



An
Bord
Pleanála

Inspector's Report ABP-303576-19

Development	Proposed Solar Farm at Poulbautia, Cappoquin County Waterford
Location	Poulbautia, Cappoquin County Waterford
Planning Authority	Waterford City and County Council
Planning Authority Reg. Ref.	18598
Applicant(s)	Engie Development Ireland Limited
Type of Application	Permission
Planning Authority Decision	Grant permission.
Type of Appeal	First and Third Party
Appellant(s)	Engie Development Ireland Limited. Affane Concern Community Group
Observer(s)	None
Date of Site Inspection	1 st April, 2019
Inspector	Stephen Kay

1.0 Site Location and Description

- 1.1. The appeal site is located c.4km to the east of Cappoquin and c.12km to the north west of Dungarvan. The site is accessed via a local road to the north that provides road frontage to the site. The site is currently in agricultural use and comprises generally improved agricultural grasslands. The stated area of the site is c.27 hectares.
- 1.2. The lands adjoining the site to the east, west and south also comprise agricultural lands and there are a number of dwellings and agricultural buildings accessed off the local road that runs to the west of the site. This local road is narrow and connects with the N72 Dungarvan to Cappoquin road approximately 2km to the south of the appeal site. There are additional residential properties on the northern side of the local road that forms the northern site boundary and also on a local road that is located approximately 400 metres to the south of the site.
- 1.3. The Magaha River flows to the east of the site and is within c.250 metres of the site boundary at the closest point.
- 1.4. The general topography of the area is characterised by a fall from north to south across the site with the most significant change in level occurring in the southern section of the site. The change in ground level across the site is approximately 32 metres ranging from c.140 metres OD at the northern end to c. 108 metres OD at the southern end.

2.0 Proposed Development

- 2.1. The proposed development comprises the construction of a solar PV panel array. Panels are to be mounted metal supports which are to be fixed in position with a southerly aspect for the panels. The panels are proposed to be installed at an angle of c.20-25 degrees to the horizontal and to have a clearance to ground level of c.1.3 metres. The maximum overall height of the panel structures is stated to be c. 2.95 metres. The stated capacity of the development is up to 16MW.
- 2.2. The development provides for 1 no. sub station to be located close to the eastern end of the site close to the entrance (note that the written description states that this

element is along the eastern side of the site). A total of 8 no. inverter units are proposed to be sited within the development for the conversion of the DC power generated to AC prior to connection to the sub station. Cabling within the site is all proposed to be underground.

- 2.3. Access to the site is proposed to be from the existing access point off the local road that runs to the north of the site. An access track running approximately north south through the site is proposed and this would be c.900 metres in length.
- 2.4. Connection of the development to the grid has not been included as part of the current planning application. The application documentation (Planning and Environment Report) states that it is envisaged that the connection to the grid will be made via the Kilcloher 38kv sub station, however the ultimate location of the grid connection will be decided by the district network operator. Two possible connection options are presented with the application and indicated in Figure 2.7. The first of these comprises an underground route running from the site entrance at the northern end of the site and running to the west of the site along the local road and then along the N72 to the Kilcloher sub station. The second option comprises an overhead connection running to the east of the site and passing close to the permitted Clashnagoneen solar development to the south and onwards to connect into the Kilcloher sub station.
- 2.5. The site is proposed to be fenced with a deer proof fence that has clearance at the bottom to allow the passage of small mammals. The height of the fence is stated to be 2.4 metres. CCTV is also proposed to ensure the protection of the development from damage. The site of these camera are proposed to be at the site perimeter and the locations are designed to avoid the overlooking of any residential properties. The layout is indicated on Drg. No.2-6.
- 2.6. A temporary construction compound to accommodate materials is proposed and this is proposed to be c. 30 metres by 40 metres in size. The location is indicated on Drg. No. 1-3a and is immediately to the south west of the site access.

3.0 Planning Authority Decision

3.1. Request for Further Information

Prior to the issuing of a decision, the Planning Authority requested further information on the following issues:

- The submission of actual noise levels associated with the on site electrical equipment. Demonstrate that the 45 dBA night time noise limit can be achieved within the site.
- Consider the provision of mitigation measures for glint and glare in the form of boundary planting. Clarification regarding the lead in time / maturity of such planting.
- Submission of details showing the provision of adequate sight lines in both directions.
- Clarification regarding apparent discrepancies in the height / dimensions of the solar panel structures.

The most significant information / alterations to the proposed layout submitted in response to the further information request can be summarised as follows:

1. Noise assessment undertaken by Envest Environmental Limited indicates that the EPAs noise criteria for areas of low background noise will not be exceeded at the nearest residential properties during daytime and evening time with a slight and imperceptible exceedance of the 35 dBA limit during the night time.
2. Submission of a supplementary glint and glare assessment that uses a more detailed high resolution dataset that includes for other screening such as vegetation and buildings. This supplementary assessment supports the original findings that there are no significant glint and glare issues likely to arise on the 27 no. dwellings / receptors in the vicinity of the site.
3. Revised drawings showing the achievement of the required sight lines at the site entrance have been submitted.

4. Clarified that the reference to a maximum height of 2.95 metres for the panels is an error and that the actual maximum is 2.2 metres.

3.2. Decision

The Planning Authority issued a Notification of Decision to Grant Permission subject to 17 no. conditions, the most notable of which are considered to be as follows:

Condition No.2 states that permission is for a period of 25 years from commissioning and requires the submission of a decommissioning plan.

Condition No.3 states that the permission shall not be construed as any form of consent or agreement to a connection to the national grid or the routing or nature of any such connection.

Condition No. 4 requires the submission of a SUDS drainage plan.

Condition No. 5 requires the implementation of a construction management plan (CMP) which shall incorporate a traffic management plan (TMP).

Condition No.8 states that in the event of noise complaints the planning authority may require the developer to undertake a noise survey.

Condition No.9 requires that existing tree boundaries be retained and supplemented with native species.

Condition No.10 requires pre development archaeological testing.

Condition No.16 requires the submission of a bond.

Condition No.17 requires the payment of a financial contribution in accordance with s.48 of the Act.

3.3. Planning Authority Reports

3.3.1. Planning Reports

The initial report of the Planning Officer notes the significant planning history in the vicinity of the site, internal and external reports and development plan and other relevant policy. A number of issues relating to cumulative visual impacts with existing solar farm proposals to the south, that the environmental report submitted should include assessment under all EIA headings, noise levels associated with on site electrical plant, consideration of supplementary planting to boundaries to mitigate glint and glare, further details regarding the site entrance and sightlines and clarification regarding discrepancies in the dimensions of the panel support structures were raised as requiring further information. It is noted that the information relating to cumulative visual impact and EIA / additional information in the environmental report were not included in the further information request issued.

A second planning officer report subsequent to the submission of further information notes the information submitted and recommends that permission be granted.

