Reference is made to the stated capacity of 5.6MW in situ on an all-Ireland basis by October 2016. This is very low in comparison to the UK and EU countries and may well change noting the rapid improvements in technology, which is likely to make it

more cost competitive. The USSPV research paper also indicates the very significant number of current applications for solar PV developments and the Board will be aware of a number of these which have been decided on appeal.

7.2.5. I am satisfied that there is a presumption in favour of the proposal which is supported by policy referenced under section 5 above and therefore the development would be acceptable in principle unless adverse impacts of the proposal would significantly and demonstrably outweigh the benefits, when assessed against wider planning policy. I consider these planning and environmental considerations in the remainder of my assessment.

7.3. Traffic and Access

7.3.1. Issues have been raised in the appeal regarding traffic safety. I note that it is proposed to open up a new access onto the R164 to serve the construction stage of the development and also the subsequent operation stage.

7.3.2. The Local Authority's road design section raised some concerns regarding the formation of a new access onto the regional road, but accepted that if the project is of national importance, this could be mitigated against with the requirement for a Stage 1/2 Road Safety Audit prior to commencement of the development followed by a Stage 3 Road Safety Audit on completion of the development.

7.3.3. The applicant provided details on the transportation of the solar arrays at further information stage. It is stated that no abnormal loads would be associated with the development and that all infrastructure would be transported by HGVs. The construction period would be short term in duration over an anticipated period of c.12-16 weeks and traffic movements at the site would peak to 16 one-way movements per day (10 one-way car/van movements and 6 one-way HGV movements).

7.3.4. The proposed development would generate very low levels of operational traffic anticipated to be less than 1 van per week for maintenance visits, which I consider is unlikely to be any greater than existing traffic generated by current agricultural activities. I am therefore satisfied that no material intensification would arise because of the operation of the proposed development, and that the safety and carrying capacity of the road network would accordingly not be prejudiced for the construction or operational phases.

7.3.5. Overall, subject to a requirement of road safety audits (Stage 1/2 followed by Stage 3 post-completion), I am satisfied that the traffic, which would likely be generated during construction and operation phases, would not constitute a traffic hazard and the development should not be refused for traffic reasons.

7.4. Landscape and Visual

7.4.1. Concerns around landscape and visual impacts were raised in the grounds of appeal. In particular, it was submitted that the viewpoints selected were not representative of the visual impacts which would arise. The site is located within the character area identified as the Lake Catchments of South Cavan within the Cavan County Development Plan. It is located on land north of Finnea, within a local landscape character identified as Undulating Agriculture.

7.4.2. A landscape and visual impact assessment (LVIA) was submitted with the planning application. In its conclusion, it stated that the proposed development effects on the character type would be largely restricted to land within the site boundary and at close proximity and that no effects would be experienced on the remainder of the Landscape Character type or neighbouring character types identified in the study area.

7.4.3. The assessment included 10 no. viewpoints which were selected within the study area. These are summarised on Page 12-13 of the response to the appeal. It is further submitted that Viewpoint 1 (VP1) represents a worst-case scenario viewpoint, which I note is rated 'minor and not significant'. A residential impact assessment submitted at further information stage also considered visual impacts.

7.4.4. The conclusions of the LVIA confirm that no significant landscape or visual impacts would result and that apart from a short section of the R194 directly adjacent to the development, views would not result in significant visual impact and additional planting would further reduce the views. It is also concluded that identified views, scenic routes and amenity areas would not experience significant visual impacts.

7.4.5. I am satisfied, based on the information available on file and gathered during my site visit, that while the proposed development would be a departure from the established landscape locally, it would not adversely impact on the landscape setting or the visual amenities of the area. Having regard to the retention and proposed

augmentation of site boundaries, existing environmental screening and the scale and height of development proposed I am satisfied that medium and long range visual impacts arising would be minor. I consider that the landscape change to the landscape character area (Lake catchments of South Cavan) would result in a minor landscape impact but would be largely contained to the appeal site boundaries and land close to the site. The wider landscape unit would be without significant impacts. There would be some potential intermittent views along the regional road adjacent to the development, but given the type and scale of the development, these would not be unacceptable. Regarding protected views and scenic routes, river/lakeside amenity areas and parks and high landscape identified in the development plan, I am satisfied that none would experience significant visual impacts as a result of the development.

- 7.4.6. Overall it is considered that the landscape and visual impacts would not be so harmful as to outweigh the benefits of providing a renewable energy source and to warrant a refusal on landscape or visual amenity grounds and I do not recommend that permission be refused on these grounds.