3.3.2. Other Technical Reports

Area Engineer – notes that entrance sightlines not indicated on plans. Storm drainage details required. Haul route to be identified and assessment of construction impact on local roads.

Heritage Officer – Report states that the finding of no significant affects as per the submitted screening assessment is agreed with. Stated that the site is of overall low ecological value agricultural grassland.

3.4. Prescribed Bodies

Department of Culture, Heritage and the Gaeltacht – Recommended that in the event of a grant of permission that archaeological conditions would be attached.

3.5. Third Party Observations

A submission from the residents of the Poulbautia / Moneygorm area was submitted following the submission of further information. The following is a summary of the main issues raised in this submission:

- Excessive scale of development in rural area particularly when taken in combination with existing proposals.
- The danger to health from the proposed on site inverter units. Radio frequency radiation.
- Flooding and the frequency of flooding in the area.
- That the submitted maps are unclear and the number of residential properties underestimated (particularly at the north west corner / area of the site).
- Traffic impacts of the project and that no account is taken of existing traffic flows and large commercial / agricultural operations in the vicinity.
- Negative impact on tourism.
- Lack of national policy and conflict with one off housing in the vicinity.
- Impact on land values.
- Uncertainty regarding overall / whole of life impact of solar farms.

4.0 Planning History

There is no planning history on the appeal site. There have, however, been a number of applications for solar energy developments in the general vicinity of the appeal site and these are summarised as follows:

Waterford County Council Ref. 17/564; ABP Ref. 300004-17; Permission refused by the Planning Authority (for reasons relating to visual impact, glint and glare and flood risk), but granted on appeal for the construction of a solar PV development on a site of 62.8 ha. at Ballyyard, Ballyhane and Clashnagoneen which is a short distance to the south of the current appeal site and to the north of the N72 national road.

Waterford County Council Ref. 16/126; ABP Ref. 246902 – Permission granted by the Planning Authority and decision upheld on appeal for the construction of a solar PV development on a site of 28.2 ha. located to the south of the appeal site and to the south of the N72 at Drumroe.

Waterford County Council Ref. 16/371; ABP Ref. 247677 – Permission refused by the planning authority and decision upheld by the Board for the construction of a solar PV development on a site of c.12.6 ha. at Ballymoodronagh, Lismore approximately 9km to the west of the current appeal site. Permission was refused on the basis that the development was proposed to be located on lands that are on the alignment of the Cappoquin to Lismore N72 by pass.

5.0 Policy and Context

5.1. European Policy Context

- 5.1.1. The EU has through a series of policy framework and directives outlined an approach to reduce greenhouse gas emissions, the Europe 2020 Climate and Energy Framework and Europe 2030 Climate and Energy Framework to reduce greenhouse gas emissions by 40% from 1990 levels with increasingly the use of renewable energy as a source of energy and also for greater efficiency in the production of energy.
- 5.1.2. In addition, Directive 2009/28/EU the Renewable Energy Directive promoted the increased use of renewable energy and increased targets for the overall level of energy produced and consumed by member states from renewable energy sources; the adoption of greater efficiency in energy production; the preparation of national plans and for the use of energy storage systems for integrated intermittent production of energy from renewable sources.
- 5.1.3. The Energy Roadmap 2050 published in 2011 continues the overall policy direction of previous policy frameworks and guidance on how to attain targets and objectives up to 2050 with continued adherence to energy efficiency; the use of renewable energy and advancing technologies and capacity.

5.2. National Policy

- 5.2.1. In relation to energy arising from the EU Directive national policy has focussed measures to achieve the targets set out in the European policy framework.
- 5.2.2. The **National Renewable Energy Plan** published in 2010 is an action plan indicating how the targets would be achieved. Ongoing progress plans have been produced in 2012, 2014 and 2016 on progress in meeting targets in relation to renewable energy and efficiencies in energy.
- 5.2.3. The **Strategy for Renewable Energy 2012** published by Department of Communications, Climate Action and Environment outlines a policies and strategies for the developing of increased renewable energy production to meet targets in relation to renewable energy including the development of cost efficient systems of energy production and the development of commercial large-scale electricity storage which arises from the need to store renewable energy which may generate energy at periods when there are not peak demands for energy.
- 5.2.4. **Ireland's Transition to a Low Carbon Energy Future 2015-2030** is a White Paper published by the Department of Communications, Climate Action and Environment in December 2015 as a framework to guide policy and the actions that the Irish Government intends to take in the energy sector from now up to 2030 and takes into account European and International climate change objectives and agreements, as well as Irish social, economic and employment priorities as part of a progression towards a low carbon energy system.
- 5.2.5. The White Paper considers the increasing transition from fossil based fuels to greater use of Renewable Electricity (RES-E) and the need to develop back up technologies in order to ensure that stability of supply is maintained.
- 5.2.6. Paragraph 130 of the White Paper 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 in the future.

5.3. Development Plan

The appeal site is located within an area covered by the **Waterford County Development Plan, 2011-2017**, the life of which has been extended under the provisions of s.11A of the Planning and Development Act 2000 (as amended) until such time as a new Regional Spatial and Economic Strategy is made by the Southern Regional Assembly.

The site is located on lands that are zoned agricultural under the provisions of the development plan. The stated objective is '*to protect and provide for the development of agriculture and to protect and improve rural amenity*'.

The following policies are of relevance:

Policy ECD 15 states that it is policy 'to facilitate appropriate renewable energy infrastructure and promote the use of renewable energy among businesses and households throughout Waterford County'.

Policy ENV10 states it is policy '*to facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.*'

A renewable energy strategy for *Waterford City and County, 2016-2030* makes reference at section 5.2 to solar energy and solar PV developments. It is recognised that Waterford is in the top 15% in terms of solar resource in Ireland and that therefore, subject to rigorous planning assessment, solar energy has good potential in the county.

Policy INF26(3) states: 'To facilitate, where appropriate, future alternative renewable energy developments throughout the County that are located in close proximity to the National Grid Strategy improvements so as to minimise the length and visual impact of grid connections'.

Chapter 8 refers to Environment and Heritage and section 8.1 to **landscape**. Reference is made to Appendix A9 of the plan Scenic Landscape Evaluation and to various classifications of landscape. The site is not within any designated landscape in relation to visual sensitivity or amenity designation by reference to the Scenic Landscape Evaluation of the plan or impacting scenic routes as indicated in section 6.6 (b) Scenic Routes of the Scenic Landscape Evaluation.

5.4. Natural Heritage Designations

The site is located such that it is c.2km east of the Blackwater River SAC.

There are a number of other European sites at further remove from the appeal site, these being

- Blackwater Callows SPA c.10 km to the west.
- Comeragh Mountains SAC c.11km to the north east
- Glendine Wood SAC c.13 km to the south east.
- Lower River Suir SAC c.14km to the north east.
- Dungarvan Harbour SPA c.13km to the south east.

5.5. EIA Screening

- 5.5.1. The proposed development (solar PV development) does not comprise a class of development for the purposes of EIA as set out in Parts 1 and 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended).
- 5.5.2. The application provides for the on site development of a sub station. This sub station would serve only the subject development and is proposed to connect to the existing grid via what is stated to be a 38kv sub station at Kilcloher. The capacity of the on site sub station is not therefore such that it would comprise part of the electricity transmission system such that the development could be considered to constitute Strategic Infrastructure Development.
- 5.5.3. In view of the above, the submission of an EIAR or undertaking of screening for EIA is not therefore required. It is noted that the application is accompanied by a Planning and Environmental Report and technical appendices contained in a separate volume.

6.0 The Appeal

6.1. Grounds of Appeal

The following is a summary of the main issues raised in the third party grounds of appeal:

- That the proposed connection to the Kilcloher 38kv substation. It would appear that this sub station is only 10kv and therefore does not have capacity.
- That under the Aarhus Convention, there is an obligation to provide information and an opportunity to comment on the project. The lack of alternative routes for the connection to the grid means that this has not been complied with.
- That project splitting would occur contrary to the O’Grianna judgement.
- That condition No.3 attached by Waterford County and city council states that the permission does not infer any consent regarding the grid connection and reinforces the concerns regarding project splitting.
- That other solar farms have been refused by the council on the basis of glint and glare impacts on the N72.
- That there are a number of haulage and agricultural contractors in the general vicinity of the site and traffic safety will be an issue.
- That flooding will be an issue in this development.
- The potential impact of bad weather (such as high winds) on the development.
- The need to secure a bond to cover the potential for pollution of surface waters.
- Impact of fire at a solar farm.

The following is a summary of the main issues raised in the first party appeal against Condition No.17 (development contribution).

- That the form of development is a renewable energy installation (other than wind or hydro) as per section 6 of the adopted Waterford County Council Development Contribution Scheme 2015-2021.
- As the proposed development is within the 10-20MW power generation range, the relevant rate applicable is 85% of the standard renewable energy rate.
- The correct contribution should therefore be €136,000 rather than €160,000.

6.2. Applicant Response

The following is a summary of the main issues raised in the first party response to the third party grounds of appeal:

- That extensive information has been submitted with the application which sets out the need for the development in the context of the requirements for Ireland to meet renewable energy targets.
- That the O’Grianna judgement clearly related to a case where there was a development that required EIA (a windfarm) and a separate connection to the grid. The decision of the court was that permission should not be granted for any project which is subject to EIA and which requires a connection to the national grid unless details of the grid connection process are provided and included in the EIA process. In the current case, the proposed development is not a project that requires EIA and therefore the principles established in the O’Grianna judgement are not applicable.
- That a comprehensive glint and glare assessment was undertaken by the applicant and submitted with the application.

6.3. Planning Authority Response

- That the planning authority confirm that all information submitted with the application as amended by the FI response was examined and considered in the assessment.
- That the decision to grant permission is in accordance with the provisions of the development plan.
- That the issues raised in the third party appeal have been considered and it is not considered that they are such as to alter the decision of the Planning Authority.

6.4. Further Responses

6.4.1. Planning Authority Response to First Party Appeal

The Planning Authority responded to set out a calculation of the financial contribution under s.48 of the adopted scheme. This is based on a full assessment of the development on the basis of 16MW output and €1,000 per 0.1 MW of output.

6.4.2. Third Party Observations on First Party Response

The third party appellants responded to the first party response to the grounds of appeal stating that it is considered that the response is null and void as it refers to case studies and precedents from another planning jurisdiction (UK). Requested that the application be assessed on the basis of current Irish planning legislation only. Also requested that consideration be given to the existing industrialised nature of the area and to the fact that a grant of permission would divide the local community.

7.0 Assessment

7.1. The following are considered to be the main issue relevant to the determination of this appeal:

- Principle of development and legal issues
- Visual impact
- Impact on Residential Amenity.
- Traffic and Site Access
- First Party Appeal and Other Issues
- Appropriate Assessment

7.2. Principle of Development and Legal Issues

Principle of Development

- 7.2.1. The appeal site is located on lands that are zoned for agricultural use under the provisions of the *Waterford County Development Plan, 2011-2017*. This plan has been extended on foot of the amalgamation of Waterford City and County Councils. The land use zoning matrix contained at Table 10.1 of the development plan does not make any specific reference to solar energy developments or to any form of renewable energy. Note 4 attached to the matrix states that uses not covered in the Land Use Matrix above may be allowed in accordance with the written provisions of the County Development Plan. In this regard, I note that there are a number of policies in the plan which are supportive of the principle of renewable energy developments, notably Policy ECD 15 which states that it is policy '*to facilitate appropriate renewable energy infrastructurethroughout Waterford County*', and Policy ENV10 which states that it is policy '*to facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.*'
- 7.2.2. In section 5 of this report I have outlined EU and national level policy in relation to energy and the transition from fossil fuels to renewable energy sources and the proposed development is, in my opinion consistent with the general aims of these

policies. It is therefore my opinion that the proposed development is acceptable in principle subject to compliance with other relevant standards and consistency with the land use zoning objective for the site which states that it is an objective '*to protect and provide for the development of agriculture and to protect and improve rural amenity*'.

Legal Issues

- 7.2.3. As set out at section 5.5 of this report above, the nature of the proposed development is such that it does not comprise a class of development for the purposes of EIA as set out in Parts 1 and 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended). The submission of an EIAR or undertaking of screening for EIA is not therefore required. I note that the third party appellants make reference to the fact that under the Aarhus Convention, there is an obligation to provide information and an opportunity to comment on the project. It is contended that the lack of information relating to alternative routes for the connection to the grid means that the requirements of the Aarhus Convention has not been complied with and that project splitting would occur contrary to the O'Granna judgement. The third party also note that condition No.3 attached by Waterford County and city council states that the permission does not infer any consent regarding the grid connection and reinforces the concerns regarding project splitting.
- 7.2.4. The reference by the third party to the Aarhus Convention is noted, and in this case the proposed development is clearly not of a class of development that requires EIA. I note however that a Planning and Environmental Report, which contains significant details relating to the impact of the proposed development on the environment, has been submitted with the application. An opportunity to comment on the environmental implications of the proposed development has also been afforded by way of submissions to the Planning Authority and the option of appeal of the decision to the Board. I do not therefore agree with the submission made by the third party that the proposed development is contrary to the provisions of the Aarhus Convention.
- 7.2.5. Similarly, with regard to the contention that project splitting has occurred, this is only the case where elements of an overall project are being separated in an attempt to avoid undertaking EIA. As the proposed development is not of a class such as to

require EIA project splitting is not an issue which arises in the current case. It is possible that the grid connection may require EIA in which case any EIAR submitted and EIA undertaken would be required to consider the cumulative impacts between the grid connection and the solar farm. In the current case, the proposed development is not a project that requires EIA and therefore the principles established in the O'Granna judgement are not in my opinion applicable to the circumstances of this appeal.