7.5. Glint and Glare

- 7.5.1. Concerns were raised in the appeal around glint and glare on road users and homeowners. Glint results from the specular reflection of direct solar irradiation and can cause visual distraction and discomfort. Glare is a continuous source of brightness from the reflection of diffuse solar radiation and is usually not a significant issue with solar farm developments.
- 7.5.2. Solar panels are normally dark in colour and designed to absorb daylight and therefore have a low level of reflectivity. The potential for glint and glare from a solar farm is much lower than from other manmade structures such as polytunnels and glasshouses, which form a typical part of the rural countryside, as well as natural features such as water or snow.
- 7.5.3. The application was accompanied by a Glint and Glare Assessment. A total of 21 road receptor locations were assessed along every 200m on a 4.2km section of the R394, R194 and connecting local roads immediately adjacent to and surrounding the proposed solar farm. Roads beyond those assessed are not expected to experience

glint or glare. The location of these are included as Figure 3 in the Glint and Glare assessment. The report concludes that it would not be geometrically possible for road users to the north of the site between receptor point 1 and point 7 or receptor points 14 and 15 to experience solar reflection. When screening is considered, the report confirms that the occurrence of solar reflection would only be possible for a 350m stretch of road to the south east (Shown as Fig 2 in the appeal response). It is submitted that solar reflection would occur for c.15 minutes per day but only when a solar reflection is geometrically possible and only when the sun is out. It is also submitted that the solar reflection would be fleeting in nature for a moving receptor such as in a vehicle and would be less bright than the direct sunlight which would be experienced by road users.

- 7.5.4. In relation to consideration of glint and glare on residential receptors, 34 residential dwellings were considered. Receptors to the north were discounted having regard to the orientation of the solar panels to the south. The Glint and Glare assessment concluded that the only dwelling where glint and glare would be possible is at residential dwelling no.19, which is an unoccupied dwelling owned by the landowner. I note condition no. 8(b) attached to the Planning Authority's decision, which places a requirement on the developer/operator to submit annual glint surveys for a 2-year period post operation with further mitigation measures as may be required by the Planning Authority should glint impacts arise. I recommend that a similar condition should be attached should the Board be minded to grant permission in this case.
- 7.5.5. Having regard to the orientation of the panels (facing south), the separation distance from properties, and to the existing mature hedgerow and tree screening together with proposals for additional planting, I am satisfied that, subject to the attachment of an appropriate condition seeking glint surveys and mitigation if deemed necessary, that glint and glare issues would not result in any significant adverse impact on residential receptors or on road users.
- 7.5.6. Overall, I consider that there is low potential for the occurrence of glint and glare from the proposed development and neither would result in any significant adverse impact on established amenities. Accordingly, I do not consider the proposal should be refused based on glint and glare impacts.

7.6. Hydrology including Flood Risk

- 7.6.1. There is unlikely to be any significant increase in run-off as a result of the development. There may be some minor changes to the journey of rainfall to the ground but having regard to the overall agricultural context, this would be minimal and have little or no impact on the infiltration rate. No formal drainage system is proposed and no such system is required in my view.
- 7.6.2. I do not consider that the surface water regime would be altered such that the development would result in any significant increase in flood risk. Accordingly, permission should not be withheld for issues of surface water drainage or flood risk.

7.7. Fire Safety

- 7.7.1. The appellant raises concern regarding fire risk associated with the development and the difficulty for fire tenders to reach the site in the event of a fire. Reference is made to studies of PV systems in Italy, which are stated in the appeal to illustrate potential fire hazards associated with the panels and polyurethane coverings, and accordingly it is contended that safety procedures should have formed part of the application. In response, the applicant states their disagreement that the solar farm would give rise to a fire risk, having regard to all components being required to be designed and manufactured in accordance with Irish and EU safety legislation and that the components are not considered to be a fuel for fire. It is also stated that the panels are separated to optimise absorption of light and that this separation would also serve to mitigate against fire spread in the event of a fire.
- 7.7.2. I would agree that the materials utilised in solar farms could not reasonably be considered as potential fuel for a fire. and I do not consider that the solar farm would give rise to a fire risk in the normal operation. The substation and inverter stations are isolated buildings which would not give rise to a fire risk. In addition, the site would be remotely monitored and have safeguards in place including an automated suppression system which would activate in the unlikely event of a fire and access would be available throughout the site for the fire service via internal tracks.
- 7.7.3. Having regard to the above, I recommend that permission should not be withheld for reasons of fire risk.