7.3. Visual Impact

- 7.3.1. The third party appellants contend that the proposed scale of development is inconsistent with a residential area and would be excessive when taken in conjunction with the existing permitted solar developments in the vicinity. In this regard, I note that as part of the assessment of the application, the Planning Authority requested a revised glint and glare assessment that took account of existing and potential additional boundary planting and landscaping. It is also noted that one of the items recommended to be requested by way of further information related to the submission of an updated visual impact assessment which took account of the potential cumulative visual impacts arising from the granting of permission for the solar farm development on adjacent lands to the south of the current appeal site, (Ref. 17/564; ABP Ref. 300004-17) at Ballyyard, Ballyhane and Clashnagoneen.
- 7.3.2. The application is accompanied by a landscape and visual impact assessment which is included as Appendix 6 to the Planning and Environmental Report. There are no landscape designations that apply to the site and the area is characterised by modified agricultural grassland with mature hedgerow boundaries. Policy ENV4 of the Plan states that the Council will assess all proposals for development in terms of the scenic evaluations map. This map is contained at Appendix A9 of the development plan and assesses the capacity of the landscape to absorb new development, and the area of the appeal site is classified as 'Normal'. The development plan also identifies scenic routes, and the closest such route is located c.1.6km to the west of the appeal site.

- 7.3.3. The contours of the site are such that there is a fall of c. 33 metres from north to south across the site with the majority of this change in levels occurring in the southern part of the site. There are a significant number of visual receptors located in the vicinity of the site with dwellings located to the north, west and south of the site. The location of these visual receptors is, however such that there are generally separated from direct views into the site by existing field boundaries.
- 7.3.4. Section 1.6 of the landscape assessment sets out how the susceptibility of the landscape to change is low to medium and the landscape value is low. Given the modified agricultural grassland use of the site, the lack of specific landscape designations and the fact that the landscape is not unique, these categorisations are considered appropriate.
- 7.3.5. Section 1.7 of the landscape and visual assessment sets out a number of viewpoints of the site. The location of these viewpoints is set out in Table 6.6. The location of these viewpoints is in my opinion acceptable and representative of the most significant viewpoints from publically accessible locations. The assessment of visual impacts as summarised at Table 6.7 states that the magnitude of change is generally low with some medium impacts and that the overall visual effects are also generally low with a number of views having a low - medium overall effect (Views 5 and 6). In general, I would be in agreement with the submitted assessment with regard to these views and consider that the scale of development, land contours and presence of vegetation is such that impacts on views are minimised. The most vulnerable locations are View Points 5 and 6 to the south of the site where the site contours are such that there are clear views north across the site. It should also be noted that in the case of view 6, the indicated view from the N72 does not take account of the permitted solar farm development located in the townlands of Ballyhane, Ballyyard and Clashnagoneen between View point 6 and the appeal site. The site boundary of the permitted Clashnagoneen, Ballyyard, Ballyhane solar development is illustrated on Figure 6.4. With this permitted development completed, it is my opinion that the magnitude of change would be increased and that the overall visual impact would be moderate negative. Additional glimpsed views of the proposed development (additional to View 6) would be available from other locations along the N72, however the separation distances at 2km or greater and the degree of existing screening along both the N72 and the field boundaries surrounding the site mean

that the proposed development would not have a significant negative visual impact from the N72.

- 7.3.6. The Figure 6.1 of the submitted Environmental Report identifies landscape designations in the vicinity of the site including scenic routes. The closest scenic route is that which runs north south approximately 2km to the west of the site at the closest point. No photomontage viewpoints have been prepared relating to positions on this route however, as stated in 1.7.3 of the submitted Landscape and Visual Impact Assessment, there are no clear views of the site from the scenic routes to the west. From an inspection of these routes I would agree with this assessment, as the degree of screening afforded by topography, distance and vegetation means that no clear views of the site would be available. In any event, the focus of the identified scenic views is primarily west away from the appeal site and in the direction of the Glenshelane River.
- 7.3.7. The other main potential visual impacts would be on individual residential properties that are located in the vicinity of the site. No specific viewpoints relating to these residential properties are included in the landscape and visual impact assessment, however Viewpoint 2 does show the view from the north west corner of the site in the vicinity of dwellings located around the junction of the local roads in this location. The screening afforded by existing roadside hedgerow boundaries and field boundaries within the development mean that there will not be any likely clear views of the proposed development from within residential properties. I note that there is a recently constructed residential property located at the south west corner of the crossroads to the north west of the site however the screening afforded by site boundary planting should ensure that the visual impacts on this property are not significantly adverse. Some views will however likely be available from within the curtilage of agricultural properties which bound the site to the west. Other residential properties accessed from the local road to the west and north of the site would be screened from views by the existing boundary planting.
- 7.3.8. No reinstatement plan has been submitted with the application and in the event of a grant of permission it is recommended that a condition relating to reinstatement including a requirement for a plan, timescales for its implementation and the submission of a bond to cover reinstatement costs would be attached.

7.3.9. Overall, having regard to the scale of the proposed development including its physical extent and height, the screening afforded by the existing mature roadside boundaries and field boundaries within and bounding the site and the separation to scenic routes and residential properties it is not considered that the proposed development alone or in combination with other permitted developments in the vicinity would have a significant negative impact on the landscape character or visual amenities of the area.

7.4. **Impact on Residential Amenity.**

7.4.1. In addition to the potential impact on visual amenity which is addressed in the section above, the proposed development would have potential impacts on residential amenity arising from glint and glare and noise. The third party appeal also raises concerns with regard to the impact of the proposed development on safety due to extreme weather events and fire risk as well as potential health risks.

7.4.2. With regard to **glint and glare** impacts, the application was accompanied by a glint and glare assessment (Appendix 10 of the Planning and Environmental Report) which sets out how the level of reflectance from solar PV panels is low and similar to other elements in the rural landscape such as wet road surface or poly tunnels. The assessment uses a model to predict the potential glint and glare impacts occurring within a c.1 km radius of the site and the impact on sensitive receptors in the form of roads and dwellings along the route. The assessment identifies 27 no residential properties located within the zone of potential influence and of these a total of 14 are identified as having any potential to be impacted. The other 13 no. receptors are discounted on the basis of their orientation relative to the solar development or the screening afforded by existing vegetation. Road receptor points examined are presented in Figure 10.10 and a total of 80 road receptor locations were examined.

7.4.3. I note the fact that the third party appeal states that other solar farms have been refused by the council on the basis of glint and glare impacts on the N72. This was one of the reasons for refusal included in the Notification of Decision to Refuse Permission issued by the Planning Authority for the construction of a solar PV development on a site of 62.8 ha. at Ballyyard, Ballyhane and Clashnagoneen a short distance to the south of the current appeal site and to the north of the N72

national road, (Waterford County Council Ref. 17/564; ABP Ref. 300004-17). It should however be noted that this development was granted permission by the Board notwithstanding its scale and proximity to the N72 national road.

- 7.4.4. The results of the glint and glare assessment are presented at Appendix A (dwellings) and Appendix B (roads). The impact on dwellings is concluded to be none, very low or low. The further information request issued by the Planning Authority requested that consideration be given to additional screen planting and the potential impact that such planting would have in relation to glint and glare impacts. The response presented by the first party comprises a more detailed modelling exercise of the potential glint and glare impacts within the 1km zone of impact identified. While the original model is stated to be undertaken using a digital terrain model (DTM), the revised assessment submitted as part of the further information response used a revised model that accounts for non terrain features such as vegetation or buildings that may provide additional natural screening and reduce the potential glint and glare impact. This dataset which provides the basis for the revised model is stated to be provided by Opensky and the modelling undertaken is described as a digital surface model (DSM). Using this revised more representative model, the number of dwellings potentially impacted is reduced from 14 to 5 and of these five only three are deemed by the assessment to be impacted. These impacts are however very minor at between 2 and 22 minutes per year per dwelling.
- 7.4.5. On the basis of the information presented with the application augmented by the additional analysis submitted as part of the further information response I am satisfied that the potential for negative impacts on residential amenity as a result of glint and glare is very limited and not such that it is the basis for refusal of permission or a requirement for amendment to the layout.
- 7.4.6. With regard to **noise**, the design of the proposed development comprises fixed solar panels and there would not therefore be any mechanical movement that would potentially generate noise. The initial assessment contained in the Planning and Environmental report does not comprise a specific noise assessment, however a noise assessment was submitted as part of the response to further information.

- 7.4.7. Notwithstanding the proposed use of fixed panels, the potential sources of operational phase noise from the proposed development comprise the on site sub station and particularly the inverter units which are located throughout the site. The wording of the request for further information requires the assessment of actual noise levels associated with on site electrical equipment and the preparation of a noise contour map that illustrates the extent of any third party lands that may be impacted by the 45dbA contour. Any revisions to the layout that may be required to avoid impacts on third party lands were requested to be submitted.
- 7.4.8. The nature of the vicinity of the appeal site is such that it is classified as an area of low background noise for the purposes of noise assessment and this is recognised in section 2 of the submitted noise assessment. On this basis, the relevant day, evening, night noise criterion are identified as being 45, 40 and 35db. Section 5 of the submitted noise assessment provides sound power levels for the proposed inverter units and details of octave sound power levels for the proposed equipment is also provided. Sound power levels for the inverter units range between 89 and 96 dB and are above the 70dB for the sub station. The modelling exercise is undertaken to predict the worst case noise levels from the inverter units at 6 no. identified sensitive receptors which are identified on Figure 2 of the assessment. These NSRs are in my opinion representative of the closest residential properties to the appeal site.
- 7.4.9. The results of the assessment demonstrate that the predicted sound levels at all NSRs are within the DEN noise limits for a low background noise area with the exception of R4 and R5 where there is a slight exceedance predicted above the 35dB night time level. The degree of exceedance is a maximum of 2dB in the case of R5 and is not such as to significantly impact on residential amenity. A 45dB noise contour as requested by the Planning Authority is presented in Appendix A of the assessment and indicates that intrusion of the 45dB noise contour into third party lands is limited to the far north and far south west corners of the site. The extent of these areas is limited and not in my opinion such that it would impact significantly on residential amenity.

7.4.10. With regard to **health effects** and potential exposure to electromagnetic fields arising from the proposed development, the issue is addressed at section 11 of the submitted Planning and Environmental Report. The evidence presented indicates that the level of electromagnetic fields generated is very low and where it occurs is generated by the inverter units. The available evidence suggests that EMFs generated are no more significant than what is already present in most domestic dwellings and the separation distance of existing residential properties from the proposed locations of the inverter units is significant with a separation of at least 50 metres between the closest units and the site boundary and approximately 180 metres to the closest residential property. In view of the available evidence relating to health effects and the proposed separation distances it is not envisaged that any adverse health effects would arise.

7.5. Traffic and Site Access

7.5.1. The access to the appeal site for both construction and operational traffic is proposed to be located at the northern end of the site where there is frontage onto the local road network. Construction traffic is proposed to access the site via the L-5053 which runs to the west of the site and connects with the N72 national road network to the south. The route of the proposed construction traffic route is indicated on Figure 2 of the Traffic and Transport Assessment submitted as Appendix 13 to the Planning and Environment Report. The construction period is stated to last approximately 6 months and the capacity of the haul route from the N72 to accommodate the largest predicted vehicles is included in the traffic and transportation assessment submitted. This information includes autotrack assessment of the junctions along the route and the S bend that is approximately midway along the L-5053 which demonstrate that satisfactory access is available. The local road network between the site and the N72 is narrow, however on the basis of the information presented in the traffic assessment and having regard to the nature of the development and the material to be transported to the site, I am satisfied that construction traffic can be accommodated on the local road network.

7.5.2. **Construction traffic volumes** are estimated at an average of 8 no. HGVs and 59 cars / LGVs per day and Section 3 of the submitted traffic assessment includes an analysis of the impact of this traffic on the L-5053 and the N72. The impact of average construction traffic on the N72 is negligible at c.1.3 percent PCUs, however the increase in traffic on the L-5053 would equate to c. 136 percent PCUs. The additional traffic on the L-5053 would therefore have potential to result in some construction phase congestion however it should be noted that the increased traffic on the L-5053 is from an existing very low base of an average of 3 HGVs and 51 cars / LCVs per day. A construction Traffic Management Plan has been submitted with the application and is included as Appendix D of the Traffic and Transportation Assessment. These measures include for repairs to the local road network to be agreed with the local authority, provision of temporary passing lands along the L-5053 and preparation of a detailed schedule for deliveries. Subject to these measures being agreed with the council and implemented, I do not consider that the construction phase of the proposed development would have excessively negative impacts on third party access, traffic safety or road condition.

7.5.3. **Operational phase** traffic is predicted to average c.2 cars / LGVs per day and is not considered to be material in terms of the potential impact on the local or national road network.

7.5.4. **Sightlines** at the entrance to the site was one of the issues raised in the request for further information issued by the Planning Authority. In response, the first party has submitted drawings demonstrating how adequate sight lines are available at the proposed access point when measured from a position 4.5 metres back from the road edge. This information is considered to be acceptable and it is my opinion that adequate sight lines can be provided at the proposed vehicular entrance to the site.