7.8. Other

- 7.8.1. **Grid Connection** – It is stated in the application that a grid connection application is currently being considered by ESB Networks. It is anticipated that the project would connect to the network via the existing 38 kv substation at Bracklagh which is c.1km to the west of the site and this would involve 1km of underground cable. Noting this would require a further planning application, the information provided at this stage is considered acceptable.
- 7.8.2. **Noise and Air Pollution** – There are no elements of the operational stage of the project which would give rise to noise or air pollution issues. During the construction stage, the development would be required to be carried out in accordance with a construction management plan (CMP) which will include noise management measures and dust management measures. I consider this to be satisfactory.
- 7.8.3. **Cultural Heritage** – The cultural heritage report concludes that the proposed development would not impact on any recorded or protected archaeological or built heritage site. The requirements of the Department of Culture, Heritage and the Gaeltacht on archaeology are noted, namely archaeological monitoring by a qualified archaeologist. I have included a condition on monitoring in the recommended planning conditions set out below. Otherwise I consider the development would not give rise to any significant impact on the archaeological or architectural heritage of the area.
- 7.8.4. **Development Contributions** –Section 3 of the Cavan County Council Development Contribution Scheme includes a category for development contributions for renewable energy developments including solar farms at the rate of €1,000 per hectare. Accordingly, a S.48 development contribution condition should attach in the event of a grant of permission.

7.9. Appropriate Assessment Screening

- 7.9.1. Article 6 (3) 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 considering its conservation objectives’.

7.9.2. No conservation designation applies directly to the appeal site. A Stage 1 Screening Assessment report was submitted with the application, included as Appendix II of the Ecology report. The Natura 2000 sites identified are Lough Sheelin SPA (Site Code 004065) located 1.1km south east of the site, Moneybeg and Clareisland Bogs SAC (Site Code 002340) located 1.3km south east and Lough Kinale and Derragh Lough SPA (Site Code 004051) located 1.2km south west.

7.9.3. The Natura 2000 site features in respect of each of the three sites are as follows:

- Lough Sheelin SPA (Site Code 004065) – 4 no. overwintering species of bird and wetlands;
- Moneybeg and Clareisland Bogs SAC (Site Code 002340) – raised bog habitats;
- Lough Kinale and Derragh Lough SPA (Site Code 004051) – 2 no. overwintering species of bird and wetlands.

Generic conservation objectives apply to the Lough Sheelin SPA (004065) site and Lough Kinale and Derragh Lough SPA (004061) site. Conservation objective for the Moneybeg and Clareisland Bogs SAC (002340) site include 17 no. attributes for active raised bogs including area, range, structure, functions and typical species of active raised bog habitat.

7.9.4. A description of the project is set out under Section 2.0 of my assessment above. The site is not directly connected with or necessary for the management of the Natura 2000 features.

7.9.5. I consider that the possible effects of the proposal on the conservation status of the designated sites include loss/reduction of habitats, disturbance of key species, habitat or species fragmentation, reduction in species density and decrease in water quality and quantity. However, as the site does not form part of any designated site and there are no resources required (e.g. water abstraction) and there are no appreciable off-site emissions.

7.9.6. It is stated that there is no published policy advice in Ireland in relation to the possible effects of solar farms on bird species. It is also stated that there is published

advice for non-EIA development in Northern Ireland indicating where impacts of solar farms on natural heritage interests can occur. I have noted this advice note (Energy generation – solar farms advice for planning officers and applicants seeking planning permission for solar farms which may impact on natural heritage issue 01 July 2015) and I enclose a copy as an appendix to this report. According to the flowcharts in the advice document, as the proposed development is greater than 500m from a SPA or known flyaway path to a designated SPA, then ‘no impact is envisaged’. In the current appeal, all SPA sites are greater than 1km away and the SAC site with a mobile species qualifying interest is c.1.4km downstream and there is no pathway or appreciable effect upon a mobile species. Accordingly, I am satisfied that disturbance to qualifying interests or special conservation interests’ species would not likely occur.

- 7.9.7. In relation to wetland habitat qualifying interests and special conservation interests, there is a pathway of possible effects between the proposed development and designated sites located downstream. However, having regard to the nature of the development (solar farm) and noting the lack of significant excavations or earthworks together with the construction management controls which would be required to be put in place to reduce risk of suspended solids and polluting substances entering a watercourse (detailed under Section 1.2.2 of the applicant’s submitted ecology report), no appreciable effect on any downstream wetland would likely arise. With the implementation of good construction management, I am satisfied that 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 combination with other plans or projects, on any designated Natura 2000 sites.
- 7.9.8. It is submitted that there is no potential for significant effects either from the proposed development on its own or in combination with other plans and projects. A number of spatial plans are listed and in relation to planning history, there is no live planning applications which would be of relevance. I am therefore satisfied that in-combination effects are unlikely to arise.
- 7.9.9. In this regard, it is reasonable to conclude that based on the information on file, which I consider adequate 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 any designated European site in view of those sites' conservations objectives and that a Stage 2 Appropriate Assessment (and submission of an NIS) is not therefore required.