7.6. **First Party Appeal / Other Issues**

7.6.1. The **first party appeal** submitted contends that the adopted development contribution scheme has been incorrectly interpreted by the Planning Authority. Specifically, it is contended that the form of development is a renewable energy installation (other than wind or hydro) as per section 6 of the adopted Waterford County Council Development Contribution Scheme 2015-2021 and that, as the

proposed development is within the 10-20MW power generation range, the relevant rate applicable is 85% of the standard renewable energy rate. It is therefore submitted that the correct contribution should be €136,000 (85 percent of the maximum) rather than €160,000.

- 7.6.2. The issues raised in the first party appeal have been responded to the Planning Authority in that it sets out a calculation based on a rate of €1,000 per 0.1MW of output with no reduction applied.
- 7.6.3. Section 6 of the adopted development contribution scheme sets out the development contribution charges for Residential and Non Residential developments. Under the non residential heading, section B, there are two categories relating to renewable energy. The first is '*Renewable Energy Developments (i.e. wind and hydro)*' which has a charge of €1000 per 0.1MW plus 0.50 cent per metre of grid connection. The second category of development identified is '*Renewable Energy Installations (i.e. other than wind and hydro)*'. Other than the examples given in the brackets, it is not clear what the distinction between a renewable energy development and renewable energy installation is. Given the specific reference to projects other than wind and hydro under the heading of Renewable Energy Installations, I consider that this is the appropriate category of development for the purposes of calculating the rate of contribution.
- 7.6.4. The applicable rate is stated to be the standard non residential rate which I consider to be the €1000 per 0.1MW of energy generated and subject to a reduction which increases with the power output. In the case of the proposed development, the stated maximum anticipated power output is 16MW which would fall within the 10-20MW range identified in section 6 of the development contribution scheme as being charged at 85% of the relevant rate. In my opinion, the appropriate contribution is therefore 85% of €10,000/MW by 16MW maximum output. This equals 85% of €160,000 or €136,000. In the event of a grant of permission, it is therefore recommended that the wording of the financial contribution condition be amended to provide for a contribution of €136,000.

- 7.6.5. Under the heading of **archaeology**, the Planning and Environmental Report submitted includes (Appendix 12) an Archaeological Impact Assessment Report which was prepared by Tobar Archaeological Services. The site does not contain any national or recorded monuments and a walkover survey of the site undertaken in 2018 did not reveal any likely archaeological features of merit. There are a number of sites (8 no.) that are on the Record of Monuments and Places that are located within c.2km of the site. None of these are located in very close proximity to the site boundary and the majority of these sites are ringforts and enclosures. Archaeological monitoring of earthworks and testing is recommended as mitigation in the event of a grant of permission.
- 7.6.6. I note that details of the application were referred by the Council to the Development Applications Unit of the department and that there were no objections to the proposed development subject to archaeological monitoring and testing. On the basis of the information presented with regard to the location of recorded sites and subject to the requirement for archaeological monitoring, I do not consider that the proposed development would have likely significant impact on archaeology.
- 7.6.7. With regard to **drainage and surface water impacts**, the third party appeal raises concerns with regard to the implications of the development for flooding and highlights what are stated to be historical flooding issues on the site. The nature of the proposed development is such that the panel structures range in height from 0.85 metres to 2.2 metres and that there is therefore significant clearance to the ground level. In addition, the separation between the rows of solar arrays is proposed to be between 7.6 and 9 metres. The result of this layout is that the installation of the solar panels would not have any material impact on site drainage.
- 7.6.8. The watercourses in the vicinity of the site comprise a small drain that flows along the side of the local road approximately 250 metres to the west of the western site boundary and the River Magaha which runs to the east of the site and within c.200 metres of the north east site boundary at the closest point.
- 7.6.9. The appeal site is not located such that it would be impacted by any areas identified in the OPW Preliminary Flood Risk Assessment Mapping and there are no flood risk events recorded on floodmaps.ie. There is no reference on historical mapping to flood risk or springs on the appeal site. A Flood Risk Assessment has been

submitted with the application (Appendix 8 of the Planning and Environmental Report) and identifies the site as being within Flood Zone C as per the Planning System and Flood Risk Management Guidelines. On the basis of the information available, I do not consider that there is basis to conclude that the designation as Flood Zone C is not appropriate and the form of development proposed is consistent with the designation of the site as flood zone C.

- 7.6.10. Overall, on the basis of the information available, there is no evidence that the appeal site is prone to flooding or at a high flood risk. There are no watercourses or historical indications of flooding on the site and the nature of the proposed development is such that it would not result in a material alteration to the existing natural surface water drainage of the site. The form of development proposed is consistent with the flood risk of the site and the proposal is therefore considered to be consistent with the provisions of the Flood Risk Assessment Guidelines. For these reasons it is considered that the proposed development would not have negative impacts due to flooding or increased risk of flooding.
- 7.6.11. The management of surface water during the construction phase is set out in the submitted **Construction and Environmental Management Plan (CEMP)** contained at Appendix 6 of the Planning and Environmental Report. This sets out the proposed mitigation measures for the control of surface water and details how a mixture of the minimisation of natural ground disturbance and use of on site attenuation will be utilised. The basic approach and methodologies for surface water management set out in the CEMP are considered to be acceptable and in the event of a grant of permission it is recommended that all mitigation measures set out in the CEMP would be implemented.
- 7.6.12. With regard to **general ecology**, the appeal site is not located in or close to any European Site and an assessment of the potential impact of the proposed development on European sites is given in section 7.7 of this report below.
- 7.6.13. The appeal site comprises modified agricultural grasslands with existing mature hedgerows. The proposed development will involve limited disturbance to the existing ground and the existing hedgerows within and bounding the site will be retained. An assessment of the ecological impact of the proposed development is provided at Appendix 7.7 of the Planning and Environmental Report submitted with

the application. The site was the subject of a habitat survey, albeit that this was conducted in February and outside of the optimal May to September period. Bird, bat and invasive species records were consulted. The results of the desk and walkover studies indicate that the main habitats are improved agricultural grasslands and hedgerows. A large number of bird species were observed on the site, however none are included on the red list and rather are common species. As will be discussed under the heading of appropriate assessment, none of the species observed on the site are species of interest for the SPA sites located in the general vicinity of the site

7.6.14. There are a number of features including ruined structures and mature tree and hedge lines identified both within and adjacent to the site, however these do not clearly exhibit potential to be used as bat roosting sites. In any event, the nature of the proposed development is such that these potential habitats will not be directly impacted by the proposed development. Significant negative impacts on bat species are not therefore envisaged. Evidence of badger presence in the form of potential setts was observed close to the north west corner of the site and this is considered to be an outlier setts. Section 5.2.2.1 of the submitted Ecological Impact Assessment states that the layout has been designed to avoid this area and that, given the recorded presence of badger, detailed pre construction surveys will be undertaken. Given the detailed survey already undertaken, it is considered that subject to pre construction surveys being undertaken significant impacts on badger populations are not likely to arise.

7.6.15. Overall, on the basis of the information presented with the application, it is not considered that the proposed development would result in significant adverse impacts on flora or fauna during either the construction or operational phases of the development.

7.7. Appropriate Assessment

7.7.1. The nature of the proposed development comprises the installation of relatively low level (0.85 – 2.2 metre high) solar PV panels in arrays across the site and the installation of associated electrical equipment in the form of underground cabling, inverter units and a sub station. Emissions from the site during the operational

phase are not envisaged as there will be no emissions to the air or to ground or surface waters. The existing water regime will remain substantially unaltered. The main feature of the proposed development that has the potential to impact on European sites relates to the construction phase and the potential for the release of sediment and other contaminants from the construction activities. The construction and installation of the arrays will require the installation of supports c.1.6 metres into the ground and excavation will also be required for the construction of the inverters and the sub station. On site underground cabling is proposed to be installed at a shallow depth. There is therefore the potential for the pollution of surface and ground waters arising from construction activity.

- 7.7.2. The application documentation sets out how, for the purposes of environmental assessment, the first party has considered the solar farm and the associated grid connection options to be part of an overall development. For the purposes of appropriate assessment, there is no clear definition in the legislation of what constitutes a project and, on the basis of the precautionary principle, and having regard to the definition of a project for the purposes of EIA, it is in my opinion necessary that consideration of the potential impact of the solar farm project and associated grid connection options on European sites would be considered under the screening for appropriate assessment.
- 7.7.3. The application is accompanied by a screening assessment which identifies that there is a potential impact on the River Blackwater SAC site arising from the proximity of one of the grid connection options to a stream that discharges into this SAC. Following further consideration, the screening assessment concludes that the proposed development would not be likely to have significant effects on this European site. Likely significant effects on the River Blackwater SAC are therefore screened out and no Stage 2 Appropriate Assessment is submitted.
- 7.7.4. The appeal site is located such that there are no watercourses on the site. The closest watercourse adjoins the local road approximately 200 metres to the west of the site at the closest point and the information submitted with the application indicates that this small stream is fed by springs located off site. This stream connects with the Magaha River to the south east of the site. To the east, the site is located within c.220 metres of the Magaha River at the closest point. This connects

with the Finisk River c.3.5km to the south of the appeal site and then to the River Blackwater at a point approximately 4km to the south west of the appeal site.

7.8. The following European sites are located in the vicinity of the appeal site:

- Blackwater River SAC c.2km to the west of the site.
- Blackwater Callows SPA c.10 km to the west.
- Comeragh Mountains SAC c.11km to the north east
- Glendine Wood SAC c.13 km to the south east.
- Lower River Suir SAC c.14km to the north east.
- Dungarvan Harbour SPA located c.13km to the south east.

SPA Sites

7.9. The species of interest for the Dungarvan Harbour SPA site identified in the conservation objectives for the site are as follows:

- Great Crested Grebe (*Podiceps cristatus*)
- Light-bellied Brent Goose (*Branta bernicla hrota*)
- Shelduck (*Tadorna tadorna*)
- Red-breasted Merganser (*Mergus serrator*)
- Oystercatcher (*Haematopus ostralegus*)
- Golden Plover (*Pluvialis apricaria*)
- Grey Plover (*Pluvialis squatarola*)
- Lapwing (*Vanellus vanellus*)
- Knot (*Calidris canutus*)
- Dunlin (*Calidris alpina*)
- Black-tailed Godwit (*Limosa limosa*)
- Bar-tailed Godwit (*Limosa lapponica*)
- Curlew (*Numenius arquata*)

- Redshank (*Tringa totanus*)
- Turnstone (*Arenaria interpres*)
- Wetland and Waterbirds

7.10. The species of interest for the Blackwater Callows SPA site identified in the conservation objectives for the site are as follows:

- Whooper Swan (*Cygnus cygnus*)
- Wigeon (*Anas penelope*)
- Teal (*Anas crecca*)
- Black-tailed Godwit (*Limosa limosa*)
- Wetland and Waterbirds

7.11. The nature of the site comprising modified agricultural grassland and the results of the desk and site ecological surveys undertaken and set out at Appendix 7.2 of the Planning and Environmental Report do not indicate that the site comprises suitable foraging or feeding habitat for any bird species which are listed as qualifying interests of the Blackwater Callows or Dungarvan Harbour SPA sites. In addition, the significant separation distances between the appeal site and these European sites at c.10 and 13km respectively are noted. In view of these factors, it is not considered likely that there would be any likely significant effects arising on these sites in light of their conservation objectives.

SAC Sites

7.12. In the case of the Comeragh Mountains SAC, the Lower River Suir SAC and the Glendine Wood SAC sites, there is no potential hydrological connection between these sites and the appeal site that would lead to any potential effects arising on the conservation objectives of these sites. For this reason it is considered that there is no potential for significant effects on the conservation objectives of these sites to arise.

7.13. The **River Blackwater SAC** site is located c.2km to the west of the appeal site at the closest point. Both the small roadside watercourse that is located c. 200 metres to the west of the site boundary at the closest point and the Magaha River that runs to the east of the site at the closest point connect with the River Blackwater SAC at a point to the south of the site where the Magaha River connects with the Finisk River. This point is c.3.5 km due south of the appeal site and c.6km by way of the hydrological connection between the SAC and the watercourses in the vicinity of the appeal site. The features of interest listed for the Blackwater River SAC are as follows:

- Estuaries.
- Mudflats and sandflats not covered by seawater at low tide.
- Perennial vegetation of stony banks.
- Salicornia and other annuals colonising mud and sand.
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*).
- Mediterranean salt meadows (*Juncetalia maritimi*).
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation .
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles.
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).
- *Margaritifera margaritifera* (Freshwater Pearl Mussel).
- *Austropotamobius pallipes* (White-clawed Crayfish).
- *Petromyzon marinus* (Sea Lamprey).
- *Lampetra planeri* (Brook Lamprey).
- *Lampetra fluviatilis* (River Lamprey).
- *Alosa fallax fallax* (Twite Shad).
- *Salmo salar* (Salmon).
- *Lutra lutra* (Otter).