7.10. Requirement for Environmental Impact Assessment

7.10.1. Solar farms are not listed as a class of development under Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001-2017, whereby a mandatory EIA and the submission of an EIS is 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 the proposed solar farm. Article 92 of the Planning & Development Regulations 2001-2017 defines sub-threshold development for the purposes of EIA as 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. As I have considered above that the solar panel development is not a development set out in Schedule 5, then I also consider that the subject development is a not 'sub-threshold development' for the purpose of EIA and an EIS is not required for the development.

8.0 Recommendation

8.1. Further to the above assessment of matters pertaining to this appeal, including the consideration of the submissions made in connection with the appeal and including my site inspection, I recommend that permission is **granted** for the reasons and considerations set out below.

9.0 Reasons and Considerations

9.1. Having regard to the nature and scale of the proposed development, the suitability of the aspect, topography of the site, available screening, the proximity to the grid infrastructure, the pattern of development in the vicinity, the provisions of the Cavan County Development Plan 2014–2020, and of regional and national policy support for renewable energy including solar photovoltaics, it is considered that, subject to compliance with the conditions set out below, the proposed development would not have an unacceptable impact on the landscape or visual amenities of the area,

would not seriously injure the residential amenities of property in the vicinity, would not result in an increase to an increase in flood risk or result in any significant fire risk, would be acceptable in terms of glint and glare, traffic and road safety, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment Screening

In undertaking a screening exercise in relation to the proposed development, the Board had regard to the Appropriate Assessment screening report submitted in support of the application, the nature, scale and location of the proposed development, the distances to and potential for connectivity with European Sites, and the report of the Inspector. The Board accepted the assessment of the Inspector that the proposed development, individually or in combination with other plans and projects, would not be likely to have a significant effect on any European site in view of those sites' conservations objectives and shared her conclusions that a stage 2 assessment is not required.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 5th day of April 2017 and by the further plans and particulars received by An Bord Pleanála on the 17th day of July 2017, 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 proposed development shall be undertaken in compliance with all environmental commitments made in the documentation supporting the application.

Reason: To protect the environment.

6. Details of materials, colours, textures and finishes to the inverter cabins, control building, customer cabin and sub-station shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

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

7. 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 and of property in the vicinity.

8. The solar panels shall have driven or screw pile foundations only, unless otherwise agreed in writing with the Planning Authority.

Reason: In the interest of clarity.

9. Cables within the site shall be located underground.

Reason: In the interest of visual amenity.

10. 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/operator shall provide detailed glint surveys on an annual basis to the Planning Authority to confirm that no such glint impact has taken place, and shall provide such mitigation measures as the Planning Authority may specify in writing, to ensure this is achieved.

Reason: To mitigate against any glint impact and in the interest of residential amenity.

11. All landscaping shall be planted to the written satisfaction of the Planning Authority prior to commencement of development. 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 biodiversity and the visual amenities of the

area.

12. 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. 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.

13. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -
- (a) notify the planning authority and the Department of Culture, Heritage and the Gaeltacht in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works,
 - (c) provide arrangements, acceptable to the planning authority and the Department of Culture, Heritage and the Gaeltacht, for the recording and for the removal of any archaeological material which either authority considers appropriate to remove,
 - (d) Should archaeological material be found during the course of monitoring, the archaeologist may have work on the site stopped, pending as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Department of Culture, Heritage and

the Gaeltacht with regard to any necessary mitigation action (e.g. preservation in situ, or excavation) and should facilitate the archaeologist in recording any material found,

(e) The planning authority and the Department of Culture, Heritage and the Gaeltacht shall be furnished with a report describing the results of the monitoring.

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

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

14. Prior to the commencement of the development, a Stage 1/2 Road Safety Audit shall be carried out by a TII approved team and a Stage 3 Road safety Audit shall be carried out by a TII approved team on completion of the development and agreed in writing with the Planning Authority.

Reason: In the interest of road safety.

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

Reason: To ensure the satisfactory reinstatement of the site upon cessation of the project.

17. 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.

Patricia Calleary
Senior Planning Inspector

2nd October 2017