- *Trichomanes speciosum* (Killarney Fern)

- 7.14. The **construction** of the proposed solar development within the red line application boundary would give rise to potential release of sediment and other construction related contaminants and pollutants. As part of the application documentation, a Construction and Environmental Management Plan has been submitted setting out the general approach to the control of surface waters on the site during construction. A number of generally standard construction methodologies aimed at the management of surface water and the avoidance of spillages during the construction activity are set out in this plan. These standard construction methodologies together with the fact that there are no existing surface water features on the site, the separation distance between the site boundaries and watercourses that connect with European sites and the nature of the proposed construction activity which is limited in terms of the degree of ground disturbance are, in my opinion such that the construction activity on the appeal site would have no significant potential effects on the River Blackwater SAC site having regard to its conservation objectives.
- 7.15. The **operational phase** of the proposed development is such that there would be no significant emissions to the environment generated. Therefore, in my opinion, the operational phase of the development on the appeal site would have no significant potential effects on the River Blackwater SAC site having regard to its conservation objectives.
- 7.16. As set out at the start of this section of the report, for the purposes of appropriate assessment it is considered appropriate that the entirety of the development, inclusive of grid connection options would be considered. **Two general grid connection options** are identified in the application documentation and these are illustrated on Figure 2.7 attached with the application. The first option comprises an underground connection to the Kilcloher sub station which runs along the local road to the west of the appeal site and then along the N72. The second option comprises an overground option which runs to the east of the site and forms a more direct connection with the Kilcloher sub station. The **overground option** does not directly impact on any European site and, while it would involve a crossing of a minor watercourse that drains to the River Magha and potentially runs close to the River

Magha in the vicinity of the Kilcloher station, the nature of the overground connection and the separation between these potential crossing points and the River Blackwater SAC is such that there are not likely to be significant adverse effects on the European site in light of its conservation objectives.

- 7.17. The possible ***underground connection*** runs along the local road to the west of the site and meets the N72 c.1.8 km to the south of the appeal site boundary. Limited detail with regard to this potential alignment is provided in the application documentation although there is reference in section 1.6 of the Planning and Environmental Report to the underground route option 'following the road'. No details with regard to the location on the road, details of trenching requirements, construction methodology are provided. In addition, while details of construction mitigation are provided in the outline construction and environmental management plan submitted with the application (Appendix 6 of the Planning and Environmental report), this plan does not provide any further details about the design, alignment or outline construction practice / methodology for the underground grid connection aspect of the development. Section 2.3.13 of the submitted CEMP relates specifically to the grid connection element of the overall project however the construction methodologies outlines in the plan do not relate to the grid connection options and it is stated that '*the CEMP will be updated with the appropriate construction methodologies following a decision on the connection route.*'
- 7.18. The issue for consideration is therefore whether the underground grid connection option to the west of the site, were it to be the chosen grid connection option, be such that it would be likely to have significant effects on the River Blackwater SAC site. The screening assessment submitted with the application notes the fact that the surface water hydrological pathway from the grid connection route to the SAC is in excess of 6km, that the roadside ditch is small, that the works will be within the roadway and that no instream works are required and concludes (section 4; Table 4.1) that '*given the nature, scale and short term nature of the proposed grid connection installation, there is no potential for significant effects on downstream QIs for which the SAC has been designated.*'
- 7.19. The section of local road along which the potential underground grid connection would adjoin the watercourse that ultimately leads to the SAC is approximately 1.75km in length. The relationship between the road and the watercourse is that it is

separated by a verge with a boundary hedgerow at the northern end of the section and a more open connection further to the south. While details of the exact alignment of the potential underground connection are not provided, it is evident that the potential route would not involve in stream works or works that would directly impact on the watercourse adjacent to the public road and that there is room for a set back to be provided. The nature of the works required to facilitate a single connection are also not likely to be significant.

7.20. With regard to species, the main species of interest of the River Blackwater SAC site most susceptible to the impacts of sedimentation and reduction in water quality are freshwater pearl mussel with potential impacts also for lamprey and crayfish species. The conservation objectives for the River Blackwater site indicates that the section of river potentially impacted by any discharges from the development would be outside of the areas identified as having recorded populations of pearl mussel, lamprey or crayfish species.

7.21. In terms of ***in combination effects***, the most significant other permitted development is for the development of a solar farm on a site of c.63 ha. to the south of the current appeal site at Ballyyard, Ballyhane and Clashnagoneen (Waterford County Council Ref. 17/564; ABP Ref. 300004-17). The site of this permitted development incorporates a watercourse that drains to the River Magaha and onwards to the River Blackwater SAC. This proposed development was the subject of appropriate assessment screening undertaken by the Board which recognised the potential for a hydrological connection to the Blackwater SAC and the potential discharge of sediment and construction related contaminants. The assessment concluded that there were no likely significant effects arising on the SAC and stage 2 Appropriate Assessment was not required. On the basis of this assessment of no likely significant effects it is not considered that there are any likely significant in combination effects arising in the case of the proposed development.

7.22. Having regard to the above factors relating to the nature of the proposed grid connection project, its separation in terms of river pathway from the closest point of the River Blackwater SAC and the fact that there are no recorded locations of the main species of interest that would potentially be impacted by sedimentation generated by construction activities associated with the project (including grid connection), it is concluded that the proposed development is not likely to have

significant effects on the River Blackwater SAC site in the light of its conservation objectives.

8.0 Recommendation

Having regard to the above, it is recommended that permission is granted based on the reasons and considerations set out below and subject to the attached conditions.

9.0 Reasons and Considerations

Having regard to:

- (a) the National and Waterford county policies in relation to renewable energy, in particular,
- the National Renewable Energy Action Plan 2010,
 - the Strategy for Renewable Energy 2012-2020,
 - Ireland's Transition to a Low Carbon Energy Future 2015-2030, and
 - the Waterford City and County Renewable Energy Strategy 2016-2030 incorporated into the *Waterford County Development Plan 2011-2017* in favour of the deployment of renewable energy,
- (b) the scale, extent and layout of the proposed development, and
- (c) the pattern of development in the area, and the generally good screening available to the site by means of existing hedgerows,

it is considered that, subject to compliance with the conditions set out below, the proposed solar farm would in accordance with national and local policy, would not seriously injure the visual or residential amenities of the area, would be acceptable in terms of landscape impacts and traffic safety and convenience and would not endanger human health or the environment. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars received by the Planning Authority on the 11th day of February, 2019, 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 interests 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 considered it reasonable and appropriate to specify a period of the permission in excess of five years.

3. (a) 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.

(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, 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.

(c) 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. 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.(a) Existing field boundaries shall be retained.

(b) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development. Any trees or hedgerows that are removed, die or become seriously damaged or diseased during the operative period of the development authorised by this permission, 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 protection of visual and residential amenity.

.

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

(d) The inverter/transformer stations shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black slate or tiles.

Reason: In the interests of clarity, of visual and residential amenity and to minimise impacts on drainage patterns and surface water quality.

7. All mitigation measures set out in the application documentation including the Planning and Environmental Report and associated Technical Appendices shall be complied with in the development.

Reason: In the interests of clarity and to ensure the protection of the environment.

8. Prior to the commencement of development, details of the proposed surface water drainage system shall be submitted for the written agreement of the Planning Authority.

Reason: To protect the environment and to ensure that measures are implemented to address any potential flooding arising from this development.

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

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

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

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements

(including, if necessary, archaeological excavation) prior to commencement of construction works.

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

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

10. 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.

11. 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.

12. The developer shall pay to the planning authority a financial contribution of € 136,000 (one hundred and thirty six thousand euro) 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. The application of any indexation required by this condition 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.

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.

Stephen Kay
Planning Inspector

1st May, 2019